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भारतीय शिक्षा शोध संस्थान द्वारा प्रकाशित

लेखकों के सूचनार्थ शीर्षक में दिये गये निर्देश के अनुसार ही अपने शोधपत्र/शोध टिप्पणी प्रकाशनार्थ भेजें, जिससे उसके प्रकाशन पर शीघ्र निर्णय लेना सम्भव हो सके।

इस शोध पत्रिका में लेखकों द्वारा व्यक्त विचार, निष्कर्ष आदि उनके अपने हैं। ये विद्या भारती एवं भारतीय शिक्षा शोध संस्थान की नीतियों के परिचायक नहीं हैं। यदि किसी लेखक की प्रकाशित सामग्री से कापीराइट नियम का उल्लंघन होता है तो इसके लिए लेखक स्वयं उत्तरदायी होंगे। प्रकाशक अथवा सम्पादक मण्डल इसके लिए किसी भी प्रकार से उत्तरदायी नहीं होंगे।

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भारतीय शिक्षा शोध पत्रिका के इस अंक को प्रेषित करते हुए हमें हार्दिक प्रसन्नता हो रही है। इस अंक में सामाजिक विज्ञान के विभिन्न विषयों से सम्बन्धित शोध पत्रों को प्रकाशित किया गया है। डॉ. मोनिका गौतम, असिस्टेंट प्रोफेसर, डॉ. माला टन्डन, प्रोफेसर एमिटी, इन्स्टीट्यूट ऑफ एजूकेशन, लखनऊ एवं डॉ. अमिता बाजपेई, प्रोफेसर, शिक्षाशास्त्र विभाग लखनऊ विश्वविद्यालय, लखनऊ द्वारा प्रस्तुत शोध पत्र, A Comparative Study of Emotional Intelligence of Professionals in Lucknow City में यह जानने का प्रयास किया गया है कि लखनऊ नगर में मेडिसिन, इन्जीनियरिंग, वित्त, विधि एवं शिक्षाशास्त्र के क्षेत्र में कार्यरत् लोगों की संवेगात्मक बुद्धि (Emotional Intelligence) में यदि कोई अन्तर है तो वह क्या है? इस अध्ययन के परिणाम दर्शाते हैं कि उपरोक्त विभिन्न क्षेत्रों में कार्यरत् लोगों की संवेगात्मक बुद्धि में कोई सार्थक अन्तर नहीं हैं। संवेगात्मक बुद्धि में अन्तर न पाया जाना इस बात को इंगित करता है कि वर्तमान समय में लोग संवेगात्मक बुद्धि के प्रति जागरूक हैं। यद्यपि संवेगात्मक बुद्धि के प्रत्यय को लेकर विभिन्न मनोविज्ञानी एक मत नहीं हैं। फिर भी इस प्रत्यय को महत्वपूर्ण माना जाता है और इस दिशा में अनेक शोध किए जा चुके हैं और किए जा रहे हैं।

एक अन्य अध्ययन डॉ. असित के. मन्त्री, असिस्टेंट प्रोफेसर, डॉ. रवि वांगुरी, असिस्टेंट प्रोफेसर, सेन्ट्रल यूनिवर्सिटी आफ जम्मू तथा सुश्री ज्योति शर्मा, असिस्टेंट प्रोफेसर लाल बहादुर शास्त्री कालेज आफ एजूकेशन राजबाग कठुआ द्वारा प्रस्तुत हुआ है जिसका प्रकरण हैं, The Perspective of Research Scholars on the Mode of UGC/CBSE/CSIR National Eligibility Test Examination. इस अध्ययन का मुख्य उद्देश्य यह जानना है कि NET उत्तीर्ण विद्यार्थी ने इस परीक्षा की भाषा, कठिनाई स्तर, अवधि पाठ्यक्रम एवं मूल्यांकन के बारे में क्या धारणा रखते हैं तथा क्या उन्होंने इस परीक्षा की आवृत्ति, लचीलापन व परीक्षाफल की घोषणा में किसी कठिनाई का अनुभव किया है? शोध के परिणामों में यह पाया गया कि अधिकांश NET उत्तीर्ण विद्यार्थी इस परीक्षा के बारे में यह धारणा रखते हैं कि यह परीक्षा उच्च शिक्षा में योग्य (Competent) शिक्षकों की पात्रता को तय करने के लिए उपयुक्त है। विद्यार्थियों का मत था कि इस परीक्षा में गणित एवं तार्किकता (reasoning) पर अधिक बल न देकर उनके द्वारा पढ़े गए विषयों पर बल देना चाहिए। अधिकांश विद्यार्थी इस मत के थे कि UGC/CBSE/CSIR-NET परीक्षा में पुनर्मूल्यांकन (Revaluation) की भी व्यवस्था होनी चाहिए।

NET की परीक्षा उच्च शिक्षा के क्षेत्र में शिक्षकों की भर्ती में योग्य अभ्यर्थियों के चयन में एक महत्वपूर्ण भूमिका निभा रही है। इस परीक्षा में यूजीसी के द्वारा आश्यकतानुसार समय-समय पर परिवर्तन किया जा रहा है।

शिक्षण समाज का एक अतिमहत्वपूर्ण क्षेत्र है, विशेष रूप से बाल्यकाल व किशोरावस्था में जो कि व्यक्तित्व का निर्माण करने में सहायक होता है। इसके लिए बी.एड. डिग्री को आवश्यक माना गया है (बाल्यकाल के लिए डीएल.एड. / बी.डी.सी. इत्यादि) ऐसे बीएड. प्रशिक्षुओं के प्रतिकूल भागफल (एडवर्सिटी कोशेंट) का उनकी उपलब्धि अभिप्रेरणा व शिक्षण के प्रति अभिवृत्ति से क्या कोई सम्बन्ध है? और है तो क्या है? इस प्रकार का अध्ययन डॉ. गुरदीप कौर एवं श्रुति डोडा ने Study of Adversity Quotient of B.Ed. Students in relation to Achievement Motivation and Attitude towards Teaching Profession के अन्तर्गत किया है और पाया है कि उपलब्धि अभिप्रेरणा व शिक्षण के प्रति अभिवृत्ति की अन्तःक्रिया बी.एड. प्रशिक्षुओं के प्रतिकूल भागफल (Adversity Quotient) को प्रभावित करता है। सम्भवतः इसलिए कि यह दोनों प्रशिक्षुओं के प्रतिकूल भागफल का निर्धारण करने में एक साथ कार्य करते हैं और व्यक्ति प्रतिकूल परिस्थितियों का सामना करने योग्य बन जाता है।

आजकल सूचना विस्फोट का युग है। शिवांगी तिवारी एवं प्रोफेसर तृप्ता त्रिवेदी द्वारा प्रेषित शोध पत्र A Multi-Dimensional Analysis of Social Cognition: Enhancing The Information Capabilities of Students में बताया गया है कि सामाजिक अनुभूति कई मनोवैज्ञानिक तंत्र को सम्बोधित करती है जो उस सामाजिक समूह में होने से लाभान्वित होते हैं। बालक / बालिका किसी नवीन परिस्थिति में जाने से पूर्व अपने सामाजिक समूह के सदस्यों विशेष रूप से माता की मुखमुद्रा को देखता / देखती है, इस प्रकार प्रेक्षण विधि से सीखता / सीखती है। मानव समाज में अद्वितीय क्षमता होती है जो प्रेक्षण के साथ निर्देशन से भी सीखने की सम्भावना बनाती है।

पचहत्तर वर्ष बीत जाने के पश्चात् भी हमारे देश में अंग्रेजी का वर्चस्व बना हुआ है और अधिकतार माता-पिता अपने बच्चों को अंग्रेजी में पटु बनाना चाहते हैं। ऐसा मानना है सुश्री लक्ष्मी रावत एवं डॉ. भोपाल सिंह रावत का अपने शोध पत्र A comparative study of the English learning status in terms of its skills prevailing among the High School class students with reference to gender and urban/rural locality में इन्होंने पाया कि बालकों में अंग्रेजी समझने, पढ़ने व लिखने का कौशल बालिकाओं की अपेक्षा अधिक था जबकि बोलने का कौशल बालिकाओं में अधिक पाया गया। इसी प्रकार शहरी क्षेत्रवासियों में ग्रामीण पृष्ठभूमि वाले अधिगमकर्ताओं की अपेक्षा अधिक कौशल पाया गया।

इस अंक में अन्य सभी शोधपत्र शिक्षा एवं सामाजिक क्षेत्र में अपना अमूल्य योगदान रखते हैं जो महत्वपूर्ण है तथापि यहाँ पर सभी का वर्णन करना सम्भव नहीं है। आशा है कि इस अंक में प्रकाशित शोध पत्र विश्वविद्यालय / महाविद्यालय के शिक्षकों एवं शोधार्थियों के लिए उपयोगी एवं सार्थक सिद्ध होंगे। इस सम्बन्ध में पाठकों के सुझाव जानकर हमें प्रसन्नता होगी।

(Sunil Kumar Pandey)
Chief Editor

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Utilization of Soft Skill Enhancing Programme through Theru-K-Koothu (Street Play) to Enhance Storytelling Skill of The Prospective Teachers at B.Ed. Level

*V. Parthiban, **Dr M.Vakkil

Abstract

One group pre-test and post-test experimental design was used for this study with a sample of 32 prospective teachers at B.Ed. level. The storytelling soft skill enhancing programme through theru-k-koothu was conducted for 15 days. The study consist of pre-test and post-test, The story telling performance of the prospective teachers were recorded and evaluated by the experts by using story telling skill evaluation tool for analysis, the obtained data was analysed using descriptive and inferential analyses. The results revealed that the prospective teachers at B.Ed. level have better enhancement in their story telling soft skill enhance programme through theru-k-koothu.

Introduction

Theru-k-koothu (literally means street play or street drama) is an ancient dramatic folk art performed in rural areas of Tamil Nadu a southern state in India. As Nimeshika Venkatesan (2021) states "Dance, drama, music, poetry and prose stream seamlessly in and out of the various acts of a theru-k-koothu performance; improvisations, deviations from didacticism into slapstick humour and social satire keeps the audience informed and engaged". More than entertainment, Theru-k-koothu educates the rural people about religious values and their history. Koothu performances generally depict scenes from ancient epics like Ramayana, Mahabharata and Tamil classical epics. Artists are trained to sing in their own voice and in a high pitch to reach entire crowd, since the technology unavailable that time. The artists dressed up with complex heavy costumes and have a very bright elaborated makeup. They are used to wear wooden ornaments which is made up of drumstick wood with glass work.

Theru-k-koothu can provide a process for learning by living through or experiencing an event. Educating through Theru-k-koothu is a novel approach to make the students to participate more actively in teaching learning transaction. The teacher transforms his/her content to students, the same way the artist deliver his content to audience by using various dialogs, songs, and dance with proper acting skills like body language, facial expression and so on. Therefore in this article the researcher made an attempt to enhance the story telling skill by using Theru-k-koothu.

The relevant studies and literature reviews are existed the soft skill enhancing programme among various disciplines by many investigators. In order to efficiently manage the interpersonal relationships, every one of us need to equip our skills. These include soft skills like adaptability, communication, time management, listening skill, creativity, ethics, emotional intelligence, empathy, mutual respect, social bond, conflict resolving, attitude, leaderships, public speaking, problem solving, team work (Hampton, 1981; Kechagias, 2011). Altogether, these soft skills could be referred as 'people skills' (Pachauri and Yadav, 2013) and are the characteristics (Heckman & Kautz, 2012) representing an individual's personality. Irrespective of the subjects taught in school, soft skills are essential to enhance the quality of teaching-learning process and to bridge the gap between teachers and learners. Soft skills also ease the process of attainment of educational objectives by students. Among the various soft skills, communication skills and ethical work behaviour (Mathews & Reddy, 2018) are considered to be essential for a teacher. In specific, effective communication skills could be fully utilised by teachers through strategies like storytelling, discussion, etc.As Dodson (2000) states "Drama is an ideal way to bring skills of grammar, reading, writing, speaking, listening and pronunciation together in a course where the focus is not

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on form but rather fluency and meaning". Theoretically, this study is expected to give contribution to the development of teaching strategy in improving student's presentation ability.

For the majority, in words of Howard's (2019), the best stories are about things that do not go to plan, where there is an unexpected twist or turn so there is a bit of drama or humour or something surprising, when there is an interesting lesson to be learned. According to Smeda, Dakich and Sharda (2014) storytelling is a natural and powerful method to communicate and share knowledge and experience. Adding, stories are familiar and accessible forms of sharing information (Cubillo and Manzanares, 2017). Usually, kids remember the tales with less effort as compared to other means of understanding and exhibit higher retention levels as they directly connect to their emotions. Stories can provide students the necessary contextual knowledge and coherence to understand more complex information. Therefore, the investigator focused the utilization of soft skill enhancing programme for story telling skill in Theru-k-koothu (Street play) among prospective teachers at B.Ed. level.

Title of the Problem

The present study was entitled as "Utilization of soft skill enhancing programme through Theru-k-koothu (Street play) to enhance storytelling skill of the prospective teachers at B.Ed. level"

Research Design

Method: The investigator adopted one group pre-test and post-test experimental design for this study.

Population and Sample: For the present study the investigator adopted prospective at B.Ed. level teachers of Namakkal district, Tamilnadu. The sample of 32 Prospective teachers at B.Ed. level were selected by random sampling technique in which 16 are male and 16 are female.

Tool for the study: The investigator prepared the self-made Story tellingskill evaluation tool for collecting data. It comprises seven sub criteriaof storytelling skill with five point scale. Each item provides alternatives as Excellent (4), Good (3), Fair (2), Unsatisfactory (1) and Not done (0).The modification of the tool was done as per the opinion and suggestion given by two subject experts so as to find out the validity of the tool. The final draft of the tool was administered to pre-test and post-test among the prospective teachers at B.Ed. level. After collecting the data from them, the data were applied the statistical analyses.

Objectives of the study

1. To find out the level of effectiveness on utilization of soft skill enhancing programme for story telling skill in Theru-k-koothu among prospective teachers at B.Ed. level in pre-test.
2. To find out the level of effectiveness on utilization of soft skill enhancing programme for story telling skill in Theru-k-koothu among prospective teachers at B.Ed. level in post-test.

Hypotheses of the study

1. The level of effectiveness on utilization of storytelling soft skill enhancing programme through Theru-k-koothu (Street play) among prospective teachers at B.Ed. level is low in their pre-test.
2. The level of effectiveness on utilization of storytelling soft skill enhancing programme through Theru-k-koothu (Street play) among prospective teachers at B.Ed. level is low in their post-test.

Analysis and Interpretation

Pre-test analysis on story telling skill

Hypothesis 1- The level of effectiveness on utilization of storytelling soft skill enhancing programme through Theru-k-koothu (Street play) among prospective teachers at B.Ed. level is low in their pre-test.

Table 1: Mean and standard deviation of story-telling skill with its sub categories

Variable	Mean	SD
Story-telling Skill (whole sample)	5.16	3.07
Objectives of the story teller	0.41	0.83
Instinct questions and answers	0.28	0.88
Emotional content	0.12	0.42
Voice modulation	1.28	0.58
Usage of sounds and music	0.09	0.39
Content economy	1.47	0.50
Pace of delivery	1.50	0.62

From the table 1 shows that the mean and standard deviation values of whole sample are 5.16 and 3.07. It indicated that the story-telling skill of first year prospective teachers at B.Ed. level is poor (score range 0-28). The sub categories of story-telling skill namely objectives of the story teller, instinct questions and answers, emotional content, voice modulation, usage of sounds and music, content economy, and pace of delivery have obtained the mean values are 0.41, 0.28, 0.12, 1.28, 0.09, 1.47 and 1.50 respectively. Among the sub categories of story-telling skill, pace of delivery of prospective teachers have obtained the maximum mean value (1.50) and usage of sounds and music have secured the lowest mean value (0.09). It is noted that the first year prospective teachers at B.Ed. level having poor usage of sounds and music skill than the other sub categories of story-telling skill in theru-k-koothu.

The various levels of story-telling skill of first year prospective teachers were categorized by using normal probability curve and it is presented in Table 1.1.

Table1.1: Various levels of story-telling skill of prospective teachers (whole sample)

Score range	N	Percentage	Level
Above 8	3	9%	Good
4-7	19	60%	Moderate
Below 3	10	31%	Poor

It is clear from table 1.1 that among the total 32 prospective teachers 3 (9 percent) have obtained good level of story-telling skill, 19 (60 percent) are moderate level and 10 (31 percent) have obtained poor level of story-telling skill. It is concluded that the maximum number of prospective teachers have moderate level of story-telling skill.

Post-test analysis on story telling skill

Hypothesis 2- The level of effectiveness on utilization of storytelling soft skill enhancing programme through Theru-k-koothu (Street play) among prospective teachers at B.Ed. level is low in their post-test.

Table 1.2: Mean and standard deviation of story-telling skill with its sub categories

Variable	Mean	SD
Story-telling Skill (whole sample)	13.57	3.93
Objectives of the story teller	1.12	1.04
Instinct questions and answers	1.47	1.10
Emotional content	1.62	0.75
Voice modulation	3.00	0.71
Usage of sounds and music	0.84	0.98
Content economy	2.56	0.75
Pace of delivery	2.84	0.62

From the table 1.2 is that the mean and standard deviation values of whole sample are 13.57 and 3.93. It indicated that the story-telling skill of first year prospective teachers at B.Ed. level is average (score range 0-28). The sub categories of story-telling skill namely objectives of the story teller, instinct questions and answers, emotional content, voice modulation, usage of sounds and music, content economy, and pace of delivery have obtained the mean values are 1.12, 1.47, 1.62, 3.00, 0.84, 2.56 and 13.47 respectively. Among the sub categories of story-telling skill, pace of delivery of prospective teachers at B.Ed. level have obtained the maximum mean value (13.47) and usage of sounds and music have secured the lowest mean value (0.84). It concluded that the first year prospective teachers at B.Ed. level having good pace of delivery skill than the other sub categories of story-telling skill in Theru-k-koothu.

The various levels of story-telling skill of first year prospective teachers were categorized by using normal probability curve and it is presented in Table 1.3

Table1.3: Various levels of story-telling skill of prospective teachers (whole sample)

Score range	N	Percentage	Level
Above 17	8	25%	Good
10-16	18	56%	Moderate
Below 9	6	19%	Poor

It is clear from Table 1.3 that among the total 32 prospective teachers 8 (25 percent) have obtained good level of story-telling skill, 18 (56 percent) are moderate level and 6 (19 percent) have obtained poor level of story-telling skill. It is concluded that the maximum number of prospective teachers have moderate level of story-telling skill.

Comparison between mean values of pre-test and post-test scores of story-telling skill

The mean values of pre-test and post test scores of story-telling skill were tabulated to analyse the effectiveness of Therukoothu training programme. It is presented in Table 1.4

Table 1.4: Mean values of pre-test and post-test on story-telling skill

Variable	Pre-test mean value	Post-test mean value	Mean difference
Story-telling Skill (whole sample)	5.16	13.57	8.41
Objectives of the story teller	0.41	1.12	0.71
Instinct questions and answers	0.28	1.47	1.19
Emotional content	0.12	1.62	1.50
Voice modulation	1.28	3.00	1.72
Usage of sounds and music	0.09	0.84	0.75
Content economy	1.47	2.56	1.09
Pace of delivery	1.50	2.84	1.34

It is clear from the table 1.4 indicated that the mean difference between pre-test and post-test scores of prospective teachers' story-telling skill has enriched significantly. It is concluded that the Theru-k-koothu (street play) training programme is more effective in developing storytelling skill of prospective teachers. Also it is inferred that voice modulation skill is highly enriched than the other sub categories of story-telling skill.

Major findings

The following are the major findings of the present investigation.

Pre-test analysis: The maximum number of prospective teachers have moderate level of story-telling skill in pre-test. Among the sub categories of story-telling skill, pace of delivery of prospective teachers is high.

Post-test analysis: The maximum number of prospective teachers have moderate level of story-telling skill in post-test. The prospective teachers having good pace of delivery skill than the other sub categories of story-telling skill.

Comparison between pre-test and post-test scores: The prospective teachers' story-telling skill is significantly enriched. Among the other sub categories of story-telling skill, voice modulation skill is highly enriched.

Conclusion

The present study aimed to investigate enhancing storytelling soft skills through performing arts Therukoothu (Street play). The results of the study shows that Theru-k-koothu training programme significantly enhanced storytelling soft skills among first year B.Ed., prospective teachers. It is also found that the prospective teachers have obtained moderate level of story-telling skill. Further, the comparative analysis for both pre-test and post-test analysis shows the prospective teachers' story-telling skill is significantly enriched. Among the other sub categories of story-telling skill, voice modulation skill is highly enriched. Hence the educationist and policy makers should consider the above findings to integrate soft skills effectively in the teacher education programme to make quality and proficient teachers.

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An Assessment of Automaticity of Basic Mathematical Facts among Government Secondary School Students

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Abstract

Several studies have shown that many children in India are not proficient in basic mathematical facts. Fundamental mathematics is a necessary component that should be mastered by all the students. The goal of the current study was to assess the students' proficiency in basic mathematical facts to determine whether or not they showed automaticity in it. Automaticity is the capacity to recall basic mathematics concepts quickly and accurately at an unconscious level. According to information processing theory, automaticity plays a significant role in mathematics education since it provides more flexibility to cognitive resources for more complicated task. 188 students of Class IX from four secondary government schools of Chandigarh were chosen to demonstrate automaticity by a timed probe on four basic mathematical operations. The standard for considering automaticity was 60 or more correctly solved problems per minute. Just 1.064% of the students exhibited automaticity, which is a setback for the researchers. The result opens the gate for the further research to determine the causes of lack of automaticity among school students and the ways to remediate it.

Introduction

Mathematical skills are the practical skills and abilities that are valued in every field, regardless of the area, and do not just refer to the subjects taught in school or college. It includes mental calculations, number sense, quantitative reasoning, critical thinking and the most important automaticity of basic mathematics facts. Mathematics facts are the foundational number combinations for addition, subtraction, multiplication, and division. Children should be able to quickly recall these facts. Automaticity of basic maths facts-the most crucial component of mathematical skills should be attained by students in elementary classes. Woodward (2006) discussed automaticity in mathematics facts as the "ability to retrieve facts directly or automatically". Automaticity is the capacity to process information automatically without preoccupying the mind with minute particulars, enabling it to develop into an automatic response pattern or habit. Students who have mastered automaticity with their maths facts typically out perform students who never achieve it in terms of overall maths performance over the course of their education. Researchers have found automaticity as the predictor of performance on general mathematics tests (Baker & Cuevas, 2018).

One of the main objectives of early education is the acquisition of basic mathematical knowledge and abilities (Göbel, Watson, Lervg, & Hulme, 2014) and the knowledge of numbers and mathematical operations are essential for children of all ages (Nelson, Parker, & Zaslofsky, 2016). Boaler (2015) argues, "Number sense is the foundation for all higher-level mathematics". Number Sense is a crucial idea that fosters children's comprehension of arithmetic as well as their capacity to apply mathematics in the real world. Since the students have progressed through the elementary classes, it is common to assume that students have automatic mastery of basic mathematics concepts when they reach secondary classes. However, this might not always be the case. It was found out that the percentage of automaticity in the third grade was 52.4%, which is much below than the overall percentage (64.9%), (Baker & Cuevas, 2018). By the end of the school year, all students in this grade should be proficient in addition, subtraction, multiplication and division facts.

A timed maths test was used to assess the fundamental multiplication fact fluency skills of a group of college students in USA. 90% of college students who were tested lacked automaticity in simple multiplication facts (DeMaioribus, 2011). Higher levels of basic mathematics facts fluency and mathematics success were all shown to be generally correlated. According to

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the SDG 4 report from the UNESCO, which was released on January 24,2022, just 12.3% of lower secondary school pupils in India (aged 10 to 16) are skilled in fundamental mathematics. According to a subsequent ASER (2022), the fundamental arithmetic proficiency levels of students in most grades have decreased since 2018 levels. The survey also highlighted the loss in children's aptitude for fundamental maths. According to the survey, just 25.9% of students in Class 3 could do fundamental math operations, down from 28.2% in 2018. The proficiency in fundamental maths should improve with time, but instead, it is deteriorating year after year, which is not a beneficial move.

The National Education Policy 2020 has developed fresh solutions to deal with these problems. One of the main elements of the NEP (2020) is Foundational Literacy and Numeracy (FLN). FLN is generally understood to be a child's capacity for reading simple texts and doing simple mathematical operations (such as addition and subtraction). The ability to do simple arithmetic operations automatically is crucial in every profession and stage of life. This has also been demonstrated by many studies. Automaticity marks a positive impact on Life Skill Mathematics of higher secondary school students (Minikutty & Mohan, 2020). Alkandari (2014) recognised "lack of problem-solving abilities" as one of the significant issues faced by undergraduate engineering students. Basic arithmetic automaticity (what children can do without an electronic calculator) is discovered to be an accurate indicator of achievement incollege's first semester of Chemistry (Petros *et al.,* 2017; Albaladejo *et al.*, 2018; Williamson *et al.*, 2020). MUST (Math-Up Skills Test) was employed in the Chemistry series of research to pinpoint students who were deemed to be at risk. Poor automaticity contributed to the lower performance of several students. Strengthening students' fundamental number sense may initially have greater benefits for their long-term performance. Without mental maths automaticity, knowledge of higher conceptual notions in mathematics is impossible. According to cognitive science, students may find it challenging to do calculations in the physical sciences if the prerequisite maths has not been automated. Nevertheless, if automaticity deficiencies are corrected before a maths topic, success rates will increase. The country's education system that discourages mathematics skills, observed a drop in automaticity (Hartman & Nelson, 2020). Also, individuals are no longer required to learn basic mathematical knowledge; instead, they may just punch buttons on a calculator, denying them the possibility to naturally recall numerical sequences or information. With the reform of mathematics education, gains in student achievement have not risen as anticipated (Loveless, 2008; Hanushek, Peterson, & Woessmann, 2010; OECD, 2013). It is really distressing to find that secondary school students struggle with simple mathematics facts. This dissatisfaction may be explained by students' lack of automaticity in fundamental abilities needed to go on to advanced mathematics. In the present study, the researchers made an attempt to assess the automaticity of basic mathematics facts of secondary school students studying in the government schools of Union Territory, Chandigarh. This is an eye-opening study in understanding the extent of the students' knowledge of basic arithmetic concepts and their level of automaticity. The current study differs from past studies in one respect. This study has assessed all four fundamental mathematical operations (addition, subtraction, multiplication and division) in one study, something that previous studies have not done.

Research Questions

Basic mathematical facts lay the groundwork for multi-digit addition, subtraction, multiplication, and division, but their significance extends well beyond serving as a base for more difficult calculations. According to the experts, the capacity of children to develop higher-order mathematics and to solve problems depends, on their ability of automaticity of basic mathematics facts (Wong & Evans, 2007). Students improve their knowledge of operations, their ability to use mental maths techniques, and their understanding of numbers by carefully studying mathematics facts. The present study uses the timed test worksheet to understand the following research questions. The research questions are as follows:

1. Do most of the secondary school students studying in government schools of the Union Territory, Chandigarh possess the automaticity of basic mathematical facts?
2. Is there any significant difference between the level of automaticity of basic mathematical facts of boys and girls studying in secondary classes of government schools of Chandigarh?

Hypotheses

In order to answer the above stated research questions, the following hypotheses were formulated:

Ho1: Most of the secondary school students studying in government schools of the Union Territory, Chandigarh do not possess automaticity of basic mathematical facts.

Ho2: There is no significant difference in the level of automaticity of basic mathematical facts of boys and girls studying in secondary classes of government schools of Chandigarh.

Methods

The present study assesses automaticity of basic mathematical facts among secondary school students of government schools of the Union Territory, Chandigarh. So, the descriptive survey method was used to determine whether students possess automaticity of basic mathematical facts and whether there is any significant difference in the level of automaticity amongboys and girls.

Participants

Students studying in secondary schools of government schools of Chandigarh constituted as the population of interest for this study. Because it was expected that children who had finished middle school would be familiar with the fundamentals of mathematics and have automaticity in it. Secondary students' automaticity would be a reflection of mathematics education.

The sample for the current study consisted of Class IX students from four government schools in Chandigarh. The students were selected through random sampling. The researchers randomly chose four secondary government schools of Chandigarh, out of which Class IX students from those schools were chosen by lottery method. 47 students from each school were picked to make the sample size of 188. Regardless of size, males and girls were chosen at random.

Tool used

A timed test of 81 mix problems was prepared by the researchers. The researchers developed a multiple-skill mathematics test based on the most recent recommendations for curriculum-based assessment (Shapiro, 2010). The worksheet had one-digit problems on four mathematical operations (addition, subtraction, multiplication and division) that had to be solved by the students. The problems were laid up in 9 rows and 9 columns on one side of the sheet. It was timed for one minute using a stop watch.The problems were prepared to test the students'knowledge of basic mathematical facts to determine their automaticity. The examples of problems are 7+8, 9-2, 2x6, 24 ÷ 4 and so on.

Procedure

Before the study could take place, the principals of the respected schools were contacted for seeking the approval for the study. After getting the approval from the principals, the data was collected. The class teachers were contacted to choose the sample and administer the test in their classes.The researchers were present in all four schools at the time of administration of the test to explain the purpose of the study they were conducting. The students were informed that the automaticity of mathematics basic facts was being examined and that their test results would remain confidential. The importance of the study was explained to the students and later the procedure to be followed to solve the problems. They were also promised that their success on the test would have no influence on their class marks. The time limit for solving 81 mixed problems was 1 minute. The stop watch was kept to monitor the time. The researchers and the class teachers were present in the classroom to monitor the test. Exactly after 1 minute, the students were asked to stop and submit their sheets. After the test, there was a brief conversation about how interested or uninterested they are in mathematics and which operations they found challenging. Whether they employed any strategies to address the problemsor not was a crucial question that needed to be answered.

Results

This study was undertaken to assess the level of automaticity of basic mathematical facts among government secondary school students of Union Territory, Chandigarh. This research centred around the main research question pertaining to the idea of students in government secondary schools knowing fundamental mathematical concepts automatically. For the purpose of categorising the results and seeing trends, the data was gathered and shown on a spread sheet.The data was then ranked in order of the highest to smallest number of correct responses. Each student's correct problems per minute (ppm) from the completed timed test were recorded. Participants were given one minute to do a mathematics test consisting of single-digit questions on addition, subtraction, multiplication and division in order to evaluate their basic mathematics fact automaticity. The test had to be completed in an orderly manner, to prevent someone from unfairly having an edge by bypassing challenging questions. They were told to work quickly, completing each problem in order from left to right and from top to bottom. This data was divided into three level of automaticity-high, moderate and low. The greatest degree of automaticity, known as Level 1, was defined as being higher than or equal to 60 right questions per minute. Level 2 was in the 40 to 60 ppm range and Level 3 was below 40 ppm range. The number of correct problems per minute (ppm) revealed the level of automaticity for each student. The levels of automaticity and the number of pupils in each level are shown in Table 1 below:

Table 1: Levels of Automaticity of Basic Mathematical Facts among Secondary Schools Students

Levels of Automaticity	No.of Students	% of Students
High	2	1.64
Moderate	23	12.23
Low	163	86.70

The first research question focused on the possession of the automaticity of basic mathematical facts among government secondary school students. Only two of the 188 participants (1.64%) were in the high level, 23 students which made 12.23% were in level 2 (40-60ppm) which was the moderate level and 163 students which made 86.70% were in level 3 (below 40 ppm) which was the low level. The highest number of correct answers was 72ppm. So, the hypothesis that most of the secondary school students studying in government schools of the Union Territory, Chandigarh do not possess automaticity of basic mathematical facts is accepted.

The second research question focused on the differences in the level of automaticity of basic mathematical facts between girls and boys. The data retrieved from the students' accurate answers on the timed test is displayed in Table 2 below:

Table 2: Comparison of Level of Automaticity of Basic Mathematical Facts among Boys and Girls of Government Secondary Schools

Groups	N	Mean	Standard Deviation	t value	Level of Significance
Girls	80	24.65	11.09	0.302934	Not Significant
Boys	108	22.69	10.32		at 0.05 level

In order to find out the level of automaticity of basic mathematical facts among boys and girlsof government secondary schools, the mean and standard deviation of the test scores were identified. The mean of girls test scores is 24.65 and for the boys is 22.69 and the standard deviation for the girls test scores is 11.09 and for the boys is 10.32. The calculated t value for the data came out to be 0.302932 which is not significant at 0.05 level of significance. Hence the second hypothesis that there is no significant difference between the level of automaticity of basic mathematical facts between girls and boys is accepted.

Discussion

There is increasing agreement that automatic recall of addition, subtraction, multiplication, and division facts is essential for developing computational fluency and preparing students for success in mathematics in the present and the future (Battista, 1999). Timed mathematics fact tests are a standard diagnostic tool used in classrooms in schools. Therefore, this test was used to assess automaticity of basic mathematical facts among government secondary school students. Also, because the test was brief, it offered a quick and convenient way of assessing the automaticity. They had one minute to do as many of the problems on the test as they could. According to the result,just two students out of 188 showed a high degree of automaticity, which is defined as scoring 60 or more accurate problems per minute. While the majority of students fell into the third category of havinglow degree of automaticity. The outcome calls into question the quality of the mathematical education being provided to students in the classrooms. According to Baker & Cuevas (2018), there are studies that have proven math fact automaticity to be a predictor of success on general mathematics assessments. It is challenging to categorise the causes of students' low level of automaticity based on gender. Boys and girls of secondary schools did not differ significantly from one another in their level of automaticity in this study. In the former studies also, the same result was found out. The findings fell short of demonstrating sex differences in automaticity (Gray and Mulheren, 2012).

Elementary school students are not mastering the basic mathematical concepts that are expected of them. Poor performance in secondary and higher education is a result of the inadequate foundation provided in primary school. However, it is believed that only 50% of children have mastered the multiplication and division facts automatically (Berg, 2023). This upends a child's foundational framework of mathematical education. Teachers must approach teaching mathematics to students at school with a serious note. Several methods have been developed in recent years to stimulate students' interest in mathematics. NEP 2020 has brought various changes in the curriculum and has primarily emphasised on mathematical skills. According to the National Education Policy (NEP) 2020, achieving universal acquisition of foundational literacy and numeracy (FLN) abilities at the primary level by 2025 is the top objective for the school education system. A child's foundational education serves as the cornerstone for all subsequent learning. The inability to learn or insufficient practise in mastering basic skills might lead to mathematical anxiety (Wittman, Marcinkiewicz & Douglas, 1998). It possesses a great challenge for teachers to make sure that students are receiving the practice to recall the basic facts rather than merely drawing conclusions from them. More practise time should be incorporated into the curriculum, and there should be some standards that students must meet. A number of companies, including Learning Wrap Ups, FASTT Math, and Everyday Math, have created software to develop automaticity.

Conclusion

Although there has been a determined effort in recent years to enhance mathematics education in India, still mathematics test results have not increased. This study examined government secondary school students' levels of automaticity of basic mathematical facts to ascertain on levels, where the students arein the development of automaticity. In this study, just 1.64% of the student population possessed automaticity, which is much less than any country's expectations. The Indian government has made a number of attempts to improve maths proficiency; it is now time for everyone engaged in the educational process to take these efforts seriously. National Curriculum Framework, 2023 has made the recommendation that everyone revaluate the method of teaching so that students see mathematics as a part of their lives and like it with a stronger emphasis on logic and original problem-solving. To teach mathematics to students, teachers must arm themselves with the most modern and innovative techniques. We as educators require materials and equipment to promote the acquisition and retention of basic maths concepts in our classrooms (Olson, 2021). According to research, automaticity serves as a foundation for acquiring more complex mathematical ideas. Also, it serves as a major predictor of success on standardised examinations and supports students in avoiding arithmetic anxiety (Sholes, 2018). Less focus on learning basic mathematical facts should not be the cause of low automaticity in future. Students should not be lacking automaticity of basic mathematical facts that support higher order thinking in the rapidly changing environment. What impact does the lack of automaticity have on mathematics education, how automaticity helps in order to acquire advanced mathematics and the relationship of automaticity with various aspects of mathematics and lives of students need to be expanded for future research in order to draw more reliable findings. It is important to understand the function and importance of automaticity in mathematics education.

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Participation of Tribal Women in Panchayati Raj Institutions: A Study on Tehatta-I Block in the District of Nadia, West Bengal

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Abstract

The Panchayati Raj Institutions (PRIs) are playing an important role at the grassroots level to provide a stable administrative set up in the rural areas of our country. Tribal women are the largest deprived section in our country and they have been living in rural areas throughout. We all are well known that the 73rd Amendment Act to the Constitution of India is a landmark step towards giving socially excluded groups, especially the women, a chance to take part in the governance process at grassroot level. As per the last census data, many tribal people are living in rural areas. The Panchayati Raj system is the main institution for the decision-making process in the local level for the development of rural areas. Without active participation in the democratic process, we cannot be reached ata sustainable development process. In our society, women have a significant role. In this regard, tribal women have been playing an important role in their society too. So, without participation in PRI institutions of Women specially the tribal women, we could not able to ensure the healthy socio-economic status of tribal People in India as well as West Bengal. We should give focus and importance to promote the status of tribal women through Panchayati Raj Institutions. In this paper I want to focus on the Participation of Tribal Women in Panchayati Raj Institutions: A Study on Tehatta-I Block in the District of Nadia, West Bengal. For the development of this research article, I have used both qualitative and quantitative methods to establish my argument. The primary data has been collected througha questionnaireduring field survey and the secondary data has been collected from articles, books, newspapers, journals etc.

Introduction

The start of India's one-year G-20 Presidency from December 1, 2022, through November 30, 2023, and its assumption of the SCO Presidency through September 20, 2023, will make December 1, 2022, a momentous day for India and its 1.41 billion residents. In the Amrit kaal of our Independence, this is both an honour and a huge duty. According to IMF projections, India would overtake Germany and Japan to become the third-largest economy by 2027. India now has the second-largest labor force in the world and is the most populous nation overall. 477 million people in India are employed in agriculture or the unorganized sector. In a democratic system with numerous welfare programs, the federal and state governments make every effort to improve opportunities for the underprivileged without discriminating on the basis of gender.

Due to its assurances of equality of status and opportunity, fraternity, and the right to participate in political decision-making, democracy is recognized as one of the most important forms of government. Citizens' involvement in and power over the government define democracy. The Panchayati Raj, one of India's most important political innovations, promotes grassroots democracy and increases popular participation in politics. All issues relating to rural development are resolved via the establishment of Panchayat Raj Institutions (PRIs). It has to do with empowering the disadvantaged section of society, especially women. In particular, affirmative action has greatly increased the participation of female legislators over time, especially those from marginalized groups. Numerous studies have found that female leaders are more likely to uphold the rule of law, provide more public goods of comparable quality at a faster rate, and take into account women's preferences to improve traditional governance (Nandal, 2013).

Beyond their involvement in the electoral and administrative processes, women are politically active. It describes efforts that not only try to affect the attitudes

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and behaviors of people who have formal authority to make decisions, but also those who do so informally. Participation in grassroots organizations may help them learn about democracy and empowerment. It will act as the basis for democratic behavior across the board in the entire society. Through participation in Beyond their involvement in the electoral and administrative processes, women are politically active. It describes efforts that not only try to affect the attitudes and behaviors of people who have formal authority to make decisions, but also those who do so informally. Participation in grassroots organizations may help them learn about democracy and empowerment. It will act as the basis for democratic behavior across the board in the entire society. Attending standing committee and panchayat meetings to participate in panchayat activities. Participating in the selection of the recipients of the many development initiatives, in contrast. A critical step in this regard is the establishment of a policy to boost the proportion of women and women from Tribal groups who participate in politics in PRIs (Mohapatra, 2017).

Constitutional Provisions for Women

The Indian Constitution not only ensures women's equality but also gives governments the authority to enact affirmative discriminatory laws in their favor to minimize the overall social, educational, and political disadvantages that women face. Fundamental rights guarantee everyone's equality before the law and equal protection under the law, guarantee that everyone has an equal chance to succeed in areas relating to the job, and prohibit discrimination against anybody based on their race, religion, caste, sex, or place of birth. The Constitution's Articles 14,15,15(3), 16, 39(a), 39(b), and 39(c) are particularly significant in this regard (Dwibedi & Aptaprava, 2023).

In addition to granting local governments more autonomy, the 73rd and 74th Amendments to the Constitution, which were approved by the Parliament in 1992 and put into effect on April 24, 1993, mandated that not less than one-third of the seats in each Panchayat and municipality be reserved for women from scheduled castes and scheduled tribes. This will be dispersed to various constituencies on occasion. This is a big step in the right direction for women's emancipation. It provides the women with a significant opportunity to actively take part in local decision-making processes. The local bodies should be required to organize the regular, periodic elections for the local bodies in order to maintain the reserve policy (Kalita, 2012).

Panchayat and Tribal Women

The Panchayat is the most significant democratic institution at the local level, and tribal women are the most disenfranchised community in rural India. The 73rd Constitutional Amendment Act of 1992, commonly known as the Panchayati Raj Act, established the three-tier Panchayati Raj system and provided employment opportunities for women. It sought to ensure that women and the general public were involved in rural rehabilitation. The Panchayati Raj Act was passed on April 24, 1993. According to the Act, women must be given preference for specific jobs. The Panchayati Raj Act requires that seats be reserved for women in a small number of Panchayati Raj positions, but it also mandates that newly appointed women candidates in Panchayats acquire a specific set of skills and training through training institutions with the assistance of the Ministry of Rural Development, which provides financial support for the same. The PRIs provide rural tribal women with the leadership opportunities they need to actively take part in the decision-making process for development. It will also help in preventing the mistreatment and neglect of women from Scheduled Tribes (Patnaik & Panda, 2007).

The 73rd Amendment Act has been in effect for nearly three decades. However, we discovered that tribal women's involvement in Gram Panchayats was hardly ever. Even some of the women don't know how the Gram Panchayat functions. The decisions regarding who indigenous women will vote for in the Gram Panchayat elections are frequently made by their husbands and families rather than themselves. Living in a tribe is not easy. The indigenous people have inhabited forests since the dawn of time. They reside in tribal territories and other highland stretches that are largely inaccessible and lonely. The tribal way of life is erratic and filled with adventures. Tribal communities have gotten preferential treatment from the government ever since independence. The village council is essential for carrying out local policies, programs, and economic development. But tribal women are still falling behind. It is crucial to keep in mind that indigenous women have never been given the chance to take part in the management of local or village governments, and this imbalance still remains in the Village Authority/Council today. As a result, it is urgently important to include women in these organizations by amending the law so that they can effectively exercise their rights and perform their duties at Local Self-governing organizations (Majhi, 2017).

Objectives of the Study

The main objectives of the present study are highlighted below:

(i) To understand the proper knowledge of PRIs among the tribal women.

(ii) To examine the participation of tribal women in PRIs in the study areas.

(iii) To analyze the political participation and socio-economic development of the tribal women in the study area.

(iv) To examine the barriers to the participation of tribal women in the PRIs.

Research Questions

Research questions provide the road map to proceed and identify and focus on the research gaps. Here in this article the research questions are:

(i) Do the tribal women have proper knowledge on Panchayati Raj Institutions?

(ii) Which process do the tribal women follow to participate in PRIs?

(iii) Are the tribal women participating in political activities of PRIs?

(iv) What type of problems are faced by the tribal women regarding their participation in PRIs?

Methodology

The study has been conducted at Tehatt-1 Block in the district of Nadia, West Bengal. For the successful completion of this article, I employed both quantitative and qualitative methods. The study focuses on primary data collected through field surveys and other secondary data from various books, journals, government reports, and other published works. The primary data have been collected through survey conducted with the schedules and questionnaires by taking interviews directly to the common people selected through random sampling in the study area. The size of the sample was 100 nos. among the rural women from the tribal community at Tehatt-1 Block in the district of Malda, West Bengal, besides the secondary data collected from books, journals, government records, etc. are the strength of this article.

Area Profile

In this study, I have taken a rural block named Tehatta-1 block in Nadia district in the Indian State of West Bengal. The Tehatta-1 Community Development Block spans 249.6 kilometers. Tehatta-I Block is bounded by Naoda, in Murshidabad district, and Karimpur-II Block, in the north, Gangni Upazila, Meherpur Sadar Upazila and Mujibnagar Upazila of Meherpur District of Bangladesh in the east, Chapra Block in the south and Tehatta-II Block in the west. The study area i.e. in Tehatta-1 block has 11-gram panchayat and one panchayat samiti. The law and order is controlled by the tehatta police station which the headquarter of this block. Tribal people are living in each district of West Bengal. I have taken the Tehatta-1 Block in the Nadia district for this study. According to the Government of India's 2011 census report, the total number of tribal people living in the Tehatta-1 block is 4,481. The main tribal groups or sub-castes living in the block are Bumij, Santhal, Paharia, Oraon etc.

Agencies working for the betterment of Tribal women in the study area

Different agencies under the state government and central schemes are also actively working in the study area. Some of them are:

(i) Agriculture Department

(ii) Department of Higher Education

(iii) Department of Rural Development (Pradhan Mantri Awas Yojana & MGNREGA)

(iv) Department of School and Mass Education (Kannyashree, Sabujsathi, Mid day meal scheme, Sikshashree etc)

(v) Food Supply & Consumer Welfare Department

(vi) Handicrafts and Cottage Industries Department

(vii) Integrated Child Development Schemes (SSK & MSK)

(viii) Panchayatiraj Department

(ix) Public Health Department, Government of West Bengal

(x) Self Help Groups

(xi) Tribal Welfare Department

(xii) Women & Child welfare Department, Government of West Bengal.

Theoretical framework

There are several approaches and theories dealt with the welfare of tribal women and to ensure their political participation in panchayatiraj institutions in India. Firstly, the immersion approach where there is no difference in curricular content and medium of instruction between the mainstream schools and tribal schools.

Secondly, the ashram school approach which tries to draw the child from its environment and kept in boarding schools and encouraged them especially the female students to be courageous and develop themselves to face society in broader perspective. Finally, the participation approach, after their education, they will come forward and participate in the governance process which is the key my study.

Result of data collection and discussion

I have collected a lot of data randomly from rural Tribes in both study areas through sample questionnaires related to tribal participation in panchayati raj institutions. Based on the collected information, some analyses are:

Table-1: Age wise classification of Respondent

Age group	Number	Percentage
18-32	62	62%
33-50	32	32%
Above 50	06	6%
Total	100	100%

(*Sources:* primary data)

The respondents' ages are shown in Table 1 for comparison. Looking at the table, it can be seen that, of the 100 female respondents in the sample, 62% were between the ages of 18 to 32, and 32% were between the ages of 32 to 50. Only 6% of responders were over 50, which is a small percentage.

Table-2: Educational Qualifications of the Respondents

Educational Qualifications	Number	Percentage(%)
Illiterate	40	40%
Matric	30	30%
Higher Secondary	25	25%
Graduate	3	3%
Post-Graduate	2%	2%
Total	100	100%

(*Sources:* primary data)

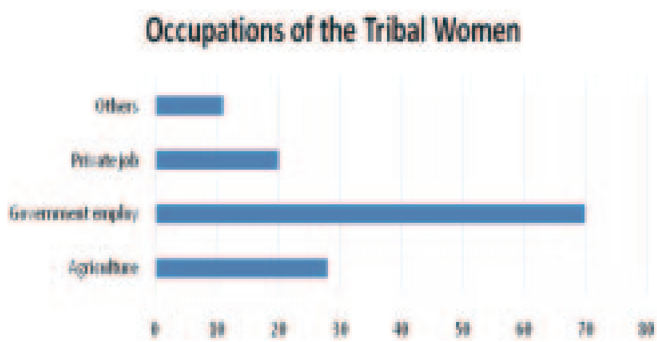
Table 2 shows that 40% of our respondents were illiterate, which is the majority. 30% of students achieved matriculation. 25 percent of people studied all the way through senior secondary school. Following the graduate level, 3% of respondents had post-graduate degrees, 2% had undergraduate degrees. Higher education was required in this field. To raise the respondents' awareness of PRIs, education is crucial.

Table-3: Occupations of the Responded

Name of occupation	Number	Percentage (%)
Agriculture	65	65%
Government employ	4	4%
Private job	20	20%
Others	11	11%

(*Sources:* Computed from primary data)

Figure No: 2



According to Table 3 and Graph 2, the majority of women who responded63%were farmers, with 22% working in the private sector as their primary source of income. Following that, 11% of respondents worked elsewhere, while 4% worked for the government.

Do you know about Panchayati Raj Institution?

Table 4

Number of Responded	Yes		No		No Response	
	Number	Percentage	Number	Percentage	Number	Percentage
100	26	26%	72	70%	2	2%

(*Sources:* Computed from primary data)

Figure 3

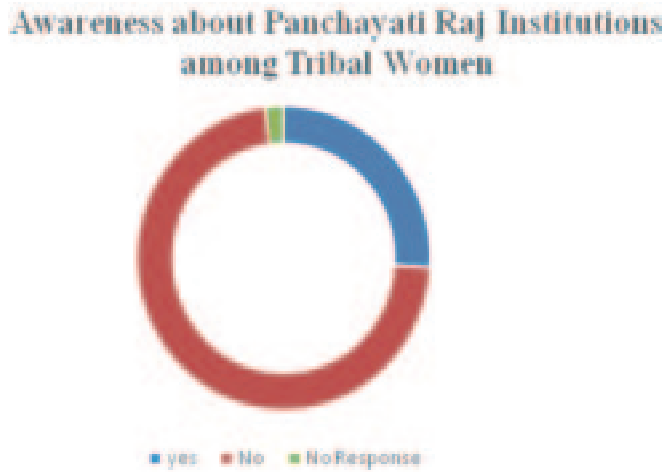


Table No. 4 and Figure No. 3 shows that the majority of Respondents i.e.72 per cent were unknown about PRIs, 26 per cent have known about Panchyati Raj Institution and two per cent of respondents have given no response on these issues. What I found that, maximum tribal women have no idea about PRIs in this area.

What about your ideas onpowers & functions of Panchayats?

Table 5

Number of Respondents	Yes		No		No Response	
	Number	Percentage	Number	Percentage	Number	Percentage
100	20	20%	75	75%	5	5%

(*Sources:* Computed from primary data)

Figure 4

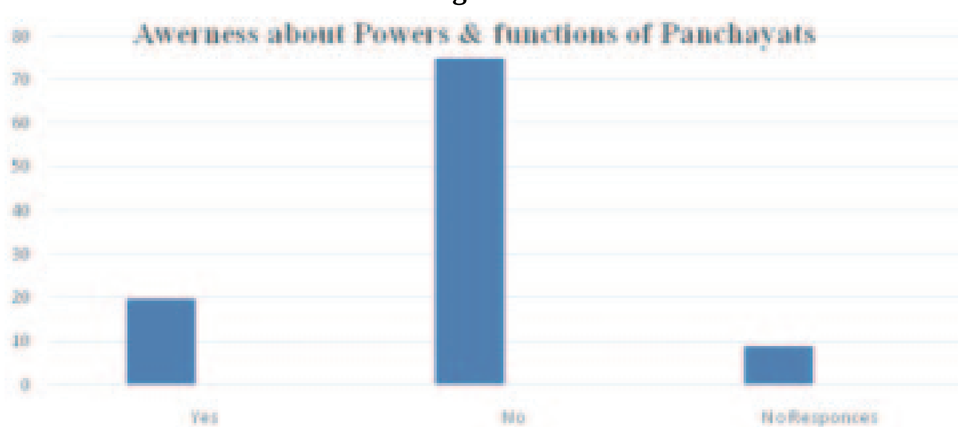


Table 5 and Figure 4 shows that the majority of our respondents i.e. 75 per cent have no idea about the powers and works of Panchyati Raj Institutions. Besides, 20 per cent of respondents were known about the powers and works of PRIs. Only 5 per cent of respondents have no response on these issues. Maximum tribal women have no idea on the powers and works of PRIs in this area.

Are you directly attending to any decision-making process organised by your Gram Panchayat?

Table 6

Number of Respondents	Yes		No		No Response	
	Number	Percentage	Number	Percentage	Number	Percentage
100	10	10%	82	82%	8	8%

(*Sources:* Computed from primary data)

Figure-5

Table 6 and Figure 5 shows that 10 per cent of people participated in the decision-making process of Panchayati Raj Institutions. Besides, 82% of respondents have yet to participate in the decision-making process of PRIs. Eight per cent of respondents have yet to respond on this issue. Maximum tribal women are not participating in the decision-making process of PRIs in this area.

Do you know that seats are reserved for women in PRIs?

Table-7

Number of Respondents	Yes		No		No Response	
	Number	Percentage	Number	Percentage	Number	Percentage
100	18	18%	76	76%	6	6%

(*Sources:* Computed from primary data)

Figure-6

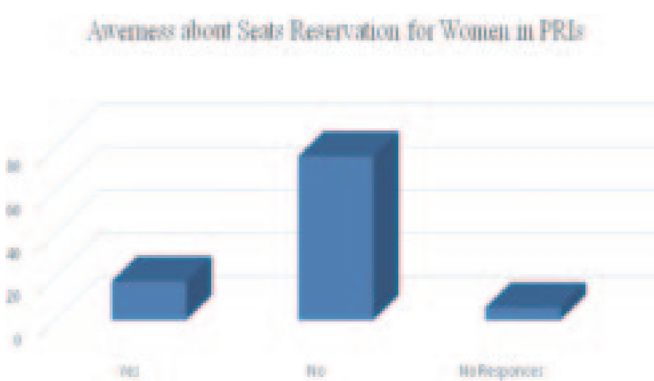


Table 7 and Figure no. 6 depict that the majority of our respondents i.e. 76 per cent need proper knowledge on seat reservations for women in PRIs. Only 18 per cent of respondents have a good idea on reservation of seats for women in PRIs. Besides, 6% of respondents have yet to respond to these issues. Maximum tribal women do not have proper knowledge on reservation of seats for women in PRIs in this area.

Have you actively attended any political programmes organized by a political party?

Table 8

Number of Respondents	Yes		No		No Response	
	Number	Percentage	Number	Percentage	Number	Percentage
100	36	36%	61	61%	3	3%

(*Sources:* Computed from primary data)

Figure 7

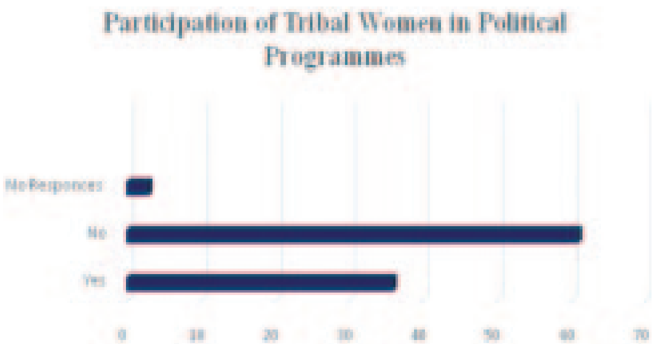


Table 8 and Figure 7 depict that 36 per cent of the tribal women actively attended the political programmes organized by different political parties. Besides, 61 per cent of respondents did not participate in any political programme organized by any political party. Three per cent of respondents have yet to respond on these issues. Maximum tribal women have no interest in participating in the political programmes.

Are you participating in Panchayat Elections?

Table 9

Number of Respondents	Yes		No		No Response	
	Number	Percentage	Number	Percentage	Number	Percentage
100	90	90%	7	7%	3	3%

(*Sources:* Computed from primary data)

Figure-8

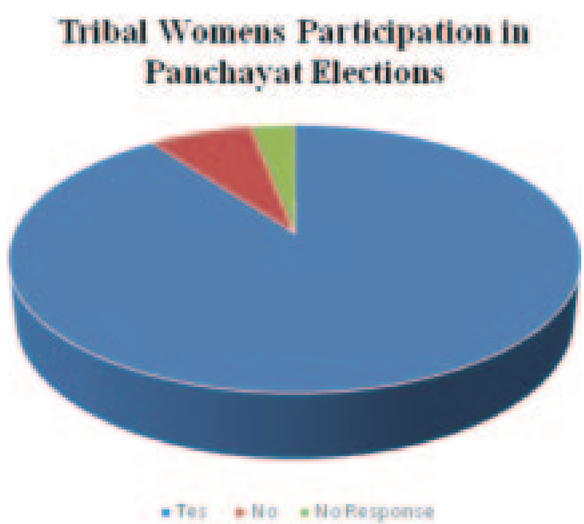


Table 8 and Figure no. 7 show that 90 percent of the tribal women participated in the panchayat election in the Study block. Besides, only 7 percent of respondents did not participate in the panchayat election. Three percent of respondents have yet to respond on these issues. Maximum tribal women are interested in participating in the panchayat elections in the study area.

Primary Findings

Following the gathering of data and its processing, my initial conclusions are as follows:

- The majority of indigenous women in this region are unaware of the Panchayat Raj institutions.
- The majority of tribal women lack proper knowledge of the authority and duties of panchayat institutions.
- The majority of tribal women are not actively participating in any Gram Panchayat-level decision-making processes.
- The reservation policy for women in PRIs in the study block is not well known by tribal women.
- The majority of respondents have not yet participated actively in any political event sponsored by a political party.
- The majority of the study's indigenous women only participate in the Panchayat Elections to cast their ballots.

Concluding Observations

The current researchPaper, Participation of Tribal Women in Panchayati Raj Institutions: A Study on Tehatta-1 Block in the District of Malda, West Bengal where one hundred women participated in the study.Their low participation in Panchayati Raj Institutions is clearly caused by a number of factors, including illiteracy, poverty, traditional family values, and social patterns, a male-dominated society, etc. Despite all of these obstacles, I observed a continuous rise in the proportion of women working for local governments and the Panchayati Raj system during my field research. It is encouraging for the research areas since I think very few tribal women actively participated in the panchayat meetings. Everyone concurred that women are more inspired to participate in development Programme now than they were in the past since they are experiencing PRIs more regularly.

If we wish to strengthen the tribal community, our first priority should be the empowerment of scheduled tribe women. Without the involvement of panchayat raj institutions, rural tribal women cannot be empowered. Tribal women should become knowledgeable about PRIs and have the skills needed for a healthy level of engagement. Since gaining independence, our government has introduced a number of initiatives to increase women's participation in PRIs. My modest recommendation is that the government, semi-government organizations, and other groups should step up more and try their best to implement more programs and policies while also encouraging women to ensure their participation in Panchayati Raj Institutions. If they do this, democracy will succeed in a greater way.

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The War Khasi Ethno-Medicinal Plants and the Sustainability in the Modern Ecological Crisis

*Benedict Kharlyngdoh

Abstract

Folk-herbal-knowledge derives from indigenous people's intimate relationship to mother earth. The responsibility of mankind for future generations is to leave a world rich in biodiversity with plants, animals, fungi and micro-organisms living interdependently and at the same time allowing each species to exist autonomously in a given ecosystem. Khasis' beliefs and practices provide methods that protected many plants and species and converted forest into living-store houses of ecology and biodiversity. The socio-cultural life of the Khasis in general and War Khasis in particular is manifested in their reverential love for nature which is deeply embedded in their philosophy, medicine and customary practices. Their forefathers have been able to take advantage of the benefits from different medicinal plants to cure all kinds of ailments and still available and valuable even today. However, the rural folk are gradually discarding their culture and folk traditions including the practice of herbal remedies. Further there has been a decline or extinction due to multifarious human activities coupled with natural calamities, deforestation, urbanisation and socio-economic technological advancement. Moreover, the younger generation is suffering from eco-cultural crisis as there is a rapid transition from subsistence economy to cash economy, lucrative behaviours of hybrid cultivation and commercial greed which is growing with greater intensity. Consequently, humans need to develop a world-view ofeco-spirituality blended with civic sense and sensitivity to the environment. Thus, the objective of the study is to understand the important roles medicinal plants play and also identify the degree of risks and pressures the medicinal plants encounter through human advancements. Since the study is descriptive and narrative in approach, respondents were purposively selected to collect primary data using Interview Schedule as tool.

Introduction

Biological diversity is the most important natural asset that constitutes an enduring resource for supporting the continued existence of human race. The whole environment, the animals, birds, rivers and hills, forests, flora and humans are being energised inter-dependently. The Khasis in general and the War Khasis in particular have close affinity with mother earth and the fecundity of nature. Their myths, folklores and stories, songs and drumming describe the vital relationship between humans and the cosmic forces. Since olden days, their ancestors have been able to exploit different native herbal plants to cure all kinds of ailments knowing full well that they have only curative power with no side effects or harmful post-effects. The Khasi families are ornamented with beautiful blossoms and greenery all overbut the populationgrowth andurbanisationcause threats to the medicinal plants especially those rare species.

Rationale of the Study

The Khasis and War Khasis have a reciprocal relationship with the environment and form an integral part of the ecosystem since ancient tradition. They derive their basic necessities for survival like food, fodder and herbal medicines from the forests and they have survived the remoteness of life, the diseases and the natural calamities. Nature qualified them with different herbal cures and in fact till date in every Khasi locality there would be some experts in herbal medicines. Meghalaya being one of the richest centers of biodiversity in India plays a significant role in the conservation of medical plants in the region. The present topic has been chosen, intrinsically, to exhibit the close affinity between the Khasis and the mother earth and how she in turn provides them with multi herbal remedies of their ailments.

Objectives of the Study

The study has the following objectives:

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1. To study the important roles medicinal plants play in the life of the Khasis in general and the War Khasis of Lad-Ryngud.
2. To identify the degree of risks and pressures the medicinal plants encounter through human advancements.

Review of Literature

Devi Nilakshee (2007) in her work entitled Inventorisation and Prospects of Sustainable Utilisation of Certain Common Medical Plants of N.E. Region noted that North East is an important storehouse of zingiberaceae family and their multi-indigenous usages. The rich properties and the curative powers of these wild gingers are like the divine magic. This establishes a closer bond between humans and nature.

Gurdon P.R.T. (1906) in his book The Khasis viewed that the Khasis originated from somewhere in Southeast Asia belonging to the Mon-Khmer people of Cambodia. He expressed that the features of the Khasis - the physical appearance, language and customs - bear great resemblance to those of the Khmer people.He noticed that the complexion of many of the women, especially those who live at Nongkrem, Laitlyngkot, Mawphlang etc., possess the pretty gipsy of the south of Europe.

Joshi and Joshi (1999) in his work Man and his environmentdescribed that nature is broadly comprised of three elements: abiotic, biotic and micro-organisms. These elements are interdependent on each other's existence. All living beings including human beings are living on water and air that is provided by the atmosphere. They always have close relationship between them.

M.J. Anthony (1995) in his work Landmark Judgment on Environmental Protection intensified that from the dawn of civilisation human and nature had an uneasy relationship. Human progress and expansion had always been at the cost of nature. Human population growth brings about destruction to mother earth and human development has disturbed the fragility of the environment pushing native species more and more towards extinction.

Mawrie Barnes L. (2001) in his work entitled the Khasis and their Natural Environment, a study of the eco-consciousness and eco-spirituality of the Khasis observed that most Khasi fables and folklore begin with the narration ka Sotti-juk, an era of peace and harmony, indicating that when human world and animal world spoke one language to highlight the harmonious relationship existed between the human and other living components of the earth.

H.O. Mawrie, (1981) in his book The Khasi Milieu emphasised that physical world has been a great teacher and human beings cannot exist separating from it. It provided practical knowledge for existence, medicine for diseases and served as the natural clock of seasonal rotation of days and months. The author expresses that a strong sense of community existing in Khasi society is imbibing from the mother earth.

Mohanty (1998) in his work Environment and Development: Search for an alternative paradigm, in Sociology of Environment stated that the natural environment has immediate impact on human beings. He is of the opinion that the environment is ofthree fold: the social, the cultural and the natural environment. He further elaborates that sociologists are concerned with the third environment. Nature has its own mechanism to restore injuries and the healing elements.

S. Jyrwa (2007) in his work Biodiversity Herbal Medicine stated that India is one of the most important sources of plant-based medicines that give rise to healing systems like Ayurveda, Sidha and Unani. He added that medical plants are also a major source of pharmaceutical formulations accounting for considerable earnings in foreign exchange. He further noted that Meghalaya produces important medical plants as great source of herbal knowledge practiced for thousands of years by the Khasiseven up to this day.

Shadap-Sen (1981) in her work the origin and early history of the Khasi-Synteng people emphasisedat length stature, behavioursand features of the Khasis. The Palaungs of Upper Burma are similar to the Khasis not only in language but also in dress. The author further noted that property descended through the youngest daughter, but the eldest brother or all the brothers jointly managed it. In fact, in religious ceremonies men played the major roles and the priests (ki lyngdoh) were generally male.

Shangpliang R. (2009) in her work 'Ecological Basis of Khasi Ethno-Cultural Traits' emphasised that Mei Ramew (Mother earth) embraces the land, the mountains, the rivers and the life that they contain. Shefurther stated that to the Khasis, the forests and wooded lands are abodes of the gods, spirits and sacred places of worship. Environment has always been an integral part and essential element in the way of life of the Khasis.

Methodology of the Study

The universe of study is Meghalaya emphasising on the importance of biodiversity, conservation and sustainable utilisation of medicinal plants among the Khasis in general and the War Khasis in particular, situated in northeast India. The present study is a descriptive one and narrative in approach. The data is collected through primary and secondary sources. Secondary sources of data collection are from books, journals, articles, souvenirs, magazines, and other relevant documents. For primary data, interview schedule is used especially the purposively selected respondents and other tools like camera, recorders and observation is also used for the study. The researcher has no control over the variables but only reports what has happened and narrates state of affairs as it exists at present. The study is aimed to understand the important roles herbal medicine plays in the life of the Khasis and the risks they encounter through human involvement in the modern ecological crisis.

Brief Sketch on the Khasis

The Khasi tribes and sub-tribes in general inhabit different districts of Meghalaya distributed in the following manner: the Khasi uplanders and the War Khasis, reside in the East Khasi Hills District. The Marams, the Nongtrais and the Lyngngams dwell in the West and South West Khasi Hills Districts. The Bhois and few Marams and War Khasis occupy the Ri-Bhoi District and the Pnars and the War Jaintias settle in the West and East Jaintia Hills Districts. The Khasis have a very vague origin and different scholars present dissimilar views. They have inhabited the present habitat for a considerable period but there is a fairly general belief among the scholars that they originally came from elsewhere.

Apparently, Gurdon (1906: 2-3) said that the colour of the Khasi skin may be described as being usually brown, varying from dark to a light yellowish brown, according to locality. The complexions of many women who live in villages surrounding the high plateau possess that pretty gipsy complexion that is seen in the south of Europe amongst the peasants. Shadap-Sen (1981:18-19) described that the Khasis, like other people of Indo-Chinese origin, are addicted to gambling; they are straight forward and honest and are a powerful athletic race of men. Men wear a sleeveless coat or jymphong, a garment leaving the neck and arms bare, with a fringe at the bottom, and with a row of tassels across the chest; it is still worn in the traditional dances. Women wear a garment called *ka jympien,* a piece of cloth worn round the body and fastened at the loins with a kind of cloth belt which hangs down from the waist to the knee or a little above it. These above typical appearances are not prominently noticeable among the modern Khasis tribes and sub-tribes may be due to changes of food-habits, work-culture and perhaps due to intermarriages and other racial elements.

Filial Relationship of the Khasis to Nature

The Khasis, like other indigenous tribes of Northeast India, are dependent on nature for everything and reverentially call nature as *Mei Ramew* (Mother earth). This can be observed in the works of different scholars like the work of Shangpliang (2009:220) who emphasized that *Mei Ramew* embraces the land, the mountains, the rivers and the life that they contain.Likewise, Mawrie Barnes L. (2001:122) opines that most Khasi fables and folklores begin with the narration *ka Sotti-juk,* an era of peace and harmony when human and animal world spoke one language to highlight their harmonious,egalitarian and communitarian relationship. Further, all Khasi festivals and dances are linked with nature figuratively expressing their deep sense of intimacy to the environment which is observed when Khasis enter the dancing pool bare-footed and plunge their toes into the ground while dancing, symbolically, to experience the maternal embrace of the earth. Exaggeratingly, they would slowdown the movement while dancing to feel her caresses and to have a heart-to-heart colloquy with the environment. Another instance regarding traditional wisdom is how intrinsically natural knowledge that intuitively instruct them for their daily life can be observed in how people calculated the timeof the day by calculating the number of times the cock crows and they read the sunset, even in rainy evening, when the gooseberry leaves are closed. They even know the annual quantity of rainfall or water level of a particular year by reading the marks left behind by the water-beetle (*ka ñiangriang*) along the sides of streams on rocks, stones or trees etc. In fact, they do not pluck vegetables, fruits, or even herbal plants at night lest they disturb their sleep. If it is so urgent, they would wake them up and request them, telling them their unforeseen needs.They always treat nature as equal to their own existence and it is handed down to their posterities through oral narrative.

Herbal Treatment among the Khasis and War Khasis

Herbal remedy is an age old practice for treating different types of diseases. India is one of the most important sources of plant-based medicines that give rise to healing systems like Ayurveda, *Sidha* and *Unani* S. Jyrwa (2007:8). Meghalaya is one of the states of North East India with a rich storehouse of medicinal plants due to the climatic condition that is conducive to adequate rainfall annually and thus, the environment has its own mechanism to restore itself. Herbal plants have been used as a natural mechanism to treat different diseases and sicknesses by the Khasis as wellsince ancient time.

Herbal knowledge today has become part of cultural pluralism at least in values and there are positive efforts to foster intercultural relationships globally. One of the most important benefits of herbal medicines is that they provide a simple and handy method of preparation and are locally available with no side effects or harmful post-effects. With people all over becoming more health conscious, searching for permanent cure or at least things that are not harmful to the body, the Khasis too have realised the significance of herbal medicines yet due to lack of documentations, records and specialised studies, reduces to the partial disappearance of the knowledge and practices.

Regardless ofmodern technological era with sophisticated machines and medical experts to diagnose, there are people who still prefer to be treated bytraditional healersnot only because of their sicknesses beingcuredbut is also affordable. These Khasi traditional healers have great knowledge of medicinal plants which they pick and choose from the forests and process them into curative remedies. Some are said to have special healing power curing diseases merely by blowing through their mouth (*Pyrsat*), uttering or chanting some words or even just blow with mere breath. The therapeutic effects that the herbal medicines have on the patients continue to mystify many people even the allopathic doctors.

The War Khasis, being the subgroup of the general Khasis, have the same medicinal plants as the Khasis; yet due to the change in the climatic conditions some medicinal plants may not grow there. Thus in the War area the main crops are fruits so too most of the medicinal products are from the fruits and fruit-trees. *Sohkwit* (Citrus) is very unique of War areas especially in Ryngud and Lad-Ryngud and adjacent villages. Traditionally, citrus was used to embalm the dead bodies before burial. They also mix the juice of *Sohkwit* and *Sohkynphor*- Carica papaya (en.m.wikipedia.org) and applied on the hair for killing lice and on the body to get rid of skin diseases. It is also used to heal wounds and cuts. People also used turmeric mixed with mustard oil to massage and to remove pain from the body. *Shkorblang* (plantago major) is also used for curing sores, stomach disorders, insect stings etc. Black turmeric (medicalnewstoday.com) is also used among the War Khasis to cure stomach aches and other related problems.

Another herbal plant is the *Ingblei* also called God's ginger (finger shape ginger) is typical of the Khasis and War Khasis among all the herbal plants, always available and accessible in time of emergency grown in almost every family. The parts used are rhizomes administered to animals and human as it digestive and also believed to cure heart disorders, hiccup, vomiting, piles, cough, fever, dysuria, diarrhea, diabetes, eye diseases, rheumatism etc. It is well protected, respected and deified and it is for this reasonthat it is called God's ginger. However as observed by Nilakshee, there are other different names used to refer to this Ginger among different localities such as *Ingsmoh* (Kaempferiafoetida), in another mango ginger or Curcuma amadaroxb or *Ingmakhir* (zingiberzerumbet (L) Smith) etc., (Devi Nilakshee, 2007:18). Similarly, H.O. Mawrie (1981:97) observes that nature is also like a big hospital on whose threshold all types of medicines are to be found which can heal all bodily ailments. In this way nature qualified them with different herbal cures and in fact till date, in every Khasi locality there would be some experts in herbal remedies.

Conservation and Sustainability

Biological diversity is used to describe the variability of living entities within each category in a given ecosystem. Thus Joshi and Joshi (1999:14-15) points out that the environment is broadly comprised of three elements: abiotic, biotic, and micro-organisms. Herbal gardens are the sources that conserve the environment where most of the medical plants require shady forests while other medicinal creepers need trees to climb. The Khasis throughout history have had concerns of conserving the environment and the biodiversity through different indigenous as well as modern approaches of which some are explained:

i) ‘Lawblei-Lawkyntang (Sacred Groves):

The fundamental principle of Khasi ethno-cultural life is the concept of sacredness of nature. The Khasis customarily still retain pockets of forest undisturbed to serve as Ki *‘Lawkyntang* (Sacred Groves), the old approach for protection of animals and conservation of forests for herbal plants.These sacred grooves have survived for thousands of years,with prohibition to trespass them, because of conservational ethics coupled with taboos and traditions. This concept prevents deforestation in major forms and leads to the formation of biosphere reserved. When kings and kingdoms were active, there were *‘Law Adong Hima* (king's groves) and the king was the custodian, then, there are *‘Law Adong Shnong* (village's groves) where the village headman is the custodian and *'Law Adong Kur* (clan's groves) where the maternal great uncle (*Knirangbah*) is the custodian of which some are being kept even today. These major landmarks of the Khasi indigenous approach in conservations of the forest wealth, the medicinal plants and the protection of wild animals indicates an intricate relation between man and nature.

ii) Controlled Exploitation:

Controlled exploitation is nothing but using nature without harming it or exploiting it without indiscriminately destroying anything extensively. The collection of plants for usage in different ailments without destroying the mother plant and thus the species are safe from extinction. If the mother plant is removed at least the young plants, or roots, or gingers, or bulbs or stems are left in the soil to enable the plant to survive, meaning fifty used fifty kept. In this way, we can constantly utilise the plants and at the same time conserve them. In many cases just for the leaves, the whole plantis uprooted that would take years for the plants to regain maturity.

iii) Flower Gardens and Nurseries:

The Khasis by nature are fond of flowers and they take pride in planting them in their gardens. Whenever they return from travelling, international or national, an extra baggage of flower seeds or seedlings or plants are said to accompany them back home. Thus Khasi houses are adorned with variety of flowers throughout the different seasons of the year. In this way conservation is propagated and what is more valuable in those flower gardens and nurseries is that most of those flower plants are medicinal plants containing various medicinal properties. This looks as an insignificant but surer way of conserving plant species and promoting the environment.

iv) Domestic Gardens:

When we speak of domestic gardens or household garden it gives us an insight of another wilder gardens in a natural habitat. The plants in a domestic garden are transported and planted selectively and nurturing in an accessible manner. Besides the flower gardens, the Khasis always have domestic gardens around their houses where perennial and non-perennial vegetation are planted. It is here that the most important medicinal plants are groomed including the Ingblei mentioned above and the produce are organic and healthy food. This shows Khasis' intimacy with nature who believe that nature is unbiased and infallible.

v) Botanical and Herbal Gardens:

Meghalaya has many advanced, registered and government funded botanical and herbal gardens such as Botanical garden at Baridua, Mawdiangdiang herbal garden, Asananggre herbal garden, Montfort School herbal garden (Tura), Public School herbal garden (Tura) etc.,(megforest.gov.in) which are ofgreat export potentials to national and international markets and a source of commercial sustainability. There are also herbal gardens considered inheritable property called the *'Law Dawai'* of which many Khasi individuals have inherited from their parents and the medicinal knowledge passed down from their forefathers and foremothers. They reflect the ancient indigenous touch and are semi-wild withold trees which help the medicinal creepers to climb on. There are certain aromatic medicinal plants growing only in particular forests, they cannot grow away from their natural habitat. Interestingly, the government and pharmaceutical companies have supported many registered gardens but the indigenous herbal gardens are hardly recognised. The government can bring about sustainability and stability by promoting banking system and government funds for seeds including rhizomes, corms, bulbs, tubers, cuttings, synthetic seeds and investments to the herbal gardens managed by individuals.

Inheritance of Folk-Herbal-Knowledge

Khasis have been practicing the folk-medicinal-knowledge by way of using the native medicinal plants from ancient days. The family herbal gardens are usually managed by the maternal uncle or the father or mother of the family who would instruct the formulae of the profession to any of their progenies who shows interest. The mode of transfer is done in a sacred manner because they considered healing as sacred and a gift from God. The transmission of folk herbal knowledge is often done just before the death of the expert which is why in many cases the handover remains incomplete when the tutor dies prematurely. The handing over of the herbal gardens was always delayed due to a couple of reasons: (a) The learner should be knowledgeable. (b) It must be done secretly and sacredly without disclosing to the public because the faith in traditional healers is significant for the healing.

Conclusion

In an era, marked by unprecedented changes of health hazard around the globe, a glimpse into the herbal-traditional wisdom and knowledge of the Khasis offers a sense of hope in sustaining the preservation not just the traditional knowledge but also conserving the environment that is under threat. Natural medicinal plants form an integral part of the ecosystem and promote the ecological balance. H.O. Mawrie (1981:97) summarised that a Khasi lives with nature and nature lives in him. Unfortunately, technological advancement, development and mass tourism have indiscriminately exploited and cornered indigenous species. However, the Khasis in general and War Khasis in particular continue to maintain a reciprocal relationship through different approaches in the process relying and protecting the environment. Further preservation of the indigenous knowledge regarding herbal medicines is observed in the fact that till date, in every Khasi locality there would be some experts or traditional healers.

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Vocational Education in North-East India: Status and Prospects

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Abstract

Vocational education in higher education institutionsexpanded after the National Skills Qualification Framework (NSQF) which was launched in 2014 by the University Grant Commission (UGC) nationwide. Concerning the North-East region, it has yet to be expanded as needed. North-East India is a significant region for tribal's habitation. Higher education is expanded in all the states of this region. Eighty-three universities have been established in eight states of the country's North-East region. The present study is an exploratory study with the objectives of presenting the status and exploring the prospects of vocational education in the North-east region. The findings' base is secondary data collected through universities's websites. The findings of this study indicated that only four central universities offer Bachelor's degree courses in Vocational Education (B.Voc.) courses in some specializations. It is also revealed that only one university offers Master's degree courses in Vocational Education (M.Voc.). There is a massive need and great scope for extension in vocational education degree courses in North-East Indian universities to address the region's demands and achieve the goal of NEP 2020 concerning the vocationalisation of education. This article highlights the status of vocational education, specifically in the central universities established in North-East India, and presents its' expansion prospects.

Introduction

Skill development has been a significant policy agenda of the Indian government in the past few years (Agrawal, 2014). There is much emphasis on promoting vocational education and training (VET) programs (Agrawal & Agrawal, 2017) in the country. The new education policy proposes revising and revamping all aspects of education, including the educational structure, regulations, and governance, to create a new system aligned with the aspirational goals of 21st-century students (Pathak, 2021). It envisages broad-based accessibility, multidisciplinary, holistic education with flexible curricula, creative combination of subjects, integration of vocational education, and multiple entries and exit points with appropriate certification (MHRD, 2020). The NEP 2020 has given importance to vocational education and teacher capacity development to boost learners' employability and vocational skills at all levels (Pathak, 2021). It recommended the synergy of vocational education with regular education in all educational institutions in a phased manner over the next decade (NCERT, n.d.). The NEP 2020 proposed…. "By 2025, at least 50% of learners shall have vocational exposure through school and higher education (MHRD, 2020).

Vocational Education

Vocational education is a specialized form of education that equips individuals with practical skills, knowledge, and competencies related to specific industries, trades, or occupations. Vocational education consists of practical courses through which one gains skills and experience directly linked to a career in the future (Kaushik, 2014). It can be viewed from different multi-layered practices: the hands-on training component and employment generation and sustainability (Kaushik, 2014). Unlike traditional academic education, which emphasizes theoretical knowledge, vocational education strongly emphasizes the development of practical skills and expertise. Agarwal (2014) studied the status of vocational education and training and reviewed the vocational training models of emerging economies. A comparative analysis of India, China, and Singapore concerning skill gaps and workforce has been done. It is revealed that there is a vast scope for generating a skilled workforce in the country and utilizing the 'demographic dividend.' Furthermore, Agrawal & Agrawal (2017) explored the status of the vocationally trained population in India. They used the data from a survey on employment and unemployment. They found that a large section of

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the population aged 15-59 had no formal training. They also revealed that the relative returns to vocational education are higher than general secondary education (Agrawal & Agrawal, 2017). The National Education Policy (NEP) 2020 envisions an inclusive and comprehensive education system that embraces vocational education as an integral part of holistic development.

Recommendations of NEP 2020 on Vocational Education

NEP 2020, as outlined by the Ministry of Human Resource Development (MHRD), introduces several significant initives to ensure universal access to quality holistic education, including vocational education, from preschool to Grade XII. One of the key principle emphasized in the NEP 2020 is the elimination of a rigid separartion between vocational and academic streams. Instead, it promotes a more integrated approach, aiming to provide students with exposure to at least one vocational course throughout their educaional journey. Further, the NEP advocated for the introduction of experiential vocational learning from Grdes 9 to 12 to facililitate practical learning experiences.Socially Useful Productive Work (SUPW) as a separate subject in secondary classes and vocational degree courses at higher education levels has recommended by the new policy (Shubhangi, 2020). Italso emphasizes the establishments of 'Skill Labs' within schools, along with the recruitment of sufficient teachers specializing in vocational subjects (MHRD, 2020).

The policy extends its focus on vocational education to Higher Education Institutions (HEIs), calling for the expansion of Bachelor of Vocation (B.Voc.) program. It also advocates for the creation of incubation centres within HEIs, fostering partnership with industries to enhance practical exposure and entrpreneurship skills. In order to facilitate flexibility and mobility between general and vocational education, the NEP introduces a credit-based framework, allowing students to transition seamlessly between the two streams. It also highlights the importance of aligning the National Higher Education Qualifications Framewok (NHEQF) with the National Skill Qualification Framework (NSQF), ensuring a coherent and comprehensive educational structure. To promote coordination and integration of vocational education, the NEP establishes the National Committee for Integration of Vocational Education (NCIVE), which will play a pivotal role in driving collaboration and synergy among stakeholders in the vocational education ecosystem (MHRD, 2020).

Vocational Education in Higher Education Institutions

It has been a long-felt necessity to align higher education with the emerging needs of the economy. The University Grants Commission (UGC) launched a scheme called' The National Skills Qualification Framework (NSQF) in February 2014 on skill development-based higher education as part of college/ university education, leading to Bachelor of Vocation (B.Voc.) and Master of Vocation (M.Voc.) degree with multiple exits. The curriculum is mapped with the job role descriptions as per NSQF. The NSQF levels, graded from one to ten, are defined in terms of learning outcomes that the learner must possess regardless of whether they are obtained through formal, non-formal, or informal learning. The NSQF indicated the different exit levels such as Certificate, Diploma, Advanced Diploma, and Degree courses.

The multiple entry and exit enable the learner to seek employment after any award level and join back as and when feasible to upgrade qualifications/skill competencies to move higher in the job profile or the higher education system (Claire & Heike, 2019). This flexible system provides the learner with an opportunity for vertical mobility to the second year of the B.Voc. degree program after one year diploma and the third year of the B.Voc. degree program after a two-year advanced diploma (Claire & Heike, 2019). The students may move to masters and research degree programmes mapped at NSQF Level 8-10. Levels of NSQF (5-10). The structure of these programsis aligned with the recommendation of National Education Policy 2020, as multiple entry and exit are the salient features.It has become the prime responsibility of higher education institutions to take initiatives in this direction after NEP 2020. Moreover, B.Voc. and M.Voc. are offered in some central and state universities nationwide. There is a need to know the status and prospects of vocational education in north-east region, as this region is different in various manner.

The North-east region of India, comprising eight states, is known for its rich cultural diversity and unique geographical characteristics. It is a significant region for tribal's habitations. This region has faced several challenges in terms of development, including limited access to quality education and employment opportunities. There needs to be adequate infrastructure for vocational education, including well-equipped training centers and modern facilities. Limited collaboration between educational institutions and industries is another challenge for the growth of vocational education in this region. Moreover, vocational education is considered a low-prestige course compared to traditional courses. The present article focuses on vocational education expansion in higher education. Eighty-three universities have been established in eight states of the country's North-East region. Table 1 presents the status-wise distribution of the universities in each state;

Table I: Status of Universities in North-East India

S. No.	States' Name	Central	State	Deemed	Private	Total
1.	Arunachal Pradesh	1	1	1	8	11
2.	Assam	2	18	1	8	29
3.	Manipur	3	4	0	5	12
4.	Meghalaya	1	0	0	9	10
5.	Mizoram	1	0	0	1	2
6.	Nagaland	1	0	0	4	5
7.	Sikkim	1	2	0	8	11
8.	Tripura	1	1	0	1	3
	Total	11	26	2	44	83

Central Universities of North-East India

There are fifty-four Central Universities in India; out of these, eleven has established in North-East India.

Table II: List of Central Universities in North-East India

S.No.	Name of the University	State
1.	Rajiv Gandhi University	Arunachal Pradesh
2.	Assam University	Assam
3.	Tejpur University	Assam
4.	Manipur University	Manipur
5.	Central Agriculture University	Manipur
6.	National Sports University	Manipur
7.	North-Eastern Hill University	Meghalaya
8.	Mizoram University	Mizoram
9.	Nagaland University	Nagaland
10.	Sikkim University	Sikkim
11.	Tripura University	Tripura

To achive the goals of NEP 2020 with regard to vocational education in HEI's, there is need to explore the present status and find the prospects. The present study is conducted to find the answers to the following questions.

Research Questions

1. What is the status of Vocational Education in Central Universities of North-Eastern India?
2. What are the prospects of Vocational Education in Central Universities of North-Eastern India?

Objectives

1. To find out the status of Vocational Education in Central Universities of North-Eastern India.
2. To explore the prospects of Vocational Education in Central Universities of North-Eastern India.

Methodology

The descriptive method was used for the present study. Secondary Data was collected by exploring universities' websites.

Sampling

All the universities of North-east region of Indiawere taken as the population of the study. Further, all the central universities North-eastern Indiawere selected as the samples of the study.

Status of Vocational Education in the North-East Region of India

Regarding objective no. 1, i.e., to find out the status of Vocational Education in Central Universities of North-eastern India; table III is presented.

Table III: Status of Vocational Courses in Central Universities of North-East India

State	Name of the Central University	Available Vocational Courses
Assam	Assam University, Silchar	B.Voc. in • Food Processing • Farm Machinery & Power Technology
Manipur	Manipur University, Imphal	B.Voc. in • Food Processing & Quality Management • Retail Management and Foreign Trade • Tourism and Hospitality Management M.Voc. in • Entrepreneurship & Foreign Trade • Tourism & Hospitality Management
Mizoram	Mizoram University, Aizawl	B.Voc. in • Beekeeper • Interior Designing • Handloom Weaving
Tripura	Tripura University, Agartala	B.Voc. in • Film and Video Production • Rubber Technology

The investigator collected the above information from the central universities' websites of the northeast and found the status of vocational education courses. Two of eleven universities offer courses in specialized fields such as Agriculture and Sports (Central Agriculture University, Manipur, and National Sports Universities, Manipur). Other universities offer traditional, professional, and vocational courses in various disciplines. Regarding Vocational courses, Bachelor of Vocation (B.Voc.) isoffered in four central universities out of ninein their respective states, i.e., Assam, Manipur, Mizoram, and Tripura. A single university, Manipur University, Imphal, offers Master's level Vocational Courses. Master of Vocation (M.Voc.) in Entrepreneurship & Foreign Trade and Tourism & Hospitality Management is offered by Manipur University, Imphal. Courses are offered based on available resources in their area, such as handloom weaving, beekeeping, and food processing. Handloom weaving is very common in the tribal culture so students may start with a specialized degree in such a course. Other courses are also very demanding in today's scenario.

There is much scope for offering Vocational courses in different specializations, such as Agriculture, Banking, Financial Services, Entrepreneurship, Horticulture, Public Health, Public Services, etc., in the same universities and introducing vocational courses in those universities that have yet to start. It is astonishing that only one university, i.e., Manipur University, offers a master's degree course in vocational education. There is much scope for each central university to offer Bachelor in Vocational Courses in different specializations and Master in Vocational courses to cater to the need of local and other states students.

Prospects of Vocational Education in the North-East Region of India

- **Skill Development Courses (SDC)**

Skills and knowledge drive any country's economic growth and social development (University Grant Commission, n.d.). According to National Policy on Skill Development, 2009, India aims to create 500 million skilled workers by 2022. Thus, the capacity and capability of skill development programs are needed. Skill development is a vital component of new initiatives by the universities to realize the goals of NEP 2020. Various Dual education courses (out the campus and on campus) such as Master's and Bachelor in Business Administration, Engineering and Technology and Vocational Courses such as Master of Vocation, Bachelor of Vocation, and Diploma of Vocation must be launched in the universities where have not started yet. A limited number of courses and universities offer skill development courses in the Northeast region. There is a great scope to work in this area.

- **Short-Term Programs (STP)**

There is much scope to start STPs as it has yet to start. These courses included an essential feature, i.e., internship, so it is essential to collaborate with the related companies where students can get practice in specified skills. Some of the short-term programs such as Organic Farming, Hydrophonic Producer, Certificate in Music-Vocal, Certificate in Music-Instrumental, Phlebotomist Technician, Geriatrics, Blockchain Developer, Data entry operator, Data Scientist, Hardware Solution Designer, Multimedia Developer, Research Associate, Office Coordinator, Microfinance Associate, Tally Assistant, House Keeping Executive, Food and, Beverage Server, Sales Executive, Multi Cuisine (Cook), etc must be offered by central universities in north-east region.

- **Apprenticeship Embedded Degree Programs (AEDP)**

Apprenticeship/Internship is considered the most efficient and promising form of structured training for providing exposure to the natural working environment. Apprenticeships/Internships enable students to learn new skills through hands-on work and mentorship. Students get practical knowledge while working in organizations. They can earn a good amount of money from the organization where they get training. These courses may start in dual mode (online and offline). Online courses are more coinvent concerning pace, schedule, and location. Mizoram University has started AEDP courses such as a Diploma in Computer Applications; a Diploma in Operations; a Bachelor of Commerce in e-accounting and e-commerce, and a BBA in e-business. There is an excellent opportunity to use online mode to start AEBD in other central universities in the northeast region.

- **Establishment of Entrepreneurship Development Centres (EDC)**

Entrepreneurship is considered one of the global engines of growth and development. There is a need to generate interest in entrepreneurship in the northeast region. Pradhan Mantri YUVA Yojana is the flagship scheme of the Ministry of Skill Development and Entrepreneurship (MSDE) on entrepreneurship education and training. Two universities in North-East Region have established Entrepreneurship Development Centres (EDC) intending to catalyze and advance entrepreneurship and skill development activities. Rajiv Gandhi University, Arunachal Pradesh, established the Centre for Entrepreneurship in May 2015. Various programs such as National Faculty Development Programme. Manipur University, Imphal, established the Centre for Entrepreneurship and Skill Development under the School of Social Sciences in 2014. There is a great possibility to establish Entrepreneurship Development Centers (EDC) in othercentral universities in the northeast region to build entrepreneurship capacity among youth.

- **Skill Development University (SDU)**

Skill development is a vital component of new initiatives to be taken by the government of India to realize the goals of NEP 2020. Recently, the first skill development university, namely Shri Vishwakarma University, is established in Haryana, the North part of the country, in line with this goal. There is a need to establish a skill development university in India's North-east region to fulfill this region's need.

Conclusion

NEP 2020 envisions an inclusive and comprehensive education system that embraces vocational education as an integral part of holistic development. Vocational and skill development courses are very essential in developing countries like India. It is next to impossible to create jobs for a large number of the youth population in our country. The country needed job creators instead of job seekers. They must develop skills in a specific area to start work and contribute to the country's economy. The findings of this study indicated that less than half of central universities are offering B.Voc. courses in a few specializations in North-East India. There is a need to introduce B.Voc. courses in each central university where it has yet to be started and increase the number of specializations in Vocational courses in every university. Findings also revealed that only one university offers Master's degree courses in Vocational Education (M.Voc.), which is insufficient. There is a need to offer more Master's degree courses by central universities to cater to the need of the students in the North-East region. There is a need to offer to start short-term programs, the Apprenticeship Embedded Degree Programs (AEDP) and the establishment of Entrepreneurship Development Centers (EDC) in the central universities.There is much scope to establish a 'Skill Development University' in the Northeast region of India as such a specialized university has yet to be established. There is a need and great scope for expansion in vocational education in North-East India to address the need of the students and achieve the goal of NEP 2020 concerning Vocational Education. There is a need to spread awareness towards Skill development and entrepreneurship among the youth and to expand vocational education across the region.

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A Study on the Efficacy of Audio Based Tactile Model (ABT) in learning the Excretory System of the Human Body among Children with Visual Impairment

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Abstract

The study aimed to design, adapt and develop an adaptive and modified teaching-learning material, namely the Audio-Based Tactile (ABT) Model, to teach the Human Organ System (Excretory System) to students with visual impairments. Thirty students with visual impairments studying in Std. VII were selected for the study using stratified random sampling method. The Audio-Based Tactile (ABT) Model was prepared using a bilingual method (English and Tamil language) with a detailed audio description of the Excretory System. The study was conducted for a period of 2 months. A tool was developed and standardized to conduct pre and post tests to determine the impact of the Audio-Based Tactile (ABT) Model in learning the Excretory System. The t-test results for pre and post test evaluation was significant at 0.05, revealing that the Audio-Based Tactile (ABT) Model had created an impact among the visually impaired student in learning about the Excretory System. Traditionally, Science was one of the major and compulsory subjects for students, but it is considered a complex subject, and complicated for students with difficulties in vision. The Audio Based Tactile model enhanced the concept through joyful learning and curiosity.

Introduction

Science is one of the compulsory subjects for the secondary level students. Traditional science teaching chiefly depends on visual instruction and has complex and abstract concepts. This makes it challenging for students with visual impairment in the classrooms to learn the concepts. Teachers mostly use demonstration methods while teaching science concepts that an average student can easily follow. However, students with visual impairment who do not have visual interface difficulties understand a concept. They need to learn using other senses, such as tactile and hearing. Classrooms and instruction should be accommodated for better science teaching to Visually Impaired students.

Due to limitations in vision, students with visual impairments have limited control over the environment resulting in a lack of confidence to learn a concept. Thus, because of its abstract nature, students experience more difficulty in understanding biology concepts. In addition, the limitations in learning sources and props are some of the significant challenges to improving academic achievements (Arlinwibowo & Retnawati, 2015). However, Students can learn science concepts with curiosity and due understanding if teachers apply the suitable teaching model with auditory, tactile, and kinesthetic learning mediums. Accessibility of the learning materials is required to improve the students' learning experiences. Well-arranged practical activities in teaching science concepts raise curiosity and promote student engagement. In addition, activity-based learning helps enhance a range of competencies, scientific knowledge, and conceptual understanding. Like their peer groups, students with visual impairments have the same cognitive abilities and can master higher-order science concepts as well if provided with a need-based learning experience.

Theoretical Framework

Moreland (2014) investigated how the science teaching incorporate the attitudes, perceptions, and knowledge of accessible technology in the classroom. The result reflected that the teacher needs intensive training in usage of Accessible technology. The effectiveness of the instructional design in teaching science concepts to students with visual impairments was examined by Kizilaslan (2019). The findings suggested that the student's academic performance had increased and that the instructional design positively affected

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teaching science concepts. Alves *et al.* (2009) suggested a need for infrastructure and pedagogical support to educate students with blindness and low vision.

Arlinwibowo & Retnawati (2015) developed a valid, practical, and effective audio and tactile based teaching material to improve learning motivation and level of achievement among students with visual impairment. Planes, puzzles, geoboard, tactile rules, and tactile protectors supported the audio-tactile material. The qualitative analysis revealed that the Audio tactile teaching materials positively impacted the students' learning achievements. In another study, Suhin & Yorek (2009) identified that students with visual impairment need accommodation in the instruction and environmental in learning science concepts. For example, tactual and audio-based instructions can be more effective for students with visual impairments. Also, it is equally essential to design simple teaching materials and activities by focusing only on a few core areas while teaching any concept (Kizilaslan *et al.*, 2020). So, an attempt needs to be made in this direction to eliminate this vital issue. Hence the study focuses on these key issues with the following objective.

Objectives

The study aimed to efficacy of Audio-Based Tactile (ABT) Model in developing the knowledge and understanding of the Excretory System among students with visual impairments with respect to Age group, Gender, Socio economic status, and Type of condition.

Methodology

The present study was conducted in school providing services to the visually impaired students. The schools were clustered in Chennai. The investigator spent a considerable time to select the sample of the study before administering the tool. The investigator used stratified random sampling method to select the sample. The sample consisted of 30 students (14 boys and 16 girls). Quasi-Experimental method was used in the present study. The independent variables were Age, Gender, Type of Impairment, and Socio-economic status, and the dependent variables were Audio-Based Tactile (ABT) Model used in teaching-learning the Excretory System. For measuring the efficacy level in learning the Excretory System in the science subject, the investigator conducted pre and post test. During the teaching-learning process, initially, the authors provided oral instruction about the internal organ system to the students. After that, the students were allowed to explore the Audio-Based Tactile (ABT) Model of the Excretory System. Each and every part of the model consists of buttons. Once the students explore the part and touch the button, the voice output on the related part will come out. This feature of the model allowed the students to overcome their challenges in understanding a diagram, and helpful to learn the concepts with curiosity. The scorning is based on individual responses. Qualitative and Quantitative analysis procedures were used.

Analysis Procedure: Independent t-test. An Independent t-test is done by grouping the independent variables.

Result

Table 1. Mean and SDs of learning Excretory System with respect to Age Group

Phases	Age Group				p
	12 years(N=14)		13 years(N=16)		
	Mean	SD	Mean	SD	
Pretest	13.80	1.52	13.73	1.33	0.13^{NS}
Posttest	22.20	1.32	21.67	1.79	0.93^{NS}

^{NS} = Not Significant

Learning the internal organ systems can be more impactful if the visual demonstration strategy is used for secondary-level students. However, students with visual impairments often struggle to learning the internal human organ system. Therefore, the authors have designed and adapted the Audio-Based Tactile (ABT) model to provide a maximum learning experience for the students. Students aged 12-13 years were allowed to learn the concept of the excretory system, and a t-test was conducted to measure the difference between pre and post test phases in knowledge acquisition on the excretory system. No significant difference was found between the students aged 12 years (M=22.20, SD=1.32) and 13 years (M=21.67, SD=1.79) after the teaching-learning process was carried out. The finding is supported by Andic *et al.* (2022), who reported that 3DMP (3D Modeling and Printing) improves students' knowledge about cells and their parts. In addition, the 3DMP was equally helpful in developing the student's abilities to view, enumerate, and describe a cell and its parts. Thus, it can be said that the Audio-Based Tactile (ABT) Model consists of an audio description, and the embossed diagram was equally impactful in learning the excretory system for students with different age groups.

Table 2. Mean and SDs of learning Excretory System with respect to Gender

Phases	Gender				*p*
	Boys (N=14)		Girls (N=16)		
	Mean	SD	Mean	SD	
Pretest	14.00	1.30	13.56	1.50	0.85^{NS}
Posttest	21.64	1.98	22.19	1.10	0.94^{NS}

^{NS} = Not Significant

There was no significant difference observed in learning the excretory system between the boys and girls with visual impairments. In spite of having the similar knowledge on the excretory system before teaching learning process carried out, both boys' (M=21.64, SD=1.98) and girls' (M=22.19, SD=1.10) knowledge and understanding were similar in the post test phase. The finding is supported by ReynagaPeña (2015), who developed texture-rich 3D and 2.5D tactile, didactic materials on concepts such as cells, tissues, fungi, viruses, bacteria, and other microscopic objects. The models were developed to make it accessible for students with blindness and visual impairment and for sighted students as well. Thus, the 3D models can be effectively used in inclusive schools, including multi-sensorial experimental activities to facilitate need-based teaching-learning.

Table 3. Mean and SDs of learning Excretory System with respect to Socio Economic status

Phases	Socio Economic Status				*p*
	Middle (N=13)		Low (N=17)		
	Mean	SD	Mean	SD	
Pretest	13.62	1.66	13.88	1.21	0.51^{NS}
Posttest	21.15	1.57	22.53	1.32	2.58*

*=Significant at 0.01 level, ^{NS} = Not Significant

There was no significant difference observed between students belonging to middle and low socio economic status before the instructional model was used to teach the excretory system to students with visual impairments. However, there was a significant difference observed among the two groups after teaching the concept using Audio-Based Tactile (ABT) Model. It indicates that students with low socio economic status learned better than the other group. Thus, it can be said that if additional input is given, they will be able to learn better. The finding is line with a previous study by Hansen *et al.* (2016), who designed and developed an accessible simulation-based science assessment task among residential students who are blind. The learning experience for the students was task based and technology enhanced. The findings suggested that students could perform the tasks with some success.

Table 4. Mean and SDs of learning Excretory System with respect to Type of Impairment

Phases	Type of Impairment				*p*
	Low Vision(N=19)		Total Blind(N=11)		
	Mean	SD	Mean	SD	
Pretest	13.63	1.57	14.00	1.09	1.02^{NS}
Posttest	22.16	1.16	21.55	2.11	0.69^{NS}

^{NS} = Not Significant

A comparison between students with low vision and total blindness was done to analyse the effectiveness of the Audio-Based Tactile (ABT) model in learning the excretory system. there was no significant difference observed between students with total blindness and low vision after the teaching-learning process was carried out. It indicates that the Audio-Based Tactile (ABT) Model was equally impactful for the students irrespective of their type of impairment.

Conclusion

Over the decades, students with visual impairments studying a variety of subjects such as science, math, law, social work, and computer science. However, there is a need to provide audio and tactile-based learning experiences to the students. Thus, the study aimed to design and adapt the Audio-Based Tactile (ABT) Model, implement, and analyze the effect of the model in learning the concepts of the excretory system in detail. The Model was developed in order to reduce discrimination and marginalization in a classroom to ensure effective teaching-learning. The results indicate that the students benefitted from the Audio-Based Tactile (ABT) Model and were able to develop their knowledge of the excretory system.

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Transformative Horizons: Unravelling the Potential of Teachers' Professional Development under the Revolutionary National Education Policy 2020

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Abstract

Education is a never-ending cycle of learning. After graduating and beginning a career, it will not stop. Career-minded people benefit from continuing education by consistently developing their abilities and elevating their professionalism at work. There is a growing understanding that teacher educators must actively pursue ongoing professional development throughout their careers to maintain their professional standing. A critical turning point in the development of educational reform in India may be seen in the National Education Policy (NEP) 2020. The Indian educational system is expected to undergo several significant modifications due to the new National Education Policy 2020 (NEP, 2020). The National Professional Standards for Teachers (NPST), which will govern all areas of teacher career management, professional development initiatives, pay increases, etc., are the goal of the NEP. Another crucial component of NEP for teachers is teacher audits and professional evaluations. In-depth research will be done on foreign pedagogical methods by NCERT, and the results will be included in the CPD programmes for NEP teacher training. A specified number of hours of continuous professional development, or CPD, are required for teachers' preparation under NEP 2020. Though NEP 2020 highlighted the encouragement of blended learning teacher training programmes (MOOCs) for continuing professional development (CPD) for educators, with a minimum requirement of 50 hours per year, there is uncertainty about how to raise the professional certification of current teachers to that of future teachers with a four-year education. Alternatively, a complex, resource-intensive, and potentially contentious process of upskilling will need to be implemented.This paper will attempt to emphasise the NEP 2020 objectives for teachers' Continuous Professional Development. It will analyse and critically reflect on the failures of various policies, commissions and committees to implement Continuous Professional Development of Teachers after independence.

Introduction

The instructor is the most critical person in a student's life. Being the facilitator and the caretaker, they have the power to alter circumstances. Teachers must inspire, motivate, and encourage their pupils to impact their lives positively. Today's classrooms and those from 50 years ago are considerably different. To provide the best service, professionals such as doctors, dentists, and teachers must keep up with new developments in their fields of study. Professional development for teachers is essential in the field of education worldwide to improve the quality of instruction. Once a teacher earns a teaching degree, their education cannot cease. Learning must be continuous and continued throughout a person's career. Their education, background, and skills must be current and applicable. Technology is responsible for the improvement of the educational system. Online education has taken the role of classroom instruction. Mobile screens replaced blackboards. Electronic records replaced notebooks.Teachers must continuously improve to keep up with the changes and prepare their students for the future. Today's educators need a variety of skills to succeed as teachers. They need in-depth subject knowledge, strong interpersonal abilities, keen comprehension and analysis, and practical expertise. To accomplish all of them, ongoing professional development is necessary. Effective professional development is ongoing, includes training, practice, and feedback, and offers enough time and follow-up support, according to the OECD's comparative study on teachers (OECD, 2005); Successful programmes support the growth of

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teachers' learning communities and involve teachers in activities similar to those they will do with their students. Finding strategies for instructors to share their knowledge and developing schools as learning organisations are two topics that are receiving increased attention.

Objectives of the study

1. To critically review the various pieces of research related to the Professional Development of Teachers.
2. To discuss policy perspectives and initiatives on the Professional Development of Teachers after the Independence.
3. To critically analyse various government policies, programmes and initiatives after independence for the Professional Development of Teachers.
4. To reflect and analyse Teachers' Continuous Professional Development as discussed in National Education Policy (NEP) 2020.
5. To explore the conceptual underpinnings and to examine strategies for Professional Development.

Methodology

The study is descriptive in nature. Content analysis has been done for the paper. The sources used in this paper are secondary source data.

Need & Importance of the Study

Teachers continue to study and learn throughout their careers. Aside from addressing the needs of kids with special needs and second languages, today's school systems must keep up with pedagogical and subject-area research, close the achievement gap, implement evidence-based practices, and meet acceptable yearly progress targets. Educators must keep up with the essential improvements in education. Professional growth can help with this. Teachers must continuously improve to keep up with the changes and prepare their students for the future. Today's educators need a variety of skills to succeed as teachers. They need in-depth subject knowledge, strong interpersonal abilities, keen comprehension and analysis, and practical expertise. To accomplish all of them, ongoing professional development is necessary. The comparative study of teachers conducted by the OECD (OECD, 2005) found that good professional development is ongoing, includes practice and feedback, and provides enough time and follow-up support; Successful programmes encourage the development of teachers' learning communities and engage teachers in tasks like to those their students will perform.The policies following independence and NEP 2020 for teacher professional development are discussed in this paper. Given the complex teaching, one-third of instructors quit their jobs after three years, and half quit after five (Ingersoll, 2003). Each year, even seasoned educators face difficult obstacles like shifting subject matter, new teaching strategies, technological advancements, altered regulations and procedures, and changing student learning requirements. When educators receive appropriate professional development, their abilities stay strong, positively impacting student learning. Following independence, numerous commissions and policies periodically appeared. However, policies or commissions mainly discussed or highlighted the need for teachers' professional development, but the implementation results were disappointing. Most programmes lack reflective practice, constructivism, as envisioned by (NCF 2005), has not been realised, lack of understanding of many bits of intelligencemanaging learning issues received a poor rating.

Critical Review of Related Studies

In educational environments, "teacher's professional development" refers to formalised activities such as initial training, induction programmes, in-service training, and ongoing professional development. (OECD, 2010)

The verbal and behavioural characteristics of the instructors primarily reflect their professional development. Its goal is to improve the teachers' pedagogical expertise and subject-matter knowledge. It is vital in enhancing training and learning (Quint, 2011). While carrying out their employment obligations, teachers encounter various issues and difficulties.Teacher educators need professional development to improve their work's calibre, standing and position among other professionals (Lunenberg, Dengerink & Korthagen, 2014). According to the British Council (2014), there are several issues with higher education in India, including poor teaching and learning, a lack of faculty, and inadequate faculty training. These issues are covered in the following two points: issues with teaching and learning and faculty shortages.The central and state levels of India's essential educational planning criteria have veered off course; thus, getting them back on track is still a top priority for the country's present education officials (Chudgar, 2013). In-service professional learning of teachers is still severely lacking in India. Only 30% of teachers nationwide reported getting any in-service professional learning of teachers in the prior year, according to a DISE (District Information System for Education) survey performed in 2010-2011(Mehta, 2012). Furthermore, according to Mehta (2012), the results were primarily influenced by government schools; in contrast, the situation at private schools was worse, with only 1% to 2% of all teachers reporting any professional development in the preceding year.

Although in-service teacher education programmes were started in India as early as the 1960s, they are typically poorly structured and do not consider teachers' needs, which makes them a burden and ritual (Ramachandran, 2005). The Right to Education Act (RTE) may recommend several ways to equalise teacher education in theory and practice; however, if a shift does not occur in trying new models of professional teacher learning (Chudgar,2013; Singh, 2013). According to Rabindra Nath Tagore, a lamp can never light another until it keeps burning its flame. Bolitho and Padwad (2013) claim that there are insufficient high-quality teacher CPD programmes in India. Restructuring and Reorganisation of the Centrally sponsored Scheme on Teacher Education, a 2012 report, states that teachers in practice and teacher educators must constantly advance their academic and professional credentials.

Critical Analysis

Following independence, in-service teacher education was an essential topic of discussion for the policies, commissions, and committees. The commission recommended setting up refresher courses for teachers in schools and colleges to attend once every four or five years as a requirement for promotion in 1948-1949 when it gained independence from the *University Education Commission*. The commissions' thorough recommendations for professional improvement in in-service teacher preparation were unnoticed. *The Secondary Education Commission*, which met in 1952-1953, emphasised pre-service rather than in-service teacher preparation. The Secondary Education Commission, established in 1952-1953, was the first effort in India to establish a network of institutions or organisations providing in-service teacher training after independence. It outlined the procedures that universities that train teachers should adhere to. In reality, it did not take place. Additionally, the term "teachers' professional development" was condensed by this commission. *The Education Commission* (1966-1966) talked about various issues regarding teacher preparation.The establishment of "school complexes," where a nodal school would be in charge of all teacher's professional development who worked in the complex's schools, was encouraged by the Education Commission (1966-1966). The State Institutes of Education (SIEs) were established in several states to provide in-service training for teachers as per the recommendations of the Education Commission. Additionally, the commission avoided discussing professional development for higher education teachers. It focused on professional development for school teachers and how to get there. Every teacher should attend in-service training of a three-week duration once every five years, according to the "Teacher and Society" reports by the *National Commission of Teachers-I* (1983-1985). The commission also recommended that this training be linked to career advancement, which they failed to do. *The National Policy on Education from 1986 to 1992* emphasised hiring qualified teachers and providing ongoing professional development opportunities for them. Institutions for in-service teacher training were recognised, but professional development for teachers was not included. The policy had little impact on in-service teacher training *(NCFTE, 2009)*. The in-service training programmes were poorly planned and viewed as a process rather than an event. On the recommendation of *NPE 1986/92*, Crash course programmes were developed in 1987, but they did not have much success. In-service education programmes are poorly coordinated and monitored and are not carried out correctly. Lack of research to support improving in-service education *(Acharya Ramamurti Review Report, 1990)*. Programs for Continuous Professional Development should be implemented to improve teachers' overall competencies and commitment to their careers. Pre-service teacher training makes up the majority of teacher education programmes; there are almost no organised in-service training programmes and insufficient facilities for them *(POA, 1992)*. As opposed to the previous commission's emphasis on in-service teacher training, the *National Curriculum Framework of 2005* emphasised pre-service teacher education. Additionally, it puts various demands and expectations on the teacher, which both initial and ongoing teacher education must address. The *NCF 2005* was unable to showcase teachers' ongoing professional growth. It did not identify any programmes, techniques, or initiatives for in-service teacher training, nor did it address the needs of teachers through ongoing professional development and support. Most states' in-service training programmes for teachers are woefully underfunded and poorly run, and these programmes need to be expanded and significantly reformed to allow for greater flexibility *(National Knowledge Commission,* *2006-09).* In-service training has insufficient quantity, variable quality, out-of-date curricula, and poor management, according to the *NKC 2006-2009*. The majority of educators in this nation have never attended any in-service training. Most of the instructors in the nation have never taken an in-service course.Despite this, many DIETs are understaffed, demoralised, and unable to provide teachers with top-notch training. An important document from *2009 is the NCFTE*, which focuses on teachers' ongoing professional development. This framework has been important since NCFTE 2009 introduced the concept of "Continuous Professional Development" for in-service teachers for the first time. It emphasised every facet that *NCF 2005* had neglected to emphasise. Even though it highlighted many aspects of in-service teachers' continuous professional development, suggestions for in-service teacher training programmes were not followed when it came to execution. There should be room for innovations in teacher education, and preparations should be taken to turn a trainee into a genuine facilitator and collaborator. To build a complete programme for secondary school teachers' ongoing professional development, it is urgently necessary to reinforce CTEs, IASEs, and current institutional structures *(Justice Verma Commission, 2012)*. So, Therefore, it may be said that the NCFTE 2009 requirements for in-service teachers' continuous professional development were not entirely met.Justice Verma Commission (2012) raised awareness that despite numerous attempts, there is still a substantial supply-demand imbalance for in-service teacher training as a professional development tool. First Joint *Review Mission on RMSA, January 14-28, 2013:* Officials from the RMSA claimed that in some states, the DIETs and SCERTs, in particular, were unable to take on the in-service education of teachers in secondary schools since they were already fully committed to teaching elementary school teachers. The mission reiterates the Twelfth Five Year Plan's proposal to strengthen in-service teachers' continuous professional development (CPD) concerning teacher preparation. According to the interpretation above, *RMSA 2009* could alter secondary teacher training in a few ways, but it could not provide continuous professional growth for teachers. INSET programmes were created but typically did not offer follow-up assistance and used decontextualised content delivery and instructional strategies. The traditional institutional procedures for educating teachers have been rather formal and regulated *(NCERT, 2022)*. The *National Achievement Survey from 2017* and other research findings covered in NEP 2020 emphasised the necessity for CPD in light of the rising demand for high-quality education.

National Education Policy 2020 and Continuous Professional Development

Sensitising the various problems and reforms, the Indian educational system will be updated and modernised by implementing various broad reforms promised by National Education Policy 2020. The goals of NEP 2022 sounded quite promising for teachers' ongoing professional development. Some of the most gratifying modifications pertain to teachers and their CPD (CDP). Continuous Professional Development is a significant priority of NEP 2020 for teachers. The NEP 2020 emphasised the necessity for teachers, especially ECCE instructors, Secondary teachers, and Higher Education faculties, to engage in ongoing professional development. This policy covered the facilities necessary for ECCE instructors' first professional training and Continuous Professional Development the first time (CPD). Teachers will get ongoing professional development as instructed, encouraged, and supported in teaching basic literacy and numeracy skills. Teachers can share ideas and best practices thanks to the development of platforms, particularly online platforms. This strategy strongly emphasisedpromoting blended learning teacher training programmes (MOOCs), with at least 50 hours of required CPD for teachers and school administrators per year, directed by their interests.

By 2022, National Professional Standards for Teachers (NPST) will beformed, and NEP's Career Management and Progression CPD will be connected to all teachers' CPD (CMP). State governments might then adopt them and use them to decide on tenure, professional development initiatives, pay raises, promotions, and other teacher recognitions, among other areas of career management. Each higher education institution (HEI) must develop and include in its Institutional Development Plan a system of multiple performance assessment criteria for "tenure," or confirmed employment after probation, promotion, salary increases, recognitions, etc. These criteria should include peer and student evaluations, innovations in teaching and pedagogy, the calibre and impact of research, professional development activities, and other forms of service to the institution and community (IDP). College and university professors will continue to obtain in-service continuous professional development through current institutional structures and continuing initiatives. These will be considerably enhanced and developed to satisfy the demands of improved teaching-learning processes for good education. It will be encouraged to use technology platforms like SWAYAM/ DIKSHA to offer many teachers standardised training programmes quickly. The National Educational Technology Forum will aid technological projects that improve the teaching-learning and evaluation procedures (NETF). The following crucial long-term thrust areas for funding are identified in this policy: supporting teacher professional development and funding teacher education. NEP 2020, each teacher must complete a CPD of 50 hours that includes a mix of in-person, online, open, and distant learning activities.Guidelines for Teachers and Head Teachers 50 Hours of Continual Professional Development National Education Policy 2020 highlights the objectives, design of CPD, CPD opportunities, module development, continuous assessment during face-to-face workshops, follow-up and portfolio assessment, etc.

In-service solid training programmes are required under the policy for teachers, ensuring that they get continual support and chances to advance their skills throughout their careers. The need for cooperation between schools and teacher preparation programmes is also underlined. The NEP 2020 promises a thorough strategy for the ongoing professional development of Indian teachers. The strategy intends to elevate the stature of teachers and improve the general standard of education in the nation by supporting modular learning, interdisciplinary exposure, technological integration, peer cooperation, assessment, leadership development, and more.

Conclusion

NEP 2020, it is now more criticalto bring a qualitative change than ever for teachers and other concerned stakeholders to continue their professional development. National Education Policy 2020, teacher education should strongly emphasise continuous professional development (CPD). The CPD material will contain the most up-to-date pedagogies for teaching essential reading and math skills, as well as for formative and adaptive evaluation of learning outcomes, leadership and management skills, occupational skills, competency-based learning, etc. (NCERT, 2022).The NEP 2020 states, "Teachers shape the future of our children- and, consequently, the future of our nation," suggesting that teachers play the most critical role in nation-building by producing top-notch human resources in their classrooms.CPD is essential for changing teachers' attitudes and beliefs, affecting their practice and students' academic progress. We anticipate that the suggested steps in the NEP 2020 will help to re-evaluate the current CPD rules and practises. Additionally, teachers working in diverse educational settings (such as schools and higher education) will have improved access to CPD opportunities (i.e., government, government-aided, and self-financed).

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Attitude and concerns of B.Ed. Teacher Trainees towards inclusive education

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Abstract

The present study aimed to ascertain the attitude of B.Ed. teacher trainees regarding inclusive education. The study consisted of 100 B.Ed. teacher trainees who were choosed using purposive sampling technique. 50 samples were trainees who have completed their course and %0 samples were those who are yet to complete their course. It tried to compare the attitude of two types of samples. The study was undertaken as teacher training course is very essential for every teacher. Teacher plays a vital role in society. Teacher's competency and skill along with attitude towards his profession and students determines the future of many students. Here, the researcher felt the need to take a research study which will show theattitude of prospective teachers. Prospective teachers were taken as a sample because many of them will be the future teachers at different stages of education. Also, the present study tried to shed light on the attitude and concerns of prospective teachers regarding inclusive education. The result of the study indicated that B.Ed. Trainees from both the group did not show a favourable attitude towards inclusive education. Very few samples from both the groupshowed favourable attitude. The attitude of more number of trainees who have completed their course was inclined towards not favourable attitude. Whereas, from the sample group of trainees who are yet to complete their course, more number of trainees attitude is inclined towards moderately favourable attitude. Also there is no significant difference in attitude between two types of sample groups.

Introduction

Human Rights and security is the most indispensible need of human life. From times immemorial it has been found that in most part of the world, there is a section of marginalized people in the society. One of such marginalized group is differently-able people. It was more prominent in the past when differently-able people were not considered fit for living a normal life. They remained neglected in different sectors of human activities. One of such sector is education. But now as the time passed by there have been a lot of changes in the attitude towards those people. Differently-abled people enjoy equal rights and opportunities as the normal people in different sectors. In the field of education too, differently-able children are ensured equal rights and opportunities. The National Curriculum Framework for School Education (NCFSE, 2000), recommends on "Inclusive schools" for pupils with special needs for providing quality education to all learners. The Persons with Disabilities (Equal Opportunities, Protection of Rights and Full Participation) Act, 1995 is an act which deals with full participation of the Person with disabilities and their equality all over Asian and Pacific Region. Development of inclusive education has made possible for differently-able children to get education in the same classroom with normal children without feeling neglected. Inclusive education results in developing social interaction and inclusion of students thereby minimizing unfavourable stereotypes prevalent towards special needs students (Mohd Ali, *et al.,* 2006).

Implementation of inclusive education is not an easy task. It requires positive attitude towards differently-abled peoplefor proper functioning of the system. Teacher is an integral part of any education system that has to contribute a major role. Many a times it is seen that teachers shows positive attitude, while there is a section of teachers who do not support inclusive education concept. The attitude of pre-service secondary teachers is found to be positive towards inclusive education (Costello & Boyle, 2013). In contrast to that In-service and rural teachers did not showed much positive/ favourable attitude (Singh, Kumar, Singh, 2020). Many primary school teachers do not understand well what they can do for teaching in inclusive classroom finding it to be overworked and stressful while few tries their best to

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help the learners (Rachel, 2018). Sabella (2015) also revealed that teachers support the philosophy of inclusion but more suitable type of school for children with disabilities is special schools. Paramanik & Barman's (2018) study supported it as they found moderate attitude of secondary school teachers in their study. Difference in opinion and attitude may result due to various reasons. Teachers without training for work with special needs students display a low level of agreement for assistance and support at educational activities for special needs students (Schmidt & Vrhovnik, 2015). When young teachers are compared with older teachers and trained and experienced is compared with untrained and inexperienced, Young, trained and experienced teachers are found to be more positive (Sharma, 2020). It is also supported by another study in which it is found that teachers with personal experience with disable individuals had more positive attitude in comparison to peoplewith no experience (Pritchard, 2014). Perez, Cervera & Minguez (2021), also revealed that teachers' attitudes get influenced by the amount of training and contact of teachers with students with special educational needs. Pingle & Garg (2015) also supports in this line. In their experiment it is supported that in comparison to control group, experimental group gained awareness regarding inclusive education. Insufficiency in training, inadequate resources and administrative support are also the factors influencing perception of teachers towards inclusive education (Newton *et al.*, 2014; Gyimah, Ackah Jnr & Yarquah, 2010). Osero (2015), revealed in the study- lack of knowledge, indiscipline, heavy workload and negative attitude of teacher, that lack of facilities, low self-esteem of disabled learners contributes to the negativity of teachers towards inclusive education. Opinion and attitude of teachers also differs based on the type of disabilities. Middle School teachers felt that disability in learning, physical, visual, hearing, communication and health impaired can be educated in a general classroom setting whereas education of mentally impaired (cognitive disabilities/developmental delay), behavioral disordered and multi-disabled should not be done in general classrooms (Holley, 2017). Teachers showed higher positive attitudes on inclusion of students with 'orthopedic challenges' showing concern towards vision, speech, hearing impaired and pedagogic challenges (Sharma, Chari & Chunawala, 2017).

Objectives

The objectives of the study are as follows:

1. To examine the attitude of B.Ed. trainees who have completed their course, with regard to inclusive education.
2. To examine the attitude of B.Ed. trainees who are yet to complete their course, with regard to inclusive education.
3. To find out whether there exists differences in the attitude of B.Ed. trainees who have completed their course with those who are yet to complete their course.
4. To get a glimpse on the concerns of B.Ed. trainees towards Inclusive Education.

Null Hypothesis

H_{01}: There exists no significant difference between the attitudes of B. Ed. trainees towards inclusive education who have completed their course and who are yet to complete their course.

Need and significance of the study

Inclusive Education is a very recent concept developed in the field of education. Many a times it can be seen that people does not show desirable attitude towards the differently-able. In the field of education also it can be seen that some teachers think that for differently-able children, special education system is better in comparison to mainstream education system which is evident by the literature review done in this aspect. It might happen because of the number of the reasons like lack of knowledge and awareness on the part of the teacher. Since, teacher has to play a major role in the implementation of inclusive education successfully; it becomes appropriate for the teacher to build up positive attitude towards inclusion in education and differently-able students. Teacher trainees are the future teacher of the society. Different studies have been already conducted on the pre-service teachers and in-service teachers. But, no comparative study has been found between pre-service B.Ed. teacher trainees who have completed their course with those who are yet to complete the course. Therefore, in the present study it is aimed to find the attitude of B.Ed. Trainees regarding inclusive educationwhereby this research gap can be addressed.

Research design

Method

Researcher used Descriptive survey method for the present study.

Sample size and Sampling technique

The study has been conducted on 100 pre-service teachers, out of which 50 B.Ed. trainees from who have completed their course and 50 B.Ed. trainees who are yet to complete their course. To select the sample Purposive sampling technique has been used.

Tool for the study

Tool for the present study is self-constructed questionnaire which focuses on the Attitude of Pre-service B.Ed. trainees regarding inclusive education. It consisted of 30 statements containing two options such as- agree and disagree for each of the statements. For response-Agree, 1 point has been awarded and for response-Disagree, 0, i.e, no score has been awarded. Content validity has been checked by taking expert consultation after which it has been fixed that 27-30 points falls under favourable attitudecategory, 20-26 points falls under moderately favourableattitude categoryand below 20 points falls under not favourable attitude category. The pattern of scoring is shown below:

Points	Category
27-30 points	Favourable attitude
20-26 points	Moderately favourable
Below 20 points	Not favourable

Study Area

The study covered B.Ed. trainees from different B.Ed. colleges in Lower Assam area of the state of Assam, India.

Data Collection Procedure

The questionnaire was administered to the B.Ed. trainees.They were asked to read the items of the questionnaire, fill it upand return it back to the investigators.

Delimitation

1. Only pre-service teachers were included for the study.

Statistical tools for analysis of data

Chi-square method is used to compare the attitude between B.Ed. trainees who have completed their course and who are yet to complete their course.

Data Analysis

Objective 1 : To examine the attitude of B.Ed. trainees who have completed their course, with regard to inclusive education.

Table 1: Table showing the attitude of B.Ed. trainees who have completed their course

Points	Respondents	Percentage
Favourable attitude	4	8%
Moderately favourable	21	42%
Not favourable	25	50%

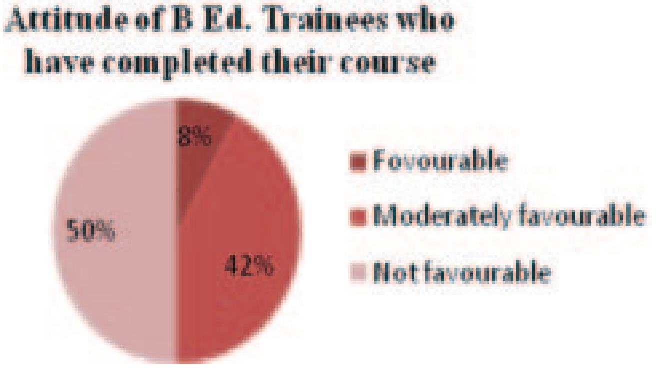

Figure 1. Showing the attitude of B.Ed. trainees who have completed their course

The above table and figure shows that very less (8%) course completed B.Ed. trainees showed favourable attitude towards inclusive education, 42% showed moderately favourable attitude, and half of the course completed B.Ed. trainees from the sample group i.e, 50% did not show favourable attitude.

Objective 2: To examine the attitude of B.Ed. trainees who are yet to complete their course, with regard to inclusive education.

Table 2: Table showing the attitude of ongoing course B.Ed. trainees

Points	Respondents	Percentage
Favourable attitude	7	14%
Moderately favourable	27	54%
Not favourable	16	32%

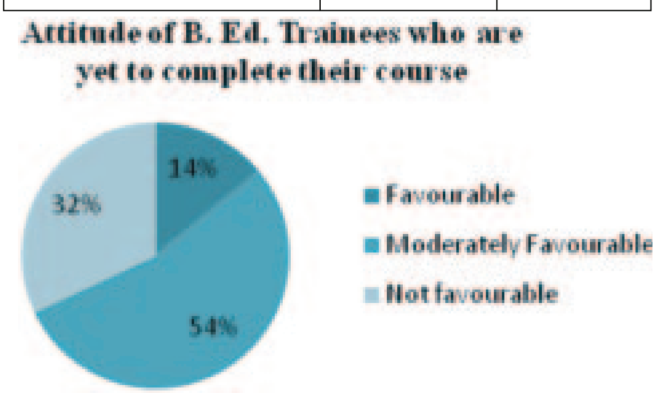

Figure 2. Showing the attitude of B. Ed trainees who are yet to complete their course

The above table and the figure shows that very less B.Ed. trainees (14%) who are yet to complete their courseshowed favourable attitude towards inclusive education. More than half of the sample i.e., 54% showed moderately favourable attitude, and 32% trainees did not show favourable attitude.

Objective 3: To find out whether there exists differences in the attitude of B.Ed. trainees who have completed their course with those who are yet to complete their course.

H_{01}: There exists no significant difference between the attitudes of B. Ed. trainees who have completed their course with those who are yet to complete their course.

Table 3: Table showing the comparison of attitude of two types of B.Ed. trainees

Variable	Type of students	N	Df	x^2	Critical value	Level of Significance	Remarks
Attitude of sample group towards Inclusive Education	B.Ed. trainees who have completed their course	50	2	1.89	9.21	0.01	Not significant
	Ongoing course B.Ed trainees	50					

The above table shows that the chi-square (x^2) value- 1.89 at df- 2 is less than the critical value- 9.21, at 0.01 level of significance, which indicates that it is not significant and hence we may accept the null hypothesis. It shows that there is no significant difference in attitude between B.Ed. trainees who have completed their course with those who are yet to complete their course.

Objective 4: To get a glimpse on the concerns of B.Ed. Trainees towards Inclusive Education.

The main concerns of B.Ed. trainees towards Inclusive Education were found to be:

Table 4: Showing the concerns of B.Ed. teacher trainees towards inclusive education

Concerns	Respondents
Lack of acceptance for differently-able students by normal students	81.4%
Difficulty to pay equal attention to all the students	57.7%
Increased workload	53.6%
More Stress	81.4%
May hamper the classroom activities	68%
Lack of appropriate knowledge and skills on the part of teachers	55.7%
May divert teachers attention to Special needs children only	79.4%
May disrupt the study of other normal students	66%

The above table shows that teacher trainees are concerned that differently-able students might not be accepted by normal students in inclusive education setting (81.4%). Inclusive education might make it difficult to give equal attention to all the students (57.7%). It will increase teachers' workload (53.6%) and stress (81.4%), it may hamper the classroom activities (68%).They also feel that they lack in proper knowledge and skills for inclusive education setting (55.7%). Inclusivity might also make the teachers attention diverted towards special needs children only (79.4%). It may also disrupt the study of normal students (66%).

Findings

Findings of the study are as follows:

1. A large portion (42%) of B.Ed. trainees who completed their course andmore than half of the trainees (54%) B.Ed. trainees who are still pursuing course have shown moderately favourable attitude towards inclusive education.
2. Half of the total of trainees who have completed their course have shown not favourable attitude towards inclusive education.
3. More number of trainees' attitude, who have completed their course was inclined towards not favourable attitude. Whereas, from the sample group of trainees who are yet to complete their course, more number of trainees attitude is inclined towards moderately favourable attitude.
4. Very less number of traineesfrom both the groups i.e., trainees who have completed their course and

those who are yet to complete their course did notshow a completely favourable attitude.

5. No significant difference was found in the attitude between the two groups i.e., trainees who have completed their course and those who are yet to complete their course.

6. Both the groups showed similar type of attitude towards inclusive education.

7. Main concerns of teacher trainees towards inclusive education were: Lack of acceptance of differently-able students, increased workload and stress, hamper in classroom activities and disruption to normal students, teachers' lack of proper knowledge and skills, inability to pay equal attention to all the students and diversion towards special needs children.

Educational Implications of the study

Teacher has to play a vital role in education system. It is the teachers who can bring out the best in any student. In case of inclusive education, favourable behaviour, attitude, competency on the part of teacher are of an utmost need for the better development of all the students. It is found through the present study that maximum number of pre-service teachers, both on-going course and passed out candidates showed moderately favourable attitude which means that there is some lacking in their attitude and understanding towards differently-abled students. Teacher trainees are the future teachers. Teachers must be well acquainted and well-versed with complexities that arise during the classroom teaching-learning process. So, from the very initial stage of teaching profession i.e, from training stage itself favourable attitude and competency should be developed among the teacher trainees. Teacher training courses should include within its curriculum practical work along with their theoretical course, content regarding inclusive education. In the teacher training curriculum, during the internship period pupil teachers should be sent to practice teaching in inclusive education setting too along with general classroom setting.

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उच्च माध्यमिक स्तर के वाणिज्य एवं विज्ञान वर्ग के छात्रों के मध्य सृजनात्मकता का तुलनात्मक अध्ययन

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सारांश

प्रस्तुत शोध अध्ययन में "उच्च स्तर पर अध्ययनरत विज्ञान तथा वाणिज्य वर्ग के विद्यार्थियों की सृजनात्मकता का तुलनात्मक अध्ययन" के मध्य सृजनात्मक चिंतन का अध्ययन करने के लिए सृजनात्मकता की विमा प्रवाहशीलता, विविधता तथा मौलिकता का अलग-अलग अध्ययन किया गया है। सृजनात्मकता का तुलनात्मक अध्ययन करने के लिए डॉक्टर वकार मेहंदी का सृजनात्मक चिंतन परीक्षण का प्रयोग किया गया है। प्रस्तुत शोध अध्ययन की समस्या प्रकृति को ध्यान में रखते हुए वर्णनात्मक अनुसंधान के लिए सर्वेक्षण विधि को प्रयोग में लाया गया है। जनसंख्या के तौर पर लखनऊ जिले में उच्च स्तर पर अध्यनरत 12वीं कक्षा के विज्ञान वर्ग एवं वाणिज्य वर्ग के विद्यार्थियों को जनसंख्या के रूप में लिया गया है। 75 वाणिज्य वर्ग के तथा 75 विज्ञान वर्ग के विद्यार्थियों को जनसंख्या के रूप में साधारण यादृच्छिक प्रतिचयन विधि से चयन किया गया है। प्रस्तुत शोध अध्ययन में अध्ययन से प्राप्त आंकड़ों के विश्लेषण के लिए मध्यमान, मानक विचलन तथा टी अनुपात का प्रयोग किया गया है। शोधकत्री ने अपने शोध अध्ययन से प्राप्त निष्कर्ष के आधार पर यह पाया कि उच्च माध्यमिक स्तर पर अध्ययनरत विज्ञान एवं वाणिज्य वर्ग के विद्यार्थियों बालक एवं बालिकाओं के मध्य सृजनात्मकता की विमा प्रवाहशीलता और विविधता में दोनों वर्गों के विद्यार्थियों की सृजनात्मकता में समानता है जबकि विज्ञान वर्ग तथा वाणिज्य वर्ग की सृजनात्मकता की विमा मौलिकता में असमानता पाई गई है।

21वीं सदी के इस युग में शिक्षा व्यवस्था की तुलना में शिक्षा के उद्देश्य और शिक्षण प्रक्रिया में लगातार और तेजी से परिवर्तन हो रहे हैं। प्राचीनकाल से लेकर आधुनिक युग में जो भी शिक्षा में परिवर्तन हुए हैं, यह परिवर्तन मनुष्य के मस्तिष्क की सृजनात्मकता का ही देन है। सृजनात्मकता मनुष्य के व्यक्तित्व का एक महत्वपूर्ण अंग है, किसी भी देश के राष्ट्र की उन्नति, प्रगति एवं उत्थान वहां पर निवास करने वाले व्यक्तियों की सृजनात्मकता एवं रचनात्मकता पर निर्भर करता है। शिक्षा द्वारा मानव का न केवल व्यक्तित्व का विकास होता है अपितु व्यक्ति इस योग्य बन जाता है कि वह सफलता के साथ अपना जीवन व्यतीत करते हुए अपने समाज, देश तथा राज्य के उत्थान करने में भी सहायता करता है। यह शोध वाणिज्य और विज्ञान के छात्रों के साहित्यिक रचनात्मकता, सृजनात्मकता के विभिन्न आयामों का पता लगाने के लिए किया गया है जिसके अंतर्गत विभिन्न सोच, विचार, समस्या समाधान और मौलिकता आदि को सम्मिलित किया गया है।

उच्च माध्यमिक स्तर के विज्ञान एवं वाणिज्य वर्ग के दो समूहों की अलग-अलग सोच-क्षमता और नवीन क्षमता को इस शोध के अंतर्गत सृजनात्मक विकास पर प्रकाश डाला गया है।

1. प्रस्तावना

सृजनात्मकता से तात्पर्य मुख्य रूप से किसी भी कार्य की मौलिकता और नवीनता से है। किसी भी समस्या को नए ढंग से समाधान करना ही सृजनात्मकता है। दूसरे शब्दों में हम कह सकते हैं कि सृजनात्मकता वह एक योग्यता है जिससे मनुष्य को किसी भी समस्या का समाधान के लिए नए ढंग से सोचने तथा समझने योग्य बनाता है तथा वह समाज में प्रचलित तथा रूढ़िवादिता से हटकर अपने कार्य में नवीनता लाता है।

क्रो एंड क्रो के अनुसार- "सृजनात्मकता मौलिक परिणाम को अभिव्यक्त करने की मानसिक प्रक्रिया है।"

सृजनात्मकता मनुष्य को समाज में एक योग्य और अलग पहचान दिलाती है। सृजनात्मकता प्रत्येक व्यक्ति में विद्यमान होती है, सिर्फ उसे सही समय में सही दिशा देने की आवश्यकता होती है। यह सृजनात्मकता व्यक्ति में किसी भी रूप में जैसे-संगीत, कला, कविता, लोक नृत्य, भाषा-दृश्य आदि रूप में विद्यमान होती है, और व्यक्ति अपनी भावनाओं को किसी भी रूप में व्यक्त कर अपने आप को सृजनात्मक बना सकता है। समकालीन शिक्षा-व्यवस्था में भी सृजनात्मकता को ही विकास का आधार बनाया गया है।

समकालीन शैक्षिक परिदृश्य में नवाचार और प्रगति की

* शोधकत्री शिक्षाशास्त्र श्री जगदीशप्रसाद झाबरमल टिंबरेवाला यूनिवर्सिटी राजस्थान विद्यानगरी चुरू चुडेला जिला-झुंझुनू, राजस्थान-333010

** प्रोफेसर शिक्षा संकाय श्री जगदीशप्रसाद झाबरमल टिंबरेवाला यूनिवर्सिटी राजस्थान विद्यानगरी चुरू चुडेला जिला-झुंझुनू, राजस्थान-333010

*** एसोसिएट प्रोफेसर शिक्षाशास्त्र विभाग, संत विनोबा पीजी कॉलेज, देवरिया, उत्तर प्रदेश-274001

आधार को वर्णित किया गया है। भारत सरकार के अंतर्गत सतत विकास लक्ष्य-4 जो शिक्षा की गुणवत्ता से संदर्भित है और जिसके अंतर्गत ज्ञान कौशल और दक्षता आदि का व्यक्तिगत विकास में सक्रिय भागीदारी लोगों के जीवन को बेहतर बनाने के लिए गुणवत्तापूर्ण शिक्षा सुनिश्चित करता है। भारत सरकार के राष्ट्रीय संकेतक उच्च माध्यमिक शिक्षा में सकल नामांकन का प्रगति तालिका निम्नवत है-

Year	Gross Enrolment Ratio
2015-16	48.32
2017-18	48.13
2019-20	51.42
2021-22	57.60

Source of Data: Progress Report 2023 (MOSPI)
प्रगति विवरण 2023 सांख्यिकी और कार्यक्रम कार्यान्वयन मंत्रालय भारत सरकार।

उपरोक्त सांख्यिकी तालिका यह स्पष्ट करती है कि उच्च माध्यमिक शिक्षा में ज्ञान कौशल एवं दक्षताएं आदि का सतत विकास अग्रसर है। 2015-16 एवं 2021-22 के तुलनात्मक अध्ययन से यह ज्ञात होता है कि सतत विकास लक्ष्य 4 में भी विद्यार्थियों की शिक्षा की गुणवत्ता पर विशेष ध्यान दिया गया है तथा गुणवत्ता दिन पर दिन वृद्धि कर रही है।

यह अध्ययन बारहवीं कक्षा के छात्र-छात्राओं की रचनात्मकता की पहल करता है। दोनों वर्ग वाणिज्य और विज्ञान में शैक्षणिक पाठ्यक्रम व्यवसाय के आधार पर भिन्न है। विज्ञान धारा वैज्ञानिक जांच, गणित और प्रौद्योगिकी पर जोर देती है जबकि वाणिज्य धारा मुख्य रूप से वित्त और अर्थशास्त्र पर केंद्रित है।

वाणिज्य और विज्ञान के छात्रों की रचनात्मक तुलना का निर्णय इस शोध के शैक्षिक प्रथा और नीति को कैसे प्रभावित करती है, सृजनात्मकता के दृष्टिकोण से किया गया है।

इस अध्ययन में वाणिज्य और विज्ञान के छात्रों के मध्य सृजनात्मक अनुसंधान वकार मेहंदी की शाब्दिक चिंतन परीक्षण विधि को मानकीकृत मापन के माध्यम से गुणात्मक आंकड़ों का विभिन्न आयामों पर नवीन दृष्टिकोण अपनाया गया है।

2. उद्देश्य

प्रस्तुत शोध अध्ययन में निम्नलिखित उद्देश्यों को लिया गया है-

1. उच्च माध्यमिक स्तर पर अध्यनरत विज्ञान एवं वाणिज्य वर्ग के विद्यार्थियों की सृजनात्मकता का तुलनात्मक अध्ययन करना।
2. उच्च माध्यमिक स्तर पर अध्यनरत विज्ञान एवं वाणिज्य वर्ग के विद्यार्थियों की सृजनात्मकता की विमा प्रवाह शीलता का तुलनात्मक अध्ययन करना।
3. उच्च माध्यमिक स्तर पर अध्यनरत विज्ञान एवं वाणिज्य वर्ग के विद्यार्थियों की सृजनात्मकता की विमा विविधता का तुलनात्मक अध्ययन करना।
4. उच्च माध्यमिक स्तर पर अध्यनरत विज्ञान एवं वाणिज्य वर्ग के विद्यार्थियों की सृजनात्मकता की विमा मौलिकता का तुलनात्मक अध्ययन करना।

3. परिकल्पना (H_0)

1. उच्च माध्यमिक स्तर पर अध्यनरत विज्ञान एवं वाणिज्य वर्ग के विद्यार्थियों की सृजनात्मकता में कोई सार्थक अंतर नहीं है।
2. उच्च माध्यमिक स्तर पर अध्यनरत विज्ञान एवं वाणिज्य वर्ग के विद्यार्थियों की सृजनात्मकता की विमा प्रवाहशीलता में कोई सार्थक अंतर नहीं है।
3. उच्च माध्यमिक स्तर पर अध्यनरत विज्ञान एवं वाणिज्य वर्ग के विद्यार्थियों की सृजनात्मकता की विमा विविधता में कोई सार्थक अंतर नहीं है।
4. उच्च माध्यमिक स्तर पर अध्यनरत विज्ञान एवं वाणिज्य वर्ग के विद्यार्थियों की सृजनात्मकता की विमा मौलिकता में कोई सार्थक अंतर नहीं है।

4. शोध अध्ययन का परिसीमांकन

प्रस्तुत शोध अध्ययन की निम्नलिखित परिसीमाएं हैं-

1. शोध अध्ययन के लिए लखनऊ जिला को लिया गया है।
2. शोध अध्ययन के लिए कक्षा 12वीं के विद्यार्थियों वाणिज्य एवं विज्ञान वर्ग को लिया गया है।
3. जनसंख्या के रूप में कक्षा 12वीं के विद्यार्थियों 75 वाणिज्य वर्ग एवं 75 विज्ञान वर्ग को लिया गया है।
4. उपकरण के रूप में प्रोफेसर बकर मेहंदी का शाब्दिक चिंतन परीक्षण का प्रयोग किया गया है।
5. सांख्यिकीय विधि में मध्यमान, मानक विचलन तथा टी-परीक्षण का प्रयोग किया गया है।

5. संबंधित साहित्य का अवलोकन

1. पासी, बी.के. (1972) ने सृजनात्मक तथा छात्रों की बुद्धि और उपलब्धियों में संबंध ज्ञात किया और अपने अध्ययन में यह पाया कि छात्रों की सृजनशीलता और बुद्धि के बीच सार्थक सह-संबंध प्राप्त हुआ।

2. शर्मा, श्वेता (2006) ने मूक-बधिर बालकों की सृजनात्मक और शैक्षिक उपलब्धि में संबंध का अध्ययन किया। इन्होंने निष्कर्ष में पाया कि मूक-बधिर बालकों की शैक्षिक उपलब्धि एवं सृजनात्मकता में कोई सार्थक अंतर नहीं है।
3. राय, नीरज (2013-14) ने संस्थागत मूक-बधिर विद्यार्थियों के मानसिक स्वास्थ्य एवं सृजनात्मक का अध्ययन में इन्होंने कक्षा 6 से 10 के संस्थागत मूक-बधिर विद्यार्थियों की सृजनात्मकता का तुलनात्मक अध्ययन किया। उन्होंने निष्कर्ष में पाया कि कक्षा 6,7,9,10 के संस्थागत मूक-बधिर विद्यार्थियों में विस्तारण नामक रचनात्मक योग्यता में अंतर नहीं है तथा कक्षा 8 के संस्थागत मूक-बधिर विद्यार्थियों में विस्तारण नामक सृजनात्मक योग्यता कक्षा 6 के विद्यार्थियों से अधिक है।

6. शोध प्रविधि

प्रस्तुत शोध अध्ययन का अवलोकन करते हुए वर्णनात्मक अनुसंधान के अंतर्गत यादृच्छिक सर्वेक्षण विधि का चयन किया गया है। प्रस्तुत शोध अध्ययन में लखनऊ जिले में अध्यनरत उच्च माध्यमिक स्तर में अध्यनरत विज्ञान एवं वाणिज्य वर्ग के विद्यार्थियों बालक एवं बालिकाओं को जनसंख्या के रूप में लिया गया है। 75 विज्ञान वर्ग के बालक एवं बालिकाएं एवं 75 वाणिज्य वर्ग के विद्यार्थियों बालक एवं बालिकाओं को साधारण यादृच्छिक प्रतिचयन विधि से चयन किया गया है। उपकरण के रूप में प्रोफेसर बकर मेहंदी का शाब्दिक सृजनात्मक चिंतन परीक्षण का प्रयोग किया गया है। शोध अध्ययन में आंकड़ों के विश्लेषण के लिए मध्यमान, मानक विचलन एवं टी-परीक्षण का प्रयोग किया गया है।

7. आंकड़ों का प्रस्तुतीकरण विश्लेषण एवं व्याख्या

उद्देश्य-1 उच्च माध्यमिक स्तर पर अध्यनरत विज्ञान एवं वाणिज्य वर्ग के विद्यार्थियों (बालक एवं बालिकाओं) की सृजनात्मक चिंतन का तुलनात्मक अध्ययन करना।

परिकल्पना-1 उच्च माध्यमिक स्तर पर अध्ययनरत विज्ञान एवं वाणिज्य वर्ग के विद्यार्थियों कि सृजनात्मक चिंतन में कोई सार्थक अंतर नहीं है।

सारणी-1: उच्च माध्यमिक स्तर पर अध्यनरत विज्ञान वर्ग तथा वाणिज्य वर्ग के विद्यार्थियों की सृजनात्मकता की विमा प्रवाहशीलता का मध्यमान, मानक विचलन और टी अनुपात का विवरण

Sr. No.	Group	No. of students (n)	Mean ($\bar{x}$)	Standard Deviation (SD)	Cal t	tab t	Level of Significance	Remarks Accept/Reject
1	Science Stream	75	39.60	14.00	0.53	1.98	0.05	Accept H_0
2	Commerce Stream	75	38.43	13.00				

सारणी (1) के अनुसार विज्ञान वर्ग के विद्यार्थियों का मध्यमान 39.60 और मानक विचलन का मान 14 है, जबकि वाणिज्य वर्ग के विद्यार्थियों के मध्यमान 38.43 और मानक विचलन 13 है। सारणी के विश्लेषण से यह स्पष्ट है कि उक्त मध्यमानों में अंतर के टी-अनुपात का मान 0.53 है, जो .05 सार्थकता स्तर पर तालिका मान 1.98 से कम है अतः शून्य परिकल्पना स्वीकृत की जाती है। दोनों मध्यमानों पर दृष्टिपात करने से पता चलता है कि माध्यमिक स्तर पर अध्ययनरत विज्ञान एवं वाणिज्य वर्ग के विद्यार्थियों की सृजनात्मकता की विमा प्रवाहशीलता में सार्थक अंतर नहीं है। अतः निष्कर्ष यह निकलता है कि उच्च माध्यमिक स्तर में अध्ययनरत विज्ञान वर्ग के तथा वाणिज्य वर्ग के सृजनात्मकता की विमा प्रवाहशीलता में समानता है।

उद्देश्य-2 उच्च माध्यमिक स्तर पर अध्ययनरत विज्ञान एवं वाणिज्य वर्ग के विद्यार्थियों की सृजनात्मकता की विमा विविधता में तुलनात्मक अध्ययन करना।

परिकल्पना-2 उच्च माध्यमिक स्तर पर अध्ययनरत विज्ञान एवं वाणिज्य वर्ग के विद्यार्थियों की सृजनात्मकता की विमा विविधता में कोई सार्थक अंतर नहीं है।

सारणी-2 : उच्च माध्यमिक स्तर पर अध्ययनरत विज्ञान एवं वाणिज्य वर्ग के विद्यार्थियों की सृजनात्मकता की विमा विविधता का मध्यमान, मानक विचलन और टी-अनुपात

Sr. No.	Group	No. of students (n)	Mean ($\bar{x}$)	Standard Deviation (SD)	Cal t	tab t	Level of Significance	Remarks Accept/Reject
1	Science Stream	75	29.32	10.00	0.83	1.98	0.05	Accept H_0
2	Commerce Stream	75	28.04	9.00				

सारणी संख्या-2 का अध्ययन करने से यह स्पष्ट होता है कि उच्च माध्यमिक स्तर पर अध्ययनरत विज्ञान वर्ग तथा वाणिज्य वर्ग के विद्यार्थियों की सृजनात्मकता की विमा विविधता का मध्यमान क्रमशः 29.32 वह 28.04 है एवं मानक विचलन क्रमशः 10 व 9 है। सारणी का अवलोकन करने से पता चलता है कि उक्त मध्यमान में अंतर के टी-अनुपात का मान 0.83 है जो 0.05 सार्थकता स्तर पर तालिका मान 1.98 से कम है अतः शून्य परिकल्पना स्वीकृत की जाती है। प्राप्त दोनों मध्यमानों पर दृष्टिपात करने से यह पता चलता है कि उच्च माध्यमिक स्तर पर अध्ययनरत विज्ञान एवं वाणिज्य वर्ग के विद्यार्थियों की सृजनात्मकता की विमा विविधता में कोई सार्थक अंतर नहीं है, अतः उच्च माध्यमिक स्तर के विज्ञान एवं वाणिज्य वर्ग के विद्यार्थियों की सृजनात्मकता की विमा विविधता में समानता है।

उद्देश्य-3 उच्च माध्यमिक स्तर में अध्ययनरत विज्ञान एवं वाणिज्य वर्ग के विद्यार्थियों की सृजनात्मकता की विमा मौलिकता का तुलनात्मक अध्ययन करना।

परिकल्पना-3 उच्च माध्यमिक स्तर पर अध्ययनरत विज्ञान वर्ग एवं वाणिज्य वर्ग के विद्यार्थियों की सृजनात्मकता की विमा मौलिकता में कोई सार्थक अंतर नहीं है।

सारणी-3: उच्च माध्यमिक स्तर पर अध्ययनरत विज्ञान वर्ग एवं वाणिज्य वर्ग के विद्यार्थियों (बालक एवं बालिकाओं) की सृजनात्मकता की विमा मौलिकता का माध्यमान, मानक विचलन और टी-अनुपात

Sr. No.	Group	No. of students (n)	Mean ($\overline{x}$)	Standard Deviation (SD)	t-value	tab t	Level of Significance	Remarks Accept/Reject
1	Science Stream	75	22.20	10.00	18.87	1.98	0.05	Reject H_0
2	Commerce Stream	75	89.00	29.00				

सारणी संख्या 3 को आलोकित करने से यह स्पष्ट होता है कि उच्च माध्यमिक स्तर पर अध्ययनरत विज्ञान एवं वाणिज्य वर्ग के विद्यार्थियों बालक एवं बालिकाओं की सृजनात्मकता की विमा मौलिकता का मध्यमान क्रमशः 22.2 व 89 है और मानक विचलन का मान क्रमशः 10 व 29 है। सारणी के विश्लेषण से यह स्पष्ट है कि उक्त मध्यमान में अंतर के टी-अनुपात का मान 18.87 है जो 0.05 सार्थकता स्तर पर तालिका मान 1.98 से अधिक है अतः शून्य परिकल्पना अस्वीकृत की जाती है। दोनों वर्गों के मध्यमान पर दृष्टिपात करने से स्पष्ट है कि उच्च माध्यमिक स्तर पर अध्ययनरत विज्ञान एवं वाणिज्य वर्ग के विद्यार्थियों (बालक एवं बालिकाओं) की सृजनात्मकता की विमा मौलिकता में सार्थक अंतर है। अतः यह स्पष्ट है कि विज्ञान के विद्यार्थियों की अपेक्षा वाणिज्य के विद्यार्थियों की मौलिकता उच्च है।

8. निष्कर्ष

उच्च माध्यमिक स्तर में अध्ययनरत विज्ञान एवं वाणिज्य वर्ग के विद्यार्थियों के सृजनात्मकता की विमा प्रवाहशीलता एवं विविधता में समानता है और विज्ञान वर्ग एवं वाणिज्य वर्ग के विद्यार्थियों की सृजनात्मकता की विमा मौलिकता मे असमानता देखने को मिलती है। इस शोध अध्ययन में सृजनात्मकता के विश्लेषण बहुमुखी प्रकृति पर प्रकाश डाला है। विभिन्न सैद्धांतिक रूपरेखाओं, अनुभवजन्य अध्ययनों और व्यावहारिक अनुप्रयोगों की गहन खोज के माध्यम से, हमने सृजनात्मकता को प्रभावित करने वाले कारकों, इसमें शामिल प्रक्रियाओं और विभिन्न डोमेन में इसके निहितार्थों में मूल्यवान अंतर्दृष्टि प्राप्त की है।

हमारी जांच से पता चला है कि सृजनात्मकता एक अखंड अवधारणा नहीं है, बल्कि संज्ञानात्मक, भावनात्मक और पर्यावरणीय कारकों की एक गतिशील परस्पर क्रिया है। यह व्यक्तिगत गुणों से प्रभावित होता है, जैसे अनुभव के प्रति खुलापन, साथ ही संगठनात्मक संस्कृति और नेतृत्व सहित प्रासंगिक कारक। इसके अलावा, सृजनात्मकता केवल कला तक ही सीमित नहीं है, बल्कि व्यवसाय, विज्ञान, वाणिज्य और प्रौद्योगिकी जैसे क्षेत्रों तक फैली हुई है, जहां नवीन सोच और समस्या-समाधान महत्वपूर्ण हैं।

हालाँकि, सृजनात्मकता को और उच्च स्तर पर समझने और मापने में चुनौतियाँ बनी हुई हैं। भविष्य के अनुसंधान को इन चुनौतियों का पता लगाना जारी रखना चाहिए और रचनात्मकता का आकलन करने के लिए अधिक व्यापक और संदर्भ-विशिष्ट ढांचे विकसित करना चाहिए। इसके अतिरिक्त, उभरती प्रौद्योगिकियों और अंतःविषय दृष्टिकोणों का एकीकरण रचनात्मकता की हमारी समझ को आगे बढ़ाने के लिए नए रास्ते प्रदान कर सकता है।

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A Multi-dimensional Analysis of Social Cognition: Enhancing The Information Capabilities of Students

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Abstract

Social cognition refers to the many psychological mechanisms that allow people to benefit from belonging to a social group. Social cognition depends on the different social cues that help us learn about the outside world. Risk indicators include facial reactions like disgust and dread and eye gaze direction, which shows where attractive things are to be discovered. These signals are essential for a baby's development. For instance, the phenomenon known as "social reference" describes how young children decide whether or not to approach a novel object based on their mothers' facial expressions. We can pick up a lot just by watching other people. A large portion of this signalling appears to be carried out automatically and subconsciously by both the transmitter and the receiver. By watching how another person reacts to a stimulus when unaware of it, we can learn to dread it. However, Learning through instruction instead of observation does not generalise to circumstances in which the stimulus is offered subliminally, suggesting that such learning may depend on awareness of the stimuli. The paper suggests that this increased ability to gain from cultural learning, which appears to be unique to the human race, was made possible by recognising and learning from instructions rather than only from observation.

Introduction

People are social beings. We continually engage with those around us, whether working together, vying for attention, or just going about our daily activities. We need to comprehend and anticipate the behaviour of these other people in order for these encounters to be successful. Typically, we think of thoughts-beliefs, wants, and intentions-as driving forces behind actions. The complex set of mental processes that underlie social stimuli perception, processing, interpretation, and response is known as social cognition. These skills work together to enable the growth of appropriate social competence and adaptation. From birth through adulthood, social cognition develops slowly. The foundation of our species' most impressive achievements is, in one way or another, our capacity for mutual understanding. Due to how prevalent and fluidly they are used, our social skills might be taken for granted. However, it is impressive how expertly we move through the social sphere.

'Cognition' refers to the many different processes by which creatures understand and make sense of the world. The term does much the same work as was previously done by the term 'information processing' and is strongly influenced by developments in computing beginning in the 1940s. Perception, attention, memory and action planning are examples of cognitive processes. 'Social cognition aims to provide mechanistic, process-oriented explanations of complex social phenomena' (Winkielman & Schooler, 2011). In this paper, the researcher wants to consider whether there are aspects of cognition, specifically social and specifically human.

Concept of Social Cognition

Social psychology's subfield of social cognition examines how individuals gather, organise, and use knowledge about others and social contexts. It focuses on how cognitive processes affect how we interact with others. Our thoughts, feelings, and interactions with the world significantly impact how we perceive others. What exactly is social cognition, according to psychologists? There is no definition, although many experts agree that several common elements are crucial. In social cognition, there are:

- The methods by which we perceive others and how we know the people in our immediate environment.
- Examining the mental operations necessary for recognising, recalling, considering, and caring for the needs of others in our social environment.

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- The motivations behind our attention to certain social information, how it is retained in memory, and how it is applied in social interactions.

Social cognition is a way to investigate any subject with social psychology, not only a subfield within social psychology. From a social-cognitive approach, researchers can investigate a range of topics, including individual perception, stereotypes, self-concept, discrimination, decision-making, and other areas. In childhood and adolescence, social cognition develops. Children mature and become more conscious of their own emotions, thoughts, and motivations, as well as those of others.

The work of psychologist Jean Piaget is at the centre of one of the most well-known theories that look at how social cognition develops. Piaget suggested that a child's cognitive development passes through several stages (Barrouillet, 2015).

- Children are pretty egocentric in their early phases of development. They struggle to consider how others see the world because they only see it from their point of view.
- As kids age, they are better at taking other people's perspectives and can better consider how and why others behave in social situations.

Historical Development of Social Cognition

The history we have succinctly outlined demonstrated that social psychology is a dynamic, fascinating field that produces novel ideas and insights on numerous fronts. However, some fresh developments started to appear by the middle of the 1970s. Numerous new theoretical stances on cognitive functioning were developed due to the "revolution" in cognitive psychology. In addition, cognitive psychologists have created fresh methods for observing and analysing those processes in detail. Some social psychologists gained fresh perspectives from these theoretical concepts on issues that had long dominated social psychology (underlining the cognitive processes, which is close to fundamental to the theories we have just discussed). Additionally, the novel methodological approaches created in that cognitive work offered helpful approaches for empirically assessing them.

Priming

Higgins, Rholes, and Jones demonstrated how the introduction of certain trait concepts in one task can affect how people understand ambiguous information that is important to a particular trait in a completely unrelated task that follows (Tory Higgins *et al.,* 1977). Semantic priming as a concept and the models that explain it are both products of cognitive psychology (Collins & Loftus, 1975; Collins & Quillian, 1969; Quillian, 1967). In fact, these cognitive work extensions included significant differences. Studies on social cognitive priming often concentrated on effects that persisted longer than those on cognitive studies and examined priming effects using more intricate target stimuli (e.g., behavioural descriptions). Cognitive research, on the other hand, looked at the effects on straightforward semantic notions. However, similar associative mechanisms were used to model and explain priming in both domains, with the social cognitive models essentially derived from earlier cognitive ones.

Cognitive Structures

Concepts are mental representations or cognitive constructs that relate to a specific content domain, such as the qualities utilised by (Tory Higgins *et al.*, 1977). Cantor and Mischel showed that memory for personality traits is organised with prototypic representations of the traits' various domains (Cantor & Mischel, 1977). Rosch and her colleagues demonstrated that categories have a hierarchical structure in their cognitive research on item categorisation, with broad, superordinate categories (for example, furniture) containing subtypes (for example, chairs, tables), which in turn can have subtypes (easy chair, dining room chair) (Rosch *et al.*, 1976). Based on the findings of Rosch, Cantor, and Mischel claimed that prototypic representations are frequently stored in hierarchies, progressively replacing each relatively low level in a pyramid with higher-level representations (Cantor & Mischel, 1979). Brewer, Dull, and Lui documented concurrent effects in many fields (Brewer *et al.*, 1981). They suggested that stereotypes are hierarchical memory structures capable of containing various degrees of generality. For instance, the "old folks" stereotype comprises grandmother types, senior citizens, and elder statesmen.

Self-Structures

Academic writings on the nature of the 'self' dates back to a time long before psychology was identified as a field of study. Numerous publications have reported various ways to gauge one's self-concept and self-esteem during the 20th century, and several hypotheses regarding the make-up and operation of the self have also been put forth. Markus unveiled a novel strategy. She suggested that self-knowledge is organised through self-schemas generated from and based on our prior experiences

(Markus *et al.,* 1982). The cognitive representation of what we perceive and think to be authentic and unique about ourselves is called a self-schema. Self-relevant information is compiled and guided in the processing by self-schematic knowledge, which is widely accessible in memory.

Stereotypes and Stereotyping

Stereotypes have been the subject of social psychological research for at least eight decades (Katz & Braly, 1933). This study mainly focused on assessing stereotypes' content over several decades using an adjective checklist (Brigham, 1971). Despite helping to track the content of various racial, national, gender, and other stereotypes as well as their changes over time, which started to shift in the 1970s, that body of work (and its methodology) could only provide limited insights into the processes involved in shaping stereotypes, how they are expressed in our minds, and how they affect our notions of and behaviours toward members of the targeted groups.

Impression Formation and Personal Memory

Since 1946, personal impressions have been a popular research subject (Asch, 1946). Many hypotheses regarding how impressions are created and impact perceptions have been put out during this time. However, its ramifications were frequently examined by examining how different modifications affected trait inferences or liking assessments. By examining how information is processed, retained in memory, and recalled during the development of impressions, Hastie and Kumar proposed a cognitive processing perspective (Hastie & Kumar, 1979). They found the counterintuitive result that behaviours incongruent with a first impression are recalled better than impression-consistent behaviours. Their study discovered that behaviours that contradict a first impression are better remembered than behaviours that are consistent with the first impression. To explain this result, they developed an associative network-based process model, adopting initial concepts from the cognitive literature (Anderson & Bower, 1974; Collins & Loftus, 1975; Collins & Quillian, 1969; Smith *et al.*, 1974).

Non-Conscious Processing

Prior to the mid-1970s, a common implicit assumption in social psychology was that people generally understand what they are doing and why they are doing it. They typically understand the thought processes that underlie their perceptions, preferences, choices, and actions. Some social psychologists started to challenge that presumption in the mid-1970s. We must be aware of the mental processes that direct our decisions, preferences, and other actions to comprehend why we behave the way we do. In a significant essay from 1977, Nisbett and Wilson questioned how much control people have over specific mental processes (Nisbett & Wilson, 1977). They claimed that as people cannot typically appropriately articulate how stimuli affect their inferences, assessments, and decisions, their descriptions of those processes are frequently inaccurate. Nisbett and Wilson noted numerous instances when people's verbal accounts of how or why they did something diverged from the actual reasons for their deeds (e.g., those manipulated in an experiment).

A New Way of Thinking

The studies cited in this section are a sample of recent research that deviated dramatically from earlier work in social psychology. A new language and some novel concepts to many social psychologists were designed to describe various aspects of mental functioning (cognitive structures, schemas, priming, encoding versus retrieval, associative networks, and non-conscious processes). These novel conceptualisations represented a striking break from social psychology's conventional theorising. Additionally, these investigations used uncommon methods in conventional social psychology studies (free recall, clustering in recall, recognition memory, frequency estimation, and response times). These studies did not use the previously standard metrics, such as checklists and Likert scales.

Social Cognition in Education

Essentially, education is basically about broadening the conceptions of human perception. However, today, education has slowly shifted into a mode where people believe it is about enforcing information through instruction and lectures. The human brain is like a device used to receive and store information from its surroundings and apply it in their daily life after analysing and processing them. Information through lectures and instructions may be helpful in a certain way, but it will not make one's life. It will earn your living. So, right now, most of the education on the planet has become a means to earn a living, not to enlarge your horizons.

According to the social-cognitive paradigm, learning is primarily based on what we observe in others. Social cognition is how people process, retain, and apply knowledge in social circumstances to understand and anticipate how others will act (Fiske, 1993). Toddlers get two primary early childhood care types: center-based care and home-based care. In centre-based care, children interact with peers and adults in a group environment. Routines, play areas, and toys are set up for the kids and adults; the caregivers are all qualified adults. Children are more likely to be left alone with adults or share routines and toys with a small group of other kids in home-based settings, mainly younger or older siblings. Caretakers are typically non-professional babysitters, grandparents, or mothers in these informal situations (Bulgarelli & Molina, 2016).

One of the fundamental tenets of social cognitive theory is that people are capable, active agents who can impact their growth, learning, and behaviour (Bandura, 2000). Bandura suggests that individuals can learn by observing others in social contexts. According to his theory, people react to their surroundings following their beliefs, values, prior experiences, sense of efficacy, and expectations. Social cognitive theory also conceptualises individuals as able to regulate their thoughts, beliefs, and actions. Under the umbrella of social cognitive theory, research on self-regulated learning has attracted significant attention during the last four decades. Self-regulated learning has far-reaching practical applications to the classroom context and instruction. Several studies place self-regulation as the cornerstone of academic endeavours and consider it a determinant of learning and development (Bembenutty, 2013; Zimmerman & Schunk, 2011). This line of research emphasises the role of teachers as critical social models and the role of learners as proactive and self-directed seekers in all learning endeavours. In this vein, the role of self-ef?cacy is conceptualised as a determinant of actions and an agent of learning, and self-regulation is construed as a processof growth and development (Bembenutty, 2013; Boekaerts *et al.*, 2000; Zimmerman & Schunk, 2011).

In the early years of the development of social cognitive theory, Bandura conducted seminal work on self-regulation and self-efficacy(Bandura, 1986),Whereas self-regulated learning refers to individuals' control of their thoughts, actions, feelings, and behaviour in order to pursue designated academic tasks (Zimmerman, 2013), self-efficacy is de?ned as individuals' beliefs about their capability to perform designated tasks. Consistent with Bandura's theory, Zimmerman's research on self-regulation reveals that learners can identify learning targets toward which they set goals, select strategies for learning and monitoring, and engage in self-re?ection outcomes. Zimmerman suggests that learners develop self-regulation through four levels (Schunk & Zimmerman, 2010; Zimmerman, 2010; Zimmerman & Kitsantas, 1997). The first level begins by observing an effective and competent model, followed by the second level, which involves emulating the patterns observed under the direct supervision of the model. Once learners have the observed patterns of behaviour and can replicate them, they engage in self-control, performing tasks somewhat independent of the model while keeping the initial represented pattern in mind. When learners can do the task independently of the model, they can adapt and modify the initial techniques as needed by the context. This final level is called self-regulation. However, there is limited understanding of how self-regulated learning can be applied to different developmental stages of children in the classroom. Teachers and peers also play significant but different roles at various maturational levels. How these different factors play out in the classroom appears poorly understood.

Conclusions

Understanding what it means to age as a social person has crucial implications for work on social cognition. Our growth at any age is significantly influenced by our life experiences, social skills, fundamental beliefs, and overall awareness of the social world. To address these complications, we must take into account fundamental cognitive capacities and processes in the ageing adult as well as regular cognitive functioning in a social setting. In old age, cognitive ability and processing speed do decline. However, the majority of older people are adept and successful in participating in their social surroundings. The social cognitive approach aims to comprehend how participants perceive their connections with others and the events of daily existence. By analyzing five major fields of social cognitive research-person perception and stereotypes, socioemotional selectivity, collaborative cognition, morality, and positive psychology-this paper earnestly sought to expand our careful observation of these processes.

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Implementing Integrated STEM Education: A Delphi Study of Secondary Teacher Leaders of Odisha

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Abstract

In the modern world, there has been an increasing demand for the implementation of the integrated STEM education at the school level. Integrated STEM education makes students competent to use multiple skills to solve real-world problems. The purpose of the study was to identify the key elements of professional learning opportunities that best support the implementation of integrated STEM education at the secondary level. This study also sought to determine the degree of importance of these identified elements of professional learning opportunities. The study utilized Delphi method to elicit responses from an expert panel through telephonic interviews and electronic survey within a 2-round process. The expert panel consisted of 12 teacher leaders of the government secondary schools of Bargarh district, Odisha and they were selected by their principal based on 5 prominent characteristics of effective teacher leaders. The responses of Delphi round 1 elicited through interviews were analyzed thematically. The data collected through four-point Likert scale was analyzed through frequency, percentage, and mode. The findings revealed that there are numerous requirements of professional learning opportunities that need to be met. The expert panel members identified eight key professional learning opportunity elements for the implementation of integrated STEM education that were collaboration, mentoring, leadership skill enhancement training, resources, professional development training, networking with neighborhood colleagues, peer observation, and a safe atmosphere. In terms of the degree of importance of the identified eight elements, the expert panelists identified the need for collaboration as the most important element of professional learning opportunities. In addition to collaboration, the other key elements of professional learning opportunities i.e., mentoring, resources, and peer observation were also given importance.

Introduction

Education is an important instrument to make the future generation globally competent and represent India in the world landscape. The quality of education depends largely on the school culture, teachers' competencies, teaching approaches, infrastructure, and teaching learning materials. It also affects students' success in the academic field. In order to make students ready to solve real-world problems, the development of 21st-century skills, and life skills are needed. Teachers should develop these skills among students either through a direct approach or indirect approach to enable students to cope in this challenging world. They should be trained to solve problems of real life by thinking critically and creatively along with making the right decisions on time. The government has initiated several reforms in the sphere of education to make students ready to meet the challenges of the 21st century. National Education Policy (2020) has strongly recommended promoting holistic development in schools. The goal of education is not only promoting cognitive development but also moulding well-rounded students equipped with 21st-century skills (NEP, 2020). The attainment of this goal requires revamping and reorienting all aspects of the pedagogy and curriculum in schools at each stage of education. In this stance, Science, Technology, Engineering, and Mathematics (STEM) education serves as a potent means to promote holistic development as well as national development. Integrated STEM education is an approach to teaching that integrates two or more of the four STEM courses and uses real-world situations which in turn improve student learning. According to Sanders (2009), integrated STEM education is an "approach that explores teaching and learning between/among any two or more of the STEM subject areas, and/or between a STEM subject

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and one or more other school subjects". Disciplines are combined "based on interconnections between the subjects and real-world challenges (Moore *et al.*, 2014). Integrated STEM education makes students aware about when and how to apply the learned knowledge in real-life situations. However, it is seen that the present education system does not equip students with the required skills and competencies.

The Teaching-Learning Scenario

Nowadays, learning poverty is a barrier to students' all-round development. A simple, age-appropriate story cannot be read and understood by 53 percent of Indian children by the end of the elementary level (World Bank, 2019). In Grade 3, approximately 75% of rural students struggle to read at grade level (ASER, 2019). The NCERT report of 2022 states that 11% of students are unable to do the most basic grade-level tasks because they lack the necessary skills and knowledge. Additionally, just 37% of students possess minimum skills and knowledge and can only partially complete activities appropriate for their grade level (NCERT, 2020).

Indian students lack critical thinking abilities, hence they avoid difficulties rather than seeking solutions (Patro, 2022). In a study conducted in Mysore, India, by Sherafat and Murty (2016) including 625 students, it was revealed that 51% of students had poor critical thinking abilities, 17.60% had moderate abilities, and roughly 30.72% had strong abilities. Additionally, 74 percent of students of government schools exhibit poor critical thinking skills.

Researches have shown that pedagogy used in Indian classrooms do not improve conceptual understanding and develop thinking skills among students. Soni and Trivedi's (2018) case study on Gotirth Vidyapeeth of India revealed that traditional methodology is used by teachers to educate students. In present times students give a lot of importance to rote learning and are more exam-focused. From elementary school to college, the majority of Indian graduates are educated through rote learning (Antidote to Rote Learning-Forbes India Blogs, 2018). Thus, they cannot handle the challenges of knowledge explosion. The intellectual development of students is hampered by a lack of knowledge and abilities. In order to promote holistic development, schools should stress on enhancing knowledge, skills among students. Integrated approach to STEM can serve as an effective means to attain this goal. Integrated STEM education enables children to perform their age-appropriate tasks i.e., reading, writing, arithmetic along with developing higher order thinking skill. STEM education is an effective model for enhancing higher-order abilities among K-12 students (Zeng *et al.*, 2018). Researches have shown that STEM education issuccessful in enhancing students' academic successatknowledge, comprehension, and application levels (Ozkan & Kettler, 2022).

In order to promote holistic development nationwide, special consideration should be given to educationally backward districts all over India. An expert committee of the University Grants Commission (UGC, 2008) has recognized 18 districts out of a total of 30 districts in Odisha as educationally backward (Major Initiatives, Ministry of Education, 2021). According to this report, Bargarh is an educationally underdeveloped region of Odisha.

Students of Odisha perform poorly in competitions at the national level. In 2019, Just 1.78 percent (4360 out of 245000) of the qualifying applicants for the Indian Institute of Technology Joint Entrance Examination (IIT JEE) (Main) were from Odisha (TOI, 2019). Odisha had 575 out of 38705 (i.e., 1.49%) eligible candidates nationwide for the IIT JEE in the same year (Advanced) (TOI, 2019 & IITBBS, 2019). 2.1% (16 out of 759) of the qualified applicants for the civil service examination held by the Union Public Service Commission were from Odisha. 2.1 percent (16 out of 759) of the qualified applicants for the civil service examination held by the Union Public Service Commission were from Odisha (New Indian Express, 2019). It demonstrates how woefully unimpressive are the level of student competitiveness of Odisha at the national level. Just 31% of students in Odisha have the necessary skills for a suitable profession, according to a news article released by Patro, titled Skills India Report (2021). Odisha is not one of the Top-10 states in terms of employability.

There is a demand to improve the quality of education in Odisha. In order to promote quality education, Integrated STEM education may serve as a means. According to research, integrated STEM education increases students' participation in learning activities, which helps them develop critical 21st-century abilities. According to Korthagen (2010), implementing integrated teaching approaches encourages teachers to increase their knowledge base and spend more time on lesson planning and teaching activities to increase the effectiveness of their lessons. It provides students with the opportunities for developing higher-level thinking and problem-solving skills by facilitating student-centered and meaningful learning experiences (Stohlmann *et al.*, 2012). Students who study through the STEM approach are able to solve problems logically and use technology on their own to come up with new ideas and inventions. Integrating STEM subjects have positive effects on the achievement, learning, and attitudes of students (Bragow *et al.*, 1995; Hurley, 2001; Becker and Park, 2011).

Additionally, research has shown that when students engage in STEM-related activities like prototyping, inventing solutions, and using technology like 3D printers, they perform better and are more motivated (Tillman *et al.*, 2014). This could be because integrated techniques make instruction seem more relevant, dynamic, demanding, meaningful, competent, and supportive to students, all of which are associated with higher levels of student engagement (Shernoff, 2013).

Professional Learning opportunities: Implementation of STEM Education

The successful implementation of integrated STEM Education highly depends upon the teacher efficacy and competencies. Teacher professional development is a stepping stone towards improving efficacy and competencies of teachers to make them ready to implement such integrated approaches in the classrooms. In this stance, professional development opportunities throughprofessional learning community, workshops, conferences, study groups, networking, and mentoring serve as effective means to do so. Falloon *et al.*, (2021) found that principals believed that the success of the STEM education depended heavily on the professional capital and collective effectiveness of the teachers. All schools strengthened teachers' competencies through professional learning by offering internal and external mentoring and training (Falloon *et al.*, 2021). Conferences, networking with distant teachers for idea exchange, peer learning and co-teaching within the classroom, and external professional development programs offered by state authorities are numerous ways through whichteachersmay engage in professional learning (Falloon *et al.*, 2021). Workshop is also an effectivemeans for professional learning (Chai, 2019). Additionally, School readiness in terms of resources and supportive culture is also needed to support teachers' growth. School transformation and reforms should also be initiated.

Odisha government initiative for the 5T high school transformation programme (Teamwork, Technology, Transparency, Transformation, and Time limit) is also helpful to implement STEM education. The 5T programme aims to prepare teachers as leaders, create confidence in the students, and prepare them for global competition. Thus, it takes steps to transform the educational environment of all government and government-affiliated high schools by equipping them with modern technology, digital and smart classrooms, e-libraries, and laboratories. Apart from this, the elements needed for successful implementation of integrated STEM education are to be identified at ground level to transform an educationally backward district (i.e., Bargarh district) into an educationally advanced district. Therefore, it is essential to study the professional learning opportunities that support the implementation of integrated STEM education.

The purpose of this study was to identify theelements of professional learning opportunities that support the implementation of integrated STEM education at the secondary level. This study also sought to determine the degree of importance of these identified elements of professional learning opportunities.

Research Design

As a qualitative research design, the Delphi method was used in this research study. A philosophical approach termed phenomenology, which focuses on people's experiences from their point of view, allowed the researchers to gather descriptive data (Roberts, 2010, p. 143). McMillan and Schumacher (2010), claimed that this research design "assesses the nature of current conditions" and "allows for defining something as it is". There are three kinds of Delphi methods that can be used to "produce a detailed investigation of a topic and/ or problem," and they are the "Policy Delphi Model, the Trend Model, and the Structural Model" (Stitt-Gohdes and Crews (2004) . This study used the policy Delphi approach, which "attempts to uncover the most solid arguments for and against various policy issue resolutions" (Stitt-Gohdes & Crews, 2004, p.3). Members of the expert panel respond to the same research questions during each round of the Delphi in this design.The researcher gathered and analyzed the responses of the first round and the results of the first round were utilized to construct the next round of questions for the expert panel members to respond.

Sample

The sample for the present study was selected by purposive sampling technique. Effective high school teacher leaders of the Bargarh district of Odisha were identified. The high school principals were requested to recommend two to three teachers who met the criteria for effective teacher leaders. The five most important attributes for successful teacher leaders identified in the literature review served as the criteria used by high school principals to chooseteacher leaders i.e., 1) Embody and convey the idea that teachers provide a positive effect (Collay, 2011), 2) Establish professional learning communities through open communication and deliberate action (Marzano *et al.*, 2005), 3)Strive for educational excellence and advancement by lifelong learning (Reeves, 2008), 4)Focus on the needs of all students to address cultural barriers inside the organization (Katzenmeyer & Moller, 2009), 5)Create networks and mechanisms of support at all organizational levels to put ideas into action (Crowther, 2009).

25 secondary teachers were identified as potential participants for the research study by 15 secondary school principals of Bargarh district. A letter of consent for participation was sent to each of the 25 teachers from 15 government high schools of Bargarh district of Odisha. For each of the two rounds, 12 teachers who had given their agreement to participate as members of the expert panel and were taken. Therefore, the final sample consisted of 12 effective high school teacher leaders from Bargarh district in Odisha.

Instrument

Researchers have constructed unstructured interview schedule to collect data pertaining to the elements of professional learning opportunities that support the implementation of integrated STEM education at the secondary level. Telephonic interviews were conducted with teacher leaders in the first round of the Delphi survey. Responses to the first-round question was analyzed and utilized to construct a four-point Likert scale. The Likert-scale has options as, not at all important (1), somewhat important (2), moderately important (3), and very important (4). In this Likert-scale, effective teacher leaders were asked to rate the degree of importance of the responses of Round 1.

Data Analysis

Delphi rounds were used to present data collection results. The responses of questions addressed in each of the two rounds, were analyzed qualitatively and quantitatively. The responses of Delphi round 1 elicited throughinterviews were analyzed thematically. The data collected through Likert scale was analyzed through frequency, percentage, and mode.

Delphi Round I: Question

One open-ended question was used in the first round of the Delphi survey in order to elicit a wide range of responses. Twelve teacher leaders who formed the group of experts panel responded to the telephonic interviews. The question of round 1 was as follows:

1. What elements of professional learning opportunities support the implementation of integrated STEM education at the secondary level?

In Round 1 of the Delphi method, responses to the first question were extracted and thematically aggregated based on the components of professional learning opportunities. These responses are given in Table-1.

Table-1: Elements of Professional Learning Opportunities that Support Integrated STEM Education

Highlighted Elements	Frequency of response
Collaboration	10
Mentoring	7
Leadership skill enhancement training	6
Resources	8
Professional development training	8
Networking with neighborhood Colleagues	4
Peer observation	1
A safe atmosphere	4

N=12

As shown in Table 1, expert panel members identified eight essential components of professional learning opportunities that support the implementation of integrated STEM education: collaboration, mentoring, leadership skill enhancement training, resources, professional development training, networking with local colleagues, peer observation, and a safe environment. Collaboration (10 out of 12), resources (8 out of 12), professional development training (8 out of 12), and mentoring (7 out of 12) were the four elements of professional learning opportunities that were most frequently identified as best supporting elements for the implementation of integrated STEM education. Additionally, out of 12 teachers, 6 teachers stated leadership skill enhancement training, 4 teachers emphasized on networking with neighborhood colleagues,1 teacher stated peer observation and 4 teachers stated a safe atmosphere is needed for the implementation of integrated STEM education.

Delphi Round 2: Question

The question for Delphi Round 2 was "To what degree are the elements of professional learning opportunities identified in Round 1 important in implementing integrated STEM education"? First-round responses were analyzed and sorted into items for a Likert scale.Expert panelists who participated in Round 1 were asked to rate the significance of the top eight responses of Round 1 during Round 2.

The expert panel was surveyed via an electronic scale. These responses are presented in Table-2.

Table-2: The Degree of the Elements of Professional Learning Opportunities that Best Support the Implementation of Integrated STEM Education

Identified Elements for Professional learning opportunity	Not at all Important	Somewhat Important	Moderately Important	Very Important	Mode
	Frequency(%)	Frequency(%)	Frequency(%)	Frequency(%)	
Collaboration	0(0%)	1(8.3%)	5(41.7%)	6(50%)	4
Mentoring	0(0%)	1(8.3%)	4(33.3%)	7(58.33%)	4
Leadership skill enhancement training	0(0%)	0(0%)	7(58.33%)	5(41.7%)	3
Resources	2(16.6%)	1(8.3%)	4(33.3%)	5(41.7%)	4
Professional development training	1(8.3%)	0(0%)	6(50%)	5(41.7%)	3
Networking with neighborhood colleagues	2(16.6%)	1(8.3%)	4(33.3%)	5(41.7%)	4
Peer observation	2(16.6%)	2(16.6%)	5(41.7%)	3(25%)	3
A safe atmosphere	2(16.6%)	3(25%)	4(33.3%)	3(25%)	3

N=12

As shown in Table 2, the expert panelists ranked the requirement for collaboration (mode=4) as the most crucial component of professional learning opportunities. In addition, networking with local coworkers (mode=4), resources (mode=4), and mentorship (mode=4) were also significant components of professional development opportunities. Another four elements that support professional learning opportunities for implementation of integrated STEM education were leadership skill enhancement training(mode=3), professional development training (mode=3), peer observation (mode=3), and a safe environment (mode=3).

Result and Discussion

Delphi I

In response to the question of Delphi round I i.e., "What elements of professional learning opportunities that support the implementation of STEM education"?, the expert panel members identified eight key professional learning opportunity elements for the implementation of integrated STEM education and the elements were collaboration, mentoring, leadership skill enhancement training, resources, professional development training, networking with neighborhood colleagues, peer observation, and a safe atmosphere. The teacher leaders strongly emphasized on four elements for the implementation of integrated STEM education. The elementsincluded collaboration, resources, professional development training, and mentoring. These findings are consistent with Shernoff *et al.*, (2017) who found that the supports needed to advance integrated STEM were time to collaborate and plan, teacher professional development, supportive stem ethos/culture, communication between departments, more instructional time, resources, shift in teacher attitudes, more manageable class size. It is believed every teacher has expertise in their own subject but effective implementation of integrated STEM education demands that teachers need to have mastery in each STEM subject. Therefore, teachers need to be supported to implement the integrated approach. Since an integrated approach focuses on big ideas that are interconnected and interrelated, support is required to aid teachers with instructional approaches that organize knowledge around significant ideas, concepts, and themes (Stohlmann *et al.*, 2012).

It was found that teachers desired to participate in professional development programs that focused on STEM approaches. In general, the teachers we interviewed with had an idea of how to begin teaching using the integrated STEM approach, but they also acknowledged that they needed support, including more cooperation and training, more role models, and more mentoring. A teacher stated the need to see classroom of other expertteachers, who adopted integrated STEM approach in their classroom. Through the observation of sample lessons, teachers comprehend how curriculum was transacted i.e., instructional method, interaction with students through the integrated approach. The literature on the best techniques in teacher professional development commonly identifies watching rich instances of classroom interactions, including both film and live observations, to efficiently structure instructors' sense-making (Ball *et al.*, 2009; Borko *et al.*, 2008; Roth *et al.*, 2011; Sherin and Han, 2004).

Delphi II

In response to the question of Delphi round II i.e., "To what degree are the elements of professional learning opportunities identified in Round 1 important in implementing integrated STEM education"?, the expert panelists indicated that the most crucial component of professional learning opportunities was collaboration. Mentoring, resources, and networking with local coworkers were additional crucial components of professional learning opportunities for the implementation of integrated STEM education at the secondary level. They emphasized that the four elements that support professional learning opportunity were leadership skill enhancement training, professional development training, peer observation, and a safe atmosphere. This is consistent with the findings of Shernoff *et al.* (2017), who found that teachers indicated their need and desire for time to work with other teachers. Successful STEM integration depends heavily on collaboration between teachers from many disciplines. In order to build multidisciplinary, integrated approaches and expand their grasp of other subject areas, teachers felt that collaboration with other teachers from different disciplines was crucial (Shernoff *et al.,* 2017). Stohlmann *et al.* (2012) also found that support is required to assist teachers with instructional approaches that organize information around major ideas, concepts, and themes since an integrated approach focuses on big ideas that are connected and interrelated.

Conclusion

Integrated STEM education demands competent and expert teachers, who have expertise in more than one subject. The requirement of teachers to attain mastery in STEM subjects needs to be fulfilledon an urgent basis. Learning opportunities should be provided to teachers both inside and outside schools for the constant development of their skills and competencies for successful implementation of integrated STEM education. The Odisha government initiative in the form of 5t high school transformation programme is just a helping hand, not enough for the implementation of such an integrated approach. As the findings revealed that the secondary teachers required more support, the Odisha government should take more initiatives to provide the needed support to teachers for the effective implementation of integrated STEM education at secondary schools of Bargarh district.

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Contravention of Gender Difference in Education

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Abstract

This paper is an attempt to study on "Contravention of Gender Differences in Education in Assam". The study was conducted in Assam. The is Descriptive in nature. The study was analysis using secondary data collected from secondary sources. The objectives of the study are; i) to discuss on provisions make by the Assam governmental schemes, policies and programs to eradicate the several gender related issues in education. ii) Substantially, the paper had tries to find out the male-female enrolment ratio at primary, secondary, higher level of education in Assam. iii) to find out the different causes which indirectly help to growth gender disparity in education in Assam. The study has found out that invarious stages of education (primary, secondary and higher level of education), this gender disparity or inequality still exists. Many reasons which actually indirectly creates this gender disparity in education in Assam. Further, the study suggested that there should be, i) Role of the teachers are very significant to prevent gender stereotypes by providing students with equal opportunities in education. ii) Through making strict government policies for eradicating gender disparity in education. iii) Education for all 'this motto must touch every citizen of the state.

Introduction

In India, education is considered as birth right, it means no one can deny formal education. The Indian constitution prescribes several constitutional provisions of education such as- Article 21A, 15, 17, 28, 30, 42, 45, 46, 350-A etc., the main purpose of these constitutional provisions to make a developed education system in India through removing class, caste, creed differences. Besides these, the Indian government has made Right to Education Act (RTE), 2009 for making education free and compulsory for the age of between 6 and 14 in India which is stated in Article 21A of the Indian constitution. In 2001 Sarva-Sikhsha Abhiyan is launched by government of India for making universal elementary education in India, another purpose of this Sarva-Sikhsha Abhiyan is to eradicate the problem of wastage and stagnation of elementary education. Besides these, other educational schemes launched by Indian government are-national programme for education of Girls at elementary education (NPEGEL), provision of mid-day meal, Beti Bachao Beti Padhao, establishing Kasturba Gandhi Balika Vidyalaya, Rastriya Madhyamik Shiksha-Abhiyan, inclusive-education for disabled at secondary stage, scholarship schemes for minority students, post-doctoral research fellow scheme, scholarship schemes for ST students by Ministry of Tribal affairs, PG scholarship scheme. The main purposes of these schemes and programmes are to make quality-based education at all levels of education, to eradicate gender-gap from education, to involve all people of all social and economic classes. In the context ofAssam, Assam has ranked fifth position in literacy rate in all India ranking but it cannot be said that Assam is totally free from educational issues. As per the census report of 2021 the total literacy rate in Assam for urban region is 84.78%, the male literacy rate is 88.37% and the female literacy rate is 76.01%, it means there is huge gap between male and female literacy rate in Assam. This gender disparity can be notified at levels of education in Assam-primary, secondary, higher education. If this gender disparity cannot be eradicated from at all levels of education, then aquality-based education in Assam cannot be expected.

Review of related literature

Nayak and Mahanta (2015) has conducted a study on 'Gender disparity and women empowerment in Assam' and found out that in the year of 2005-06 in Assam the enrolment is highest in primary level, slightly lower in middle level. The proportion of enrolment decreases with the increase in the stages of education. In almost all the districts, in primary level, enrolment rate is almost fifty percent. In middle and high school level also the percentage of enrolment is around 45%. However, in higher secondary and junior colleges the female enrolment

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is much lower i.e. below 40%. Soma, D. (2015) has analysed that gender differences in literacy status are striking in all the states of North-East India, besides Gender inequality has been found in the different aspects such as- nutritional status, employability, participation in work etc. Das, R. (2019) has conducted a study on 'A study on gender gap in higher education in Assam' and found that Assam has limited educational infrastructure in higher education which is another cause of low GER in higher education in Assam. Thakuria, G. (2019) has made a research study on 'Gender discrimination in education and economic status of women in rural area: A geographical analysis of Goalpara district of Assam' and found out that the rate of female literacy and work participation of rural women are much lower than men in Goalpara, it indicates that the condition of women education is not satisfactory. Devi, K (2020) has made a research study on 'Gender equality in education with special reference to Assam' and found out that the gap between male and female literacy rate in Assam is decreasing day by day but it is not enough because there are still some females who are totally illiterate and in this regard the government initiative is very important. Basumatary, G (2020) has done a research study on 'Inequality in education: A case study of Dhubri district, Assam and found out that there is ahuge educational gap between male and female in Ghunimari, Bhakatpara and Gauripur village of Dhubri district; socio-cultural attitude, quality education, lack of awareness, school environment has recognized as some factors which are influencing in gender differences on education in Dhubri district. Das, A. (2021) has conducted a research study on 'Gender stereotyping in schools: A study in rural Assam' and analysed that majority of teachers (26.7%) agree and around 23.3% teachers are strongly agree that boys are better and naturally clever than girls, on the other hand, 35.6% and 36.7% of the teachers agree and strongly agree to the statement that boys are more active and outspoken than girls, but around more than half of the teachers, 61.1% strongly agreed that both boys and girls should be treated equally across class and caste.

Objectives of the study

The major objectives of this study are:

- To identify Assam government's programmes and schemes of education.
- To find out gender-disparity in various stages of education in Assam.
- To identify the causes of gender-disparity in education in Assam.

Rational of the study

This study is very relevant because in Assam's educational scenario many issues and challenges have been notified. Among these issues, gender-disparity is significant one. Through this study it is tried to find out the causes of gender- disparity in education in Assam so that some remedial measures can be found out. The main motto of education 'education for all' can be automatically achieved if gender-disparity can be eliminated in proper way.

Methodology of the study

Both the primary and secondary sources are used for this study, these sources are- books, journals, government policies, acts, official data, census reports etc.

Descriptive Research study method used for this particular study.

Findings and Discussions

Assam government's various programmes and schemes of education

Assam government prescribes various programmes and schemes of education, these are;

a. *Aarohan*- The main purpose of this scheme is to mentor and monitor the talented students of the remote and rural areas of Assam.

b. *Saptadhara*- This scheme is for imparting education specially in extra-curricular activities and to provide opportunity to every student to explore global knowledge.

c. Distribution of free textbooks.

d. *Anundoram*- Borooah laptop award scheme (ARBAS).

e. Pre-matric and post-matric scholarship scheme.

f. Assam Bikash Yojana Scheme.

g. Junior college scholarship.

h. Physically disability scholarship.

i. Scholarship to the domicile students.

j. Scholarship to Girls' education.

k. Scholarship to the students of Assam studying in Rastriya Indian military college.

Gender-disparity in Education in Assam

In Assam Gross Enrolment Ratio (GER) for male is 18.6% and female is 17.8%, the highest (GER) is Tamil

Nadu that is 49.1% and the highest female (GER) is Chandigarh that is 67.71%, it indicates that Assam's GER is lower in comparison to other states of India. Some data are collected from different sources which have shown about this gender-disparity in education in Assam.

Table-1: Male and Female literacy rate in Assam from 1951-2011

Year	Male literacy rate in Assam	Female literacy rate in Assam
1951	28.01%	7.58%
1961	44.28%	18.62%
1971	43.72%	22.76%
1991	62%	43%
2001	71.28%	54.61%
2011	77.85%	66.27%

Source: Assam government census report.

The table-1 shows that from 1951 to 2011 after every 10 years male and female literacy rate is gradually increased but in each year gender disparity in education has been notified. Specifically in the year of 1951 and 1961 there was huge literacy gap between male and female in Assam.)

Table-2: As per census report 2011

District	Male literacy%	Female literacy%
Kokrajhar	91.97	83.44
Dhubri	87.03	77.87
Goalpara	80.24	71.80
Barpeta	90.44	81.94
Morigaon	88.07	80.09
Nagaon	89.67	82.89
Sonitpur	84.25	78.93
Lakhimpur	90.55	84.90
Dhemaji	88.42	88.76
Tinsukia	85.56	78.23
Dibrugarh	90.90	84.90
Sivasagar	92.86	88.76
Jorhat	74.70	70.16
Golaghat	94.25	89.11
KarbiAnglong	91.56	82.92
DimaHasao	95.37	88.70
Cachar	90.29	84.44
Karimganj	95.28	90.33
Hailakandi	95.31	90.54
Bongaigaon	91.42	83.17
Chirang	86.56	75.83
Kamrup	92.50	83.14
KamrupMetro	93.55	87.78
Nalbari	93.72	85.88
Baksa	80.43	68.28
Darrang	89.93	81.60
Udalguri	89.08	81.03

Source: Statistical handbook of Assam, 2021

The table-02 indicates that in all the districts of Assam the female literacy rate is lower than the male literacy rate, it means gender gap in education exists in all the districts of Assam.

Table-3: Literacy Rate among the SC Population in Different Districts of the Brahmaputra Valley, 2011

Districts/Valley	Literacy in Percentage		
	Person	Male	Female
1. Kokrajhar	64.15	70.97	56.76
2. Dhubri	60.29	67.31	52.80
3. Goalpara	63.66	69.49	57.60
4. Barpeta	62.95	69.64	55.82
5. Morigaon	61.86	67.24	56.25
6. Nagaon	70.82	75.62	65.82
7. Sonitpur	67.64	73.13	61.89
8. Lakhimpur	68.70	74.84	62.32
9. Dhemaji	56.86	63.40	49.76
10. Tinsukia	69.89	75.55	63.87
11. Dibrugarh	72.53	77.74	66.92
12. Sibsagar	76.98	80.69	73.12
13. Jorhat	73.86	79.45	68.05
14. Golaghat	68.89	74.74	62.79
15. Bongaigaon	61.39	68.15	54.28
16. Chirang	54.78	62.05	47.07
17. Kamrup	69.02	75.45	62.25
18. Nalbari	69.09	75.49	62.45
19. Baska	57.69	65.09	49.88
20. Darrang	61.24	67.56	54.64
21. Udalguri	60.35	67.71	52.61
Brahmaputra Valley	66.34	72.25	60.11
Assam	66.75	72.20	61.01

Source: Census of India 2011, Assam

The table 03 shows that there is huge gap between male and female literacy rate among the schedule castes population in all the districts of Brahmaputra valley in the year of 2011.

Table-4: Enrolment ratio in High schools and higher-secondary education

Classes ix-x (14-15 years) Year 2010-11			Classes xi-xii (16-17 years) Year 2010-11			Above class xii (18-23 years) Year 2008-09		
Boys	Girls	Gap	Boys	Girls	Gap	Boys	Girls	Gap
52.0	46.9	5.1	18.2	14.6	3.6	10.7	5.7	5.0

Source: www.indiastat.com

The above table has shown gross enrolment ratio in high school and higher education in Assam. The table clearly shows the gender gap in education in both high school as well as in higher education, GER for female is lower than male.

Table-5: Enrolment in PH.D/M.PHIL(Assam)

2008-09/2009-10 Men	2008-09/2009-10 Women	2008-09/2009-10 Total
440-603	339-447	779-1050

Source: Ministry of human resource development

The table-05 also shows gender gap in higher education in Assam.

But Das, R.C in the study on 'A study on Gender Gap in Higher Education in Assam' has mentioned that there is gender parity at some levels of courses in Higher Education in Assam but it cannot be said that higher education of Assam is totally free from gender disparity or gap.

Causes of gender-disparity in education

The causes are found out through observing the socio-cultural, economic scenario of Assam, the identified general causes of gender-disparity in education in Assam are:

Poverty: According to the inaugural multi-dimensional poverty Index issue by NIITI Aayog, 2021 November has mentioned that with 32.67%, Assam is the poorest state in the north-east. According to planning commission's poverty estimates, 2011-12, in Assam around 101.27 lakh people live in below poverty line (BPL). And this poverty is another main cause of gender-disparity in education, because the families who live in below poverty line, they cannot realize the importance of their children, especially female child suffer mostly.

Lack of employment equality: The Assam government has prescribed various schemes for women's financial growth these schemes are- Arundhati Scheme, Assam Orunodoi scheme, Atal Amrit Abhiyan Health Insurance Scheme, Sarothi, Swanirbhar Nari, Assam Abhinanadan education loan subsidy scheme etc. Another main purpose of these schemes is to eradicate unemployment problem and make equality between men and women in the context of financial growth. But in practically it has been seen that still there is lack of employment equality in different working sectors in Assam and it indirectly hampers in women education.

Parents negative attitude : Parents negative attitude is another cause of gender-disparity in education in Assam. The parents who are totally illiterate they cannot feel the importance of education of their children and have possessed negative attitude towards education of their children.

Lack of proper infrastructural facilities in educational institutions: It can be considered another cause of gender-disparity in education. At present many changes have come to the government educational institutions in Assam but still there are many educational institutions are not free from some issues like, proper hostel facilities specially for girls, lack of proper toilet facilities, lack of proper classrooms etc.

Static cultural norms and beliefs: Old superstitious beliefs, static socio-cultural norms, lack of scientific attitude, etc indirectly hampers in educational growth in Assam.

Implementation of Government policies: Assam government has taken many initiatives for removing gender-disparity from education but the policies are not implemented properly in practical field and it is another cause of gender-disparity in education. Though policies are made but for utilization of such policies in practical field creates a challenge.

Findings

Assam government has taken many legal steps through prescribing educational schemes and policies for the purpose of eradicating gender disparity from education.

Gender-disparity in education has been notified in every district in Assam and also identified the students of SC of Brahmaputra valley. In both secondary and higher education this gender-disparity has been observed.

Some general causes of gender-disparity are identified by observing the socio-cultural and economic scenario of Assam. The identified causes are-Poverty, lack of employment equality, parents' negative attitude, lack of proper infrastructure facilities in educational institutions, static socio-cultural norms, government policies are not implemented properly etc.

Suggestive measures

- Role of the teachers are very significant to prevent gender stereotypes by providing students with equal opportunities in education.
- Through making strict government policies for eradicating gender disparity in education.
- 'Education for all' this motto must touch every citizen of the state.

Conclusion

Assam is the largest state in North-East India, it has also heterogenous population with socio-cultural and ethnic diversity. For overall development of Assam is dependent on educational development of the common masses. The study has found out that in various stages of education (primary, secondary and higher level of education), this gender disparity or inequality still exists. Many reasons which actually indirectly creates this gender disparity in education in Assam. But it is very much important to eradicate this gender disparity but it is not an easy task, Assam government strong initiative is very important in this regard because gender disparity in education can be considered as major educational issue of Assam.

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Study of Adversity Quotient of B.Ed. Students in Relation to Achievement Motivation and Attitude Towards Teaching Profession

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सारांश

अनुसंधान बी.एड. के प्रतिकूल भागफल के अध्ययन पर किया गया था। अबोहर तहसील के चयनित महाविद्यालयों से यादृच्छिक रूप से चयनित 210 प्रशिक्षुओं पर शिक्षण व्यवसाय के प्रति उपलब्धि प्रेरणा एवं दृष्टिकोण के सम्बन्ध में बनर्जी और बिस्वास (2017) द्वारा विकसित प्रतिकूल भागफल उपकरण, डीईओ और मोहन (2002) द्वारा विकसित उपलब्धि प्रेरणा प्रकरण और एम्ब्रोस और गनासन (2014) द्वारा विकसित शिक्षण पेशे के प्रति दृष्टिकोण का उपयोग अध्ययन में किया गया था। डेटा की सामान्यता की जांच के लिए के-एस परीक्षण का उपयोग किया गया था। महत्वपूर्ण अंतरों की गणना के लिए 2×2 एनोवा और टी-टेस्ट का उपयोग किया गया था। प्रसरण के तथ्यात्मक 2×2 विश्लेषण के प्रयोग से पता चलता है प्रतिकूलता भागफल के संबंध में बी.एड. की छात्र में उपलब्धि अभिप्रेरणा में कोई महत्वपूर्ण अंतर नहीं है। प्रसरण के तथ्यात्मक 2×2 विश्लेषण के अनुप्रयोग से पता चलता है कि प्रतिकूलता भागफल के संबंध में बी.एड. की छात्र शिक्षण पेशे के प्रति अभिवृत्ति में कोई महत्वपूर्ण अंतर नहीं है। प्रसरण के तथ्यात्मक 2×2 विश्लेषण के अनुप्रयोग से पता चलता है कि शिक्षण के प्रति उपलब्धि प्रेरणा और शिक्षण पेशे के प्रति दृष्टिकोण की परस्पर क्रिया बी.एड. के बीच प्रतिकूलता भागफल पर महत्वपूर्ण अंतर में योगदान करती है।

1.1 Introduction

In the current era, there is an overflow of knowledge. The syllabus and curriculum of Degree and Diploma courses in Education are designed to produce professionally competent teachers. In order to face challenges and to fulfill the goals of education, a well designed programme of professional education is required for the B.Ed. students. Teacher education programme is the programme for professional preparation of teachers and the students undergoing this course are called student teachers. The aim of the course is to give professional training and knowledge to students and to instill necessary values and skills. Bachelor of Education (B.Ed.) is a course offered for those interested in pursuing career in teaching. B.Ed. is an undergraduate academic degree which qualifies the graduate in any degree as a teacher in the school. B.Ed. is a course leading to the Bachelors' degree of Education. The course extends for a period of two years with two semesters each. It is a time bound course with records, projects, practicum etc. to address issues in the field of education. Stakeholders in education, including researchers have long been interested in exploring variables that are associated with the quality of education. The variables may be grouped as either within or outside the school. Literature has studies on student factors, family factors, school factors and peer factors. Generally, the factors include age, gender, geographical belongingness, ethnicity, marital status, socio-economic status (SES), parents'educational level, parental profession, language and religious affiliations which are usually discussed under the umbrella of demography or "Demographic variables". Unfortunately, defining and measuring quality of education is not a simple issue and its complexity tends to increase due to the divergent views expressed by the stakeholders on the meaning of the word quality. Despite all these studies, the quality of educational achievement still remains low. Some researchers have looked beyond the above mentioned factors to other related areas within the teaching-learning grid including cognitive structures and psychological or psychosomatic constructs. Under such psychological domain are constructs like self-efficacy, self-esteem, self-concept, Intelligence quotient, emotional quotient amongst others, which are concerned with different stimuli that drive the attainment of high quality educational achievement. So,

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An emerging variable within this realm of psychological construct is Adversity Quotient (AQ). It has been stated that this variable is capable of bridging the gap in the attainment of high quality educational achievement. Adversity quotient is the capacity to deal with the adversities of his/her life. As such it is the science of human resilience. It tells how well one withstands adversity and his/her ability to triumph over it. By understanding the concept we can better understand how B.Ed. students react to challenges and adversities in all aspects of our lives. It measures our ability to face the adversities. It provides the tools for improving how you respond and thus overall professional effectiveness. Adversity quotient also plays a very important role in one's life. Students face a lot of situations or challenges in their daily life. To overcome or to face these problems, adversity quotient is required. A person who has the capacity to face and overcome the adversities can attain his/her goals in life easily. A person should have the ability to respond to a particular adversity situation in an amicable way. This ability is essential for B.Ed. students to solve their day to day problems. If we think of education as nothing but a holistic, comprehensive and a never ending continuous process through which the blissful all round development i.e expansion and enrichment of the cognitive, affective as well as of psychomotor domains of an individual takes place, then would be teachers i.e B.Ed. students will play pivotal roles in the behavioural modification of the learners. Human existence, from time immemorial has always been permeated by adversities. Life itself is full of paradoxes. For instance, though in recent times there has been knowledge explosion and technological revolution on the one hand, on the other hand, there is poverty, scarcity of food and resources, increase in crime, social and political problems and other kinds of societal upheaval. All these have created situations of stress and anxiety that tend to demand taught psychological skills both for adults and students in order to survive.

Education is under increasing pressure to create successful students. Education, in the present day context, is perhaps the single most important means for individuals to improve personal endowments, build capability levels, overcome constraints and, in the process, enlarge their available set of opportunities and choices for a sustained improvement in well-being. It is not only a means to enhance human capital and productivity but it is equally important for enabling the process of acquisition, assimilation and communication of information and knowledge.

In today's Educational literature, it is common to see the terms attitude towards teaching and achievement motivation used when describing the characteristics needed by students to be successful. At the heart of this idea is the notion that high attitude and high achievement motivation have a greater potential to develop into healthy, productive, and competent students despite experiences of severe stress and adversity. Therefore, the present study was planned to explore Adversity Quotient (AQ) of B.Ed. students in relation to their attitude towards teaching (high and low) and achievement motivation (high and low) so that they can bridge the gap between the academic institutions and society by creating values and social norms as well as preservation and transmission of the culture which ultimately reflects their own attitude amongst the learners; thus creating the positive attitude and values in the learners also. Therefore, before entering the core of the investigation process we should have a general outlook on the concepts of the constructs such as- adversity quotient along with achievement-motivation and attitude towards teaching.

1.1.1 Adversity Quotient

The term was coined by Paul Stolz. The term A.Q. was introduced by Stoltz in 1997 in his book, "Adversity Quotient: Turning Obstacles into Opportunities." He tried to measure how people respond towards adverse conditions with the help of his AQR Profile. "Strength does not come from winning. Your struggles develop your strengths. When you go through hardships and decide not to surrender, that is strength." - Mahatma Gandhi. Students deal with many problems/difficulties in their daily life. There is need to develop strength among them so that they can handle these problems/difficulties. As above quoted by Mahatma Gandhi about strength, according to Gandhi ji when a person deals with problems/difficulties that show the strength of the person and this is not necessary that he/she should always win. In same manner studentsalso face many problems that can be related to academics, home environment, socio-economic situations, identity crisis, relations with peers, physical, emotional, social and intellectual which can further lead the student to dropping out of schools, acquisition of bad habits, violence, depression, stress, anxiety disorder, accident etc. It is very necessary that students must know; only success in academic is not only important, they must also know how to deal with the adverse and hard situation which they are facing and will also face in their entire life.

American Psychological Association (2016) has defined it as ability to maintain flexibility and balance in one's life as he/ she deal with stressful circumstances and traumatic events.

According to Merriam-Webster's Learner's Dictionary (2016) Adversity has been defined as a difficult situation or condition: misfortune or tragedy.

The term deals with several important aspects of a person; history of adverse conditions in life and how to overcome it, the ability of a person to stay level-headed in stressful situations, and the ability to take blow after blow, obstacle after obstacle and still keep moving forward. An adversity quotient is how well a person work in the adverse situations. With the help of AQ concept it is better to understand how a student reacts to challenge and adversity faced by him/her in each situation of their lives. In fact, how they respond to adversity is a strong indicator of ability to succeed in many activities and situation.

1.1.2 Achievement Motivation

The term "Achievement Motivation" is comprised of two terms "achievement" and "motivation". "Achievement" means "the process of achieving something". The word "achievement" is derived from middle French word "achievement". Something that has been done or achieved through effort and a result of hard work is known as achievement. Motivation means reasons for acting or behaving in a certain way. Intrinsic and extrinsic elements which arouse desire and energy in an individual to be continually interested and responsible towards any task, role of individual in any activity and make him active to achieve set goals. It is the energy to follow and achieve goals. An individual with achievement motivation desires to attain objectives and advance up on the hierarchy of success. Here, success is essential for its own shake and not for the rewards that accompany it. Motivation is the result of conscious and unconscious elements like: (i) power/power of wish or any need, (ii) remuneration/extra value of the particular task or work and lastly (iii) expectations of the individuals related to results. These are the main factors which become the reason to behave in a certain way. For example mother always gives incentive to child for her good behave. Achievement Motivation is psychological thought that links personality traits and social background of an individual with his or her level of 'need for achievement'. Achievement Motivation is a process which reasons for acting or behaving in a certain way to achieve something. It is very important for success or the accomplishment of excellence. Individuals use various ways to fulfill their needs, and are determined to succeed for different reasons both internal and external. As per the views of expert in behavioral area and scientists, there are various types of motivation and achievement motivation is one of them. Achievement Motivation is a type of force that helps the person to make an effort to be more successful as well as goal oriented which will further lead towards good life. Achievement Motivation is the core need for achievement in life as well as this is vital element of aspiration/hope, effort/struggle, and persistence/ determination when an individual supposes that his performance will be evaluated in relation to some standard of excellence. Such type of behavior is called achievement-oriented. Motivation is the driving force behind all the actions or task performed by an individual. Both needs and desires of an individual have great influence on the behavior and these also give direction to the behavior.

McDavid and Hasari (1986) A system of good direction in human activity that is closely related to competence and dominance is described by psychologists as achievement motivation

McClelland and Atkinson (1987) Achievement motivation may be associated with three varieties of goals, but in general, the behaviour adopted will involve an activity which is directed towardsthe attainment ofsome standard of excellence.

In general, Achievement Motivation is an expectancy of finding satisfaction in mastery of difficult and challenging performances whereas in the field of education, in particular, it stands for the pursuit of excellence. Achievement motivation can, therefore, be defined as the determination to increase or to keep as high as possible, individual's capabilities in all actions of different tasks in which a standard of quality is keep in mind and where the carrying out of such actions can therefore either succeed or not succeed. Thus, the basis of achievement motivation is achievement motive which means motive to achieve anything.

1.1.3 Attitude towards Teaching Profession

Attitudes play an important role in teaching that is why there have been different definitions of what attitude towards teaching. Attitude may be defined as the predisposition of tendency to react typically towards a given object situation or value, usually accompanied by pleasant or unpleasant feeling and emotions. Parents wrongly consider attitudes as "Natural" or "Instinctive" But in reality they are learnt through socialization process.

Most of the Attitudes may develop gradually through a longer period of time, Attitude cannot be directly observed but must be inferred from individual's overt behavior both verbal and non verbal. The basic function to teaching is preparing a student to sound judgment and to be able to solve the problems of life. The study of attitude towards teaching will help the would be teacher to select suitable choices for his students. Without the study of the students' attitude the work of the teacher will remain unsatisfactory and the aim of teaching will never be attained. Effective teaching and learning are the products of various factors. These factors are directly related to the quality of education in general and to successful classroom instruction in particular. These factors include teachers background, his/her competencies, pre-service and in-service training, teacher-students' interaction, efficient use of instructional time and materials and assessment of students achievement. It is imperative that for better planning of effective and efficient education in our institutions the above factors should be well conceived, properly organized and diligently managed.

Remmers, Gage & Rummel (1960) The simplest definition is that, it is a feeling for or against something.

Fishbein (1967) defines it as "a mental disposition of the human individual to act for or against a definite psychological object."

By a psychological object, he means any symbol, phrase, slogan, person, institution, ideal or idea towards which people can differ with respect to positive or negative effect. A particular job, for example, may be a psychological object. In the literature of psychology, the terms 'affect' and 'feeling' are used interchangeably. An individual who has associated positive affect or feeling with some psychological object is said to like that object or to have a favorable attitude towards the object. An individual who has associated negative affect with the same psychological object would be said to dislike that object or to have an unfavorable attitude towards the object. The above definitions show that an attitude is a preparation or readiness to respond. It is covert rather than overt and consummator. It is not behavior, but the pre-condition of behavior. For quality in education, a proper attitude towards teaching profession is required, which will create good learners who will give his/her contribution to the society.

1.1.4 Review of Related Literature

Biswas & Banerjee (2016) aimed at assessing the level of adversity quotient (AQ), attitude and achievement motivation of both the male and female formally trained B.Ed. trainee teachers of West Bengal. Sample comprised of 326 male and female formally trained B.Ed. trainee teachers of different districts of West Bengal. Standardized Questionnaires were applied to collect the data and data was analyzed by using MannWhitney U Test along with other necessary analytical measures like mean as well as Pearson's Coefficient of Correlation etc. The study revealed that there lies a strong affinity amongst the adversity quotient (AQ), attitude and achievement-motivation of the B.Ed. teacher trainees and a significant difference was observed in the level of the above mentioned variables due to gender amongst the B.Ed. trainee teachers.

Castillano (2017) determine the level of Adversity Quotient among 80 Trainees. The study was aimed at whether work-related challenges are affected by Adversity Quotient or not. The analysis of data showed no affect of overall scores of Adversity Quotient on workrelated challenge of the subjects. The participants expressed a low range of Adversity Quotient with mean scores of 89.32. It was reported that adversity level was not influenced by gender differences on all the four dimensions of Adversity Quotient. Other demographic profiles undertaken for the investigation i.e age, course, year level and family size were also reported with no significant relationship with Adversity Quotient.

1.2 Statement of The Problem

The problem is entitled as : "Study of Adversity Quotient of B.Ed. Students in Relation To Achievement Motivation and Attitude Towards Teaching Profession."

1.3 Objectives of The Study

The study was conducted to achieve the following objectives:

1) To study the difference in Adversity quotient between B.Ed students having high and low level of achievement motivation.
2) To study the difference in Adversity quotient between B.Ed students having high and low level of attitude towards teaching profession.
3) To study the interaction effect of achievement motivation and attitude towards teaching profession on adversity quotient among B.Ed students.

1.4 Hypotheses of The Study

The study was conducted to test the following hypothesess:

1) There is no significant difference in Adversity

quotient between B.Ed students having high and low level of achievement motivation.

2) There is no significant difference between B.Ed students having high and low level of attitude towards teaching profession.

3) There is no significant interaction effect of achievement motivation and attitude towards teaching profession on adversity quotient in B.Ed students.

1.5 Design of The Study

The present study was conducted through normative survey method and involves three different variables in which one is dependent variable i.e. adversity quotient and two independent variables i.e. attitude towards teaching and achievement motivation. Main purpose of the study is to see how far the independent variables effect the dependent variable and interaction effect of these variables on adversity quotient of B.Ed. teacher trainee.

1.6 Sample of The Study

Simple random sampling technique was employed for the selection of the sample. For the study, total number of 210 trainees were selected randomly from the selected colleges in Abohar Tehsil. Shown Table 1 shows the distribution of sample:

Table 1: Distribution of Sample

Sr.No.	Name of The College	Total
1	Dav College of Education, Abohar	70
2	Kenway College of Education, Abohar	70
3	Maharishi Dayanand College of Education, Abohar	70
	Total	210

1.7 Tools Used

1. Adversity quotient tool developed by Banerjee and Biswas (2017).
2. Achievement motivation tool developed by DEO & Mohan (2002).
3. Attitude towards teaching profession scale developed by Ambrose and Ganasan (2014).

1.8 Statistical Techniques Used

1) K-S test was used to check the normality of data.

2) 2x2 ANOVA and t-test was used to calculate the significant differences.

1.9 Application of 2x2 Factorial Analysis of Variance to The Scores Obtained on The Adversity Quotient

Table 2: F-Ratio Table

Source	df	SS	Variance	F-Ratio
A	1	105.71	105.71	0.1059
B	1	1724	1724	1.728
Interaction				
AxB	1	450.49	450.49	45.16
Within Group	206	205467.567	997.41	@

For $df_1 = 1$, $df_2 = 206$
0.05 Level = 3.94
0.01 Level = 6.90
(From Table F- Ratio)

Thus it is clear from table that F-ratio is significant for interaction (AxB). To probe more deeply t-test has been used. Table 4.7 shows the results of t-test applied.

Table 2: t-ratio Table

	A1B1	A1B2	A2B1	A2B2
A1B1	0.00	-8.17	-5.80	0.36
A1B2	-8.17	0.00	2.23*	8.94*
A2B1	-5.80	2.23*	0.00	6.37*
A2B2	0.36	8.94*	6.37*	0.00

A1B1	A1B2	A2B1	A2B2
M1=131.58	M2=138.76	M3=136.86	M4=131.25
SD1=4.72	SD2=4.31	SD3=4.50	SD4=4.62

1.9 Results

1) The data of 210 B.Ed. students on adversity quotient has been found to be normally distributed. The assumptions of normality of data has been tested by K-S test. It is therefore appropriate to use 2x2 Analysis of variance for testing the hypotheses.

2) The application of factorial 2x2 analysis of variance reveals that there is no significant difference in the achievement motivation of B.Ed. student with respect to adversity quotient. It may be due to the fact that adversities may have link with day to day small events which are to be solved with intelligence, attitude, personality or other variables.

3) The application of factorial 2x2 analysis of variance reveals that there is no significant difference in the

attitude towards teaching profession of B.Ed. student with respect to adversity quotient. It may be due to the fact that attitude towards teaching profession being a dynamic activity requires a certain specific competencies from its practitioners which is not linked to adversity quotient.

4) The application of factorial 2x2 analysis of variance reveals that the interaction of achievement motivation and attitude towards teaching does contribute to significant difference on adversity quotient among B.Ed. students. It may be due to the fact that both achievement motivation and attitude towards teaching work side by side in determining adversity quotient of individuals.

1.10 Educational Implications

Following are some educational implications of the study:

1) Guides should need to give their students not only emotional support but also educational guidance, life long learning even vocational guidance to develop their proper attitude.
2) This study suggest to analyze the profile of B.Ed. students with high adversity quotient in teaching and learning.
3) This study suggests to cultivate positive attitudes and motives to achieve something, is a key to promoting general life.
4) In colleges, there should be regular activities and compititions in which students involvement is compulsory so that proper attitudes may be formed.
5) It is the responsibility of students as well as teachers to know the inner abilities of students and to guide them accordingly.

1.11 Suggestions for Further Studies

1) The study may be replicated on a large sample in order to get a better understanding of variables under study.
2) The study may be conducted on different variables like personality, self confidence, creativity, life long learning etc.
3) The present study has been conducted on B.Ed. students only. Study can be replicated on students at other levels of education also.

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A Comparative Study of Emotional Intelligence of Professionals in Lucknow City

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Abstract

For ages it was believed that high cognitive intelligence leads to success in life and career. But now high cognitive Intelligence alone does not ensure success in life. Success depends upon Emotional Intelligence also. In 1990, Salovey and Mayer defined "Emotional Intelligence as the subset of social intelligence that involves the ability to monitor one's own and others' feelings and emotions, to discriminate among them and to use this information to guide one's thinking and actions." In the present study 150 individuals working in the professions of Medicine, Engineering, Finance, Law and Education, in the city of Lucknow, India, were included. Their Emotional Intelligence was assessed through the Emotional Intelligence Scale of Hyde *et al.* A comparison has been made between the Emotional Intelligence of the professionals from the different fields. The analysis of data shows that no significant difference exists in the Emotional Intelligence of the professionals from the different fields. This may be due to an enhanced understanding of the need for and importance of identifying one's own emotions, managing them appropriately and developing good interpersonal relationships at the workplace for success, happiness and well-being.

Introduction

The qualities and capabilities present in human beings make them superior to all the other living beings. One such capability is Intelligence. For ages it was believed that a high level of cognitive intelligence will lead to success in life and career. But now we know that high cognitive Intelligence alone does not ensure success in life. Success depends upon how we manage ourselves and our relationship with others.

Emotional Intelligence

Gardner in 1975 presented the theory of Multiple Intelligences in which he explained that there are different types of intelligence like "Linguistic, Musical, Logical/ Mathematical, Spatial, Kinesthetic, Interpersonal, Intrapersonal and Naturalist". Gradually more research began to be done that showed that in addition to cognitive intelligence there can be different types of Intelligence also. In 1985, Wayne Payne introduced the term "Emotional Intelligence" in his doctoral dissertation. In 1990, Salovey and Mayer aptly defined Emotional Intelligence as, "the subset of social intelligence that involves the ability to monitor one's own and others' feelings and emotions, to discriminate among them and to use this information to guide one's thinking and actions" (Salovey & Mayer, 1990). The concept of Emotional Intelligence (EI) rose to prominence in 1995 with the book 'Emotional Intelligence' that was written by Daniel Goleman. In 1998, Goleman also wrote the book "Working with Emotional Intelligence". In this book he explained the significance of EI in the workplace (Goleman, 1995, 1998).

According to Goleman, Emotional Intelligence includes (Houston, 2021):

(i) **Self-awareness :** The ability of an individual to recognize his/her own emotions and their impact on other people is called self-awareness.

(ii) **Self-regulation :** Self-regulation is the ability of managing one's own emotions These emotions may be positive or of a negative nature.

(iii) **Motivation :** The ability of a person to motivate himself/herself to remain committed and focused on the achievement of goals is known as motivation.

(iv) **Empathy :** The ability to identify and comprehend the feelings and perspectives of others is called empathy.

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(v) **Social skills :** These help to manage good relationships with other people around us.

An emotionally intelligent person comprehends the demeanour of other people. Such a person manages his/her emotions appropriately. Emotional Intelligence is very significant in the professional environment. Organizations are making efforts to recruit personnel who are emotionally intelligent and are willing to cooperatively work in teams.

Professionals are those people who engage in activities that require certain level of Education, knowledge, training, skills and expertise. They need to follow ethical principles and codes of conduct that are related to that particular profession. The professionals are accountable for their actions and need to possess virtues like honesty, integrity, loyalty and objectivity. In the modern globalized world, it is believed that to be successful, one needs to possess both cognitive intelligence and Emotional Intelligence. An Emotionally Intelligent professional interacts wisely with other people at the workplace. They efficiently manage their personal feelings and successfully nurture good interpersonal relationships with others. Such professionals exuberate positive vibes and energies that spread vivacity, vibrancy and dynamism in the workplace. This creates a very positive environment in which all work together cooperatively to actualize the goals of the organization. This leads to reduced levels of tension and stress, good mental and physical health, increased happiness and well-being of all professionals in the organization (Gautam *et al.*, 2020).

Review of Literature

The researchers scrutinized the studies and research conducted in the sphere of Emotional Intelligence of professionals. Some of them are mentioned below:

Keshavamurthy (2013) conducted a comparative study of the Emotional Intelligence of Business Professional Groups in Karnataka. An Emotional Intelligence Tool was given to 218 HR professionals, Sales and Marketing Professionals, and Software & IT Professionals who were working in 9 organizations and 37 entrepreneurial Professionals. Descriptive statistics, F-test, chi-square test, contingency table analysis, stepwise multiple regression tests were done for data analysis. The researcher observed that Entrepreneurial professionals had the highest EI, followed by the professionals from sales and marketing, Human resource professionals and Software Engineers. IT Professionals had least scores in Emotional Intelligence in majority of the factors of EI like self- awareness, commitment, empathy, emotional stability, integrity, self-motivation, management of relations, development of self, value orientation and altruistic behavior.

Sidhu (2014) discussed the relationship that existed between Emotional Intelligence of teaching professionals and their performance in the Management and Technical Institutions of private and public Universities of Chandigarh, Punjab and Haryana. No difference in Emotional Intelligence level was perceived in the teachers with experience from 01 to 28 years. The researcher observed that, on average, the teaching professionals in the Universities had high EI.

The studies mentioned above show different results regarding the Emotional Intelligence of professionals. The researchers decided to conduct the present research as no comparative study of the Emotional Intelligence of professionals had been conducted in the city of Lucknow, India. Besides this, the above-mentioned studies were conducted in 2013 and 2014. In the last few years, there has been a steady rise in the significance being given to Emotional Intelligence. Consequently, a need was felt to conduct a comparative study of the Emotional Intelligence of professionals in the city of Lucknow, India.

Objectives

a) To assess the Emotional Intelligence of professionals from the fields of Medicine, Engineering, Finance, Law and Education.

b) To compare the Emotional Intelligence of professionals working in the fields of Medicine, Engineering, Finance, Law and Education.

Hypothesis

The hypothesis for objective (b) is:

• There is no significant difference in the Emotional Intelligence of professionals from the fields of Medicine, Engineering, Finance, Law and Education.

Methodology

The methodology adopted in the present study is explained below:

Research Design

The Research design helps in the appropriate execution of research. It is like a blueprint. In the present study, Descriptive Survey Research (Best, 2009; Koul, 2009) has been conducted by the researchers. The population for the study included all the professionals who were working in the fields of Medicine, Engineering, Finance, Law and Education in the city of Lucknow. 150 professionals were selected through purposive sampling. Their Emotional Intelligence was assessed through a questionnaire prepared by Hyde, Pethe and Dhar.

Participants

The sample in the present research consisted of 150 professionals from the fields of Medicine, Engineering, Finance, Law and Education in the city of Lucknow. They were selected by purposive sampling. 15 Male and 15 Female individuals from each of the 05 professions were included in the study. Table 1 shows the number of male and female participants from the different professions who have been included in the study.

Table 1: Number of male and female participants from different professions

S. No.	Professions	No. of Male professionals	No. of Female professionals
1.	Medicine	15	15
2.	Engineering	15	15
3.	Finance	15	15
4.	Law	15	15
5.	Education	15	15
	Total	75	75

Instrument

For the present study the tool used was the "Emotional Intelligence Scale (EIS) developed by Hyde, Pethe and Dhar." The "Emotional Intelligence Scale" prepared by Anukool Hyde (Assistant Professor, Shri Vaishnav Institute of Management, Indore), Sanjyot Pethe (Lecturer, Nirmal Institute of Management, Ahmedabad) and Upinder Dhar (Director & Vice Chancellor, J.K. Lakshmipat University, Jaipur) and published by National Psychological Corporation, Agra was used for the assessment of the Emotional Intelligence of professionals. According to the Manual, the reliability of this Scale is 0.88. In order to obtain the validity from the coefficient of reliability, the developers of this Scale calculated the reliability index. This was 0.93 which implies high validity (Hyde *et al.,* 2011).

This EIS scale consists of 34 questions on Emotional Intelligence. These questions are based upon 10 factors i.e., "Self-awareness, empathy, self-motivation, emotional stability, managing relations, integrity, self-development, value orientation, commitment and altruistic behaviour". For each statement, the participants had to tick on 1 of 5 alternatives of "Strongly Agree, Agree, Uncertain, Disagree and Strongly Disagree". 5 marks were awarded for the response 'strongly agree'; 4 marks for 'agree'; 3 marks for 'neutral'; 2 marks for 'disagree' and 1 mark for 'strongly disagree'. According to the manual, score of 85 and above imply high level of Emotional Intelligence; scores in the range of 52-84 imply normal level of Emotional Intelligence and scores of 51 or less imply low Emotional Intelligence level in the professionals (Hyde *et al.,* 2011).

Procedure of data collection

150 professionals from the fields of Medicine, Engineering, Finance, Law and Education were included in the present study through random sampling. They were given the "Emotional Intelligence Scale" of Anukool Hyde, Sanjyot Pethe and Upinder Dhar. The participants were requested to fill in the form with sincerity and to give the first response that came to their mind. They were assured that the responses given by them will be kept confidential and only their responses will be utilized for research purposes. The data collected was meticulously tabulated and statistical analysis of the data was done.

Data Analysis

The data on Emotional Intelligence collected from 150 professionals was quantitatively analyzed by using SPSS 22.0. The analysis of the data collected is presented below:

Objective 1: To assess the Emotional Intelligence of professionals in the fields of Medicine, Engineering, Finance, Law and Education.

The responses given by the professionals were statistically analyzed. The results highlighted that the means of Emotional Intelligence of different professionals i.e., Doctors, Engineers, those in the field of Finance, Lawyers and Teachers are: 140.700, 134.833, 142.333, 143.700and 141.233 respectively. According to the manual of "Emotional Intelligence Scale", if the total score obtained by a participant is greater than 85 then the individual has a high level of Emotional intelligence. Therefore, in the present study, all the professionals from the fields of Medicine, Engineering, Finance, Law and Education have high Emotional Intelligence. Table 2 represents the mean Emotional Intelligence of the professionals.

Table 2: Mean Emotional Intelligence of professionals

Professionals	N	Mean
Doctors	30	140.700
Engineers	30	134.833
Finance	30	142.333
Lawyers	30	143.700
Teachers	30	141.233
Total	150	140.560

The Emotional Intelligence of the professionals from the fields of Medicine, Engineering, Finance, Law and Education is shown graphically in Figure 1.

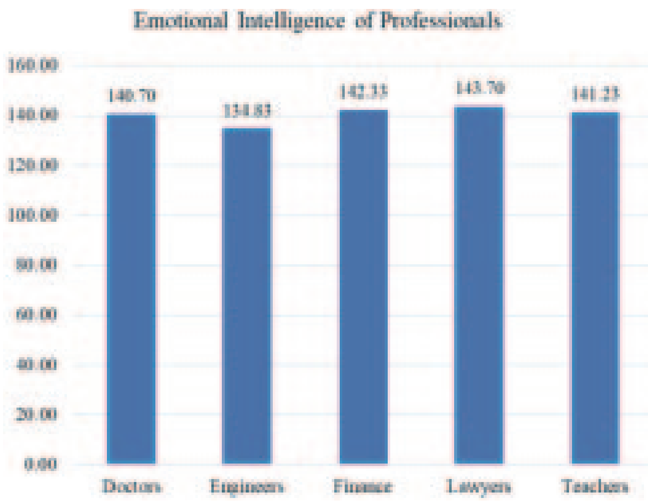

Figure 1: Emotional Intelligence of the professionals from the fields of Medicine, Engineering, Finance, Law and Education

Objective 2: To compare the Emotional Intelligence of professionals of different fields.

Hypothesis: There is no significant difference in the Emotional Intelligence of professionals of different fields.

The comparison of the Emotional Intelligence of the professionals was done through ANOVA (Analysis of Variance). "Levene's Test is used to test if samples have equal variances. Equal variance across samples is called homogeneity of variance." Homogeneity of variance implies that the "level of variance for a particular variable is constant across the sample." This is important for analysis through ANOVA. If there is no homogeneity of variance, then there is more probability of reaching wrong conclusions about the hypothesis.

There are 2 assumptions for Levene's Test. These are:

1. The observations should be independent
2. The test variable should be quantitative

Both these assumptions are fulfilled in the present study. Table 3 presents the results of Levene test of homogeneity of variance.

Table 3: Levene test of homogeneity of variance

Levene Statistic	df1	df2	Significant value
1.080	4	145	.369

df - Degrees of Freedom

The significant value of Levene test of homogeneity of variance is .369. This value is greater than 0.05 (0.369>0.05). Hence, the population variance of each group of respondents is equal. So, groups are homogeneous to each other. It satisfies the condition of one-way ANOVA.

ANOVA

ANOVA is a statistical technique and stands for Analysis of Variance. It is used to check if the means of two or more groups are "significantly different from each other". ANOVA checks the impact of one or more factors by comparing the means of different samples. Variation within the group in ANOVA refers to the variations that are due to the differences that are present within the individual groups. Between the group variation refers to the variance that is caused due to the interaction of the different groups with each other. The F value in ANOVA is calculated by dividing the variance between the groups by variance within the groups (Singh, 2018). Table 4 presents ANOVA (between the groups and within the groups)

Table 4: ANOVA- between groups and within groups

	Sum of Squares	df	Mean Square	F	Significant Value
Between Groups	1388.160	4	347.040	2.095	.084
Within Groups	24016.800	145	165.633		
Total	25404.960	149			

df = Degrees of Freedom

The significant value (p-value) in the ANOVA table is .084. This value is greater than 0.05 (0.084>0.05). This shows that statistically the difference in Emotional Intelligence levels in all the groups is not significant. Hence, the hypothesis that there is no significant difference in the Emotional Intelligence of professionals of different fields is accepted. There is no difference in the level of Emotional Intelligence of professionals from the fields of Medicine, Engineering, Finance, Law and Education in the city of Lucknow.

Discussion

The present study shows that there is no significant difference in the Emotional Intelligence of professionals working in the fields of Medicine, Engineering, Finance, Law and Education in the city of Lucknow. This is different from results obtained by Keshavamurthy. According to Keshavamurthy's research, Entrepreneurial professionals had the highest level of Emotional Intelligence, followed by the professionals from the area of sales and marketing, and human resources and then Software Engineers. The IT Professionals had the lowest scores in Emotional Intelligence.

The fact that no significant difference has been observed in the level of Emotional Intelligence of professionals from different fields may be due to different reasons. In recent years many deliberations have taken place on the necessity and importance of identifying one's own feelings and managing them in an appropriate manner for happiness and overall well-being. In addition to this, there is also a better understanding of the significance and relevance of nurturing good interpersonal relationships at the workplace so that individuals can work together cooperatively to achieve higher goals. Professionals are now more aware of the relevance of being socially and emotionally smart. Many conferences and open forums have also highlighted the need to nurture Emotional Intelligence. Besides this, many organizations have started the practice of Orientation programs in which the role and significance of Emotional Intelligence in organizational behaviour and workplace ethics are emphasized. This encourages professionals to nurture their Emotional Intelligence.

In the globalized world of 21st century, professionals must be proficient in the knowledge of content and also be efficient in life skills. "Life skills are abilities for adaptive and positive behaviour that enable individuals to deal effectively with the demands and challenges of everyday life" (Nalla, 2015). There are many life skills. WHO has listed 10 life skills as the core life skills. These are "Self-awareness, Empathy, Critical thinking, Creative thinking, Decision making, Problem Solving, Effective communication, Interpersonal relationship, coping with stress and Coping with emotion". On analyzing these life-skills it is evident that Emotional Intelligence is very important in developing these life skills. A person who has high Emotional Intelligence will be aware of his/her own self, manage his/her emotions properly, develop positive relationships with others and will be successful in the workplace. Such a person will also be able to connect and communicate effectively with other people.

In the workplace, a person's behavior influences other people also. An environment of positivity and trust is created when professionals share strong healthy interpersonal relationships with others at the workplace. Emotional Intelligence makes one aware of the emotions of other people and also helps to understand them properly. It helps to nurture strong bonds with others. This leads to better teamwork. Professionals with a high level of Emotional Intelligence are more likely to manage their stress and develop suitable mechanisms for coping with it. Consequently, they give better work output.

Emotional Intelligence also helps in the enhancement of effective communication skills, listening skills, empathy, and resilience. This leads to good occupational and personal health and success (Deutschendorf, 2016; Houston, 2021). Joseph C. Rode, Professor of Management, Farmer School of Business, Miami University of Ohio has said, "While emotional intelligence includes the ability to use emotions to increase motivation and focus, it also includes the ability to detach from very powerful short-term emotions when needed to better focus on the tasks at hand" (Sanfilippo, 2019).

Conclusion

The professionals who are working in the fields of Medicine, Engineering, Finance, Law and Education have many challenges to face in daily life. Their Emotional Intelligence plays a key role in helping them to deal with these challenges. People with high Emotional Intelligence are able to maintain good mental health. They happily interact with other people and do not remain lonely. This helps in nurturing stronger and better relationships with others. These professionals manage to stay away from anxiety and depression and remain psychologically healthy. Such individuals can progress and achieve success in the professional world.

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The Perspective of Research Scholars on the Mode of the UGC/CBSE/CSIR-National Eligibility Test Examination

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Abstract

The UGC changed the National Eligibility Test (NET) examination pattern from subjective to objective in all papers in 2012. This has sparked a debate among academics and researchers over the best way to conduct a NET examination for selecting qualified faculties for Indian higher education institutions. With this in mind, the investigators attempted to learn more about how NET-qualified candidates felt about the examination format. A total of 60 NET & JRF qualified research scholars were selected conveniently for this study. Although qualified candidates have a positive opinion about the current pattern (objective type) of examination; and also 67% of the respondents believed that the UGC-NET examination is the appropriate strategy to determine competent teachers for higher education. The study further, revealed that the NET examination should be focused on the concerned subject of the examinees rather than other areas such as Arithmetic & Reasoning. The study divulged that 70% of the NET Qualified candidates demanded to have a provision fora re-evaluation system in UGC/CBSE/CSIR-NET examination.

Introduction

The University Grants Commission (UGC) conducts National Eligibility Test (NET) to determine the eligibility and competent candidates who aspire to pursue their academic careers in Indian Higher Educational Institutions. The qualified candidates are entitled to the position of Assistant Professors in the Colleges and Universities. The candidates who score better are considered for Junior Research Fellowship (JRF). However, the NET Examination was first administered by the UGC, and thereafter by the CBSE in 84 subjects. Since 2018, the UGC-NET has been conducted by the National Testing Agency (NTA), which was established as a leading and autonomous testing organization for admission/fellowship in Indian higher educational institutions. Therefore, the National Eligibility Test (NET) is presently known as the UGC-NET or NTA-UGC-NET. Earlier it was known as UGC/CBSE-NET or CSIR-NET. The UGC-NET examination is usually held twice a year, in June and December. The examination pattern of the NET is changed from time to time. Initially, the mode of examination was offline and subjective with essay-type questions. Now, it is conducted through online mode with the computer-based test; and only multiple choice type questions. Earlier due to very limited examination centers, the candidates had to go a long distance to appear for the test. Since the CBSE took over the responsibility in 2014 the number of examination centers were increased and is easily accessible to the aspirants. Adding to these, until December 2018, the UGC NET examination was divided into two parts (Paper I and Paper II), each of which was administered in two sessions. Every year about eight to ten lakh students registered for the NET examination. There is a regular amendment in the pattern of the NET examination. Therefore, it is a need of the hour to understand the appropriate pattern for conducting NET examinations.

Need and Significance of the Study

In India qualifying for the NET is the minimum eligibility criteria for the selection of teaching faculty at the college/universitylevel. The main objectives of the UGC-NET examination are: i) to standardize the higher education system in India; ii) to determine the eligibility for college and university level teachers; and iii) to award of Junior Research Fellowship (JRF) for Indian nationals. The Government of India started conducting the test for awarding the Junior Research Fellowship for the first time in 1984. In 1988, the eligibility test for lectureship was transferred to University Grants Commission (UGC),

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New Delhi. The UGC conducted the first National Eligibility Test (NET), common to both Eligibility for Lectureship and Junior Research Fellowship in December 1989. Since then it is conducted twice (June & December) every year. The eligibility for appearing UGC-NET examination is 55% marks in Master's Degree from universities/institutions recognized by UGC. For Scheduled Caste (SC)/Scheduled Tribe (ST)/Persons with disability (PWD) category candidates must possess a minimum of 50% marks in Master's degree for applying for the NET examination. Initially, theNETexamination was conducted with a set of three papers, i.e. Arithmetic & Reasoning paper-I (objective type), paper-II (objective type),and Paper III (Descriptive-type for all subjects). Since June 2012, the UGC-NET has been conducted inthe objective mode for all three papers in two sessions.

There was a lot of dissatisfaction among academicians as a result of one of the key modifications in the format of the NET examination, from subjective to objective mode.The number of qualified candidates was thought to have increased as a result of the modified pattern. Some academicians argued that the qualified candidates through the objective mode of the NET examination are less competent. It is also noticed that unprofessional practices have increased in some NET examination centers. Until December 2011, there were just a few minor objections to the UGC's results.Since the objective mode was introduced many objections were raised to the declaration of the result of the NET/JRF examination. Inthis pattern, the third paper could seem to be a repetition of questions from the second paper. In light of the aforementioned challenges and concerns, a study was conducted to learn about the perceptions of NET/JRF-qualified research scholars on the current mode of NET examination and its various scopes.The following research questions have been formulatedto find out the answer.

Research Questions of the Study

1. What opinion do the NET Qualified research scholars possess concerning the mode of examination?
2. What challenges did the NET-qualified research scholars face when appearing for the examination?
3. What are the views of NET-qualified research scholars on the most acceptable pattern of examination for identifying qualified teachers?

Objectives of the Study

a. To ascertain the views of National Eligibility Test certified research scholars about the mode of administering an examination concerning: a) Language, b) Difficulty Level, c) Duration, d) Syllabus, and e) Evaluation.

b. To identify the difficulties faced by NET-qualified research scholars concerning: a) Examination & its Frequency, b) Flexibility, d) Declaration of results

c. To make appropriate recommendations for improving the conduct of the National Eligibility Test.

Methodology of the Study

The current study adopted the descriptive survey research method.

Sample of the Study

A total of 648 UGC/CBSE/CSIR NET/JRF qualified candidates are found to pursue their research at the University of Jammu and Central University of Jammu during the academic year of 2017-2019. Out of them, 10% population was selected through convenience sampling. Accordingly, 30 NET/JRF-qualified candidates from each of the universities were selected as a sample of the study. Thus, the total sample of the study was sixty NET/JRF-qualified research scholars.

Tools Used for Collection of Data

For achieving the formulated objectives of the study, the investigators constructed an Oppinionaire (Likert-type five-point scale) and semi-structured questionnaire comprisingfive components, i.e. Language, Difficulty level, Duration, Syllabus, and Evaluation. For developing the scale, the investigators reviewed the related literature and also available tools regarding the focused objectives.

Data Analysis Techniques Employed

The data acquired through the Oppinionaire were examinedby using the frequency and percentage calculations, whereas the data collected with the help of a semi-structured questionnaire was evaluated by using the frequency and percentage counts, as well as content analysis.

Analysis and Interpretation of Data

The nature of the data collected in this study included qualitative and quantitative dimensions. The data were gathered from 60 research scholars who were UGC/CBSE/CSIR NET & JRF qualified. The following Table 1 shows the demographic profile of the research participants involved in the study.

Table 1: Demographic Profile of the Research Participants

S.No	Participants	Frequency	Percentage
Gender			
1.	Male	42	70%
2.	Female	18	30%
Locale of the Participants			
1.	Urban	30	50%
2.	Rural	30	50%
Caste			
1.	Unreserved Category (UR)	32	53%
2.	Backward Category (BC)	13	23%
3.	Schedule Category (SC)	6	10%
4.	Schedule Tribe Category(ST)	9	15%

From Table 1, it can be seen that the majority of the participants involved in this study were male (42) whereas females were 18. But, when it was observed froman inhabited point of view, half of them were identified as rural area dwellers. By looking at the caste they belong, it is understood that 23% belonged to Backward Category, 10% Schedule Caste Category, and 15% to were Schedule Tribe Category respectively.

From the analysis of the data, it is understood that the majority of the UGC/CBSE/CSIR-NET/JRF qualified participants (53%) belonged to the unreserved category and also the number of male participantsdominated their female counterparts. It assumes that the socio-economic status of these aspirants might have been far better than their counterparts because qualifying this kind of examination claims support of diverse factors such as economic status, interest, aptitude, support of family, encouragement, attitude, etc.

Table 2: Opinion of the participants about the Duration of Time allotment for NET Examination (N=60)

S. No.	Statement	Agree %	Neutral %	Disagree %
1.	Allocation of time for the NET exam is appropriate	75%	7%	18%
2.	Allocation of time is to be given equally to all papers of the NET examination	50%	17%	33%

From Table 2, it can be observed that 75% of the respondents opined that the total time allotted for the NET examination was adequate whereas 18% disagreed with it. Regardingthe distribution of time across the papers, it was noticed that 50% of the respondents demanded that all three papers of the NET examination would be given equal weightage whereas 17% did not disclose their stand. Only 33% of the respondents opinion found to have disagreed. From this observation, it can be concluded that the duration of the time allotted for attempting the National Eligibility Test was found to be sufficient for the NET- aspirants.

Table 3: The responses of NET-qualified candidates for use of the language in the examination (N=60)

S. No.	Statement	Agree %	Neutral %	Disagree %
1.	The level of language used in the NET examination is understandable	97%	---	3%
2.	The NET exam is to be conducted in a regional/ vernacular language	47%	15%	38%
3.	The language used in the NET examination creates stress among the students	38%	17%	22%
4.	The NET exam is to be conducted according to the selection of language chosen by examinees	67%	12%	21%
5.	The level of language used in the NET exam decreases the confidence of the examinees	28%	20%	52%

It can be seen from Table 3 that the majority of the respondents (97%) expressed that the language employed in the NET examination was understandable. More than half of them (52%) felt that the level of language used in the NET examination did not have any effect on their confidence, whereas 38% of them believed to get stressed due to the language used in the examination. Further, responding to the medium of instruction, nearly half of them (47%) expressed that the NET examination would be conducted in regional/vernacular languages whereas 38% disagreed with this idea.

From the analysis of the data, it concluded that the majority of the respondents viewed the language used in the NET examination was found to be appropriate to understand, and also 47% demanded that the NET examination also be conducted in their respective regional/ vernacular languages.

Table 4: Views of the Respondents about the difficulty level of examination (N=60)

S. No.	Statement	Agree %	Neutral %	Disagree %
1.	The difficulty in answering questions in the NET examination	58%	8%	34%
2.	Paper-I of the NET examination would be the reason for creating stress	57%	10%	33%
3.	Qualifying for the NET exam is difficult because the standard of examination is high	55%	15%	30%

From Table 4, it can be observed that more than half of the respondents (58%) stressed that qualifying for the NET examination was difficult whereas 34% did not have the same opinion. Further, it can also be seen that 57% of the respondents conveyed that attempting paper-I of NET (i.e. Arithmetic & Reasoning Ability) created stress among the examinees whereas 33% of them did not agree with it. It can be also inferred that 55% of the NET-qualified candidates expressed that qualifying for NET was difficult because its standards were high.

From the analysis of the data, it is understood that 58% of the respondents opined that paper-I of NET (i.e. Arithmetic and Reasoning ability) was difficult for the qualifying examination. This also would be the prime factor for creating anxiety among the examinees.

Table 5: Response of the NET qualifiers about the prescribed Syllabus for the Examination

S. No.	Statement	Agree %	Neutral %	Disagree %
1.	The NET exam should exclusively focus on the concerned subject of examinees rather than testing knowledge of other areas	59%	13%	28%
2.	All the papers of the NET examination are to be conducted in a single paper	45%	12%	43%
3.	The NET exam is an appropriate strategy to find out competent teachers	67%	10%	23%
4.	Multiple Choice Questions of the CBSE-The NET examinations are the reason for not finding a competent teacher in the concerned subject	37%	25%	38%

It can be noticed from Table 5 that 59% of the respondents opined that the NET examination must focus on only the specific/concern subject of the examinee rather than the testing of other areas such as Arithmetic, Reasoning, General Knowledge, etc. whereas 28% of them were favorable to it. Nearly half of the respondents viewed that all three papers of the NET examination should be organized in a single paper whereas 43% of them disagreed with it. It can also be observed that 67% of the respondents believed that the NET examination was the appropriate strategy to select competent teachers whereas 23% disagreed with it. In addition to these, it can be comprehended from the above table that 37% of the respondents felt that using only multiple choice questions in the NET examination was not the appropriate assessment technique to find competent teachers in the relevant subjects whereas 38% agreed with it and 25% respondents responses were found to be neutral.

Table 6: Opinion of the NET qualifier regarding the Evaluation procedure Adopted (N=60)

S. No.	Statement	Agree %	Neutral %	Disagree %
1.	The NET exam also should have the provision of a re-valuation system	70%	10%	20%
2.	Negative marking is to be practiced in the NET examination also	45%	15%	40%
3.	Due to the objective type of NET exam, the percentage of the qualifying examination has increased	65%	18%	17%
4.	The cut-off marks for qualifying for the NET examination should have uniform criteria for all exams	63%	18%	19%
5.	Conducting the CBSE-NET examination online is an appropriate way	40%	20%	40%

From Table 6, it can be seen that the majority of the participants (70%) expressed that there must be a provision for a revaluation system in the CBSE-NET examination whereas 20% of them disagreed with it. Nearly half of them (45%) communicated that the negative marking system could be adopted in the NET examination whereas 40% of them showed disapproval of it, and 15% could not reveal their response. It also noticed that 65% of them perceived that the rate of qualifying for the NET examination was amplified after shifting from the subjective type to multiple choice questions pattern. The majority of respondents (63%) appealed that the cut-off marks for qualifying for the NET examination must have common criteria for three papers of examinations. It also shows that 40% of the participants opined that conducting the CBSE-NET examination through online mode could be an appropriate way.

From the analysis of the above data, it can be understood that 70% of the respondents are in favor of introducing the revaluation system in the UGC/CBSE/CSIR-NET examination. The study assumed that NET qualifiers might be suspecting the evaluation procedure adopted for NET examination. Another reason might be uploading the answer key repeatedly with minor modifications and also announcing the supplementary results.

Table 7: Opinion of the NET Qualifiers about the prescribed syllabus of NET (N=60)

S. No.	Statement	Agree %	Disagree %
1.	The syllabus of the CBSE-NET examination is more extensive	45%	55%
2.	The syllabus must be focused on the concerned subject of the examinee	75%	25%

Table 7 showed that 45% of the qualified candidates felt that the prescribed syllabus of the UGC/CBSE-NET examination was lengthy whereas 55% did not feel it. The majority of the qualified candidates (75%) emphasized that the examination should be conducted only on the concerned subject of the examinees rather than including other areas (i.e. Paper-I arithmetic & reasoning). It is concluded that the present Syllabus of the UGC/CBSE-NET examination is lengthy.

Table 8: Responses of the NET-qualified candidates about difficulties faced while attempting the examination (N=60)

S. No.	Items	Agree %	Disagree %
1.	The pattern of the CBSE-NET examination needs to be changed from objective to subjective	30%	70%
2.	The number of questions in the NET examinationshould be increased	28%	72%
3.	The frequency of conducting the NET examination is to be increased	37%	63%
4.	The age limit for qualifying for CBSE/UGC-NET examination should be the same for all categories of examinees	75%	25%
5.	The cut-off for qualifying NET examination must be equal for all categories of examinees.	58%	42%

Table 8 shows that the majority (70%) responded that the pattern of the CBSE-NET examination was not required to change fromobjectivemode to subjectivemode, whereas 30% believed in it. When it comes to the number of questions on the examination, only 28% of the respondents expressed that the number of questions ofthe CBSE-NET examination must be increased whereas the majority (72%) disagreed with it. The majority of the respondents (75%) demanded that the age limit to appear for the NET examination must be equivalent for all categories of examinees, and also 58% of respondents stressed that the cutoff mark for qualifying NET examination should be the same for all categories of examinees.

From the analysis of the above data, it is understood that the majority of the NET qualifiers' opinion was found to be favorable because of conductingthe NET examinationin an objective mode.

Table 9: The opinion of the NET-qualified candidates about the Allotment of Time, Fee structure, and Examination Centre (N=60)

S. No.	Items	Agree %	Disagree %
1.	Allotment of time for answering paper III of the NET examination is appropriate	55%	45%
2.	The fee for applying NET examination is more for examinees	57%	43%

3.	The Center of NET examination is far away from the residency	53%	47%

Table 9 reveals that 55% of the NET qualifiers viewed that the allotted time for answering PaperIII of the NET examination was adequate. More than half of the respondents (57%) opined that the NET examination fee was more and also felt that the NET examination center was far away from their residency (53%).

Main Findings of the Study

In light of the data analysis and interpretations, some significant findings have been emerged and presented as follows:

- The study found that the majority of respondents (97%) believed that the language used on the National Eligibility Test exam was appropriate.
- Forty-seven percent of the respondents requested that the NET also be conducted in their respective local or vernacular language.
- It was found that 58% of the respondents expressed that paper-I of NET (i.e. Arithmetic and Reasoning Ability) was difficult for the qualifying exam.
- The study revealed that 67% of the respondents believed that the NET examination was the appropriate strategy to select competent teachers, whereas 23% and 10% were found to disagree and neutral respectively.
- It is understood that 70% of the NET Qualified candidates' responses were found to have a provision fora re-evaluation system in UGC/CBSE/CSIR-NET examination.
- The study found that 65% of respondents felt that the qualifying rate for the National Eligibility Test had increased after shifting from the subjective pattern to multiple-choice questions.
- More than 60% of NET-qualified candidates appealed that the cut-off marks to qualifying for the NET examination must have common for all three papers of examinations.
- The majority of NET-qualified candidates (75%) believe that the examination should be focused on the examinees' concern subject rather than including other areas (i.e. Arithmetic & Reasoning Paper-I).
- The majority of participants' responses (75%) were found to require the equivalent age limit for all categories of candidates to appear for the NET.

Educational Implications of the Study

The purpose of this study was to find out what the NET-qualified candidates think about the mode of examination. In reality, in India, the NET is one of the most important requirements for entering the teaching profession at the higher education level. The current study's conclusions have ramifications for academics, students, educators, teachers, and policymakers in the field of higher education. Some of the key educational implications of the study are given as follows:

- The current study has a direct implication in revisiting the mode of UGC/CBSE/CSIR-NET examination concerningthe syllabus or content as it was found to be concentrated on the concerned subject only.
- The policymakers need to think about considering Regional/Vernacular language also as one of the mediums to conduct UGC/CBSE/CSIR-NET examination.
- The study has come up with a suitable proposition that there must be a provision of the re-evaluation system for the National Eligibility Test examination as other academic courses practicing.

Conclusion

The success of higher education institutions' teaching-learning programs is dependent on the quality of their professors, which necessitates the use of a strategic approach to recruiting teaching faculty. The present study discovered that the current method of administering the NET examination is adequate, although the research participants expected a re-evaluation process in it, as some academic institutions do. The prime objective of the NET examination is to find qualified and competent teachers, and therefore, the examinees must be comfortable with the medium of instruction. The majority of NET-qualified candidates believed that one of the mediums for the NET examination should be a regional or vernacular language.

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Awareness of Vocational Education in Secondary School Students

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Abstract

The meaning of education is to gain knowledge, knowledge is that which create understanding and perception, perception leads the path of individual growth, social changes and national development. Education which gives employability is need of hour. In order for vocational education to properly contribute to India's and the changing national setting. The government has already taken a number of significant measures in this area since it is fully aware of the crucial role that vocational education plays in society. It was realized to find out level of awareness of secondary students about vocational education. With the objective of finding difference between awareness of students about vocational education, this study has been conducted. 40-40 students of government and non-government schools have been chosen for the study. It was found that awareness of the students is less in an average and there is significant difference between awareness of students of government and non-government schools.

Introduction

The main objective of the education is always concerned with learning and an educationist is make a person employable. Education is not to deliver information but facilitate the desired wings to the learner to let him fly in the endless sky. When education in itself is lifelong and continuous process than why learning is not associated with vocational education and why the awareness about Vocational education is not assumed as most desired factor for vocationalisation of education.

Vocational education is always required and essential whether its ancient Vedic period or the 21st century - the century of technology. The age-old Hindu mythology of *varn-vyavstha* was eventually discrimination of occupations of the people in society. If different occupations subsist than practical training to do all those occupations would always there, no matter whether it is formal or informal, rightly explained by National Sample Survey Organization (NSSO) that there exist two sorts of occupational trainings in Asian nation - one is formal and another is non-formal. Formal training can be structured educational programme and results in certificates, diplomas, degrees, recognized by State or Central Government, Public Sector and different supported issues. Non-formal vocational preparation supports in effort some marketable expertise that permit someone to cart out her/his ancestral occupation.

In a way through such non-formal vocational training, a person receives vocational training through "hereditary sources." Till 20th century, occupational training was a hereditary issue, child learns from their parents or family members to build up and expand their family treads. Now in this century, it is not only enough to follow footsteps of ancestors but also essential to get training.

Need of the Study

As the major concern of education is learning, learning of living life happily and comfort. It has been observed for a long time that awareness of learners plays an important role for any learning choices, general concept is that if someone is aware about a certain thing than that person might be liked to opt it. Similarly, in case of vocational education it is a fact that if awareness is there, then a person can think for opting vocational education and training. Basic objective of this research is to find awareness of students for vocational education and training. It was observed for a long time the necessity to differentiate the awareness of government and non-government schools' students, so that this research has been conducted.

This is well accepted that this target of making youth more skilled and employable can be achieved only through making our educational system employment oriented.

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Basically, when it is said to make an employment oriented educational pattern the concern behind this statement is to merge vocational education in school education system so that the students will find another way of educational pattern at an early age which will make them employable, skilled and ready to be introduced in the world of work. The government is taking keen interest and rigorous efforts have been taken for vocationalisation of the educational system to make students employable. Students are the beneficiary body for whom all the policies and plans are being made and execute. So, research-for-students made this research more valuable. As Haney (2002) found in his study on "Secondary Student Perceptions of Vocational Education" that perception of students was positive about vocational education. The preference to select academics rather than vocational education was found average in this study. On the basis of the study the perception of students towards vocational education was found. The perception is always lie on awareness and interest about that certain phenomenon, so the need to do a study on awareness and interest instead of perception was decided better to enquiry students'attitude towards vocational education with examine their skill development. As it is well accepted fact that all government initiatives for betterment of students will be more impactful if students are aware about it in a positive manner and will be fruitful if students will show interest towards it. The proper execution or implementation of any plan is only possible when the beneficiary body is well aware and posses' interest towards it, here in case of vocationalisation of school education which is essential for present era, is abundantly possible only when students have knowledge about each and every aspect of vocational education and show interest about it. That was the reason behind this study, moreover as it is known that vocational education and skill development is two sides of same coin so while awareness and interest about vocational education is investigated that investigation will not achieve its goal without investigating employability skill of the students.

Objectives of the Study

Following objectives have been formulated for the study:

1. To study the difference between awareness about vocational education of students belonging to the government and non-government schools.
2. To study the difference between awareness in vocational education of students belonging to the government and non-government school boys.
3. To study the difference between awareness in vocational education of students belonging to the government and non-government school girls.

Hypotheses of the Study

The following null hypotheses are formulated for the study:

Ho1: There is no significant difference between the awareness of secondary students of government and non-government schools in vocational education.

Ho2: There is no significant difference between government and non-government school'sboy's awareness of vocational education.

Ho3: There is no significant difference between government and non-government school's girls' awareness of vocational education.

Methodology of the Study

The research is conducted by adopting survey method.

Sample of the Study

In this research, students of government and non-government schools were randomly selected to study the difference between awareness in vocational education of secondary students. Class 9th and 10th students (40) were selected from government and not government schools.

Table 1

S.No.	Group	Government School	Non-Government School	Total
1.	Students	20 Boys	20 Boys	40
		20 Girls	20 Girls	40
	Total	40	40	80

Tools and Techniques

To study the difference between awareness in vocational education of secondary students, firstly government and non-government school was selected.

Tool of the Study

Researchers' self-made questionnaire of 25 questions was constructed according to situations and subject. 'Yes' or 'No' options were provided as answer in section A and multiple-choice questions were given in section B.

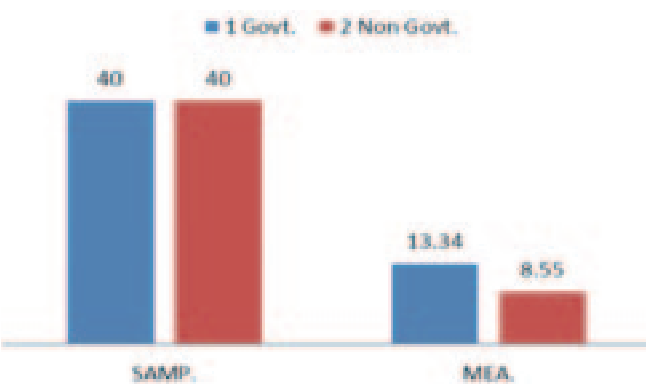
Analysis and Interpretation

Ho1: There is no significant difference between awareness of secondary students of government and non-government schools in vocational education.

Table 2

S. No.	Group	Sample	Mean	SD	Cal. t value	df	Level of Significance and tabulated value of t
1.	Government School	40	13.34	0.4370	33.71	78	At level of.01 2.374
2.	Non-Government School	40	8.55	0.3979			At level of .05 1.664

Graph 1



From the above table, calculated t is less than the value in the t-table at the difference of 78 at the level of.01 and.05, which demonstrates the difference in the significance level. Therefore, it is clear that there is a big difference. between government and non-government schools' girls' awareness in vocational education.

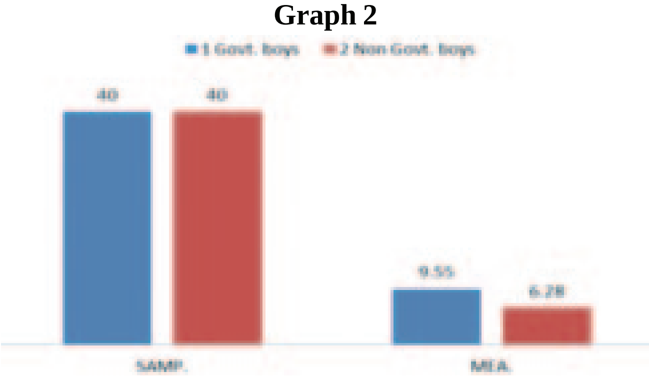
By testing this hypothesis, it was found that there is a difference between awareness of government and non-government school students. It was also realized that the awareness of government school students was more than aware of non-government school students.

Ho2: There is no significant difference between government and non- government school's both awareness in vocational education.

Table 3

S. No.	Group	Sample	Mean	SD	Cal. t value	df	Level of Significance and tabulated value of t
1.	Government Boys	40	9.55	0.24	19.406	78	At level of.01 2.390
2.	Non-Govt. Boys	40	6.28	0.448			At level of.05 1.671

Graph 2



From the above table, calculated value of t is less than at difference 78 at the level of .01 and .05 which shows difference between levels of significance. Hence it is obvious that here is significant difference between government and non-government schools' boys' awareness in vocational education.

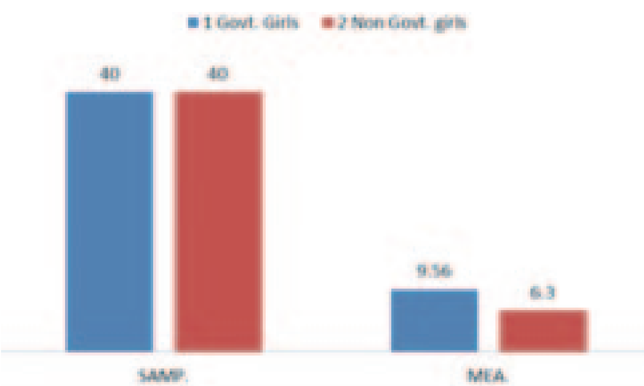
The difference between the awareness of boys of government and non-government schools was observed. It was found that awareness of boys of government was more than awareness of boys of non-government schools.

Ho3: There is no significant difference between government and non-government schools' girls' awareness of vocational education.

Table 4

S. No.	Group	Sample	Mean	SD	Cal. t value	df	Level of Significance and tabulated value of t
1.	Government Girls	40	9.56	0.24	19.406	78	At level of.01 2.390
2.	Non-Government Girls	40	6.3	0.45			At level of.05 1.671

Graph 3



From the above table, calculated t is less than the value in the t-table at the difference of 78 at the level of.01 and .05, which demonstrates the difference in the significance level. Therefore, it is clear that there is a big difference. Between government and non-government schools' girls' awareness in vocational education.

It was noted that girls in government and non-government schools had different levels of awareness. It was discovered that girls in government schools received greater attention than girls in non-government schools.

Discussion

The result of the study revealed that the awareness of secondary students is less and this can be concluded that due to lack of awareness, students are not opting vocational courses.There must be a balanced atmosphere, when vocationalisation of formal school education is concerned. As maintenance of awareness of students towards vocational education is also the major issue. I was keenly observed that education could not be defined as a limited, bounded process and for vacationalisation of education "the sky is not the limit" and if it is obstructed under the limitations of final academic education, it cannot achieve its goal. Finally, one of the most constant features in the research that came after deep discussion with de students that they wish to opt some vocational streams but they do not know how to opt it and what will be the future aspect.

Conclusion

The difference between awareness of girls of government and non- government schools was observed. It was found that awareness of girls of government was more than awareness of girls of non-government schools. The difference between awareness of boys of government and non-government schools was observed. It was found that awareness of boys of government was more than awareness of boys of non-government schools. By testing this hypothesis, it was found that there is difference between awareness of government and non-government schools' students. It was also realized that the awareness of government school student was more than awareness of non-government school's student.

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A comparative study of the English learning status in terms of its skills prevailing among the High School class students with reference to gender and urban/rural locality

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Abstract

English functions as the second language in India, being used to perform a host of international as well as intra National functions. It is being also observed that generally guardians desire to promote status of English learning among their wards (children). But what is its prevailing status among the high school class students? Which needs and empirical validation. Under this impression, the present study was conducted on class 10th students for examining the status of English learning prevailing among them with reference to Gender and urban/Rural locality. The English learning status was assessed by employing a five points response based questionnaires.

This study was carried on 200 (110 boys+90 girls and there were 100 Urban and 100 rural locality) class 10th students of Government Inter College situated in Kotdwar town and its rural vicinity. The descriptive survey method was employed. The finding revealed that boys posses better degree of understanding, reading, writing skills and in total English learning status except on speaking skill, in comparison to girls. The urban locality student's posses better degree of status on English learning and it skills. Thus, gender and locality play a remarkable role in the prevailing status of English learning among the high school class students.

Introduction

Language is a social behavior of interpersonal communication the culture of a society is transmitted through one generation to another through language. Language permits the communication of information from one generation to the other.

Broadly speaking the tools of communication may be categorized under two heads: Signs and symbols. Communication is the acquired ability of an individual in a society through socialization process and "Social conventions that specify particular relationship between a set of symbols and a set of ideas" (Mc Daviv and Herbert, 1969). It functions "as an arbitrary system of vocal symbols by means of which human beings as members of a social group and participants in a culture interact and communicate" (Encyclopedia Britanica, Vol 13, .696). Language as a system of communication through conventional symbols enables individuals to interact among themselves and share ideas of mutual interest (Kuppuswamy, 1961). A such, the acquisition of a system of language requires applications of higher mental processes. The acquisition and transmission of any language as a system of social behavior ranges from very simple to highly complex mode of expression: Verbal and non-verbal, effective expression in language demands inculcation of certain linguistic abilities or skills, these are normally: listening, reading, speaking and writing.

Listening is the ability to accurately receive and understand the message that is being communicated. Listening is the beginning of understanding. So, in the present research study, the understanding skill has been used in place of listening.

We all know that English functions as an important second language in India, being used to perform a host of international as well as intra-national functions (Satsangi, 2005-06).

That is why; English language has occupied an important place in our educational-system. Even the Guardians desire to promote English language from the beginning of the schooling as they give so many reasons in its favor. So, in the present study, under learning of English, the four basic skills: understanding, speaking,

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reading and writing have been selected for investigating there prevailing status among the student.

As the Secondary class (IX & X) play a significant role in the education-ladder of every individual. So, the study has been conducted on the high school student (class-X). It is hoped, this study will strengthen the enthusiasm among the students towards their improvement in learning of English, and by this study, the English language teachers may be creatively motivated in this regard towards improving the understanding, speaking, reading and writing the four basic linguistic skills of their pupils.

Statement of the research problem

A comparative study of the English learning status in terms of understanding, speaking, reading and writing linguistics-skills prevailing among the high school class students with reference to their gender and locality.

Objective of the study

(i) To assess the English-learning status in terms of the four basic linguistic skills, viz. Understanding, speaking, reading and writing prevailing among the high school class students.

(ii) To compare the prevailing status of English learning in term of linguistics skills will with reference to Gender and locality.

Hypothesis

To achieve the above objectives the hypothesis were framed as under:

(i) There is average status of learning English in terms of the four linguistic skills prevailing among the high school class students.

(ii) There is no significant difference between the boys and girls students in their English learning status in terms of the four basic linguistic skills.

(iii) There is no significant difference between the urban and rural locality High School class students in their English learning status in terms of the four identified linguistic skills.

Delimitation

The present study was delimitated to the high school class (X class) regular students of the session 2021-22 in the Intermediate College, situated in Kotdwar town and in its rural vicinity belonging to Pauri Garhwal district of Uttarakhand state of India.

Research methodology

As per the nature of the research problem, in the present study, the descriptive survey method was employed.

Variables

(i) ***Dependent variable:*** The English learning status in terms of understanding, speaking, reading and writing linguistic skills.

(ii) ***Independent variables:*** Gender (boys/ girls) and locality (urban/ rural).

Sample

The researcher sorted out 10% of the Government Inter College situated in the Kotdwar town and is its rural vicinity. The class Xth students of these institutions, available on the day of data-collection, were considered as sample as mentioned in the following table:

Students	Urban Locality	Rural Locality	Total
Boys	55	55	110
Girls	45	45	90
Total	100	100	200

Data Collection research tool

Inspite of her proper efforts the researcher could not get any suitable standardized tool for the present study, so a self made tool was constructed containing 10 items for assessing each skills. The item were in the form of short statements and these items were to be responded on five points liker-system in terms of always, often, sometimes, very rarely and never bearing the scores as 5, 4, 3, 2, 1 respectively. However, this tool (questionnaire) was validated on the content of those items keeping in view the meaning and linguistic construction. There are 10 items for each skills and overall 40 items.

Data Collection procedure

The researcher visited the selected Institutions and administered the research tool (questionnaire) on the Xth class students available on that very date. This process was performed in all those selected Institutions, the researcher, herself was remained present throughout the time in the classroom while responding students. These respondent sheets were collected back and arranged as per the hypotheses. Each time was scored and categorized into four linguistic skills and tabularized.

Statistical technique used : Mean, S.D. and t-value test.

Data analysis and interpretation: That tabularized data were subjected for statistical treatment in accordance with the framed hypothesis, and their testing.

Testing of hypothesis is number 1

There is average status of learning English in terms of four basic linguistic skills of the sampled students

Table 1: Presentation of status in the form of Mean-scores of students on their four linguistics skills and in to exhibitting status of learning English

N=323

Skills	Understanding	Speaking	Reading	Writing	Total
Mean-value (out of 10 scores)	5.02	5.52	5.12	4.65	20.29

From the present table it is evident that the sampled students have obtained the scores around 5 i.e. 50% of the score 10 in that skill and similarly in total the status of learning skills has been found 20.29 i.e. 50% of the 40 scores. Thus, the scores obtained by sampled students appear around the average score(50%) which leads to reduce the framed hypothesis number 1 stands accepted in general. It exhibits that the sampled student (class 10^{th}) poses average status of learning English language.

Testing of hypothesis no. 2:

There is no significant difference between the boys and girls students in their English learning status in terms of basic linguistic skills.

(a) In case of Urban student

Table 2(a): Comparison of English learning status of urban locality boys and girls students in terms of mean, S.D and t-value

	Boys (N1=55)		Girls (N2=45)			
Skills	Mean (M1)	S.D. (B1)	Mean (M2)	S.D. (B2)	M1M2 difference	t-value
Understanding	5.33	0.82	4.74	1.05	0.59	2.33*
Speaking	5.92	1.11	6.21	0.64	0.29	1.52
Reading	5.53	0.66	5.20	0.64	0.33	1.37
Writing	5.81	0.82	5.17	0.75	0.64	4.27*
Total	22.59	0.85	21.32	0.78	1.27	7.42*

At df = (55-1)+(45-1) t-value significant at 0.05 level= 1.98*
= 54+44 0.01 level= 2.62*
= 98

It appears from the above table that boys students obtained more mean values then to girls student on their three linguistics skills and in total English learning status where as it is Reversed on their speaking skills. This difference between the mean- values (M1M2) were estimated in terms of t-values up to a significance level. it was found that:

(a) Among more than 95% students boys students posses better status of understanding skill of English language in comparison to those girls students.

(b) Among less than 95% students the boy students posses poor degree of English speaking skill than to the girls students.

(c) Among more than 99% students boys students posses a better degree of English writing skills and in total English learning on these observations it can be deduced the hypothesis no(2) stands rejected for understanding and writing skills and in total English learning but it stands accepted for speaking and reading skills of English in case of urban locality students.

(b) In case of Rural locality

Table 2(b): Comparison of English learning status of boys and girls students of rural locality in terms of Mean, S.D. and t-values

Skills	Boys (N1=55) Mean (M1)	S.D. (B1)	Girls (N2=45) Mean (M2)	S.D. (B2)	M1M2 difference	t-value
Understanding	5.28	1.41	4.69	1.03	0.59	2.46*
Speaking	4.64	1.13	5.31	1.41	0.67	2.58*
Reading	5.31	0.74	4.45	0.73	0.86	5.85**
Writing	4.32	0.72	3.82	1.05	0.50	2.70**
Total	19.55	0.69	18.27	0.85	1.28	8.88**

At df = (55-1)+(45-1) t-value significant at 0.05 level= 1.98*
=54+44 0.01 level= 2.62**
= 98

It appears from above table that boys obtained more mean-values then to girls on their understanding, reading, writing skills and in total English learning status where as the boys received less mean-value then to girls on their speaking skills of English learning. The difference between the mean-values was estimated up to a significant level in terms of t-values. It indicates that among more than.

(a) 95% students the boys posses better degree of understanding skill than to girls.

(b) 95% students the girls posses better degree of speaking skill than to boys.

(c) 99% students, the boys posses better degree of English learning in total than to girls

On the basis of above finding the hypothesis no. 2(b) stands rejected.

Testing of hypothesis no. (3)

There is no significant difference between the urban and rural locality High School class student in their English learning status in terms of the four identified linguistics skills.

(a) In case of boys

Table 3(a): Comparison of boys of Urban and rural locality in their English learning status in terms of Mean, S.D. t-values

Skills	Urban locality Boys (N1=55) Mean (M1)	S.D. (B1)	Rural locality Boys (N2=55) Mean (M2)	S.D. (B2)	M1M2 difference	t-value
Understanding	5.33	0.82	5.28	1.41	0.05	0.23
Speaking	5.92	1.11	4.64	1.13	1.28	8053**
Reading	5.53	0.66	5.31	0.74	0.22	1.65
Writing	5.81	0.82	4.32	0.72	1.49	10.42**
Total	22.59	0.85	19.55	0.69	3.04	20.54**

At df = (55-1)+(55-1) t-value significant at 0.05 level= 1.98*
=108 0.01 level= 2.62**

It is clear from the above table that boys of urban locality obtained more mean-values than to those of rural locality on their four of the linguistics skills and in total status of English learning. The difference between their mean-values were estimated to be significant beyond 0.01 level in terms of t-values for the speaking, writing skills and in total English learning status. But the mean-values could not be estimated in terms of t-values even up to a significant level of 0.05.

It leads to reduce that among:

- More than 99% boys the urban boys, posses better degree of speaking, writing skills and in total English learning status in comparison to the rural locality boys.
- Even up to 95% boys, the urban and rural locality could not be differentiated significant on their understanding and reading skills of English learning.
- Thus, hypothesis no. 3(a) stands rejected in their speaking, writing skills and in total English learning whereas this hypothesis remains accepted on their understanding and reading skills.

(b) In case of girls

Table 3(b): Comparision of girls of urban and rural locality in their English learning status in temrs of Mean, S.D. and t-values

Urban locality
Boys (N1=45)

Rural locality
Boys (N2=45)

Skills	Mean (M1)	S.D. (B1)	Mean (M2)	S.D. (B2)	M1M2 difference	t-value
Understanding	4.74	1.05	4.69	1.03	0.05	0.186
Speaking	6.21	0.64	5.31	1.41	0.90	3.91**
Reading	5.20	0.64	4.45	0.73	0.75	6.00**
Writing	5.17	0.75	3.82	1.05	1.35	7.06**
Total	21.32	0.78	18.27	0.85	3.05	5.64**

At df = (45-1)+(45-1)
= 88

t-value significant at 0.05 level= 1.98*
0.01 level= 2.62**

The above table-data exhibits that girls of urban locality obtained more mean-values then to those of rural locality on their understanding, speaking, reading and writing skills, and also in total status of English learning. The difference between their mean-values were estimated in terms of t-values up to a significant 0.01 level except on the understanding skills. That is to say that among girls students more than 99% girls of urban locality posses better status, than to those of rural locality. On their all the four skills and in total English learning except the understanding skills. These observation leads to deduce that hypothesis no. (b) stands to be rejected except for the understanding skill.

Conclusion

The conclusions are drawn in the light of the acceptance/ rejection of the framed hypotheses as under:-

(a) The sampled student (class 10th) posses the average level of status on their understanding, speaking, reading, writing skills and also in total English learning.

(b) The sampled boys (whether of urban or of rural locality) students posses better degree of status on their understanding, reading, writing skills and also in total English learning status, in comparison to the girls students. However, the boys posses lower degree of speaking skill in English learning. It indicates that gender variable plays a remarkable role in English learning and its four skills understanding, speaking, reading and writing.

(c) The sampled student of urban locality (whether boys or girls) posses better degree of understanding, speaking, reading, writing skills and in total language learning, than to those of rural locality. It leads to infer that locality variable plays a Remarkable role in English learning and its four skill understanding, speaking, reading and writing.

Educational implication of the study

Keeping in view, the findings of this empirical study, it can be inferred that the English language teachers should pay more attention to their students in improving the English learning status and its linguistic skill.

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Life Skills Training using Digital Painting: A New Evidence from Rural India

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Abstract

The Digital India program was presented in July 2015 by the Government of India to empower Indians, especially rural people. The initiative was designed before the pandemic to digitally transform society with reforms in the electronic delivery of services. Hence, during and after the pandemic Government of India could support E-learning with self-confidence even in Grama panchayats of rural India. The investigator also prepared a module long before the crisis to train selected young rural girls of central Kerala using digital paintings to enable them to live happily with self-awareness. The objective of the work was to give a new creative perspective to life skill training in digital India for rural girls from a woman's studies angle. In the program done with due consent, significant differences were noticed after checking the understanding level of the participants with various hypotheses on ten life skills. Answers from the participants on life skill training lines in closed questionnaires provided data for T-tests in the comparative testing method. The post-tests after the training proved the effectiveness of digital paintings in the life skill module prepared for rural girls. The value of observation and imitation is emphasised in this article by combining art and literature. The experimentation of Albert Bandura done before sixty-one years is still relevant to change the habits of children. Thus the novel module of the researcher encouraging girls to develop new attitudes is discussed here, which has the scope of elaboration in the future. It is an evidence of the interdisciplinary integration of literacy in life skills and creativity for building confidence in the future generation.

Introduction

Life skill brings peace of mind, and the significance of this study lies in the conflicting background of the countries in this nuclear world. As women are the nightingales of humanity, giving more attention to their life skill training from budding ages can change the social structure. British Council upheld the merits of training essential life skills for healthy societies in the 21st century. According to them, life skill creates successful individuals who can express ideas confidently. Therefore, the purpose here is to give a new creative perspective to life skill training for rural girls from the perspective of women's studies. The Digital India program was launched in July 2015 by the Government of India to empower all, especially rural citizens with improved digital literacy. In line with this, a novel study was done for rural girls integrating creativity in digital painting with a life skill awareness program.

A literature survey was conducted on different topics in work to find out the novelty of the study. For instance, Wayne W. Dyer (2017) pointed out that the extraordinary embraces most of the ordinary, as we all live in the same physical world. Similarly, the inner self of a rural girl engrossed in her daily routine will long for an extraordinary task. By concentrating on positive attitudes, this remarkable power of the girl is to be increased through the mirror of women's studies. In the study of Satveer Kaur (2017), a significant difference was noted between adolescents with training in life skills on school adjustment and without training. Rural and urban adolescents differed significantly on overall school adjustment, but gender did not contribute to school adjustment in the comparison there. Angelos Markos and Constantinos M. Kokkinos (2017) did work among pre-adolescents on the change of a short form of the Greek Big Five Questionnaire for Children. Ninety such documents were verified in the present survey.

The Digital India site of the Government of India has a beautiful passage, "celebrate the girl child and enable her education", which is relevant to the present study. More digitalization and entry through internet services will help to retrieve data from any place. The broadband

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highway to rural India interweaves educational and economic activities. Now, all girls use e-education facilities and Digital India resources. From street vendors to big traders, all have digital payment facilities. The disparity between rich and poor or rural and urban narrowed in the case of digitalization. Still, a gap was seen in life skill training using digital painting alone in rural India in the literature surveyed before the pandemic. As the researcher could not find similar work, only a brief survey of the documents reviewed is given here. For example, Yau, Hon Keung, Cheng, Alison Lai Fong (2012) sans any digital painting described gender differences in confidence while using technology for learning. Kamlesh Mohindra (2010) used a picture of an eminent person with words below regarding his personality traits in an exercise done for teamwork. Even though it is an example of art, no digital medium was seen used on other pages by the author. Thus participants from an institution in central Kerala were selected to fill the gap by using the digital paintings of the researcher for training in basic life skills. The aim of the work is literacy on life skills through images painted in the memory to develop an optimistic mood. The research question here mainly revolved around the innovative way to fill up the research gap in this area after preparing a module with digital painting on life skills for rural girls.

Methods

WHO and UNICEF have noted ten basic life skills for children. They are self-awareness, empathy, effective communication, coping with stress, critical thinking, dealing with emotions, creative thinking, problem-solving, decision making and interpersonal relationship skills. Slowly, several changes in topics happened. But researcher has taken the above ten skills for the module as girls can develop new life skills if they have a basis for these skills. The next step was the preparation of the module with these life skills in a creative style.

The major limitation of the existing pedagogy in India is the need for more life skills as the compulsory subject of study. Literacy in core subjects and literacy in life skills are different. Life skills are 'psycho-social competencies, managing life' (World Health Organisation). The literal meaning of literacy is 'the skill to read and write,' but life skill is the power 'to function well in life'. The concept of life skill literacy is the knowledge of life skills, directing to the competency in leading a confident and peaceful life.

In women's studies, woman's experience is placed at the centre. So this academic field draws inter-disciplinary methods in investigations. Training in the study was through modelling, observation, and social interactions. Hence, social learning theory (Bandura, 1997) for learning new behaviour forms the theoretical framework here. It is applied in an interdisciplinary way, as girls can learn by imitating Sreeskil, the model rural girl in the paintings. A reinforcement can change attitudes by imitating ideal gender models. Actions are built upon imitation in youngsters. Thus observational learning and imitating models help them to act in similar situations. Therefore, a model named Sreeskil was used in the module to narrate life skills to have positive attitudes in the participants. When she followed time table daily, girls could imitate her well daily. Seeing her finding and accepting her limitations is also a model for the girls. The next step is being confident about her inborn talents, which can make a girl more powerful. Ego is a main hurdle in correcting errors, so saying sorry when a mistake occurs is another idea in the module. In short, the will to learn and the ability to retain are essential to acquire a girl's power to control actions when she grows up.

There is short-term to post-graduate training in life skills on and off the net, but the researcher could not find a life skill study with similar paintings during the literature survey conducted before the pandemic. The researcher could not see previous data for the following, so the life skill communications were experimented with the creativity of the researcher. Thus the simple ideas painted in the digital medium were used to develop the skill to live happily with their resources in the future using the advancement in the field by various initiatives. The basic objective of the study was to know the life skill awareness among selected rural girls after the training with the module using digital paintings. The program was conducted using the experience in this field with the researcher's digital pictures on life skill communications. In the module, the girl Sreeskil and all 60 paintings are drawn on the computer, as digital painting is highly relevant in digital India. Here conventional methods can be used with digital tools with thousands of shades. Each life skill is pictured for the study to assimilate them quickly. It is not a detailed description but a new evidence of the integration of literacy and life skills in a creative way. Closed questionnaires on ten selected life skills were used in the training activity. As Kerala is a literate state, moderate sampling was done from the central area for experimenting with different hypotheses. Questionnaires provided answers on life skill training lines in the comparative testing method from the participating children with due consent. The analysis of responses before and after the training was used to prove the effectiveness of the module. The scope of the work was limited to less than hundred selected girls of the institution. Enthusiastic researchers can expand it to more analytical, statistical, and experimental procedures. More than 20 hypotheses from various angles were formulated to find out the results of pre-tests and post-tests of the training. The hypotheses focussed on the point of variation, that is, to show 'the difference between the mean scores before and after training of selected groups of participants in their awareness of life skills selected for the study.' The significance of the difference before and after testing was recorded. The tool of five point closed questionnaire was used to elicit answers and to compare mean and standard deviation. In the analyses, T-test values decided the findings based on table values.

Results and Discussion

The analysis resulted in the acceptance of the difference between the two observations and the rejection of the null hypothesis stating that there is no difference. After training all girls with all selected life skills, a T-test value of 9.735 was seen as more significant than the table value of 1.68. The mean difference was apparent between 4.919 and 2.012. Thus, after the training with digital paintings, there was a significant difference in the awareness level of selected life skills. The values of each chosen life skill were also recorded separately after the training. For example, after the training, the T-test value of effective communication, 4.256, was greater than the table value of 1.68. There was difference also in the mean here between 4.94 and 1.99. For coping with stress skills, the T-test value of 8.06 was greater than the table value of 1.68. The mean difference after the training 4.96 was higher than 1.91 in the pre-test. These comparisons could prove the training by the module as effective through observational learning and imitation of the model as mentioned in social learning theory. Bandura, in this theory, underlines learning through observation, imitation, and modelling. Imitation is copying behaviour, and observation is performing the same act after witnessing a model. It is evident in the conduct of kids who watch their parents and imitate their day-to-day activities. The influence of the model Sreeskil used in themodule to carry out the research work was evident in the participating girls. The limited number of participants and the restricted area of study in the institution in Kerala leave the scope for expansion after the pandemic period.

The summary of the work done using digital paintings can be given on a positive note. In this program, 'literacy escorted life skill'. The post-tests after the program proved the effectiveness of digital painting in offering training. The key finding was a significant difference in the life skill awareness level of the group of selected rural girls trained with digital paintings. The test values after the experiment were shown as greater than the table values, so it is evident that participants relished the positive change brought out through digital painting.

The objectives to prepare a module by the researcher using digital paintings on selected life skills, to conduct awareness training using the module, and to compare the effect of the training were fulfilled. It is interpreted that closed questionnaires used in the study helped to handle them quickly and answer without confusion. As it was used after verification by experts, the answers were compiled quickly. Literacy in life skills of the participants was fruitful in the training using the digital medium. Thusself-transformation showing the will to live happily is the core of the current program.

Out of the different ideas given in the module, the exercise part is discussed here as an example. Patanjali underlines "yogashchittavrittinirodhah" (Sutra 2) in Yoga Sutras. Self-knowledge is objective, as the mind is an object of perception similar to the outer world. Thus Sethumadhavan, T.N. (2010) considered yoga as restraining the mind-stuff (Chitta) from taking diverse forms (Vrittis) by integrating, channelling, regulating, stilling, and controlling the thought patterns of the mind field (nirodhah). Thus, if different exercises in yoga in the module are taken here, it supported life skills like self-awareness and coping with stress.

'Whoever loves her mother cannot hate a mother in any part of the world'. This is the philosophy of the researcher regarding mother, mother India, and mother Earth. Imbibing a positive self-image is suggested to be a diamond inside and be cool like water facing those who play with emotions. In schools, girls must be allowed to discover their interests. They must be allowed to evaluate themselves to find their weaknesses and talents continually. If this mental process continues throughout life, they will know themselves well so that they will not dance up to the tunes of others. Hope is to be ignited in minds, as it will lead them through thick and thin in life. The girls are the future guardians of many, so empowering them with life skills needs to be prioritized in women's studies. There are opportunities hidden under any challenging situation, which is to be interrogated with optimism and confidence by all, especially women, to get equal status in life. It is, therefore, recommended to include such indigenous programs and activities in the syllabus to have a positive outlook on life for all Indians.

Gandhiji in Village Swaraj stated that all education must be self-supporting and find its way to the pupils' homes. He also mentioned that the mind is restless, unsatisfied, and wanting more and more. The Father of the nation imagined a revolution in empowerment principles by 'changing the mindset, changing way of living and finally changing the social structure'. Even when all uphold gender equality, he felt that women are treated as delicate. The pursuit of power was his thought for all women, as India's emancipation is possible through the emancipation of womanhood. The concept of life skill literacy for changing habits becomes relevant here. The interdisciplinary integration of social learning and creativity in the present study is a thread for this confidence-building in girls. After giving this summary of the results and interpretations, it is hoped that the work has the potential to encourage posterity todevelop new attitudes and has the scope for elaboration in the future. Happiness is there where many hands work with a similar mindset. Thus by changing the mindset of rural girls and their way of living, the researcher expects that slowly the social structure will also change.

Conclusion

UNICEF reiterated that "in adolescence (11 to 19 years), those children who miss out on developing foundational skills need to build these skills." This study by a senior citizen is only a drop of water in the ocean of works for society. Problems are always contextual, and a micro-level issue is presented from a new perspective here. The answers given by participants for the closed questionnaires on life skill training lines helped T-tests in pre and post-test comparative studies. The outcome of the work is the effectiveness of digital painting in training life skills. The findings substantiated the importance of the creativity of digital painting in life skill training. Even though experiences on issues will be different in different cultural scenarios, biologically defined sex and socially decided gender play a crucial role in the life of girls. This gender disparity in all fields made the investigator think of strategies to enhance self-confidence in women in India. Women's studies field is the best area to channel dedicated women to serve society with their areas of excellence. A mental view drawn from a visible scene stays in mind. So, the researcher is hopeful to continue this voluntary training program broadly using the content in the future. But much creative thinking by interdisciplinary rule makers has to be taken place in the area. Hence, it is concluded with the proverb in English to remind the posterity to be wise and confident during any drawbacks, as "adversity makes a man wise, not rich".

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Role of Review of Products on Social Media in Consumer Buying Process

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Abstract

The objective of this research paper is to study the effect of a product survey on the customer purchasing measure from an online store. The remarkable association with a posted online item survey on the web-based media page of the item in breaking down the pre item purchasing choice. In this manner, an exploration question has been created dependent on a deliberate writing survey. What amount can online data (online surveys) influence the client's buy conduct in the online buy measure? This examination explores the effect of online item surveys, which are posted via web-based media on shopper purchasing choices. The exploration approach is subjective. The unmistakable leave is embraced to meet the target of the exploration study. Information was gathered through meetings directed by PhD researchers in the age bunch from 25 to 35 years. The discoveries uncover that clients are affected by online item audits relying upon their degree of contribution. The restricted quantities of respondents and restricted topographical region are the potential constraints of this investigation. The organizations must actualize a methodology to adapt to negative e-WOM.

1. Introduction

Companies are exploring creative ways to be on the top of the market in today's highly competitive markets (Pingjun & Rosenbloom, 2005). "There are a variety of strategies to stay ahead of the competition, but recognising your customers' demands should always be a top priority since consumer wants or demand might shift due to rapid expansion in various market categories" (Chatura, *et al.*, 2005). Traditionally, the organizations were aimed at zeroing the cost to stay in competition in the market (Solomon *et al.*, 2018) argued that organizations do not have multiple options to survive in the current extremely competitive market. Therefore, a business needs to focus on the needs of the customer which leads to the buying process (Vilasini & Khanna, 2016).

The enterprises need to understand the cycle of the buying process as it helps to understand their customer needs (llyoo, 2015). Pappas and Nikolaos (2016) have said that "knowing the needs of the customer is one of the key solutions, but it is nota panacea". Pappas *et al.* (2014) have said that when customers ask friends and family for suggestions or when they want to know the experience of other customers related to a specific product for purchasing, it's one of the most crucial steps of the procedure. Enterprises need to understand the cycle of the buying process as it helps them understand their customer's needs Lukas (2015). According to Karimi (2013), more than 60% of the younger generation uses internet search engines as their primary source of information when researching a purchase. Lucas (2015) said there is no suspicion that the Internet has made remarkable changes in the procurement process. According to Keam *et al.* (2014), the social media platform has created a new channel of contact for consumers. "One of the new notions that have developed with the online and web-based media stage is the electronic verbal," according to Allen *et al.* (2014). The electronic verbal interchange may be described as "free correspondence channels with customers, "which has a significant impact on the client's purchase decision." Customers may examine things and obtain a notion of positive and bad features of the item using electronic information, which helps them decide on a final purchasing decision (Daugherty & Hoffman, 2014). Customers might get information about a product from social media or the Internet to reduce risk and ambiguity in their buying choices. C2C communication is a significant aspect that

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influences the purchasing process (Eun-Ju & Shin, 2014).

The online media stages, for example, Facebook, Twitter and others have enormously influenced the buying process behaviour. In contemporary times almost every company has a page on the various social media platforms because these are channels having a significant impact on communication with the end-users that helps in awareness and advertising. At this point when a customer buys an item and they offer or do their emotion and knowledge, which instigates others to share their experience with the product. This sort of contention affects consumer buying behaviour, which affects consumer buying decisions. The study aims to examine the effects of product reviews posted by the customer on social media, on consumer buying behaviour. The purpose of this study is to fit the difference in literature and provide a unique insight into the buying behaviour of products & assess the impact of the product on buying decisions regarding the reviews or experiences shared by other customers on social media.

2. Literature Review

2.1. E-WOM (Electronic Word of Mouth)

WOM has been the most established strategy for the passing of information from one person to another. A drastic change has been done in the era of the word of mouth from traditional to internet communication through social media networks, worldwide web-www and blogs. End-users use online modes of communication for the exchange of opinions and information related to the company's products and services (Cheung & Thadani, 2012). E-WOM communications indicate affirmative or adverse opinions and experiences, which are pooled by the shoppers. lt is pointed out that e-WOM affects customer-buying behaviour while makingabuying decision. Besides, some customers determined that E-WOM is more effective than conventional media like television advertising, newspaper andradio.

Amblee and Naveen (2011) say that while making a purchase decision customers either have a piece of positive or negative information through word of mouth and its assessment and experience. The sources of e-WOM end users usually rely on the past experiences and suggestions they receive from customers. However, the online platforms offer a novel channel to communicate with customers to gather information related to the productsof theirinterest.Facebook, Twitter, and Instagram are examples of social media sites. Cheung *et al.* (2005) have pointed out that consumer shares their opinions and experiences to help other customers in their decision making. The customers use such information more than the company uses it. It is termed as 'social evidence' that e-WOM has a major influence on the buying decisions of customers irrespective of a positive or negative influence.

2.2. Online Buying Process

As per William *et al.* (2010), there is a convincing link between what customers post online and their buying decisions. Chan *et al.* (2017) have concluded that various stages are followed in the online buying process and multiple factors are impacting the online buying decisions. Clients use online sources to discover data about different products, services, brands, and items before finalizing a buying decision as the customers can get crucial information from online sources. Customers can utilize internet sources to find information about numerous sources, brands, and commodities because online sources provide vital information before the buyer makes a final purchasing decision. After gathering all necessary information, customers evaluate their options and choose between online and offline shopping. According to Libai *et al.* (2010), consumers reduce the risk associated with making a purchase by researching the product, weighing their options, and gathering as much information as possible. When the customer goes through various stages of the purchase process, the Internet becomes an essential source of information as it offers customers to evaluate options and compare product information.

Their online post-purchase behaviour of shopping will become additional important (Liao *et al.*, 2012). lt indicates that if the end-user is keen on repurchasing the product or service, regardless of whether the item addresses the issue of buyers from the first buy or the purchaser has decided to leave product reviews online. The post-purchase behavior is determined by how satisfied or unsatisfied customers were with the merchandise. According to Solomon *et al.* (2014), customer satisfaction is a general indicator of how end consumers felt about using the products or services. Customers frequently provide feedback, whether positive or negative, regarding the goods or services they have used. It is advertised to potential clients on social media or via word of mouth.

2.3 Product Online Reviews

Before making a purchase decision, customers who are looking for details about the caliber of goods and services may consult online customer reviews. On online review sites, end users post their thoughts regarding the good or service they received and their experiences using it. Other customers who are considering making a purchase then refer to these reviews (Chen *et al.,* 2011). The past study argued that customers see e-WOM as a trustworthy informant of information and trust almost the online criticisms as potential buyers are convinced by individual endorsements (Zhu & Zhang, 2010). However, online product reviews significantly impact the purchase decision or intentions ofthe consumers. These reviews act as an informant or as a recommender because it helps in conveying the additional product information to thecustomers.

According to Fruth & Neacsu, (2014) certain customers tend to make their insights and experience a quick purchase decision while other customers are more involved to collect valuable information. Hence, the level of involvement may vary from one customer to another, which reflects the consumer's interest in a particular product. While customers with high levels of involvement have knowledge and competence in the relevant fields of linked items that influence consumer purchasing decisions, consumers with low levels of involvement rely more on the opinions and experiences of others and are more influenced by word of mouth. Therefore, the level of participation may vary from one customer to another, which shows the consumer's interest in a particular product. The quantity and quality of reviews were highlighted by Zhuz Zhang (2010). Customers who are less engaged are more impacted by the quantity of reviews, whereas those who are more involved are more impacted by the caliber of the evaluations that have been posted online. It reveals how customer purchase intentions are significantly influenced by the quantity and caliber of customer product reviews.

Another perspective is that customer assessment highly increase the trust in making online product purchase (Cheung *et al.,* 2012). Trust is one of the main components influencing buying decision to purchase a product online. The survey's quality will boost confidence, lowering the danger of currency exchange and increasing product demand.

Kumar & Dange (2012) opined that technology and reference group affects thebuying motives of customers, as these are extrinsic circumstances, which are genuinely beyond the consumers' control. Privacy, trust and security are the filtering elements, which filter the buying motives of customers (Kumar and Dange, 2012). These factors are prioritized when customers take online buying decisions. However, the online customer may influence by various uncontrollable factors such as the exchange of information between one customer to another onthe web platform. C2C interaction refers to the exchange of information between consumers (Huang & Hsu, 2010). C2C Interactions refer to a scenario in which customers may freely communicate information about brands, goods, and services with one another in an online environment without regard to time or geography (Huang & Hsu, 2010). This exchange of information connects several customers virtually which influences the behaviour of customers towards a particular product. Nicholls (2010) stated that C2C communication strongly affects clients buying choices in online brandcommunities.

2.4. Online Brand Communities

An online brand community is a group of people who share a common interest in a particular trademark and interact with one another via the brand platform provided by the company (Brodie *et al.,* 2013). They share information, ideas, and experiences pertaining to the good or service offered by the company. Additionally, it is a relatively new medium for businesses to communicate with consumers, market their goods and services, and track consumer behavior (Kim *et al.,* 2008). Such communities enhance the company's ability to understand the behaviour of itscustomers.

Besides, C2C communication among members of online brand communities helps customers to condense the risk, which in turn improves the capacity to make buying decisions. The purchase frequency is increased as an impact of the positive feedback of C2C interactions of customers and increasing consumer loyalty. lt allows the company in implementing new seas for the product or service and decrease the cost incurred on customer service. C2C interactions influence a company's brand image and, as a result, its consumer base loyalty, with the possibility of negative outcomes, impacting the reputation of an organization, at whatever point customers share unsatisfied experiences with different customers. Alongthese lines, online brand communities help the administrator to figure out how to decrease the adverse impacts and carry a customer likely to have a positive purchasing result (Wirtz *et al.,* 2013).

Customers must be strong for the company's goods and services in order to develop strong ties with them. Enhancing competitive advantages aids in product differentiation. In recent years, the role of online brand communities in communication plans and customer relationship management has increased.

3. Research Methodology

Based on a descriptive research design, this study was conducted. Ten semi-structured interviews using a list of questions were used to collect the data (Yin, 2015). The respondents were stratified to ensure that those who are considering the review of a product before making the final deal of the purchase were included in the sample, which was chosen at random from PhD research scholars from the University of Lucknow, Lucknow, India, with the age range of 25 to 35 years. Young people predominantly use the internet and social media to obtain any information they require about a good or service, claims Findahl (2013). Out of thetenparticipants, forty (40%) were male and sixty (60%) were female. The interviews were conducted through the telephone in June 2020.

4. Data Analysis

4.1. Online Reviews and Comments

The data were obtained through interviews with 10 PhD research scholars who were often buying products considering online information, which means the researcher has assured that they posted the review of the product online on various websites. The interviews have been used to collect data and have provided useful information to fulfil the objective of the present study. Comments posted online for various products were taken as shown in Table 1. To make a purchase decision, all participants examined internet comments and other customer reviews.

Table 1: Online Product Review Considered by the Potential Customers

No.	Gender	Age in years	Purchasing decisions are impacted by reviews and comments posted online
1	M	25	"Yes, I often question friends on social media platforms such as Facebook or Whatsapp whether a product is expensive."
2	F	30	"It's quite useful since we can receive product information on social media before making a final buying choice."
3	F	26	"I usually search for information related to the product on social media, but the type of product also makes a difference".
4	F	25	"Writing an internet review for any product, in my opinion, is critical for a customer's growth. It's great that we now have a social media platform to share our stories ".
5	M	25	"I read online product reviews to be aware of product performance. It makes no difference to me whether the product is expensive or not, if I want to buy it, I want to get information from the comment……"
6	M	28	"Okay, it relies on the kind of product. I doubt I'll put myself in an internet review of a thing I use every day, but I would in other kinds of things," the speaker said.
7	F	26	"I am constantly engaged on numerous social sites and often submit product reviews on things that are essential to me."
8	F	25	"I keep searching online on social media for the various products and am usually critical of the reviews posted online and I use the reviews posted by others."
9	M	35	"When I have to determine whether or not to buy a pricey item, I read the reviews and ask for advice."
10	F	29	"My review is the only place where Indian Express has expressed its true feelings about the product; undoubtedly, I have utilised the reviews and comments made online about the many things I have to purchase on several occasions."

4.2. Product Reviews and Social Media Platforms

According to Malthouse *et al.* (2013), social media is playing an incredible role in enhancing customer management interactions. The data that is available on social media platforms needs to be managed by businesses. Because of their clients, businesses have little control over social media and no idea what the goals of their advertising are.

"At the point when I do a review online of what I purchased it, the firm can't alter it, and my impression is that the company would try to improve their product rather than ignore my criticisms. Our area of domination is social media."

Spencer and Moon (2015) have found out that social media has extensively changed the lives of customers. All products are somehow affected by these comments and now it is difficult for businesses to ignore bad comments about their products after they've been shared on social media. Spencer and Moon (2015) have used the data from 2002 to 2011, to show thatcustomers must be associated from the beginning phase of product development as they cangive an insight into each minute detail related to product quality and specification, which was inaccessible before social media.

"At the point when I compose a remark or audit of the item, I realize that my companions and family members are benefitting from it, so if they need to purchase a similar item, they have information about that product."

According to Spencer and Moon (2015), the company have understood the importance of having a space for online reviews as it provides for an increased chance for the companies to control the reviews postedonline.

"By reading an online review about a particular product, we are trying to see how many people have written positive comments and how many people have written negative comments about that product If the product isn't pricey or requires little effort, we won't spend our time."

Guand Qiang (2014) found out that the relevance of the reviews or comments shared on social media for each product varies depending on the product's level of participation. lt is seen that products with low involvement are less expensive and usually carry fewer reviews and comments while high-involvement products are expensive products having a higher degree of involvement and usually carry morereviews.

The speed with which purchasing choices are made may be used to determine if a product is low or high in engagement. Consumers who purchase low-involvement items make rapid choices, but customers who purchase high-involvement products take longer to make decisions, which may be termed a lengthy purchasing decision. If, on the other hand, the thing is delivered, under essential items or daily basis use, it requires a fast decision, while other products require the opinions of another customer to choose from the available alternatives. Because of this, purchasing decisions are closely tied to the level of product involvement.

"I generally read the reviews and comments about the product, at the same time I may submit a query regarding the product and consumer response to it by giving some information or sharing their experience, which is helpful for me."

4.3. Reviews and opinions posted online are trustworthy and credible

Efthymios and Holleschovsky (2016) state that "the customer considers online reviews as a credible source." Generally, people have an opinion that the quality of the comments and reviews is important on the other hand some believe that the quantity is more important. According to the data collected, 80% of participants believe that the quality of online reviews is the most important factor, while 10% believe that the number of reviews builds trust, and the remaining 10% believe that an overall impact of both quantity and quality of online reviews and comments is important. However, when that comes to low-involvement items, people are more concerned with quantity, and when it comes to quality products, people are more concerned with quality.

Table 2: Represent the Interviews data

What is more important is the quality or quantity of the review,comments and real-life experiences posted online	
1	"***Quantity*** is really important as it makes a comparison of products very easy"
2	"It shows both the pros and cons about the product ***quality.***"
3	***"Additional information*** related to the product tells about both ***quality*** and ***quantity.***"
4	"Sharing a ***true story*** is better than having more reviews."
5	"Preference is always given to *the quality* of the product."
6	"Comments on a ***reliable*** website are more important than the very long comments."
7	"The website has good ***quality*** reviews"
8	"My mind was influenced by the ***quality*** of the reviews"
9	"The ***quality*** and real experience of the products can be judged from the reviews."
10	"It is dependent on the product type and is very ***helpful.***"

The result shows that the buyers are concerned about the credibility of the reviews. The credibility is considered to be high when the reviews are posted on a verified website and the reviews show both the pros and cons of the product. The findings of the present study reveal that customers prefer many comments and review while purchasing low-involvement products. On the other hand, if customers make buying decisions on high-involvement products, they mainly focused on the quality of reviews andcomments.

5. Discussion

Filieri (2015), says that word of mouth spreading through social media can contain both positive and negative product-related information. It affects the decision to buy by a customer. The findings say 80% of the people are affected by the reviews posted online, the average of the positive and negative reviews helps in making the purchase decision. Two respondents have said that the information received from their social contacts as family and relatives had higher reliability than the online reviews. Results showed that 90% of the respondents were interested to read more online reviews when they had to make a purchase decision about a high involvement product to minimize the risk while making the purchase decision. Filieri (2015) stated that the customers use different factors to evaluate different products but quality, quantity and credibility are the common factors preferred by thecustomers.

Customers search for a product online to get more information about the product and also to find other available options. The reviews and comments posted online provide an easy and trusted opinion to buyers. The customer must have clear information throughout the initial stage of the purchasing choice (Masha 2015). The data backs up this claim, with 90% of respondents saying that the information in online reviews and comments is helpful at the outset of the purchasing process. While 70% of respondents indicated that internet reviews are usually valuable, 30% of respondents indicated they don't always find information on the internet beneficial. The findings also showed that 70% of the people are interested in writing the reviews for only a high involvement product while 90% of the people said that they prefer to write reviews only if they have an "extremely good" or an "extremely bad" experience with the product. Even when people encounter a bad experience they preferably want to post on social media or the company's website to help others to make the right buyingdecision.

As per Mahsa (2015), buyers feel more comfortable hearing information from social contacts and friends about low involvement products. The results favour the above statement as 90% of the respondents have said that they do not prefer to read online reviews and comments for low involvement products as there is a lot of variation in the comments which leads to confusion. Only 10% of the respondents believe that reading the online reviews is informative irrespective of the product type as it is the real-life experiences that have been shared related to the product.

"The quality of reviews and comments is highly valued in the high-involvement items," Lee *et al.* (2013). The result of the present study supports this statement as 70% of the respondents have shown concern about the quality of online reviews for high-involvement products. All respondents have affirmed that they always want to write logical reviews that have information useful for the buyers. 30% of respondents discussed the type of review writing and said that they prefer reviews written by experts with sufficient product expertise. As a result, reviews must be written by a trustworthy individual. It's worth noting that the number of reviews, rather than the quality of the evaluations, influenced some of the responders.

Some researchers have said that "buyers are more impacted by the number of reviews posted for low-involvement products especially when people share their experiences related to the problems faced while using the product" (Lee *et al.*, 2008; Feng & Zhang, 2010). The present study supports the above statement as 90% of the respondents stated that online reviews were more useful when people posted the issues they faced or the good experiences they encountered related to the product. The important factor for the respondents was the reliability of reviews and comments on the product. "The importance of review credibility and also how customers are inspired by such reviews to make the final decision to purchase," (Lee *et al.*, 2007, 2015; Ethel, 2014). The legitimacy of reviews is increased when consumers share comparable experiences they had with the product. The results back up the claim, with 90% of respondents believing that more individuals giving a comparable evaluation increases credibility; nevertheless, 30% of respondents attribute the credibility problem to the website where the comments are made. In comparison to older methods, 100% of the respondents believe that e-word of mouth is more dependable and accessible for all items.

6. Conclusion

The goals of the current study were to be accomplished by this study. The objectives were to determine whether information put online affects consumers' decision-making when they shop online. The data collected showed that buyers are impacted by reviews and customer experiences posted online. That means people use reviews and experiences posted online for assistance in making their buying decision about the product. The type of reviews and comments about a product affect a brand or product image. Positive onlinereviews and comments can enormously boost the buying process. The results also reveal that the number of people affected by online reviews and comments depends on whether the product is a high or low involvement product.

Highly engaged products are those products that people are interested in investing more time in reading online reviews of a product that influence their purchasing behaviour. It is important to note here that the quality and reliability of the reviews and comments posted online are highly useful for this type of product. So the procedure of purchasing high-value products is longer than the process of purchasing products with low participation. The data shows that buyers are also taking into account the experience their family and friends have had.

When it comes to low engagement products, buyers are less influenced by online reviews and comments. The findings indicated that the majority of respondents were not interested in devoting time to looking up information about the product. As a result, low-engagement items have a speedier purchase process and lower information decision-making. Information acquired from close friends and relatives is extremely dependable and cuts the purchase process time in half. Finally, the study revealed that online reviews can influence readers in different ways. Whether a product requires high or minimal involvement depends on its category. It affects buyers at every level of the purchasing process, but depending on the inception stage, which is the stage of information gathering, it affects the final decision the most. These reviews control the buying decision and also provide information about the product.

Online customer reviews allow buyers to obtain information and recommendations, which are essential before making purchasing decisions. Customers benefit from the company's provision of product information which helps in increasing the sales online. As a result, businesses may develop a debate forum on their website by incorporating current product information. Allowing consumers to discuss the product and share their experiences with it. Word of mouth publicity on internet platforms is growing in popularity since it allows prospective buyers to acquire actual, both positive and negative, product evaluations.

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The Effect of Memorization Techniques on the Academic Achievement of Elementary School Students based on the Different Question Patterns

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Abstract

The research was undertaken to study the effect of Memorization techniqueson the academic achievement of elementary school students based on different question patterns. The researcher choosestrue experimental research. The experiment was done among 100 students of class VIII standard in their social science and language subjects. The researcher conducted a Pre-Test program for both the experimental group and the control group. After that, a memorization treatment was given to the experimental group and no special memorization treatment was given to the control group. This treatment was continued for four weeks. After that, the researcher took the Post-Test program to know the development in the score of different question patterns like M.C.Q., Very Short, Short type and Long type. To analyze the data Mean, Percentage, 't' test and One-way ANOVA were used. The result showed that the students of the experimental group improved their scores in different question patterns but in the Essay/Long type question pattern and Very Short type question pattern they improved more than the other two question pattern like M.C.Q., and Short type question.

1. Introduction

"Memory like learning is fundamental process of adjustment. One of the most cardinal features of adequate adjustment is the ability to profit by past experience, and it is obvious that, in the absence of memory, this ability would be impossible. There is no phase of human living untouched by memory."

--Schneiders A. Alexander

Oral memorization was the main way of memorizing data in ancient India. The recitation strategy was too improved by building the verses in a musical design. This too made a difference in memorization. Memory has two capacities which are explicit and implicit. Memory is additionally categorized by short-term (or working) memory, and long-term memory. This will be associated with the neuron. With the assistance of a working memory processor, express or certain capacities encode information in the form of stimuli. Data is additionally recovered by the working memory from earlier stored material. At long last, long-term memory stores information and data through a few categorical models or frameworks.

Memorization process is very essential for all because anything that one store in their brain, it can be recalled later with the help of our memory. So if one can use some effective process by which they can easily recall the information, have already stored in their brain, that would be valuable. Distinctive sorts of data such as scholastic notes, information, phone numbers, charts, names, visual or sound-related components, graphs, maps, pictures, stories, sonnets, addresses, etc., can all be the materials that can be memorized by a person. Specifically, students must have to remember various academic pieces of information not only for their examination purpose but also for their future aspects. Science, Social Science and Language subjects are the main focus of any student. Though it is known to all that every student has not the same IQ level, with the help of memorization techniques one can improve his/her power and skill of memory.

Malaikkani, S. (2002) examined the viability of memory and training models to improve English articulation at the higher secondary level. The study chooses the experimental method. From the one hundred and twenty students of the Higher secondary classes, 90 students of the first year were selected, based on a positioning of their execution within the English yearly

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examinations. In each gather, there were forty-five students: twenty-five were girls and twenty were boys. The researcher showed that the new model of teaching based on Memory and training was found to be most viable in improving English articulation. The conventional strategy of educating English vowels and consonants isn't so successful.

Yusuf, M. (2010) studied memorization as a learning style: a balanced approach to academic excellence in Malaysia. The researcher used qualitative research methodology. The findings of this research showed that memorization is related to the academic achievements of the research participants. Further, it measured an effective tool for speech features, illustration improvement, and brain empowerment.

Namjoshi, K. (2015) studied the effectiveness of memory procedures and memory models for memorizing spellings in Maharashtra. Within the study, the researcher has selected a convenient method for sampling. The researcher chose 53 students from VI Std of *Jnana Prabodhini* English Medium High School, Pune. The study reveals that the Program based on Memory strategies and Memory model is successful in memorizing English spellings.

Chen, W., Yang, M. & Ming Lin, K. (2016) studied to upgrade Primary School Students' English Verbal capacity how can we apply Memorization. The experimental group and Control Group were chosen from two homogenous classes from an elementary school in New Taipei City, comprising 45 6th graders, who taken an interest in this ten-week program. The experimental instructions were given to the Experimental group, though the conventional method without any memorization activities was given to the Control group. In the study, memorization techniques are proved very useful.

Gaspar, J. (2017) studied common memorization methods of ten-grade male students of Bataraza national high school (in Palawan). Observation, surveys, questionnaires, and conducting interviews are incorporated in this method. These are utilized to test the viability of memorization methods. A total of 50 students of 10-grade male students are chosen. The age constraints of the respondents are between 14-16 years old during the school years 2017-2018. The findings revealed that 10-grade male students of Bataraza National High School exceedingly utilize the Repetition recital method, besides that they too utilize other memorization strategies such as keyword techniques and repetition reading techniques.

From the above research studies, it can be concluded that various researches are based on working memory and its effects on our daily life or academic excellence of student's achievement. It is also seen that somewhere memorization and mnemonics techniques proved to be useful for memorizing spelling, for good pronunciation, for English oral ability, for the good achievement of the students of primary level and scholastic ability of the learners. But the researcher was unable to find out any researches which were done using the Memorization Techniques as a teaching method for daily school teaching for the well academic achievement of the elementary school students. So, the significance of the present study is that it emphasized the achievement score of different question patterns by using memorization techniques as a teaching method to teach three subjects (Bengali, History and Geography) to elementary school level students in the South 24 Parganas district.

The main purposes of the present research are 1) To study the overall difference in academic achievement between the Control group (Class VIII B) and the Experimental group (Class VIII A) through their Pre-Test scores; 2) To study the overall difference in academic achievement between the Control group (Class VIII B) and the Experimental group (Class VIII A) after giving Memorization treatment through their Post-Test scores; 3) To study the overall score difference among the question patterns (M.C.Q., Very Short, Short, Essay) in the academic achievement of the Experimental group between the Pre-Test and Post-Test.

In the present study, the following memorization techniques are used for the betterment of the memory skill and the achievement scores of the students.

Figure-1: Some Memorization Techniques

2. Material and Methods

2.1. Population:

All the students studying in Class VIII in Bengali Medium Schools under the West Bengal Board of Secondary Education are considered as the population of the study.

2.2. Sample:

The sample of the study is comprised of a total of 100 school students who are taken randomly from Class VIII (50 students from Section A and 50 students from section B) of Fatepur Sreenath Institution, Fatepur, South 24 Parganas. Two sections are combined based on Merit and last academic achievement score in school academic evaluation.

2.3. Tools:

In the present study, Pre-Test and Post-Test question drafts were reviewed by several subject teachers of Bengali, Geography, and History of different schools, colleges and universities. After the proper recommendation of the reviewers, the test question papers were finalized. The syllabus (Bengali, History and Geography) of the Pre-Test was the portion that was completed by the school subject teacher. After finishing the Pre-Test examination Experimental Group received the experimental instructions, whereas the Control Group got the traditional instructions without using any memorization treatment. It was a one-month treatment program. The Post-Test syllabus was selected by the researcher. The Post-Test was done to judge the student's achievement on different question patterns by using Memorization Techniques as a teaching method for both groups.

Table-1: Marks deviation and distribution of different questions of the three subjects in Pre-Test and Post-Test

Bengali	Geography	History
MCQ- 5 questions X 1 mark	MCQ- 5 questions X 1 mark	MCQ- 5 questions X 1 mark
VS- 5 questions X 1 mark	VS- 5 questions X 1 mark	VS- 5 questions X 1 mark
ST- 1 question X 3 marks	ST- 1 question X 3 marks	ST- 1 question X 3 marks
L- 1 question X 7 marks	L- 1 question X 7 marks	L- 1 question X 7 marks
Total- 20 marks	Total- 20 marks	Total- 20 marks

2.4. Research Approach:

The present research was True Experimental Research

2.5. Statistical Techniques:

In the present research study, the researcher intended to test the effectiveness of the Memorization techniques, and thus for the purpose, the statistical tool "t" test, and One way ANOVA was used.

3. Results and Discussion

$H0_1$: There would be no significant difference in the overall academic achievement scores between the Control group (Class VIII B) and the Experimental group (Class VIII A) through their Pre-Test. The null hypothesis has been tested by the independent sample 't' test, Mean and Standard Deviation.

Table-2: Two groups Mean, Standard Deviation, 't' value and the significance level in the Pre-Test

	Differences in Groups	Number of Students	Mean	Std. Deviation	't' value	p value
Differences in Pre-Tests	Experimental Group	50	32.80	10.61	.952	.343
	Control Group	50	30.79	10.49	.952	.343

In the case of the Pre-Test scores, both the groups obtained many similar scores. It was noticed that the "t" value was 0.952 and the level of Significance in the Two-tailed test was 0.343 (t=0.952 and p>0.05). Thus, the difference between the means was insignificant. Hence, the null hypothesis H01 was accepted. That meant, there is no significant difference in the overall academic achievement scores between the Control group (Class VIII B) and the Experimental group (Class VIII A) through their Pre-Test. The analysis of data has revealed that the overall academic achievement scores of the Experimental group and the Control group in their Pre-Test program are almost the same.

H_2: There would be a significant difference in the overall academic achievement scores between the Control group (Class VIII B) and the Experimental group (Class VIII A) after giving Mnemonics Treatment through their Post-Test scores.The alternative hypothesis has been tested by the independent sample 't' test, Mean and Standard Deviation.

Table-3: Two groups Mean, Standard Deviation, 't' value and the significance level in the Post-Test

	Differences in Groups	Number of Students	Mean	Std. Deviation	't' value	p value
Differences in Post-Tests	Experimental Group	50	42.11	7.417	5.647	.000
	Control Group	50	32.00	10.259	5.647	.000

It was seen that in a 95% confidence interval the level of Significance in the Two-tailed test was 0.000 ($t=5.647$ and $p<0.05$). Thus, the difference between the means was significant. Hence, the Research Hypothesis H_2 was accepted. The analysis of data has revealed that the academic achievement scores of the Experimental group are greater than the scores of the Control group in their Post-Test program.

H_3: There would be a significant score difference among the question patterns (M.C.Q., Very Short, Short, Essay) in the academic achievement of the Experimental group between the Pre-Test and Post-Test.The alternative hypothesis has been tested by the ANOVA test.

Table-4: Mean Score Differences and Standard Deviation among the Different Question patterns of the Experimental group

	Number of Samples	Mean of Scores	Std. Deviation
MCQ	50	1.3800	.98747
VS	50	2.2700	1.62321
ST	50	1.3600	1.21655
L	50	3.8400	1.83626
Total	200	2.2125	1.76256

Table-5: ANOVA table showing the F-value and the level of significance

	Sum of Squares	df	Mean Square	F-Value	p-value
Between Groups	203.594	3	67.865	32.081	.000
Within Groups	414.625	196	2.115		
Total	618.219	199			

The mean score difference of the question patterns like M.C.Q., Very Short, Short and Essay/ Long question in the Post-Test and Pre-Test was seen from the above Table 4. It was seen from the ANOVA Table 5 that the obtained F-value of the score difference of the subjects was 32.081 and the level of significance was 0.000. That meant, it was significant at the 0.05 level of significance. Thus, the research hypothesis H_3 was accepted. The analysis of data has revealed that memorization techniques are more effective in the question pattern like Very Short and Essay/ Long type than the other two types of question types like M.C.Q. and Short type.

H_4: There would be a significant difference in the academic achievement scores of the M.C.Q. type question pattern of the Pre-Test and Post-Test in the Experimental group.The alternative hypothesis has been tested by the independent sample 't' test, Mean and Standard Deviation.

Table-6: Two Tests Mean, Standard Deviation, 't' value and the significance level in the MCQ scores

	Differences in Tests	Number of Students	Mean	Std. Deviation	't' value	p-value
Score Differences of MCQ between two Tests	Post Test	50	13.3000	1.47427	3.866	.000
	Pre Test	50	11.9200	2.04879	3.866	.000

It was seen from the above table that the "t" value of the differences in the Post-Test and Pre-Test of M.C.Q questions of the Experimental group was 3.866. In a 95% confidence interval, the level of Significance in the Two-tailed test was 0.000 ($P<0.05$). Thus the Research Hypothesis H_4 was accepted.The analysis of the data has revealed that for the M.C.Q type question, the academic achievement scores of the Post-Test are greater than the scores of the Pre-Test in the Experimental group.

H_5: There would be a significant difference in the academic achievement scores of the Very Short type question pattern of the Pre-Test and Post-Test in the Experimental group.The alternative hypothesis has been tested by the independent sample 't' test, Mean and Standard Deviation.

Table-7: Two Tests Mean, Standard Deviation, 't' value and the significance level in the Very Short Type scores

	Differences in Tests	Number of Students	Mean	Std. Deviation	't' value	p-value
Score Differences of Very Short type between two Tests	Post Test	50	12.1000	1.97174	4.488	.000
	Pre Test	50	9.8300	2.98399	4.488	.000

It was seen from the above table that the "t" value of the differences in the Post-Test and Pre-Test of very short type questions of the Experimental group was 4.488. In a 95% confidence interval, the level of Significance in the Two-tailed test was 0.000 ($P<0.05$), thus the Research Hypothesis H_5 was accepted. The analysis of the data has revealed that for the very short type question, the academic achievement scores of the Post-Test are greater than the scores of the Pre-Test in the Experimental group.

H_6: There would be a significant difference in the academic achievement scores of the Short type question pattern of the Pre-Test and Post-Test in the Experimental group.The alternative hypothesis has been tested by the independent sample 't' test, Mean and Standard Deviation.

Table-8: Two Tests Mean, Standard Deviation, 't' value and the significance level in the Short Type scores

	Differences in Tests	Number of Students	Mean	Std. Deviation	't' value	p-value
Score Differences of Short type between two Tests	Post Test	50	6.6500	1.79071	2.952	.004
	Pre Test	50	5.2900	2.72196	2.952	.004

It was seen from the above table that the "t" value of the differences in the Post-Test and Pre-Test of short type questions of the Experimental group was 2.952. In a 95% confidence interval, the level of Significance in the Two-tailed test was 0.000 ($P<0.05$), thus the Research Hypothesis H_6 was accepted. The analysis of the data has revealed that for the short type question, the academic achievement scores of the Post-Test are greater than the scores of the Pre-Test in the Experimental group.

H_7: There would be a significant difference in the academic achievement scores of the Essay type question pattern of the Pre-Test and Post-Test in the Experimental group.The alternative hypothesis has been tested by the independent sample 't' test, Mean and Standard Deviation.

Table-9: Two Tests Mean, Standard Deviation, 't' value and the significance level in the Essay/ Long type scores

	Differences in Tests	Number of Students	Mean	Std. Deviation	't' value	p-value
Score Differences of Essay/ Long type between two Tests	Post Test	50	9.7000	3.73483	4.553	.000
	Pre Test	50	5.8600	4.64894	4.553	.000

It was seen from the above table that the "t" value of the differences in the Post-Test and Pre-Test of essay questions of the Experimental group was 4.533. In a 95% confidence interval, the level of Significance in the Two-tailed test was 0.000 ($P<0.05$), thus the Research Hypothesis H_7 was accepted. The analysis of the data has revealed that for the essay type question, the academic achievement scores of the Post-Test are greater than the scores of the Pre-Test in the Experimental group.

4. Conclusion

The present study showed the importance of Memorization techniques to develop the academic achievement level in social science and language subjects like Bengali, Geography, and History based on different question patterns. The researcher systematically and successfully applied Memorization techniques like the method of loci, a peg system, spaced repetition, dramatization etc. at the time of the one-month treatment program to the students of the Experimental group. Students got opportunities to use and develop their creative, imaginative, and intellectual powers. It will be helpful for any subjects and any level of study. Not only for school level teaching but the Memorization techniques can also be used for any kind of learning where lots of information has to be Memorize. It was seen from the research findings that the students of the Experimental group (treatment group) developed their memorization level and answered most of the questions correctly in their Post-Test examination than the Pre-Test. It was also seen after the treatment program that the students of the Experimental group achieved well scores in various types of questions like M.C.Q., Very Short, Short type, and Essay/ Long type question; especially in the Essay/ Long type question and Very Short type question. That meant, the Memorization Techniques positively affected the academic achievement of the Elementary school students.

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Psychological Well-Being of Tertiary Level Learners: Infusing Humor into Learning through Innovative Technologies

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Abstract

The educational ecosystem has lately anticipated the changing dynamics of the pedagogical approaches at all levels, that is, early childhood education, secondary or school education, and university level, in conjunction with India's New Education Policy 2020, which is endorsed and guaranteed by 21st century skills. Besides, the significant confluence of technology and creative pedagogies, brought about by Industrial Revolution 4.0 and urbanization has made its stakeholders empowered and self-reliant. However, the over-dependence on technology, its improper handily and lack of proper training has created a debilitated and competitive universe. The teacher's burnout ratio is increasing and learners' anxiety, stress, and fear of missing out is prominently noticeable, especially among tertiary level learners. This situation is directly influencing their psychological well- being and leading to cause of severe depression, health related problems and increased suicidal tendencies amongst them. The use of technology, multimedia resources have resulted in increased cognitive load among the learners. Thus, this study is aimed to identify the pathways to maintain the psychological well-being of the tertiary level learners through the innovative technologies as well as adhering to the approach of collaborative learning and instructional humor to reduce the learners stress in present scenario. Evidences were collected by thorough review of related literature available from secondary sources to recognize its de facto challenges, and the recommended solutions. The multifaceted relationship between the classroom humor, learning approaches and technology with its potential to enhance the psychological well-being of tertiary level students is established as findings through-active learning, problem-solving, inquiry-based and competency-based approaches to achieve the desired learning outcomes without creating load on the cognition and working memory of learners.

Introduction

Education to every child, is their human right and it must be provided in a joyful, sustainable, and healthy environment. Conventionally, the essence of education is to kindle the spirit of discovery, exploration, curiosity, and mindfulness amongst its stakeholders. With the introduction of formal education system, the classrooms were anticipated as playgrounds for the mind, where teachers and students embark on shared adventures in knowledge, building resilience, empathy, and a love for learning that would illuminate their paths far beyond the walls of the school, college and universities. The education was sought to generate knowledge, skills, attitude and mold behaviors rather than being an employment-oriented machinery. However, with technological & pedagogical advancements the modern system of education is undergoing a Sisyphean struggle and has been morphed into pressure cookers churning out students weighed down by information overload and the relentless pursuit of external validation. The entire framework is presented as a liability for parents and a burden for pupils. Besides, the current level of student-teacher stress and burnout is alarming and critical.

The rapid pace of digitalization, highly competitive employment prospects and continuously evolving industries have influenced the work culture in 21st century (Dangwal, 2023). The concept of Technostress has surfaced in current scenario that is leading to several neurological breakdowns, anxiety, stress, mental health and well being related disorders. Primarily, the adolescent and early adults are more prone to these disorders on day-to-day basis. Depression and Suicidal tendencies are

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observed amongst the students. The pressure to out-perform and making it to dream college, institution or a job-position has choked life out of the teaching-learning process, leaving everyone gasping for true meaning of education. The reported increase in suicide rates at the shadow education industry of Kota is one such example that has drawn attention and concerns to revamp the system of education and the instructional methodologies.

Amidst all the stress both psychological and technological, the existing literature has successfully drawn attention of academicians, researchers, educationist as well as governments to ensure the nurturing and nourishment of the mental health of students especially the adolescent and early adults. Various pedagogical reforms and strategies are being experimented with to fulfill the requirements and reduce the pressure of information overload, high achievement rates in the form of scores, cumber-some curriculum etc. The potential use of Instructional Humor, Humor in a Pedagogy (Garner *et al.*, 2006; Machlev & Karlin, 2016) and different types of humor i.e., relevant & appropriate humor and non-relevant humor in the classroom is observed to have positive psychological and physiological effectson learning and retention among stakeholders.

The New Education Policy 2020 of India is aligned to reduce the stress and burden of its stakeholders and provide them a positive teaching-learning environment that will explicitly include developing a caring and inclusive culture for effective learning (Ministry of Education, Government of India, 2020, p.21, para. 5.13). The policy document, in para 4.5 has encouraged to include in classroom sessions the pedagogical approaches that must contain- fun, creativity, collaboration, and exploratory activities for students for deeper and experiential learning.

Review of Related Literature

Expression of humor is a great emotional competency. A sense of humor is related to positive affective experience (Yadav & Singh, 2023). Studies have suggested that the use of humor in education is believed to have a significant growth for both the teacher and the learner. In an experimental study based on use of Instructional Humor in Cognitive - Affective Theory of Learning with Media Model (IHCATLM), Dorambari, (2022) has concluded from learners' mirth duration that there exists significant difference due to humor based media stimuli on emotions, motivation, knowledge and metacognition.

However, Wortley & Dotson, (2016) have pointed in their study that college is an inherently stressful time for students, and that stress prevents students from performing well academically. College students experience high levels of stress during their first year away from home, with the main causes being feeling of loneliness, homesickness and interpersonal relationships difficulties, and conflict. Therefore, the students at tertiary level are often subjected to depression, suicidal tendencies or are vulnerable to substance addictions. The students confront issues of accommodation, adaption, and acceptance in new environment, that leads to their poor mental health and consequently they fail to achieve academically.

However, (Garner *et al.*, 2006) have reviewed literature in support of instructional humor as a powerful pedagogical tool that can initiate and sustain student interest and can serve as a measure of divergent thinking if used appropriately. They have remarked that the effective use of humor is not akin to mere joke telling. Therefore, prudence should be used as guiding principle by the instructors and educators in their online or offline classrooms for humor because it is highly subjective, personal and contextual. One cannot predict the perception of the receiver and how impactful it can be on the learners present in the classroom.

Still,various education courses and programs exists that have admitted that teaching is a performance art, and appropriate instructional humor usage in the classroom not only engages an audience, but is directly connected to student learning and achievement.

Objectives

The study is aimed to identify pathways to support tertiary level students' psychological well-being (PWB) and mental health while implementing cutting-edge technologies and sticking to the principles of collaborative learning and instructional humor to mitigate students' stress in the current learning climate.

Method

Literature and studies from various secondary sources i.e., reports, e-journals, open access online research articles, newsletters, websites, blogs, wikis etc. were analyzed to draw the major findings of this documented, review-based conceptual article.

Instructional Humor in Classroom Pedagogies: Creating AA-HA-HA moments

Director of the OECD for Education and Skills, Andreas Schleicher has cited from her presentation at Global Peace Convention in Seoul, (2019) in the project report's background that-

"Education is no longer about teaching students something alone; it is more important to be teaching them to develop a reliable compass and the navigation tools to find their own way in a world that is increasingly complex, volatile and uncertain. Our imagination, awareness, knowledge, skills and, most important, our common values, intellectual and moral maturity, andsense of responsibility is what will guide us for the world to become a better place."

The amalgamation of innovative technologies with classroom pedagogies at tertiary level of education hold the responsibility towards maintaining the individual and collective well-being of its stakeholders (Education 2030 Learning Compass Concept Notes, 2023).

The churning of Instructional humor both relevant and non-relevant with technology in a classroom require the expertise of the instructor and its understanding of the psycho-social background of their learners.

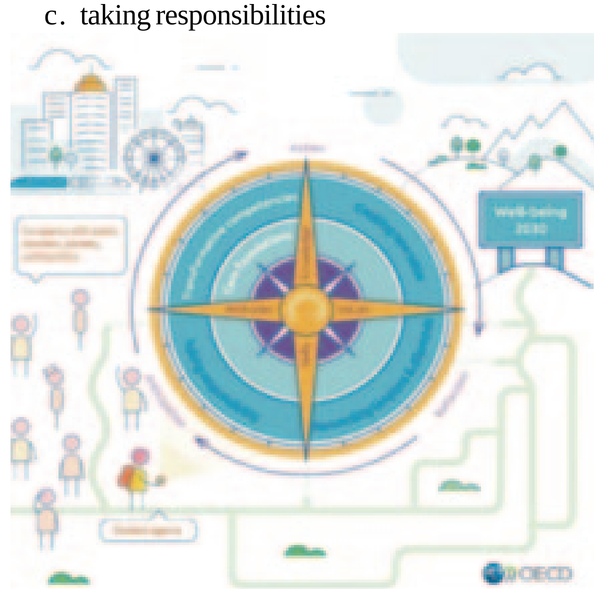
Some ubiquitous classroom pedagogies preferred by most instructors are:

- **Inquiry-Based learning:** Students are not just told facts but they become detective-like investigators. By posing questions, collecting data, and analyzing evidence, they construct their own understanding of the world.
- **Gamification:** When learning is gamified that is it becomes a game for learners. Classroom is gamified and students take -up role of players and teachers as facilitator including the concept of badges, leaderboards etc. are introduced. Students are self-regulated and motivated for learning by receiving instant feedbacks.
- **Game-based learning:** In order to achieve specific learning outcomes, the instructor might utilize games, role-playing etc. to engage and motivate learners. It is similar to gamification of learning process.
- **Collaborative learning:** It is an educational approach that involves group of students to work together to solve an assigned problem, task or create a product. It helps in developing the interpersonal skills among learners.
- **Problem-based Approaches:** It is an approach to instigate the critical thinking and logical reasoning among learners by allowing them to participate actively in a situation and by drawing feasible solutions for simulating realms of real-world problems.
- **Project-Based Learning:** Here, students tackle real-world challenges through collaborative projects, enhancing critical thinking, problem-solving, and teamwork.

The illustrated pedagogies are highly emphasized in a 21st century classroom in support of disruptive technologies (AI, AR, VR, Xr etc.) to enhance the higher order thinking skills of learners. Also, to encourage the integration of community resources beyond school walls. However, amongst the availability of resources, the task of instructor becomes critical and challenging to retain the attention span of learners, keeping them motivated and not letting the cognitive load, mental fatigue cause inhibition in learning.

According to the suggested components of OECD learning compass, the well-being - individual and collective can be maintained through three Transformative Competencies-

a. creating new values
b. reconciling tensions and dilemmas, and
c. taking responsibilities



The OECD learning compass 2030 project has indicated seven elements i.e., areas to work-upon in order to orient the 21st century learners to shape their future and develop a psychologically healthy environment to reside in future.

Further, the framework of individual well-being and progress has indicated the fields that can bring quality of life and help achieving the SDG 3. Health status, Work-life balance , education and skills, social connections are emphasized with civic management, environment quality, personal security and subjective well-being.

Key indicators of stress among tertiary level learners: The learner at tertiary level is subjected to various transitions in socio-cultural-economic and environmental perspectives. To have access to prime institutes and job-oriented courses the students usually move out or translocate themselves at new places. Hence, they often have to confront problems of language, culture, accommodation, college adjustment (Kibret & Tareke, 2017), adaption, acceptance, economic liabilities etc. Besides, pressure from peers, society and parental expectation to perform as well as accumulation of scores for external validation, might result in deteriorating their mental and physical health. This results in some serious issues of :

- Absenteeism
- Low productivity
- Interpersonal relationship strife
- Depression
- Suicidal tendency
- Loneliness
- Aggression, etc.

Therefore, use of relevant instructional humor can assist the instructor/teacher to develop rapo with students and healthy-democratic atmosphere in the classroom. Wortley & Dotson, (2016); Garner, (2006) and other researches have suggested to identify the thin line between appropriate and non-appropriate humor. As appropriate instructor-based humor can be an effective method for increasing student engagement and information recall simultaneously, an inappropriate humor can have an equally powerful effect by creating distraction, developing depression, anxiety and hostility among learners. The use of inappropriate, student-targeted and maladaptive humor that is not acceptable or understood by a student, is capable enough to create a toxic classroom environment. The use of non-relevant humor can have a negative impact on students' academic experience. Therefore, accountability of the teacher and course instructor is crucial to use the instructional humor wisely in their classroom. Hence, the pedagogical approaches that inculcate instructional humor in classrooms needed to be developed and synthesized. Training of instructors to incorporate it at the right time-space can help boost the classroom environment. Majorly, sense of humor is anticipated to be individual personality trait yet training the faculty to incorporate it with technology integration can create the AH-A moment in the classrooms.

Conclusion

For the young-adult learners who have mostly been under supervised teaching -learning environment at schools and home - universities, institutions and colleges are important contexts of development for them (Kibret & Tareke, 2017). Colleges and universities are significant settings for development since young people spend a significant amount of time in the company of their lecturers while attending classes. As long as, these institutions manage to maintain a positive learning environment, they can support psychological wellness. College classrooms can develop into resilient communities that offer crucial support and direction in a healthy setting, enabling vulnerable students to learn and achieve success. When students learn in a secure, nurturing, and encouraging atmosphere, they are more likely to be well and succeed in every field.

Presently, we stand at a crossroads were booming technological advancements and digitalization has created cognitive load among learners, also, the socio-cultural-economic challenges, peer-pressure is affecting the psychological well-being of the learners. The role of parents, instructor, and society collectively demands a collaborative approach to handle the generation Z (Gen Zee) carefully and prudently. Additionally, teaching-learning and instructional process weights on "Not To" suffocate learners with shroud of stress and "infolution" i.e., pollution of information and content. Let us reclaim the right to dream, to explore, and to learn, for ourselves and for generations to come.

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Relevance of Psychology in the Perspective of Education: Betterment of Teaching Learning Process

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Abstract

Psychology plays an important role in improving the teaching learning process in the field of education. Education and Psychology are interconnected and both of them have a deep impact on each other which can be beneficial for the teaching-learning process. Educational psychologists study the social, emotional, and cognitive processes that play a special role in the learning process. In this paper, the importance and relevance of psychology, in the field of education, has been explained. Educational psychology has an important role in the teaching-learning process, which is a branch of psychology. This paper throws light on how educational psychology is related to teaching-learning and how psychology, through its perspectives and various schools, can make the teaching-learning process effective.

Introduction

Psychology is defined as a 'Science of Human Behaviour' which aims to give a detailed description of human behaviour as a whole. William McDougall was the first to define psychology as the science of behaviour. In his words "Psychology may be best and most comprehensively defined as the positive science of the conduct of living creatures." Similarly according to Woodworth "First psychology lost its soul, then its mind, then it lost its consciousness. It still has behaviour of a sort". The term 'behaviour' includes all the collective activities as cognitive, conative and affective.

Education and Psychology are interconnected. Psychology has changed the aura of education and it gives new dimension to the teaching-learning process. It states that each child has mental ability to learn and hence learners at different speeds.

Educational psychology is the applied branch of psychology which deals with teaching and learning. It is the combination of education and psychology. S.K. Mangal described the meaning of educational psychology in his book titled 'Advanced Educational Psychology' "Educational Psychology is one of the many branches of psychology dealing mainly with the problems, processes and products of education. It is an attempt to apply the knowledge of psychology in the field of education.... educational psychology may be defined as that branch of psychology which studies the behaviour of the learner in relation to his educational needs and his environment." (S.K. Mangal, 2006 p.11).

The system of education varies in different educational institutions. No one learning strategy can be effective for everyone. Educational psychology is very important from this point of view as it helps in identifying and researching different learning strategies to know how individuals assimilate and retain new information. Educational psychologists study the social, emotional, and cognitive processes that play a special role in the learning process. It is mostly concerned with the 'what' and the 'why' of happening in the present instead of caring for the past (Mangal S.K., Advanced Educational Psychology, p.13). Children or adults who fall into a specific group have specialists for their educational development who focus on learning challenges such as attention deficit hyperactivity disorder (ADHD) or dyslexia. So it can be said that the psychological theories and techniques are extremely beneficial for developing educational strategies and teaching-learning situations. Its importance is also such that the result related to education, which are obtained on the basis of psychological theories, are very important for the formulation of educational principles. In the other words Educational psychology is the applied knowledge gained from psychology uses in the classrooms. It is helpful in understanding the learners, learning process, instructional strategies and provides basis for the selection of appropriate methods, techniques, approaches, tools to satisfy and fulfill the need of learners that results in better learning. With the help of educational psychology teacher is able to create positive learning environment in the classrooms resulting in effective learning process.

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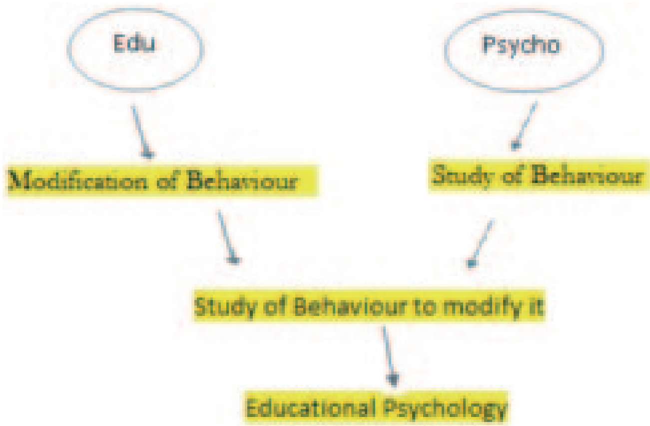
Relationship between Education and Psychology

Psychology and education have a deep connection with each other. Through education the behavior is modified as per the need but it requires definite direction and controlled environment which can be known only by psychology. Psychology studies human behavior and this study is needed to bring changes in behavior according to the situation. Thus, through the psychology it becomes known what kind of and how much modification is necessary in the behaviour.



Educational psychology is related to:

- Individual characteristics of the learner and his abilities, skills, potentials, interests, curiosities, capabilities, mental health and his personality.
- Teacher, his teaching skill, role, personality, duties, responsibilities, goals and accommodation.
- Learning atmosphere, transfer of learning, learning curve, conception, consciousness, attention and perception.
- Process of learning, its nature, effective teaching, memorization, recall, forgetting, rational and logical thinking and problem and solution.
- Subject matter, its types and utility , role of reward and punishment.

Relevance of Psychology in the perspective of Education

For the betterment of Teaching

A teacher always aims for the development of the personality of his students. A teacher becomes a philosopher to guide his students. He uses psychological methods to take care of his students so that he can understand their mental state very well. A teacher should not only have knowledge of various teaching methods and techniques but also be competent in their use. These psychological technologies not only bring innovation and relevance in teaching but also generate interest in studies among the students. John Herbart believed that 'a student's interest in a topic had a tremendous influence on the learning outcome. He believed teachers should consider this when deciding which type of instruction is most appropriate'.

- Educational psychology is helpful in improving the teaching ability of teachers.
- Educational psychology helps teachers master the teaching skills needed to achieve the best learning outcomes for students.
- Through this the teacher can know how to make the learning process effective, how to motivate students and how to make the lesson simple and interesting.
- With its help, the teacher can guide the students in the right direction as per their ability.
- Through this, the teacher can make modifications in the behavior of the learners as per need.
- It helps the teacher to find out the individual differences of the students and on that basis helps in the development of their personality.
- It is necessary to modify the teaching methods. The needs and abilities of each learner are different, hence there is a need to modify the methods of teaching keeping that in mind.
- Creating an idealistic learning environment requires mutual trust, support, empathy and mutual respect. Such an environment always makes the learner successful, enables them to struggle and encourages them to actively participate in the teaching-learning process.
- It helps the teacher to know how to solve the study problems of the students. With its help teachers can estimate the progress of their students.
- This can be helpful in ascertaining to what extent the objectives of education have been achieved.

For the improvement of learning

- Educational psychology explores the way students learn, the way they process information and how their performance can be further improved.
- Educational psychology develops the student's learning process based on his characteristics and skills. This may include new ways of remembering,

reasoning, thinking, understanding or problem-solving.

For the development of learning Environment

- Educational psychology studies and examines how information and knowledge should be transferred and how environment of classroom be managed and maintained. It analyses which methods are to be used for better learning outcomes.
- Education psychology suggested the teachers to make a positive learning atmosphere in the class where cooperation and collaboration is emphasized rather than competition.
- Educational Psychology emphasizes that to achieve lively atmosphere in the class teachers need to establish an atmosphere of mutual trust, support, empathy and mutual respect. In such an environment, learners understand that while learning they may fail sometimes, but they have to stand up and continue their struggle. This attitude encourages them to participate actively in teaching-learning process.

For Curriculum Development

- Educational psychology is very useful in curriculum design. It helps in creating student-centered curriculum.
- It emphasizes on what kind of materials are to be specified to the teachers which are beneficial to the learners.
- In addition to book knowledge in the curriculum, all those co-curricular activities which are helpful in the all round development of the child should be done. In this view, education psychology is helpful in determining which subjects and which activities would be suitable for which age-group.

For Evaluation and Measurement

- Educational psychology finds out what kinds of assessment methods are use full to test the learners.
- It measures and assesses the progress of the students.
- Having perfect knowledge of how much the child has learned and how much he has not learned, the teacher gets an opportunity to improve his teaching strategies.
- The knowledge of progress also motivates the children to further study.

Educational Psychology and Teaching-Learning Process

Knowledge of the Learner:

A successful teacher is one who not only has complete knowledge about his subject but also knows the situation of the students. Teaching students will be truly successful only when the teacher is well aware of the students' abilities, interests and mood. Important stages of human development are infancy, childhood, pre-adolescence, adolescence. Each stage has different needs, characteristics, interests, abilities and capabilities. With the help of educational psychology, these stages of development are analyzed and on the basis of that, efforts are made to provide education keeping in mind the mental, social, emotional, intellectual and physical abilities of the students.

Knowledge of Individual Differences:

Despite being similar in many aspects, we certainly differ in our level of intelligence, ability, physical structure, attitude, interest, ability, creativity, memory etc. This variation is called individual variation. The concept of individual differences propounded by educational psychology has a very important contribution in the teaching-learning process. With its help, remedial education for weak and backward children and enrichment programs for excellent students could be made.

Knowledge of Special Needs Learners:

Learners with special needs require special teachers, guidance, classrooms, curriculum, teaching methods and a systematic form of modern technologies. These learners come under the category of physically, mentally and emotionally special children. Some learners may face problems. Some students also have criminal tendencies. All these types of children are identified with the help of special methods so that teachers, teaching materials can be prepared according to the needs of these learners.

Knowledge of influencing factors:

Educational Psychology describes the many factors that influence teaching-learning and gives valuable and constructive ideas for getting better outcomes. Factors such as family and social environment, heredity, physical and mental status, educational situations etc. affect students' ability to communicate. creation of these factors also affect the intellectuality of the students.

Knowledge of personal attributes:

Psychologists have revealed that not all children learn the same. Some understand only by observation and some need to learn by action. Just as some children memorize content by rote and some learn it by understanding. Psychologists explore new ways for people to learn. Educational Psychology studies both the gifted people and people who have learning disabilities; and develops theories of individual development to comprehend the learning ability of the person and ensure the instructional practices.

Knowledge of teaching techniques:

Educational psychology evaluates and analyzes teaching methods in the real situations in learning centers. It indicates the flaws and problems that make it difficult for people to learn. These problems affect the speed of instruction.

Educational psychology is helpful in understanding the learners, learning process, instructional strategies. It provides basis for the selection of appropriate methods, techniques, approaches, tools to satisfy and fulfill the need of learners. With the help of educational psychology the teacher is able to create positive learning environment in the classrooms resulting in effective learning.

Knowledge of congenial learning environment:

With the help of educational psychology, better results can be achieved by making classroom teaching effective. For this, a favorable educational environment can be provided by in-depth study of new facts. Thus, with the help of educational psychology, better results are being achieved in the field of education and better academic achievement among the learners.

Thus it can be said that the educational psychology plays a significant role in making learning simple, relevant and motivating process. The educational psychology helps in satisfying learners academic, societal and emotional needs and enhancing learners' self- confidence and self-respect and improving learners' scholastic achievement.

System of psychology and their bearing on education

Psychology provided the scientific basis for the study of human behavior. These psychological underpinnings gave rise to various ideologies that influenced not only the evaluation of behavior and attitudes, but also the process of learning.

1. **Structuralism:** Wilhelm Wundt opened the world's first psychological laboratory in 1879 whose sole purpose was to study the disorganized mind. That is why his experiments focused on the conscious experience associated with , feelings, sensations, perceptions and thoughts. The main point of his study was the analysis of consciousness, hence his approach is called structuralism. Under this approach, importance has been given to introspection to study behavior.

2. **Functionalism:** In this approach emphasis was laid on the study of the relationship and adjustment of the individual with his environment. Following this approach, the study of the individual was first included in the subject matter of psychology and then educational psychology.

   Functionalism approach has played an important role in the development of subjects like educational psychology, individual differences, intelligence testing which have unprecedented contribution in the teaching process.

   In the functionalist school of psychology, more emphasis was given to the functionality of curriculum content, teaching methods, teaching-learning methods and measurement process. Objective tools like questionnaires, lists and mental tests are actually the contribution of functionalism.

3. **Behaviourism:** Behaviorist approach is that approach of psychology which studies the natural and acquired behavior of the living being. Psychologists like Pavlov, Thorndike, Skinner have made unprecedented contribution to the rise of behaviorism. According to the theory propounded by Thorndike, all activities and behaviors of humans and animals can be explained and studied without reference to consciousness. In fact, 'behaviorism' explains all the behavior and actions of humans. It can definitely be said that under 'behaviorism' the existence of memory, imagination, emotion and will is not recognized.

   Experiments conducted by behavioral psychologists led to the creation of laws and theories of learning. Thorndike created the 'trial and error' method in the learning process. This encouraged the study of child psychological development. In behaviorism, special emphasis was given on human development and growth and the influence of the environment.

   Psychologists of behaviorist school emphasized the methods of learning, principles of learning, emotional behavior and habits related to basic tendencies which were very useful for the teaching-learning process. Education is related to human behavior. This approach also emphasized observation and measurement which is extremely important in the teaching process.

4. **Gestalt psychology:** Gestaltists have emphasized the role of motivation, definite goals, and objectives in all types of learning. As a result, the role of motivation and specific goals played an important role in the teaching-learning process. A special feature of Gestaltism is that it emphasizes the wholeness of the act of perception, learning and problem solving rather than dividing it into different parts.

   Gestalists have a special contribution in education. Gestaltism was the first to reveal the psychological fact that a child's development progresses from the whole to the part and knowledge progresses from the general to the specific. As a result of this principle, two teaching principles were formed, namely- 'from part to whole' and 'from general to specific'. It was as a result of these that knowledge and measurement methods of personality could be developed. As a result of the influence of Gestaltism, educationists understood the importance of adjustment and laid emphasis on making efforts to protect the child from maladjustment and adoption of adjustment.

5. **Psychoanalyticism:** It began in the early twentieth century. Viennese physician Sigmund Freud was its father. Emphasizing on unconscious mental processes, he said that most of the main causes of conflict and mental disorders remain hidden in the unconscious.

   Psychoanalysis has emphasized psychological incentives such as love, use of instinct, permissiveness and generosity and the child's own will or interest in education. This has thrown light on the variations that we find in the assimilation of different subjects among different children.

Perspectives of psychology and teaching learning process

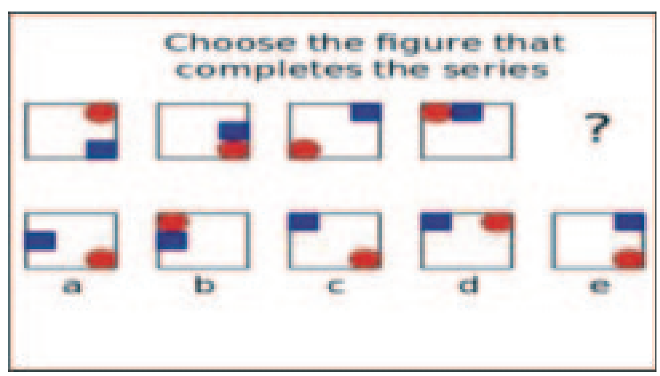
Psychologists have different approaches when they consider a particular problem. These approaches influence learned behavior which includes cognition, experience and perception.

Behavior perspective: This perspective emphasizes that learning requires conditioning. This approach emphasizes on using the principles of conditioning in the teaching-learning process.

For example, teachers can reward students for good behavior and punish them for bad behavior. For example students behave undisciplined in Nirmala Madam's class. She wants students to be disciplined and behave appropriately and for this she creates a behavior management system. At the end of class, she will write the names of students who followed the behavior management rules on the board and give them a star. In this way every student will get stars according to his conduct. The student whose star is highest can be motivated by giving him a prize. In this way all students can be motivated for good behavior.

Cognitive Perspective: The cognitive approach emphasizes that factors such as memory, ability, self-confidence, individual's emotions and intrinsic motivation contribute significantly to the learning process. This theory does not support the contribution of external rewards in the learning process.

Cognitive psychology explains how we learn, remember things, and process new information. Learning is a lifelong process. Creativity and prior knowledge have a special contribution in the learning process. Cognitive theory broadens the level of understanding of learners regarding new topics or tasks and gives students the opportunity to learn by doing. By promoting problem-solving and improving understanding, cognitive theory increases learners' self-confidence. This principle provides skills to deal with challenging and complex problems so that students can solve their study related problem easily. For example :



Insightful teachers are those who are engaged continuously in the process of cognitivelearning. They are able to learn all the time. Learning and developing is a lifelong process that will never end. Cognitive learning is an active mode of learning that helps to maximize the capacity of human brain to learn. By continuing learning, a teacher can not only learn about new knowledge but also how other teachers learn. Teachers need cognitive knowledge along with teaching skills to be excellent and thoughtful. Teachers should have self-awareness towards new learning. The process of making classroom teaching effective involves the ability to reflect cognitive knowledge as well as knowledge of classroom teaching.

Developmental Perspective: In this perspective, it has been made clear that when a child develops, intellectual and skill development also takes place along with him. During the developmental process of a child, his knowledge gradually increases. Jean Piaget, a Swiss biologist, created a proper framework for understanding the cognitive structure, function, and development of human mind. Piaget's developmental theory is successfully able to explain how children develop intellectually. Piaget's theory provides valuable information and assistance in designing curriculum and plans of study. In other words, an ideal curriculum should provide appropriate experience at the appropriate time. For example, there is no use teaching world geography to students studying in second or third grade because at that age they have not yet learned essential concepts like country, state or even city. Therefore, it is more appropriate to teach them local geography such as their neighborhood, school, classroom etc.

Constructivist approach: This perspective emphasizes how active forms of knowledge can be constructed. The constructivist approach takes into account all the social and cultural influences that influence the way we learn.

Those who take a constructivist approach believe that what a person already knows has the greatest impact on how he or she learns new information. This means that new knowledge can only be added and understood in the context of existing knowledge. This perspective also emphasizes that for the creative approach, if a person already knows something about the topic, it influences the new information he or she is learning. This means that new knowledge can be obtained only in the context of prior knowledge.

Examples related to this can be given in the form of processes of assimilation and accommodation:-

1. Assimilation means receiving new information and incorporating it into existing schema (prior knowledge).
2. Accommodation means modifying an already existing schema and using newly acquired information to redevelop it.

For example-

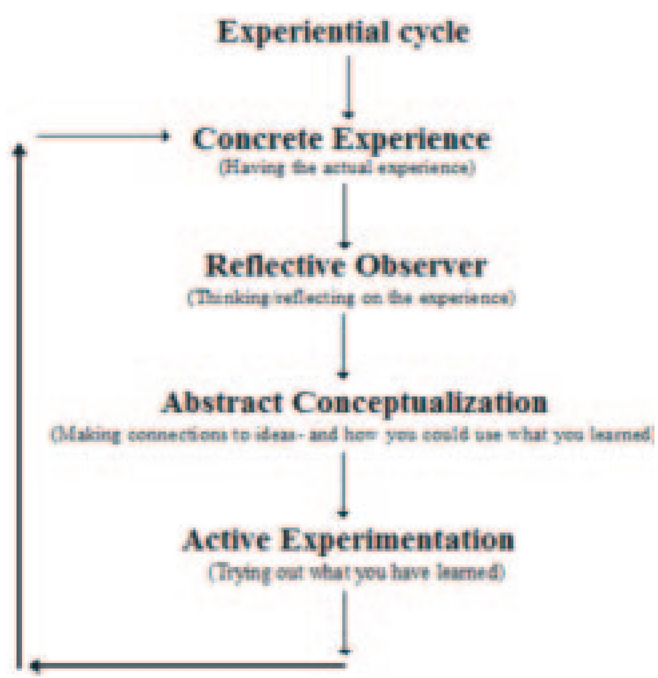
If from my point of view, friends are always good and supportive, when I meet any new person, I will consider him as a good friend and will integrate him into my schema, in which friends are always good.

Now from another perspective, if I meet someone who does not always treat me well, I will not include him in my schema (prior knowledge) as a good friend, rather I will take this fact into account. I will change my schema that someone can always be good to me or can always be a good friend. I may also reconsider whether or not the first person can still be placed in my friend schema.

Thus, the constructivist approach emphasizes acquiring new learning on the basis of accommodation of new knowledge to previous knowledge.

Experiential approach: Experiential approach is a cyclical process in which a person can gain knowledge based on his experiences. According to this approach, a person understands new information from his life experiences. This approach emphasizes the contribution of the learner's experiences, thoughts, observation and feelings to the learning process. This approach emphasizes enabling the learner to construct meaning in a way that is unique to him or her and that includes cognitive, emotional, and physical aspects of learning.

Example :



Concrete experience is gained when the learner encounters a new experience or when previous experience is reinterpreted in a new perspective.

Under reflective observation, the learner personally reflects on his experience and derives new meaning.

Abstract concepts are formed when the learner creates new ideas or adjusts his or her thinking based on his or her experience and imagination.

Active experimentation occurs when the learner applies his new ideas. And through its result it is ascertained whether any further modification is required in it or not.

Conclusion

Educational psychology transforms the formal classroom environment into a social forum where students and teachers can freely exchange their ideas and draw conclusions on important topics. Educational psychology makes the learning process easy, enjoyable and interesting thereby creating a conducive and positive learning environment in the classroom which makes the teaching-learning process effective. Educational psychology is needed to fully understand new effective methods of learning and teaching strategies. Through this, new methods, techniques, approaches and tools of teaching can be selected which provide convenience and satisfaction in studies to the learners.

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माध्यमिक स्तर पर विद्यार्थियों की गणितीय सृजनात्मकता व समस्या समाधान योग्यता के मध्य सहसंबंध का अध्ययन

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सारांश

गणित व सृजनात्मकता का मिश्रण एक अद्भुत योग्यता को जन्म देता है। प्रस्तुत शोध यह जानने के उद्देश्य से किया गया है कि गणितीय सृजनात्मकता व समस्या समाधान योग्यता के मध्य किस प्रकार का सहसंबंध है। प्रस्तुत शोध में पिथौरागढ़ जिले के माध्यमिक स्तर के 100 विद्यार्थियों को न्यादर्श के रूप में चयनित किया गया है एवं भूदेव सिंह द्वारा निर्मित गणितीय सृजनात्मकता परीक्षण व एल.एन. दूबे द्वारा निर्मित समस्या समाधान योग्यता परीक्षण के प्रयोग से प्रदत्तों का संकलन किया गया है। परिणाम में पाया गया कि माध्यमिक स्तर पर विद्यार्थियों की समस्या समाधान योग्यता व गणितीय सृजनात्मकता के मध्य धनात्मक सहसंबंध है तथा गणितीय सृजनात्मकता के दो आयामों का समस्या समाधान योग्यता से सार्थक धनात्मक सहसंबंध पाया गया है। गणितीय सृजनात्मकता के वास्तविकता आयाम व समस्या समाधान योग्यता के मध्य का सहसंबंध गुणांक सर्वाधिक 0.444 पाया गया जो (ρ मान 0.000) सार्थकता स्तर पर सामान्य धनात्मक सहसंबंध को प्रदर्शित करता है। परिणामों के आधार पर यह कहा जा सकता है कि विद्यार्थियों की समस्या समाधान योग्यता को विकसित करने के लिए गणितीय सृजनात्मकता के वास्तविकता आयाम के विकास पर अधिक ध्यान केन्द्रित किया जाना चाहिए, जिससे विद्यार्थियों को भविष्य में आने वाली समस्याओं हेतु सज्ज किया जा सके।

प्रस्तावना

सृजनात्मकता अर्थात् किसी वस्तु, विषय, समस्या को नवीन दृष्टिकोण से देखना व उसे नवीन रूप प्रदान करने की योग्यता रखना। सृजनात्मकता व्यक्ति की वह योग्यता है जिसके द्वारा वह उन वस्तुओं या विचारों का उत्पादन करता है जो अनिवार्य रूप से नए हों और जिन्हें वह व्यक्ति पहले से न जानता हो (ड्रैवडाहल, 1956)। सृजनात्मकता किसी समस्या का अद्वितीय व सही निवारण खोजने का एक महत्वपूर्ण साधन है, जिसके चलते व्यक्ति के भीतर आत्मविश्वास जागृत होता है (पिंग, 2011)। यदि सृजनात्मकता का स्थान गणित के क्षेत्र में भी सुनिश्चित कर दिया जाए तो विद्यार्थियों में गणित विषय के प्रति जो भय का भाव है उसे समाप्त किया जा सकता है। गणित विषय में सृजनात्मकता का समावेश गणितीय सृजनात्मकता कहलाता है। गणितीय सृजनात्मकता वह योग्यता है जिसकी सहायता से व्यक्ति गणितीय अपरिचित समस्याओं का नवीन परिप्रेक्ष्य से विश्लेषण कर, नवीन आकृतियों की पहचान कर, समानता व असमानताओं को ढूंढ़कर तथा बहु विचारों को उत्पन्न करके एक सही विकल्प का चयन कर समाधान कर से (लैलॉक, 1970) सृजनात्मकता का प्रयोग कर बालक गणित की समस्याओं के अद्वितीय हल खोज सकता है। इस प्रकार यह कल्पना करना गलत नहीं होगा कि गणितीय सृजनात्मकता व समस्या समाधान योग्यता के मध्य कोई सहसंबंध हो। सहसंबंध सामान्यतया दो मापों के पस्पर संबंध को बताता है, अर्थात् किसी एक माप के घटने या बढ़ने का दूसरी माप पर क्या प्रभाव पड़ेगा इस बात का अनुमान सहसंबंध द्वारा लगाया जा सकता है (व्हैरी,1984)।

वर्तमान समय विज्ञान तथा तकनीक का समय है जहाँ समय-समय पर नयी-नयी तकनीक विकसित होती रहती है जिसके साथ सामंजस्य स्थापित करने हेतु व्यक्ति में तर्क शक्ति का होना अति आवश्यक है। गणित, विज्ञान का ऐसा अंग है जो अधिकांशतः तर्क पर आधारित है (मोरसान्यी, 2018)। किसी व्यक्ति की गणितीय योग्यता प्रारम्भिक स्तर से ही गणित के विद्यार्थियों को तर्क, चिंतन द्वारा समस्या के हल ही ओर ले जाता है (नून्स, 2007) परन्तु माध्यमिक स्तर पर आते-आते विद्यार्थियों में गणित के प्रति भय अथवा घबराहट का भाव बढ़ने लगता है (विगफील्ड, 1988) तथा गणित विषय के प्रति इस घबराहट के चलते विद्यार्थियों की उपलब्धि पर नकारात्मक प्रभाव देखने को मिलता है (बोरोसो, 2021 व अंजना, 2018)। किसी समस्या के हल हेतु नवीन मार्ग को खोजना सृजनात्मकता का एक पहलू है। सृजनात्मकता व घबराहट के मध्य नकारात्मक सहसंबंध पाया गया है (ओकेबुकोला, 1986)। अतः गणित विषय में सृजनात्मकता

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का समावेश कर विद्यार्थियों में गणित विषय के प्रति भय को कम किया जा सकता है। गणितीय सृजनात्मकता विद्यार्थियों की गणितीय उपलब्धि व बुद्धि को सकारात्मक रूप से प्रभावित करती है (मियर, 2021) तथा गणितीय सृजनात्मकता व सृजनात्मकता के मध्य भी सकारात्मक सहसंबंध है (एरीकॉन, 2017)। इसी प्रकार बुद्धि व समस्या समाधान योग्यता के मध्य भी सकारात्मक सहसंबंध है (राजशेखर, 2016)। इस शोध अध्ययन की सहायता से विद्यार्थियों की गणितीय सृजनात्मकता और समस्या समाधान योग्यता को विकसित करने के साधनों की खोज करना संभव हो सकेगा, जो विद्यार्थियों हेतु भविष्य में सहायक होगा।

उद्देश्य : इस शोध अध्ययन का मुख्य उद्देश्य माध्यमिक स्तर के विद्यार्थियों की गणितीय सृजनात्मकता व समस्या समाधान योग्यता में मध्य सहसंबंध जानना है।

शोध विधि

न्यादर्श व उपकरण

अध्ययन हेतु वर्णनात्मक सर्वेक्षण विधि का प्रयोग किया गया है। उत्तराखण्ड राज्य के पिथौरागढ़ जिले के माध्यमिक स्तर पर कक्षा 9 में अध्ययनरत 100 विद्यार्थियों को सामान्य सम्भाविता तकनीक द्वारा न्यादर्श के रूप में चयनित किया गया। प्रदत्तों के संकलन हेतु गणितीय सृजनात्मकता परीक्षण (भूदेव सिंह, 1985) तथा समस्या समाधान योग्यता परीक्षण (एल.एन. दूबे, 1971) का प्रयोग किया गया।

1 समस्या समाधान योग्यता परीक्षण (एल.एन. दूबे, मनोविज्ञान विभाग, कॉलेज ऑफ एजुकेशन साइकॉलॉजी, जबलपुर)

समस्या समाधान योग्यता परीक्षण डॉ. एल.एन. दूबे द्वारा निर्मित परीक्षण है जिसको माध्यमिक स्तर के विद्यार्थियों की समस्या समाधान योग्यता के परीक्षण हेतु निर्मित किया गया है। इस परीक्षण में 20 प्रश्न हैं जिसमें अलग-अलग प्रकार के प्रश्न सम्मिलित हैं जो विद्यार्थियों की बुद्धि, चिंतन व क्रियाशीलता का एक साथ परीक्षण करने में सहायक हैं।

2 गणितीय सृजनात्मकता परीक्षण (भूदेव सिंह 1985, शिक्षा विभाग, बनारस हिन्दू विश्वविद्यालय)

यह परीक्षण डॉ. भूदेव सिंह द्वारा निर्मित परीक्षण है। यह परीक्षण माध्यमिक स्तर के विद्यार्थी, जिनकी आयु 11 से 14 वर्ष के मध्य हो, की गणितीय सृजनात्मकता परीक्षण हेतु निर्मित किया गया है। इस परीक्षण में कुल 8 प्रश्न हैं जिसमें 5 अलग-अलग प्रकार के प्रश्नों को सम्मिलित किया गया है। प्रश्न संख्या 1 प्रतिमान संबंधी समस्या है। प्रश्न संख्या 2,4,6 नवीन संबंध निर्माण आधारित समस्या है। प्रश्न संख्या 3 क्षेत्रफल से संबंधित है। प्रश्न संख्या 5 उपसमूहों तथा प्रश्न संख्या 7 व 8 समानता पर आधारित समस्या है। गणितीय सृजनात्मकता का अंक निर्धारण तीन आयामों के आधार पर किया गया है- धारा प्रवाहिता, नम्यता, वास्तविकता। परीक्षण के निर्माण में विवर्धन आयाम का भी प्रयोग किया गया है।

सांख्यिकी तकनीक

प्राप्त प्रदत्तों का निर्धारित उद्देश्यों को ध्यान में रखकर सारणीयन किया गया। आंकड़ों के विश्लेषण हेतु माध्य, मानक विचलन, टी-परीक्षण, पीयरसन सहसंबंध गुणांक आदि सांख्यिकी तकनीकों का प्रयोग किया गया।

विश्लेषण व परिणाम

आंकड़ों का विश्लेषण दो प्रकार से किया गया है- तुलनात्मक विश्लेषण तथा सहसंबंधत्मक विश्लेषण। तुलनात्मक विश्लेषण हेतु मध्यवर्ती चरों (लिंग व स्थानीयता) के आधार पर बनाए गए समूहों की गणितीय सृजनात्मकता व समस्या समाधान योग्यता का तुलनात्मक विश्लेषण किया गया है। इसी प्रकार सहसंबंधात्मक विश्लेषण के अंतर्गत भिन्न-भिन्न समूहों के लिए गणितीय सृजनात्मकता व समस्या समाधान योग्यता के मध्य सहसंबंध गुणांक की गणना की गयी। साथ ही गणितीय सृजनात्मकता के विभिन्न आयामों (धाराप्रवाहिता, नम्यता व वास्तविकता) व समस्या समाधान योग्यता के मध्य सहसंबंध गुणांक की गणना की गयी जिनका विवरण निम्न चार तालिकाओं के माध्यम से प्रदर्शित किया गया हैः

तालिका 1ः लिंग के आधार पर तुलनात्मक विश्लेषण

		गणितीय सृजनात्मकता			समस्या समाधान योग्यता		
	N	माध्य	मानक विचलन	टी मान	माध्य	मानक विचलन	टी मान
बालक	50	144.74	20.75	1.987	6.44	2.83	0.408
बालिका	50	155.28	32.53		6.66	2.56	
ग्रामीण क्षेत्र के बाालक	20	152.80	26.48	0.476	7.2	3.7	0.53
ग्रामीण क्षेत्र की बालिकाएं	30	157.31	31.23		6.7	2.6	
शहरी क्षेत्र के बालक	30	139.32	13.89	1.571	5.93	1.91	0.924
शहरी क्षेत्र की बालिकाएं	20	152.32	34.99		6.5	2.41	

सार्थकता स्तर 0.05

तालिका 2: स्थानीयता के आधार पर तुलनात्मक विश्लेषण

	N	गणितीय सृजनात्मकता			समस्या समाधान योग्यता		
		माध्य	मानक विचलन	टी मान	माध्य	मानक विचलन	टी मान
शहरी क्षेत्र के विद्यार्थी	50	144.49	25.10	2.022	6.16	2.12	1.460
ग्रामीण क्षेत्र के विद्यार्थी	50	155.50	29.23		6.94	3.12	
शहरी क्षेत्र के बालक	20	152.80	26.48	2.093	7.2	3.75	0.395
ग्रामीण क्षेत्र के बालक	30	39.32	13.89		5.93	1.91	
शहरी क्षेत्र की बालिकाएं	30	157.31	31.23	0.536	6.76	2.68	0.358
ग्रामीण क्षेत्र की बालिकाएं	20	152.24	34.99		6.5	2.41	

सार्थकता स्तर 0.05

तालिका 3: गणितीय सृजनात्मकता व समस्या समाधान योग्यता के मध्य सहसंबंधात्मक विश्लेषण

	N	पीयरसन सहसंबंध गुणांक	ρ मान	सहसंबंध
माध्यमिक स्तर के विद्यार्थी	100	0.336	0.001	सार्थक धनात्मक सहसंबंध है
शहरी क्षेत्र के विद्यार्थी	50	0.38	0.006	सार्थक धनात्मक सहसंबंध है
ग्रामीण क्षेत्र के विद्यार्थी	50	0.282	0.047	सार्थक धनात्मक सहसंबंध है
बालक	50	0.495	0.00	सार्थक धनात्मक सहसंबंध है
शहरी क्षेत्र के बालक	30	0.296	0.113	सहसंबंध सार्थक नहीं है
ग्रामीण क्षेत्र के बालक	20	0.525	0.017	सार्थक धनात्मक सहसंबंध है
बालिकाएं	50	0.242	0.09	सहसंबंध सार्थक नहीं है
शहरी क्षेत्र की बालिकाएं	20	0.422	0.045	सार्थक धनात्मक सहसंबंध है
ग्रामीण क्षेत्र की बालिकाएं	30	0.121	0.53	सहसंबंध सार्थक नहीं है

सार्थकता स्तर 0.05

तालिका 4: गणितीय सृजनात्मकता के विभिन्न आयामों व समस्या समाधान योग्यता के मध्य सहसंबंधात्मक विश्लेषण

	धाराप्रवाहिता	नम्यता	वास्तविकता	गणितीय सृजनात्मकता	समस्या समाधान योग्यता
धाराप्रवाहिता	1 (p 0.00)				
नम्यता	.867 (p 0.00)	1 (p 0.00)			
वास्तविकता	.633 (p 0.00)	.827 (p 0.00)	1 (p 0.00)		
गणितीय सृजनात्मकता	.904 (p 0.00)	.974 (p 0.00)	.889 (p 0.00)	1 (p 0.000)	
समस्या समाधान योग्यता	.163 (p 0.106)	.322 (p 0.001)	.444 (p 0.00)	.336 (p 0.001)	1 (p 0.000)

सार्थकता स्तर 0.05

माध्यमिक स्तर पर अध्ययनरत विद्यार्थियों की गणितीय सृजनात्मकता के अध्ययन से यह पाया गया कि माध्यमिक स्तर पर बालक व बालिकाओं की गणितीय सृजनात्मकता में सार्थक अन्तर है तथा बालिकाओं की गणितीय सृजात्मकता बालकों की तुलना में उच्च है। इसके विपरीत ग्रामीण क्षेत्र में बालक व बालिकाओं की गणितीय सृजनात्मकता में कोई अन्तर नहीं है तथा शहरी क्षेत्र में भी बालक व बालिकाओं की गणितीय सृजनात्मकता में कोई अन्तर नहीं है।

ग्रामीण क्षेत्र के विद्यार्थियों व शहरी क्षेत्र के विद्यार्थियों की गणितीय सृजनात्मकता में कोई अन्तर नहीं है परन्तु ग्रामीण क्षेत्र के बालकों व शहरी क्षेत्र के बालकों की गणितीय सृजनात्मकता में सार्थक अन्तर है, पाया गया है। जबकि ग्रामीण क्षेत्र की बालिकाओं व शहरी क्षेत्र की बालिकाओं की गणितीय सृजनात्मकता में भी कोई अन्तर नहीं है।

माध्यमिक स्तर पर अध्ययनरत विद्यार्थियों की समस्या समाधान योग्यता के अध्ययन से यह पाया गया कि माध्यमिक स्तर पर बालिकाओं व बालकों की समस्या समाधान योग्यता में कोई सार्थक अन्तर नहीं है, साथ ही ग्रामीण क्षेत्र के बालकों व बालिकाओं की समस्या समाधान योग्यता में कोई सार्थक अन्तर नहीं है तथा शहरी क्षेत्र में भी बालकों व बालिकाओं की समस्या समाधान योग्यता में कोई सार्थक अन्तर नहीं है।

ग्रामीण क्षेत्र के विद्यर्थियों व शहरी क्षेत्र के विद्यार्थियों की गणितीय सृजनात्मकता में कोई अन्तर नहीं पाया गया है। इसी प्रकार ग्रामीण क्षेत्र के बालकों व शहरी क्षेत्र के बालकों की गणितीय सृजनात्मकता में कोई अन्तर नहीं है तथा ग्रामीण क्षेत्र के बालिकाओं व शहरी क्षेत्र के बालिकाओं की गणितीय सृजनात्मकता में कोई सार्थक अन्तर नहीं पाया गया है।

माध्यमिक स्तर पर विद्यार्थियों की गणितीय सृजनात्मकता व समस्या समाधान योग्यता के मध्य सामान्य स्तर का सार्थक धनात्मक सहसंबंध है। यह सहसंबंध अधिकांश समूहों (शहरी विद्यार्थी समूह, ग्रामीण विद्यार्थी समूह, बालक समूह, ग्रामीण बालक समूह व शहरी बालिका समूह) में पाया गया परन्तु शहरी बाालक समूह, बालिका समूह, ग्रामीण बालिका समूह में सार्थक सहसंबंध नहीं पाया गया है।

गणितीय सृजनात्मकता के तीनों आयामों तथा समस्या समाधान योग्यता के मध्य किए गए सहसंबंधात्मक अध्ययन में यह पाया गया कि धाराप्रवाहिता आयाम व समस्या समाधान योग्यता के मध्य निम्न स्तर का धनात्मक सहसंबंध है परन्तु यह सहसंबंध 0.05 सार्थकता स्तर पर सांख्यिकीय रूप से असार्थक पाया गया है। नम्यता आयाम व समस्या समाधान योग्यता के मध्य सामान्य स्तर का सार्थक धनात्मक सहसंबंध है, इसी प्रकार वास्तविकता आयाम व समस्या समाधान योग्यता के मध्य सामान्य स्तर का सार्थक धनात्मक सहसंबंध है।

निष्कर्ष

शोध अध्ययन में पाया गया है कि माध्यमिक स्तर पर बालिकाओं की गणितीय सृजनात्मकता बालकों की तुलना में उच्च है। वहीं ग्रामीण बालकों की गणितीय सृजनात्मकता शहरी क्षेत्र के बालकों की तुलना में उच्च है। जबकि परस्पर समूहों की समस्या समाधान योग्यता में कोई सार्थक अंतर नहीं है।

सहसंबंधात्मक अध्ययन में पाया गया कि माध्यमिक स्तर पर विद्यार्थियों की गणितीय सृजनात्मकता व समस्या समाधान योग्यता में सामान्य स्तर का धनात्मक सहसंबंध है। इसी प्रकारसामान्य सृजनात्मकता का भी समस्या समाधान योग्यता के साथ सकारात्मक सहसंबंध है (ओकामोटो, 2023)।

गणितीय सृजनात्मकता के वास्तविकता आयाम का समस्या समाधान योग्यता के साथ सहसंबंध गुणांक सर्वाधिक 0.444 पाया गया जो कि 0.05 सार्थकता स्तर पर सांख्यिकीय रूप से सार्थक है।

गणितीय सृजनात्मकता का नम्यता आयाम तथा समपूर्ण गणितीय सृजनात्मकता के मध्य सहसंबंध गुणांक 0.974 पाया गया है जो 0.05 सार्थकता स्तर पर उच्च धनात्मक सहसंबंध को प्रदर्शित कर रहा है।

अतः विद्यार्थियों के नम्यता आयाम के विकास पर ध्यान केन्द्रित कर विद्यार्थियों की सम्पूर्ण गणितीय सृजनात्मकता को विकसित किया जा सकता है। इसी प्रकार वास्तविकता आयाम के विकास को केन्द्र में रखकर विद्यार्थियों की समस्या समाधान योग्यता को विकसित किया जा सकता है।

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Enhancing Opportunities for Women in the Unorganized Sector through Empowerment Strategies in India

*Nishu Soni

Abstract

This discussion focused on women in the unorganized sector, which includes workers who are outside the purview of formal labour laws and regulations. Women make up a significant proportion of the labour force in the unorganized sector globally, and they often face low wages, poor working conditions, and little access to basic labour protections. Despite these challenges, women in the unorganized sector have demonstrated remarkable resilience and resourcefulness in navigating these difficult working conditions, often forming informal networks and associations to support each other and advocate for their rights. Addressing the challenges faced by women in the unorganized sector requires a concerted effort from governments, civil society organizations, and other stakeholders, including improving access to basic labour protections, providing training and skills development opportunities, and addressing the structural barriers that perpetuate gender inequality and discrimination. This paper aims to provide an overview of the historical context and current state of the unorganized sector, based on secondary data and literature review method through this examine the gender pay gap and labour rights issues, and explore the strategies for empowering women in the unorganized sector. The statement of this paper is that women's participation in the unorganized sector is essential for economic development, but their empowerment requires policies and programs that address the structural barriers they face, such as gender discrimination, limited access to resources, and inadequate legal protections.

Introduction

Women make up a significant proportion of the labour force in the unorganized sector. According to the International Labour Organization (ILO), globally, women represent around 60 percent of the workers in the informal economy, which includes the unorganized sector. In many developing countries, women's participation in the unorganized sector is even higher, with women often concentrated in low-paid and precarious jobs.

Women in the unorganized sector may work as domestic workers, street vendors, agricultural laborers, or in small-scale manufacturing and service industries. They often face low wages, long working hours, and poor working conditions, with little access to basic labour protections such as social security benefits, paid leave, or health care. Many women in the unorganized sector are also excluded from labour laws and regulations, making it difficult for them to seek redress for grievances or access legal protections.

Despite these challenges, women in the unorganized sector have demonstrated remarkable resilience and resourcefulness in navigating these difficult working conditions. They often form informal networks and associations to support each other and advocate for their rights. For example, women's self-help groups have been successful in providing microfinance, training, and other forms of support to women entrepreneurs in the unorganized sector.

However, addressing the challenges faced by women in the unorganized sector requires a concerted effort from governments, civil society organizations, and other stakeholders. This includes improving access to basic labour protections, providing training and skills development opportunities, and ensuring that women have access to financial services and other resources. It also requires addressing the structural barriers that perpetuate gender inequality and discrimination, such as unequal access to education and opportunities for advancement.

The unorganized sector comprises economic activities that are not regulated by the government, and often lack formal employment contracts, social security, and other labour rights protections. Women's participation in the unorganized sector has been increasing rapidly in recent years, as they seek opportunities to supplement household income, gain economic independence, and

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support their families. However, women in the unorganized sector face several challenges, including discrimination, harassment, lack of access to credit, low wages, and poor working conditions.

The unorganized sector in India, which includes a wide range of informal economic activities, has long been dominated by men, leaving women with limited opportunities to participate and succeed. To address this issue, a number of organizations and institutions, have developed and implemented various empowerment strategies to enhance opportunities for women in this sector.

According to data from the World Bank, women make up only about a quarter of the total workforce in the non-agricultural unorganized sector in India. This is despite the fact that women in this sector often work longer hours and earn less than their male counterparts. In addition, many women in the unorganized sector face significant challenges related to health, safety, and social stigma.

To address these challenges, a number of organizations have developed initiatives to empower women in the unorganized sector. For example, NITI Aayog has launched a program called "Women Entrepreneurship Platform" to support women entrepreneurs in India. Similarly, UN WOMAN has launched a program called "Empowering Women Entrepreneurs in India" to provide training and support to women entrepreneurs in the country.

In addition, UNICEF has focused on providing education and training to young girls in the unorganized sector, while the OECD has highlighted the importance of improving access to finance and other resources for women in this sector. The IMF has emphasized the need to address gender disparities in labor market outcomes, while UNCTAD has focused on promoting women's entrepreneurship and leadership in the sector.

Overall, these various initiatives demonstrate the importance of empowering women in the unorganized sector in India. By providing training, support, and resources, these organizations are helping women to overcome the challenges they face and to achieve greater success and financial independence in this important sector of the Indian economy.

Literature Review

i. Historical context and current state of the unorganized sector:

The unorganized sector refers to the part of the economy that operates outside the formal legal and regulatory framework. It includes activities that are often carried out by small-scale producers, service providers, and informal workers who are not covered by labour laws and regulations. The unorganized sector has a long history in many countries, and it has been an important source of employment, especially for women. According to the International Labour Organization (ILO, 2018), the unorganized sector accounts for around 60 per cent of the global workforce. However, the lack of formal regulation has resulted in a range of challenges, including low wages, poor working conditions, and little access to basic labour protections.

ii. Gender pay gap in the unorganized sector:

The gender pay gap is a persistent issue in the unorganized sector, with women often paid less than men for the same work. According to a study by the ILO (2018), women in the unorganized sector earn on average 60 to 75 per cent of what men earn, with the gap even wider for women in low-skilled and informal jobs. The gender pay gap in the unorganized sector is often attributed to a range of factors, including occupational segregation, discrimination, and lack of access to education and training.

iii. Labour rights issues in the unorganized sector:

Labour rights issues are a major concern in the unorganized sector, with workers often facing poor working conditions, long working hours, and little access to basic labour protections such as social security benefits, paid leave, or health care. Many workers in the unorganized sector are also excluded from labour laws and regulations, making it difficult for them to seek redress for grievances or access legal protections. The lack of formal regulation in the unorganized sector also leaves workers vulnerable to exploitation and abuse by employers.

iv. Studies on empowering women in the unorganized sector:

A number of studies have examined strategies for empowering women in the unorganized sector. These strategies often focus on improving access to education and training, promoting entrepreneurship, and strengthening the capacity of women's organizations to advocate for their rights. For example, women's self-help groups have been successful in providing microfinance, training, and other forms of support to women entrepreneurs in the unorganized sector. Other strategies include promoting collective bargaining, improving access to social protection, and addressing discriminatory social norms that perpetuate gender inequality.

Research Design

This study employs a qualitative research design that involves a literature review of existing research studies, reports, and publications related to women in the unorganized sector. The research aims to provide an in-depth understanding of the historical context and current state of the unorganized sector, gender pay gap, labour rights issues, and empowering women in the unorganized sector. The study utilizes secondary data collected from various sources, including academic journals, books, and reports from international organizations, such as the International Labour Organization (ILO, 2018) and the World Bank.

Data Collection Methods

The data collection methods employed in this study are based on a systematic review of existing literature. The study uses various search engines, including Google Scholar, JSTOR, and other online databases to identify relevant publications.The data collection process involved screening the titles and abstracts of the publications, and selecting those that met the inclusion criteria. The inclusion criteria included relevance to the research questions and objectives, the date of publication, and the quality of the research.

Data Analysis Methods

The data analysis method employed in this study is a thematic analysis approach. The analysis involves identifying common themes and patterns from the selected publications related to the historical context and current state of the unorganized sector, gender pay gap, labour rights issues, and empowering women in the unorganized sector. The themes are identified through a process of coding the data and categorizing the codes into broader themes. The analysis process involves multiple readings of the selected publications, with a focus on identifying similarities and differences in the findings across the publications. The analysis also includes a critical evaluation of the quality of the research studies and the validity of the findings.

Findings of the study

Analysis of the Gender Pay Gap in the Unorganized Sector

Studies have shown that women in the unorganized sector earn significantly less than their male counterparts, with some estimates indicating a gender pay gap of up to 40%. This pay gap is due to several factors, including the undervaluation of women's work, gender discrimination, and limited access to education and training. Women's work is often concentrated in low-paying and informal jobs, such as domestic work, agriculture, and small-scale enterprises, where they are paid less than men for similar work.

Analysis of Labour Rights Issues in the Unorganized Sector

Women in the unorganized sector face numerous labour rights issues, including limited access to social security benefits, inadequate legal protections, and poor working conditions. The lack of formal employment contracts and social security benefits exposes them to economic insecurity and makes it difficult for them to save for the future. Women in the unorganized sector also face gender-based violence and harassment at work, with few legal mechanisms to seek redressal. Additionally, many women in the unorganized sector work in hazardous and unsafe conditions, with little to no access to occupational health and safety protections.

Empowering Women in the Unorganized Sector

Several programs and initiatives have been implemented to empower women in the unorganized sector. These programs aim to provide women with access to credit, education and training, legal protections, and other resources that can improve their working conditions and increase their earning potential. For example, the National Rural Livelihoods Mission in India provides women in the unorganized sector with access to credit, training, and market linkages to start and grow their businesses. Similarly, the SEWA in India provides legal and social protections to women in the unorganized sector, including access to healthcare and insurance. The success of these programs suggests that empowering women in the unorganized sector requires a comprehensive approach that addresses the structural barriers they face and provides them with the resources and support they need to succeed.

Overall, the findings of this study indicate that women in the unorganized sector face significant challenges, including a gender pay gap, labor rights issues, and limited access to resources and legal protections. However, there are several programs and initiatives that have been successful in empowering women in the unorganized sector. These programs provide insights into the strategies that can be employed to promote women's economic empowerment in the unorganized sector.

Limitations and Recommendations for Future Research

This study has several limitations, including the lack of primary data collection and the focus on a specific geographic region. Future research should consider conducting primary data collection to gather more detailed information on the challenges faced by women in the unorganized sector. Additionally, research should be conducted in other regions to examine the similarities and differences in the challenges faced by women in the unorganized sector.

Conclusion

enhancing opportunities for women in the unorganized sector in India is crucial for achieving inclusive economic growth and gender equality. The paper highlights the importance of empowering women through education, training, access to finance and resources, and promoting women's entrepreneurship and leadership. These efforts aim to address the challenges faced by women in the unorganized sector and to create a more equitable and sustainable economy. However, there is still much work to be done to fully address the gender disparities in this sector and to ensure that women have equal opportunities to participate and succeed. It is important that these organizations continue to collaborate and invest in initiatives that support women's empowerment in the unorganized sector in India. Women's participation in the unorganized sector is essential for economic development, but their empowerment requires policies and programs that address the structural barriers they face. The gender pay gap, labour rights issues, and limited access to resources and legal protections must be addressed to promote gender equality in the workplace. Policymakers and practitioners must take action to promote women's economic empowerment in the unorganized sector and work towards creating a more equitable and just society.

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Decreasing of Social Sensitivity in Indian Society: Causes, Effects & Solutions

***Sanjay Kumar**

Abstract

In the present research paper, ideas have been presented in the context of the decreasing of social sensitivity in the Indian society and its causes, effects and solutions. In today's time, we get to see that social sensitivity is decreasing in our society, the biggest reason behind the decrease in social sensitivity seems to be lack of trust and trust of people towards each other. In today's time people are only engaged in fulfilling their selfishness rather than thinking about the welfare of others and this is one of the reasons. Whenever any kind of incident happens people show social insensitivity, people just stand by and remain mute spectators to any sensitive incident. The decreasing of social sensitivity in Indian society has become a growing concern in recent years. This decline can be attributed to a number of factors including the rise of individualism, urbanization, and the influence of Western culture. The effects of this decline can be seen in areas such as increased discrimination and prejudice, a lack of empathy for marginalized groups, and a decline in community cohesion. To address this issue, solutions such as promoting cultural awareness and understanding, increasing opportunities for community engagement, and implementing education programs that promote empathy and social responsibility may be effective. Additionally, addressing the underlying societal factors that contribute to the decline of social sensitivity, such as poverty and discrimination, is also crucial in promoting a more socially sensitive society. What is social sensitivity? What is the reason behind the decrease in social sensitivity? What are the effects of decreasing social sensitivity being seen? What can be done to promote social sensitivity? These issues have been discussed in this research paper.

Introduction

Progress and development of a nation is possible only when its citizens live with each other without any differences and trust each other. But sometimes in the society we also get to see such a situation when people stop trusting each other and make a wrong impression about each other. There are so many distances between people that they start showing insensitivity towards each other, for example, if a person gets into an accident on the road, instead of helping him, people start making videos of him, similarly People go to any extent to fulfil their selfishness, they do not think about the pain of others at all. Due to the Corona pandemic, there was also a decline in Social Sensitivity. People have stopped meeting each other due to fear, according to the news published in the newspapers, many close people did not even go to the hospital to collect the dead bodies of their relatives, while people of one religion are accused of spreading corona on people of other religion. Started applying many shopkeepers also made huge profits by selling essential items like masks and sanitizers at exorbitant prices. A study found that people with high social sensitivity were also more likely to recover from mental health problems. Overall, the research suggests that social sensitivity is a complex trait with both positive and negative implications (Miller, A.M., & Cole, P.M. (2022). A review of the research on social sensitivity and mental health found that it is a complex relationship. On the one hand, people with high social sensitivity may be more vulnerable to developing mental health problems, such as anxiety and depression. On the other hand, people with high social sensitivity may also be more resilient to mental health challenges, due to their ability to connect with others and seek support (Longhurst, J.D., & Longhurst, L.A. (2021). A study found that adolescents with high social sensitivity were more likely to have a close friend group and to report feeling satisfied with their social relationships.

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Another study found that adolescents with high social sensitivity were less likely to engage in risky behaviours, such as substance abuse and delinquency (Barber, B.L., & King, L.A. (2018). It is important to note that social sensitivity is not the same as social anxiety. People with social anxiety experience a fear of social situations, while people with social sensitivity simply have a heightened awareness of social cues. On the basis of all these incidents, it can be said that the scope of social sensitivity has decreased in our society, if we all work in this direction, then social sensitivity can be promoted.

About Indian Society

The country of India is famous all over the world for its cultural heritage and identity since centuries. The feeling of living in harmony with everyone under our cultural heritage is famous all over the world. Indian society has been one of the few ancient civilizations of the world. Despite the diversity of the Indian society, we can see the sense of unity in it. People of different religions, castes and classes live in the Indian society. The geographical areas here are different and the food habits and climate of the citizens found here are also different, but in spite of all this, our Indian society has been giving the message of unity in diversity. People here have been living together for centuries. When the world was immersed in darkness, at that time the Indian society kept shining like a lamp in front of the world. At present, people of different classes, religions and castes reside in the Indian society. In this way, it can be said that Indian society is seen to be connected together even after many diversities.

What is Social sensitivity

The notion of social sensitivity is typically researched in psychology under the name of interpersonal sensitivity (IS), namely, as a form of attunement to others' emotions as well as to social situations at large (Hall & Bernieri, 2001), social sensitivity has a broader significance for philosophy and particularly for phenomenology (Magrì, 2020; Ostrow, 1990). The crucial difference between such approaches concerns the experiential character of social sensitivity that they bring to light. Psychological research on IS maintains that social sensitivity is based on inferential patterns of understanding the emotions of other subjects (Bernieri, 2001), whereas a phenomenological approach to social sensitivity centers on embodied and pre-reflective forms of social acquaintance, taking into account the role played by habit and attentiveness, but also aspects pertaining to social and moral perception. As such, a phenomenological approach offers a broader spectrum of motivational factors for the analysis of social sensitivity (Magrì, 2020). Social sensitivity includes the words social and sensitivity. The word social means related to the society or those who follow the rules of the society. If we break down the word sensitivity, then there are three words Sam+Vedana and Sheela. Sam means equal and Vedana means pain or sorrow. To feel the same pain is called sensitivity.Sensitivity is not found only in humans but it is also found in some animals such as monkeys, elephants, cows, goats and other mammals. In simple words, it can be said that if a human being or any creature experiences the same pain or sorrow towards the pain or sorrow of other humans or creatures, then it is called 'sensitivity'. When this sensitivity is visible towards the society, it is called social sensitivity. Social sensitivity is a common quality of humans.

Reason for decreasing social sensitivity

There are a variety of reasons that may contribute to decreasing social sensitivity. Some possible explanations include:

Social media and technology: The constant use of technology and social media can lead to a decrease in face-to-face interactions, which can decrease one's ability to read social cues and interpret nonverbal communication.

Lack of empathy: Research suggests that people who lack empathy may have a harder time understanding and responding to the emotions and experiences of others, which can lead to decreased social sensitivity.

Societal changes: Changes in societal norms and values can also contribute to decreasing social sensitivity. For example, a culture that values individualism and competition may discourage people from understanding and responding to the needs of others.

Socio-economic status: People who come from lower socio-economic backgrounds may have fewer opportunities to learn and practice social skills and sensitivity, which can lead to decreased social sensitivity.

Trauma: Individuals who have experienced trauma in their lives may have difficulty understanding and responding to the emotions and experiences of others, which can lead to decreased social sensitivity.

Lack of awareness: Some people may not be aware of their own social sensitivity or lack thereof, which can make it difficult for them to improve in this area.

Lack of education: People with low levels of education may have difficulty understanding and interpreting social cues, which can lead to decreased social sensitivity.

Effects of low social sensitivity: Many problems are seen due to low social sensitivity in the society like people start looking down on each other, do not trust each other, think only about themselves, others Does not care about the thoughts and feelings of The gruesome form of social sensitivity is seen when people become thirsty for each other's blood.Some recently case which shows insensitivity in our society are, "CCTV footage of the areas where the girl was spotted wandering for help suggested she walked for eight kilometres before being rescued, the SP said. At one point, she was seen being shooed away by a man after she went to his house for help. She was also seen talking to a woman, seemingly seeking assistance, but in vain, he added." (Tomar, S. (2023, September 28). Ujjain shocker: 12-yr-old seeks help after rape, turned away. Hindustan Times.) & one another case from Manipur state "In Manipur Horror, 2 Women Paraded Naked on Camera, Allegedly Gang-Raped". (Sharma, N., Choudhury, R., & Achom, D. (2023, July 20). These are only those cases which was highlighted but there should be more cases which can't be registered due to lack of awareness. So it is demand of today's time to promote social sensitivity in students & youth. The presence of social sensitivity in the society helps in the development and progress of the country, while the lack of social sensitivity leads the society and the country to the pit.

Solutions to promote social sensitivity

We all have to make efforts together to promote social sensitivity, these efforts can be done at family, society, school, media and personal level. Family is the child's first school and mother is the child's first teacher, so the child should be taught the lesson of social sensitivity from the family itself. After the family, the child comes in contact with the society, so it is the responsibility of the society to present examples of social sensitivity to the child. After this the child enters the school, where the curriculum, teachers, co-curricular activities and the school environment can play their part in developing the qualities of social sensitivity in the child. The present era is the era of social media, many types of information are being disseminated on social media, in such a situation, it becomes the responsibility of social media to broadcast programs that promote social sensitivity in children and not those that create conflict among them. The most important solution in all these solutions is to make the individual aware of social sensitivity as internal motivators are considered to be more effective than extrinsic motivators. Apart from some of the suggested solutions, there can be many solutions which can plant the seed of social sensitivity in the child's mind, we have to identify them and adopt them.

The following measures can help in promoting social sensitivity:

(1) **Person's family :** A student spends the initial time with his family and family members, the effect of the rituals given in the family remains on his whole life, in this case the family environment will be negative instead of positive, family If the people of a family do not trust each other, think only about themselves, then the child of that family will also become like them. Therefore, it should be the responsibility of every family to teach their children the culture of social sensitivity since childhood, so that in future they will be able to use social sensitivity in their lives.

(2) **Education of a person:** Education of a person has a significant impact on his personality. If a student is educated in a wrong way, then he will continue to do wrong things in his whole life and that work will be right in his own eyes. That's why it is very important to teach the importance of social sensitivity during the education of a person, otherwise social insensitivity will inculcate in a person's character, and the whole world may have to bear the brunt of it.

(3) **Company of a person :** One thing has always been said in the Indian tradition that according to the company, the behavior of a person means that if the company is good then he will become good and if the company is not good then he will go in the wrong direction. If the student's behavior is showing social insensitivity, then it is possible that his peers also behave in the same way, which would be being followed by the student. So we should keep the person's company positive and spend more time with people who promote social sensitivity.

(4) **Thoughts of a person:** Whatever thoughts a person has, his behavior will also be the same. If a person has a feeling of jealousy towards others, then it is possible that he will not have any sympathy towards him, on the contrary, if someone has a feeling of love towards others, then he will be ready to help others by seeing them in trouble. That is why it is necessary that we should have positive thoughts towards others, this strengthens social sensitivity.

(5) **Spirituality in a person:** The basic mantra of spirituality is by considering everyone as equal. Spirituality tells that we are all the children of that Supreme Father, the master of all is one and no one

in the world is immortal. If all the people living on earth accept this, then heaven can be found on earth itself. Having an influence of spirituality in one's life can help in adopting social sensitivity.

(6) **Circumstances of a person's life:** The circumstances of his life have a profound effect on the behavior of a person. Sometimes it happens that even the work which we do not want to do, we do it according to the situation. For example, if someone is hungry, he will try to satisfy his hunger by doing whatever he can, instead of thinking about right and wrong, similarly many situations in our life can lead us to misbehave, but an experienced person is aware of the circumstances of his life. Will present an example of minimizing the wrongdoing by learning from it.

(7) **A person's attitude towards life:** A person's attitude towards life also affects his social behavior. If a person has this attitude that if his work gets done, the public should go to hell, and a person having such attitude can never think about the welfare of others, his first task will be to do good for himself and not for others. That is why a person's positive attitude towards life will be effective in promoting social sensitivity.

Conclusion

Social sensitivity is the natural quality of humans, this statement is proved by Aristotle's sentence "Man is a social animal". Humans like to live in groups and build society, because of living in society, humans are called social animals and to adjust with the people living in the society. Respecting the thoughts and feelings of others is called social sensitivity. Social sensitivity is affected by many hindering elements, such as a person's family, education, thoughts, association, spirituality, influence of materiality, attitude towards life and circumstances of life. Due to lack of social sensitivity among people, many types of differences arise between them, including selfishness, jealousy, blaming others, not agreeing with their views, condemnation, violence, etc., which hinder the progress of any country. That is why we need to pay attention to this issue together in time. A review of the research on adolescent social sensitivity found that it is an important factor in healthy social development. Adolescents with high social sensitivity are more likely to be able to read and respond to social cues accurately. This can help them to form and maintain strong relationships, and to avoid conflict (Steinberg, L. & Silk, J.S., 2020). Family, society, school etc. should work to promote social sensitivity in the youth. Social media should also play its positive role. Instead of sowing the seeds of hatred among the people, it should contribute in promoting unity and harmony among them. In the end, it can be said that social sensitivity cannot be promoted by any one, but if we all together make efforts in this direction, we will definitely be able to put it into practice. Today's student is tomorrow's future, if we sow the seed of social sensitivity in him today only then he will become a tree in future and provide shade and fruits to all.

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Unlocking Insights: Financial Ratio Analysis of Indian Private Banks (2018-2022)

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Abstract

A bank's solid financial health is a promise not only to its depositors, but also to its shareholders, staff, and the entire economy of a country. The majority of financial statement studies concentrate on enterprises that either contribute significantly to economic figures or operate in a highly competitive business environment. The goal of this study is to conduct an analysis to determine the extent to which a corporation has implemented financial performance rules that are good and correct. This study investigates performance of commercial banks for the period April 2018 to March 2023. The financial data base of HDFC Bank, IDBI Bank, ICICI Bank, AXIS Bank and YES Bank for aforementioned period is taken from their respective official websites, economic times, yahoo finance and money control. These statements provided necessary information, which was summarised and utilised to compute various financial ratios during a five-year period. Financial ratios are methods that are used to assess the profitability, liquidity, and solvency of five major Indian commercial banks. This study will examine these banks' financial statements utilising profitability, management efficiency, balance sheet, leverage, or solvency and liquidity ratios. For profitability, following ratios were used. For managerial efficiency ratios were used. Capital adequacy ratio was used to check balance sheet ratio. For leverage, debt equity ratio was used and for the purpose of liquidity current ratio and quick ratio was used. The study found that HDFC Bank was the best performing followed by ICICI Bank and AXIS Bank had the worst performance followed by IDBI Bank and YES Bank.

Introduction

Many investors are confused and intimidated by the large number of statistics in a company's financial statements. Financial statements, on the other hand, are a treasure mine of information if you know how to analyse them. Financial statements are the channel via which a firm exposes information about its financial performance. Fundamental analysts make investing recommendations based on information derived from financial accounts.

Banks, as a crucial component of the financial system, play an important role in a country's economic development. A bank acts as a financial intermediary and an institution that collects money (deposits) and lends it out, either directly through loans or indirectly through capital markets. The General Bank of India was established in 1786, at the dawn of the banking system. The banking industry was divided into three categories:

1. Private Sector Banks, 2. Public sector Banks, 3. Foreign Banks.

If the banking industry fails to function properly, the economic consequences might be massive and far-reaching. As a result, there is an urgent need to explore the elements that influence the overall performance of the banking sector. For analysing the impact on performance level, the first and main component to be considered is all financial measures such as liquidity, credit, capital, operational expenditures, return on equity (ROE), return on investment (ROI), and so on.

Financial ratios enable us to identify individual bank strengths and weaknesses, which in turn influences bank profitability, liquidity, and credit quality. Because it has a substantial impact on the growth of every company as well as the country's economic growth, an efficient banking system is considered as a necessary necessity for the economic development of any nation.

Indian Banking Sector

The Indian banking sector, which includes a wide range of financial institutions, is a substantial component of the country's financial system. It is divided into two types: scheduled banks and non-scheduled banks. Public

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sector banks, private sector banks, and foreign banks are the three types of scheduled banks. The sector is critical to the country's economic development since it facilitates the flow of capital, provides loans, and provides a variety of financial services. Here is the description of prominent banks in private sector taken under area of study:

1.1.1 Housing Development and Finance Corporation (HDFC Bank)

During the fiscal year 2022-23, HDFC Bank is India's largest private bank by total sales. It was among the first to receive 'in principle' approval to form a bank in the private sector as part of the Reserve Bank of India's (RBI) liberalisation of the Indian Banking Industry in 1994. The bank was established in August 1994, with its registered office in Mumbai. As of March 2023, it was the largest private bank in India in terms of revenue and market capitalization, with 13,160 ATMs, 5,103 branches, and 98,061 staff. HDFC Bank has a customer base of around 49 million people. ROE during the last five years is 16.8%.

1.1.2 Industrial Development Bank of India (IDBI Bank)

It was founded in 1964 as the Industrial Development Bank of India, a development finance organization that offered financial support to the manufacturing sector. The organization was categorized under the "other development finance institution" category after merging with its commercial business, IDBI Bank, in 2005 to create the current banking corporation. In 2006, IDBI Bank acquired United Western Bank (headquartered at Satara) in a rescue. Byacquiring UWB, IDBI Bank increased its branch count from 195 to 425. Later that month, the Government of India asked Life Insurance Corporation to manage the bank in order to comply with regulatory requirements and to inject capital into the bank due to high NPA and capital adequacy issues, and the corporation successfully acquired a 51% controlling stake in the bank, becoming the sole shareholder. After LIC of India increased its equity stake, the Reserve Bank of India confirmed in a press release that IDBI Bank is now classified as a private sector bank, effective retroactively from January 21, 2019.

1.1.3 Industrial Credit and Investment Corporation of India (ICICI Bank)

In 1994, ICICI Bank was established as a wholly owned subsidiary of ICICI Limited, an Indian financial institution. It offers a wide range of banking products and financial services to both commercial and retail customers through a variety of distribution methods. It is 2nd in the list of top 5 private banks in India. ICIC Bank has 12.4% of ROE in last 5 years. It has 4874 branches and 14987 ATMs operating having return on equity at 17.2%.

1.1.4 AXIS Bank

AXIS Bank is the third largest private bank in India. It offers the entire spectrum of financial services to customer segments covering large and mid-corporates, MSME, agriculture and retail businesses. It is one of the first new-generation privates sector banks to have begun operations in 1994. The bank has a large footprint of 4094 domestic branches with 11801 ATMs and 4917 cash recyclers. It recorded revenue in 2022-23 at ₹94501 Crore. The overseas operation of bank is spread over nine international offices which focuses on corporate lending, trading finance, syndication, investment banking etc. ROE for 5 years reported at 9.78% in financial year 2022-23.

1.1.5 YES Bank

YES BANK, India's sixth-largest private sector bank is a high quality, customer-centric and service-driven Bank. YES Bank is a new private sector bank that was established in 2004 by Rana Kapoor and the late Ashok Kapoor. Since its founding, YES Bank has developed into a "Full Service Commercial Bank" with business lines in Corporate and Institutional Banking, Financial Markets, Investment Banking, Corporate Finance, Branch Banking, Business and Transaction Banking, and Wealth Management across the nation. Since its inception in 2004, YES BANK has grown into a 'Full-Service Commercial Bank' providing a complete range of products, services, and technology-driven digital offerings, catering to corporate, MSME & retail customers.YES BANK operates its Investment banking, Merchant banking & Brokerage businesses through YES SECURITIES and its Mutual Fund business through YES Asset Management (India) Limited, both wholly-owned subsidiaries of the Bank. Headquartered in Mumbai, it has a pan-India presence across all 28 states and 9 Union Territories in India including an IBU at GIFT City, and a Representative Office in Abu Dhabi.

2.0 Literature Review

Financial ratio analysis is widely used to evaluate the performance and financial health of banks. Prior studies have applied ratio analysis to compare private and public sector banks in India.

James (2022) focuses on the use of financial ratios to determine the financial performance of Indian banks, including liquidity, activity, leverage, profitability, and market value ratios.

Pradhan and Shrestha (2020) studied 10 leading private banks from 2015-2019. Using DuPont analysis, they highlighted how debt utilization, asset turnover and tax burden affected returns. Better performing banks balanced loan growth with risk management. Capital strength also enabled greater financial flexibility.

Bawa (2019) investigates the relationship between various financial ratios and non-performing assets (NPAs) in Indian banks, highlighting the significance of intermediation cost ratio and return on assets in determining NPAs.

Ramachandran *et al.* (2017) computed leverage, asset quality, management, earnings, liquidity, and valuation ratios for a sample of public and private banks from 2010-2015. They found private banks performed better on profitability, liquidity and valuation ratios, attributing this to better risk management and utilization of resources.

Petria, N., Capraru, B. and Ihnatov, (2015) discusses "various relationships between bank profitability. Cost ratio, return/dividend ratio and spread ratio are three categories in which the author classifies different ratios. These ratios can be used to understand a bank's financial position, operations and investment attractiveness. By using such ratio analysis, he explained, comparisons can be made between branches and the strengths and weaknesses of individual banks can be explored to make strategic decisions and take the necessary corrective actions."

Aspal (2014) analyzes "the capital adequacy of Indian private sector banks and identifies the impact of risks, such as credit, liquidity, and sensitivity, on capital adequacy ratios. The independent variable asset quality has negligible influence on capital adequacy of private sector banks. Indian private sector banks have excessive funds to meet their obligation and have opportunity to give more advances to public by protecting owner's stake."

Sanjeev Kumar Srivastaw (2013), "to analyze the selected foreign and new private sector banks operating in India by using financial ratios. The Performance has been compared by dividing the total study period into two parts viz. Supra and Umbra periods. They analyzed the asset qualities has an improvised strategy for both the foreign and New private sector banks operating in India. It has also been found that both Foreign Banks and New Private Sector Banks improved the quantum of priority sector lending in the Supra period by taking advantages of the existing provisions."

Anurag. B. Singh; Ms. Priyanka Tandon (2012) on the basis of their study or analysis "banking customer has more trust on the public sector banks as compared to private sector bank." Overall, these papers provide a comprehensive analysis of financial ratios and performance indicators to assess the financial performance of selected private banks in India during the specified period.

Despite extensive analysis, there remains scope for evaluating financial trends over the latest period of economic uncertainty. Assessing the most recent 2018-2022 period can provide updated insights into the performance drivers and financial positioning of leading Indian private banks.

3.0 Research Methodology

3.1 Research Problems & Objectives

This research paper aims to measure the financial performance of selected private sector banks of India such as HDFC Bank, IDBI Bank, ICICI Bank, AXIS Bank and YES Bank for the period Apr 2018 to March 2023 using comparative analysis of financial ratios. As a part of research procedure, the researcher obtained the data on financial statements of the aforesaid banks for five years (2018-2022) from different websites and respective banks' official website. Since financial information is pre-requisite for analysing financial performance so financial information is derived from these financial statements and later summarized and processed. This information then processed and grouped into five categories i.e., profitability ratio, managerial efficiency ratio, balance sheet ratio, leverage ratio and liquidity ratio.

This study specifically aims to provide answers to the following objectives:

1. To determine the profitability, managerial efficiency, balance sheet, leverage and liquidity ratios of HDFC Bank, IDBI Bank, ICICI Bank, AXIS Bank and YES Bank
2. To undertake a financial comparison of various banking institutions.

3.2 *Descriptive Statistics*

Table 1: Financial Ratios of HDFC Bank

HDFC BANK					
RATIOS	Mar'23	Mar'22	Mar'21	Mar'20	Mar'19
Net Profit Margin	27.29	28.93	25.74	22.86	21.29
Return on Net Worth (%)	15.74	15.39	15.27	15.35	14.12
Net Interest Income/ Total Funds	3.83	3.77	3.96	4.05	4.18
Total Assets Turnover Ratios	0.07	0.07	0.07	0.08	0.09
Capital Adequacy Ratio	19.26	18.9	18.79	18.52	17.11
Total Debt to Owners Fund	7.46	7.26	7.22	7.56	6.97
Current Ratio	0.07	0.05	0.03	0.04	0.05
Quick Ratio	19.48	18.77	17.58	16.62	16.61

Source: Compiled from annual reports of HDFC Bank

Table 1 explains the results of several financial ratios of HDFC Bank from 2018-2022. It obtains profitability ratio i.e., net profit margin and return on net worth, management efficiency ratio i.e., net interest income/total funds and total assets turnover ratio, balance sheet ratio i.e., capital adequacy ratio, leverage ratio i.e., total debt to owner's fund and liquidity ratio i.e., current ratio and quick ratio.

Table 2: Financial Ratios of IDBI Bank

IDBI BANK					
RATIOS	Mar'23	Mar'22	Mar'21	Mar'20	Mar'19
Net Profit Margin	17.72	13.33	6.82	-61.88	-68.48
Return on Net Worth(%)	9.82	7.34	4.45	-46.82	-48.94
Net Interest Income/ Total Funds	3.72	3.14	2.91	2.3	1.79
Total Assets Turnover Ratios	0.07	0.06	0.07	0.07	0.07
Capital Adequacy Ratio	20.44	19.06	15.59	13.31	11.58
Total Debt to Owners Fund	7.22	7.46	8.08	9.42	8.83
Current Ratio	0.11	0.15	0.19	0.22	0.21
Quick Ratio	12.23	15.91	13.2	28.19	21.02

Source: Compiled from annual reports of IDBI Bank

Table 2 explains the results of several financial ratios of IDBI Bank from 2018-2022. It obtains profitability ratio i.e., net profit margin and return on net worth, management efficiency ratio i.e., net interest income/total funds and total assets turnover ratio, balance sheet ratio i.e., capital adequacy ratio, leverage ratio i.e., total debt to owner's fund and liquidity ratio i.e., current ratio and quick ratio.

Table 3: Financial Ratios of ICICI Bank

ICICI BANK					
RATIOS	Mar'23	Mar'22	Mar'21	Mar'20	Mar'19
Net Profit Margin	29.2	27.02	20.46	10.6	5.3
Return on Net Worth(%)	16.19	13.97	11.21	6.99	3.19
Net Interest Income/ Total Funds	4.16	3.6	3.36	3.24	2.94
Total Assets Turnover Ratios	0.07	0.07	0.07	0.07	0.07
Capital Adequacy Ratio	18.34	19.16	19.12	16.11	16.89
Total Debt to Owners Fund	6.6	7.01	7.09	8.24	7.77
Current Ratio	0.06	0.06	0.07	0.09	0.12
Quick Ratio	13.94	14.26	14.52	15.76	18.66

Source: Compiled from annual reports of ICICI Bank

Table 3 explains the results of several financial ratios of ICICI Bank from 2018-2022. It obtains profitability ratio i.e., net profit margin and return on net worth, management efficiency ratio i.e., net interest income/total funds and total assets turnover ratio, balance sheet ratio i.e., capital adequacy ratio, leverage ratio i.e., total debt to owner's fund and liquidity ratio i.e., current ratio and quick ratio.

Table 4: Financial Ratios of AXIS Bank

AXIS BANK					
RATIOS	Mar'23	Mar'22	Mar'21	Mar'20	Mar'19
Net Profit Margin	11.24	19.33	10.35	2.59	8.5
Return on Net Worth(%)	7.66	11.32	6.48	1.57	7.01
Net Interest Income/ Total Funds	3.45	3.05	3.06	2.94	2.91

Total Assets Turnover Ratios	0.07	0.06	0.07	0.07	0.07
Capital Adequacy Ratio	17.64	18.54	19.12	17.53	15.84
Total Debt to Owners Fund	9.07	8.75	8.37	9.28	10.52
Current Ratio	0.07	0.09	0.11	0.13	0.1
Quick Ratio	16.76	16.52	17.05	17.6	17.84

Source: Compiled from annual reports of AXIS Bank

Table 4 explains the results of several financial ratios of AXIS Bank from 2018-2022. It obtains profitability ratio i.e., net profit margin and return on net worth, management efficiency ratio i.e., net interest income/total funds and total assets turnover ratio, balance sheet ratio i.e., capital adequacy ratio, leverage ratio i.e., total debt to owner's fund and liquidity ratio i.e., current ratio and quick ratio.

Table 5: Financial Ratios of YES Bank

ICICI BANK					
RATIOS	Mar'23	Mar'22	Mar'21	Mar'20	Mar'19
Net Profit Margin	3.16	5.6	-17.27	-62.98	5.8
Return on Net Worth(%)	1.8	3.15	-10.42	-75.56	6.39
Net Interest Income/ Total Funds	2.35	2.2	2.8	2.13	2.83
Total Assets Turnover Ratios	0.07	0.06	0.08	0.08	0.09
Capital Adequacy Ratio	18	17.4	17.5	8.5	16.5
Total Debt to Owners Fund	7.41	7.98	6.83	10.09	12.49
Current Ratio	0.22	0.17	0.18	0.27	0.09
Quick Ratio	14.09	15.03	15.28	12.42	15.34

Source: Compiled from annual reports of YES Bank

Table 5 explains the results of several financial ratios of YES Bank from 2018-2022. It obtains profitability ratio i.e., net profit margin and return on net worth, management efficiency ratio i.e., net interest income/total funds and total assets turnover ratio, balance sheet ratio i.e., capital adequacy ratio, leverage ratio i.e., total debt to owner's fund and liquidity ratio i.e., current ratio and quick ratio.

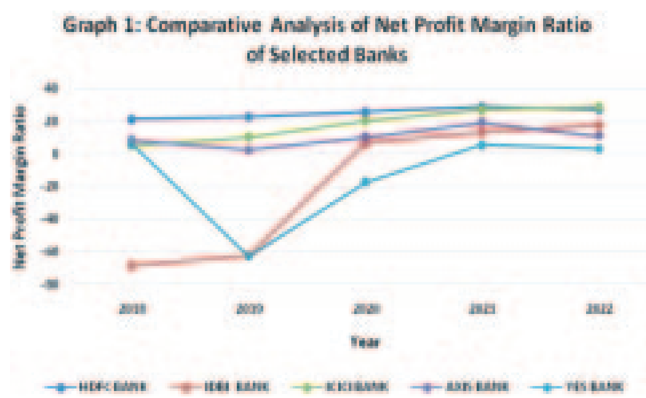
4.0 Results & Learning Insights

This section of the research paper is organised using the five categories of financial ratios. Financial ratios are very much essential tools for analysing company's financial soundness, management efficiency and performance. Specific ratios for each category are also presented and discussed.

4.1 Profitability Ratios

The efficiency and success of a business can be measured with the help of profitability ratios. These ratios measure overall performance, sustainability and effectiveness of the firm moreover it measures company's ability to generate profits relative to its assets, equity and revenue. In present study we have taken net profit margin ratio and return to net worth ratio to measure profitability of the selected banks for analysis.

4.1.1 Net Profit Margin Ratio: Analysis & Insights: This ratio compares net profit to revenue which indicates how much profit a firm generates per rupee of revenue (or sales).

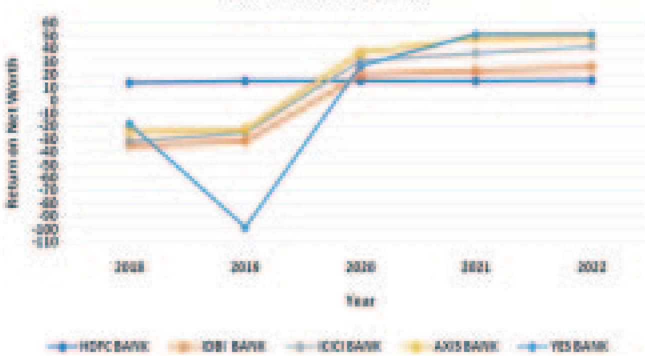


The net profit margin ratio measures net profit as a percentage of total revenue. It shows the profitability of a company after accounting for all expenses. HDFC Bank has maintained a healthy net profit margin in the range of 21-29% over 2018-2022 indicating stable profitability. IDBI Bank's margin turned positive in 2020 after losses in 2018-19 reflecting return to profitability, though still lower than peers. ICICI Bank has seen the biggest improvement, with its margin rising from 5.3% in 2018 to 29.2% in 2022, indicating significantly higher profitability now. AXIS Bank's margin dropped sharply in 2019 but recovered by 2021 before declining again in 2022. Its profitability has been inconsistent. YES Bank's margin collapsed from 5.8% in 2018 to heavy losses in 2019-20 before recovering mildly by 2022. Its profitability position remains concerning.

In summary, HDFC and ICICI have shown the most consistent profitability while IDBI and YES Bank have weaker but recovering profitability. AXIS's profitability has been more volatile.

4.1.2 Return to Net Worth Ratio: Analysis & Insights: This ratio measures the profitability of a firm's shareholders' equity.

Graph 2: Comparative Analysis of Return on Net Worth Ratio of Selected Banks



The return on net worth ratio measures a company's profitability and how efficiently it generates profits from shareholders' equity. A higher ratio indicates greater efficiency in using capital to generate returns. HDFC Bank has maintained a healthy return on net worth between 14-16% over 2018-2022 indicating stable and efficient profit generation. IDBI Bank's ratio turned positive in 2020 after losses in 2018-19. The increasing ratio reflects its return to profitability though still below other banks. ICICI Bank has seen the ratio improve remarkably from 3.19% in 2018 to over 16% in 2022, indicating significantly higher capital efficiency now. AXIS Bank's ratio dropped in 2019 but recovered to over 11% by 2021 before dipping again. Its profitability has been somewhat volatile.YES Bank witnessed a huge drop from 6.39% in 2018 to heavy losses in 2019-20 before recovering mildly. Its profitability remains quite weak.

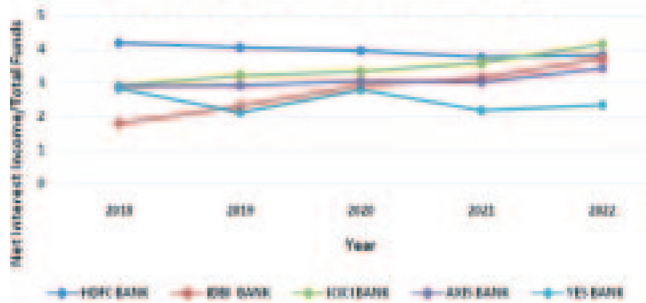
Overall, HDFC and ICICI have shown the best capital efficiency while IDBI and YES Bank are lagging, though IDBI shows signs of improvement. AXIS has been inconsistent.

4.2 Management Efficiency Ratio

The management efficiency ratios assess the effectiveness of company's management in using its resources as well as assets in generating revenue and profit. In present study we have taken net interest income/total funds ratio and assets turnover ratio to measure managerial efficiency of the selected banks for analysis.

4.2.1 Net Interest Income/Total Funds Ratio: Analysis & Insights: This ratio is essential for banks because it helps them gauge their ability to generate income from their core business activities (lending and investing) in relation to the funds available to them.

Graph 3: Comparative Analysis of Net Interest Income/Total Funds Ratio of Selected Banks

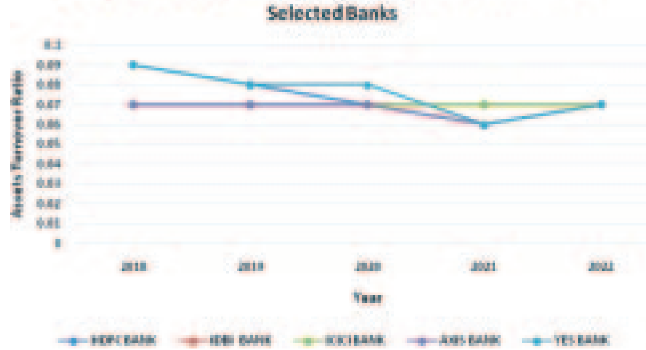


This ratio measures the net interest income generated by a bank as a percentage of its total funds. It shows the profitability of a bank's core lending and deposit-taking activities. HDFC Bank's ratio has declined from 4.18% in 2018 to 3.83% in 2022, indicating its core banking profitability has weakened slightly over the years. IDBI Bank's ratio has improved steadily from 1.79% in 2018 to 3.72% in 2022. This shows its lending and deposit activities are generating higher returns now. ICICI Bank has seen its ratio increase from 2.94% to 4.16% over 2018-2022. Its core banking profitability has strengthened significantly. AXIS Bank's ratio rose from 2.91% to 3.45% over 2018-2022, indicating moderately improving profitability of its core activities. YES Bank's ratio fell sharply from 2.83% in 2018 to 2.35% in 2022, signalling a major deterioration in its core banking profitability.

Overall, ICICI and IDBI have shown the most improvement in core banking profitability. HDFC and AXIS's profitability has remained relatively stable while YES Bank has seen a concerning decline.

4.2.2 Assets Turnover Ratio: Analysis & Insights: It indicates the rapidity by which assets are available to the firm are being used to produce sales.

Graph 4: Comparative Analysis of Assets Turnover Ratio of Selected Banks



The assets turnover ratio measures how efficiently a company uses its assets to generate revenue. A higher ratio indicates greater efficiency in asset utilization. HDFC Bank has seen a declining assets turnover ratio, from 0.09 in 2018 to 0.07 in 2022. This suggests it is generating less revenue per rupee of assets, implying inefficiency in assets use. IDBI Bank's ratio has remained stable at 0.07 over 2018-2020 but dropped to 0.06 in 2021. This indicates some worsening in asset utilization.ICICI Bank has maintained a flat 0.07 ratio throughout the period. Its asset use efficiency has remained unchanged. AXIS Bank's ratio has declined marginally from 0.07 to 0.06. Its assets are generating slightly lower revenues compared to before. YES Bank saw its ratio fall from 0.09 in 2018 to 0.06 in 2021, indicating worsening efficiency in assets utilization.

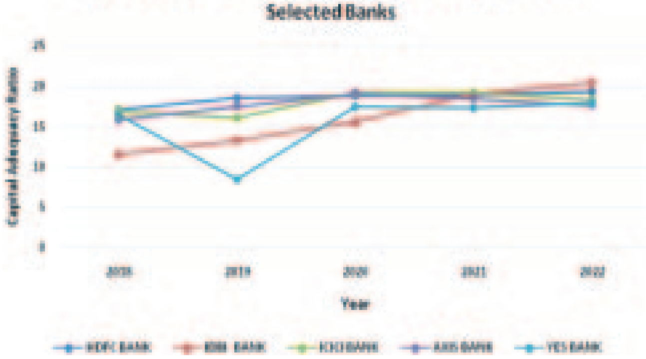
Overall, the declining ratios for HDFC, IDBI and YES Bank point to worsening asset use efficiency. ICICI and AXIS have maintained stability while scope for improvement exists across the banks.

4.3 Balance Sheet Ratio

These ratios focus on the financial position of a company at certain point of time. The balance sheet ratio provides insights into a company's equity, liabilities and assets. In present study we have taken capital adequacy ratio of the selected banks for analysis under the head balance sheet ratio.

4.3.1 Capital Adequacy Ratio: Analysis & Insights: This ratio is a regulatory financial ratio which is used to measure bank's financial strength and its ability to absorb while maintaining the safety of depositor's fund.

Graph 5: Comparative Analysis of Capital Adequacy Ratio of Selected Banks



The capital adequacy ratio measures a bank's capital in relation to its risk-weighted assets. It is an important indicator of a bank's financial strength and stability. Regulators require banks to maintain a minimum capital adequacy ratio, usually around 8-10%. HDFC Bank had the highest CAR across all years, ranging between 17.11% to 19.26%. This indicates HDFC Bank had strong capital cushions to support growth and absorb potential losses. IDBI Bank saw an improving CAR from 11.58% in 2018 to 20.44% in 2022. This suggests IDBI significantly enhanced its capital base and ability to withstand risk over the period.ICICI Bank also increased its CAR from 16.89% in 2018 to peak at 19.12% in 2020 before settling at 18.34% in 2022. ICICI strengthened its capital adequacy over the period. AXIS Bank's CAR improved from 15.84% in 2018 to 19.12% in 2020 due to capital infusions before dropping slightly to 17.64% by 2022. AXIS meaningfully enhanced its capital cushions. YES Bank had the most volatility in CAR with a high of 16.5% in 2018 plummeting to 8.5% in 2019 before recovering to 18% by 2022. This indicates unstable capital buffers.

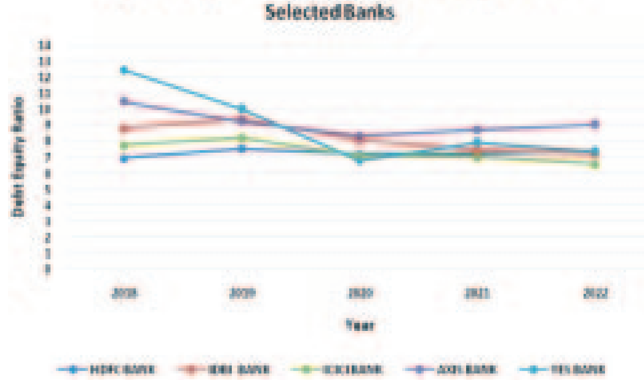
Overall, HDFC led in capital strength across the period while IDBI and ICICI made good progress in boosting capital adequacy over 2018-2022. AXIS also increased capital but YES Bank demonstrated risk with capital volatility.

4.4 Leverage Ratio

Leverage ratio or solvency ratio is used to measure the soundness of the long-term financial policies of the firm. These ratios show the proportion of debt and equity in financing the firm's assets. High leverage can increase returns but it also means high risk too. In present study we have taken debt equity ratio to measure leverage of solvency of the selected banks for analysis.

4.4.1 Debt Equity Ratio: Analysis & Insights: The debt-equity ratio is used to assess the long-term financial policies of a company. This ratio's principal aim is to establish the relative stakes of outsiders and stockholders.

Graph 6: Comparative Analysis of Debt Equity Ratio of Selected Banks



HDFC Bank maintained a steady and relatively low D/E ratio between 6.97-7.56 over 2018-2022. This indicates lower financial leverage and a higher equity base to support growth.IDBI Bank had the second lowest

D/E ratio that dropped from 8.83 in 2018 to 7.22 in 2022. This suggests IDBI reduced reliance on debt financing over the period.ICICI Bank's D/E ratio fell from 7.77 in 2018 to 6.6 in 2022, indicating declining financial leverage and increasing capital strength. AXIS Bank had the highest leverage, with D/E ratio above 8.37 in 2018-2020. However, the ratio declined to 8.75 in 2021 and 9.07 in 2022 showing some deleveraging.YES Bank had the most volatile D/E ratio, reaching a high of 12.49 in 2018 before dropping sharply to 6.83 in 2020 and recovering to 7.41 by 2022. This volatility signals unstable capital structure.

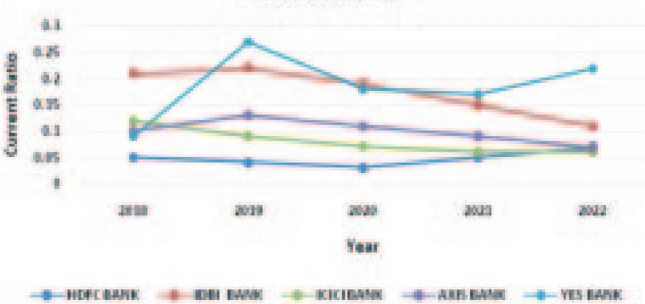
Overall, HDFC maintained the most conservative capital structure while ICICI and IDBI reduced debt dependence from 2018-2022. AXIS and Yes saw higher but declining leverage over this period. Lower financial risk is preferable for stability.

4.5 Liquidity Ratio

Liquidity ratio are short term solvency ratios which measures the firm's ability to meet current obligations through its short-term assets. These ratios are important in assessing short term financial position of the firm. In present study we have taken current ratio and quick ratio (or acid test ratio) to measure liquidity of the selected banks for analysis.

4.5.1 Current Ratio: Analysis & Insights: It shows relationship between current assets and current liabilities of a firm. It is susceptible to window dressing and its ideal ratio taken as 2:1. It measures the short-term solvency of the firm.

Graph 7: Comparative Analysis of Current Ratio of selected Banks



HDFC Bank had a low but steady current ratio ranging from 0.03 to 0.07 over 2018-2022. The ratio below 1 implies tighter liquidity but the bank was still able to service current liabilities. IDBI Bank had the highest current ratio among the sampled banks, with the ratio dropping from 0.21 in 2018 to 0.11 in 2022. Despite the decline, IDBI maintained the strongest liquidity coverage. ICICI Bank saw a declining current ratio from 0.12 in 2018 to 0.06 in 2022, indicating worsening liquidity position and reduced ability to cover short-term obligations. AXIS Bank's current ratio fell from 0.1 in 2018 to 0.07 in 2022, suggesting tightening liquidity over the period. However, the ratio remained stable between 0.09-0.11 during 2019-2021.YES Bank had an erratic current ratio, spiking at 0.27 in 2019 before dropping back to 0.17-0.22. The volatility signals liquidity management issues.

Overall, the current ratio paints a similar picture to the quick ratio, with HDFC and AXIS having below par but steady liquidity, ICICI seeing the sharpest liquidity declines, while IDBI maintained the healthiest liquidity coverage ratios over 2018-2022.

4.5.2 Quick Ratio: Analysis & Insights: This ratio measures short term solvency of the firm. It is calculated same as current ratio but excludes stock and prepaid expenses for estimating liquid assets. It assesses whether the company can pay its present creditors within a month or immediately. The ideal ratio is taken 1:1. It is most rigorous test of liquidity.

Graph 8: Comparative Analysis of Quick Ratio of Selected Banks

HDFC Bank had the most consistent quick ratio over the period, ranging from 16.61 in 2018 to 19.48 in 2022. This indicates HDFC Bank maintained strong liquidity levels and was able to meet its short-term obligations using its most liquid assets. IDBI Bank had the highest quick ratio in 2019 at 28.19 but this dropped sharply in 2020 to 13.2. The high ratio in 2019 suggests excess liquidity but the large decrease in 2020 implies poor liquidity management and inability to cover short-term liabilities. ICICI Bank's quick ratio fell steadily from 18.66 in 2018 to 13.94 in 2022, indicating a weakening in liquidity position over the years. However, the ratio remained above 1, implying ICICI could still meet current liabilities. AXIS Bank maintained a relatively stable quick ratio between 16-17 over 2018-2021 before a small drop to 16.76 in 2022. This suggests consistent liquidity, albeit with a minor deterioration in 2022. YES Bank had the lowest quick ratio among the sampled banks. Their ratio fell from 15.34 in 2018 to 12.42 in 2019, rebounded in 2020, before dropping again to 14.09 in 2022. The decline indicates worsening liquidity.

Overall, the table shows HDFC Bank in the healthiest liquidity position while IDBI and YES Bank faced the biggest liquidity pressures over 2018-2022. ICICI and AXIS saw some minor weakening in their quick ratios over this period.

Conclusion

Following a thorough financial ratio examination of the aforementioned five institutions, the following results are reached:

Overall, HDFC Bank emerges as the most financially stable and profitable bank across the period 2018-2022 based on the metrics analyzed. It maintained healthy profitability margins, return on equity, core banking profitability, capital adequacy, liquidity coverage and low leverage. ICICI Bank showed remarkable improvement across profitability, capital efficiency, capital adequacy and core banking returns indicating growing financial strength.

IDBI Bank demonstrated a turnaround from losses to profitability after 2020 along with boosting capital adequacy. However, its profitability and returns lag peers while liquidity management seems problematic. AXIS Bank showed volatile profitability but maintained adequate capital and liquidity. YES Bank exhibits the weakest financial performance with profitability collapse, volatile capital buffers, weakening liquidity and high leverage.

In summary, HDFC and ICICI appear to be on the strongest financial footing currently combining growth with stability. IDBI and AXIS have shown improvement but need to address inconsistencies. YES Bank remains in the most vulnerable position currently from a financial health perspective. Overall, the leading private banks seem well-capitalized currently but must continue strengthening buffers given economic uncertainties.

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Study of Stress among Female College Teachers of Kathua district in Relation to their Locale, Type of Institutions, Marital Status and Designation

*Mrs. Sneh Devi, **Prof. Parmod Kumar

Abstract

The individuals' mind, as well as the complete personality structure, are made up and shaped by the emotions. From the moment of birth until the last breath is taken, a person is constantly exposed to different stressful situations. Education plays a prominent role to relief stress situations of the individual's life and it possible by teachers. But if a teacher suffers from the stress. Then the quality of education degraded. The researchers has been carried a study of stress among female College teachers and took sample of 120 female college teachers and standardized Stress Scale developed by Dr. Prerna Puri Nee Kumar and Professor Manju Mehta has been employed to collect the necessary data. The Mean, Standard deviation and t-ratio used for analyzed the data. The study revealed that there was no significant difference in the level of stress between Degree College female teachers and B.Ed. College female teachers, but a significant difference in the level of stress among female College teacher with respect to their marital status. This study also revealed that there was no significant difference in the level of stress among female College teachers with respect to their designation.

Introduction

Stress is a common occurrence. It affects us physically, emotionally, and behaviorally and can elicit both positive and negative emotions. Stress is thought to be primarily brought on by outside circumstances; it happens when there is more pressure than there are resources to handle it. Stress is a factor in 50 to 70 percent of modern diseases, and workplace stress, which affects up to 28 percent of employees, is the second most common problem. Life now includes a lot of stress. It has existed since the dawn of time and has a significant impact on whether a work activity is successful or unsuccessful. There are positive aspects to stress. The right amount of stress is necessary for fostering passion, creativity, and productivity. However, too much stress could have the opposite effect. Every day, the complexity and stress of human life increases. As a result of the demands in one's life, stress is a mental, bodily, and emotional reaction. A person's job, where he actively spends the majority of his time, is a significant source of stress relief and satisfaction for his numerous social and psychological demands. Selye Hans initially discussed stress in the life sciences in 1936. Its derived from the Latin word "Stringere," which described physical suffering, famine, torment, and misery. A teacher who has "unpleasant, negative feelings, such as anger, anxiety, irritation, or depression, coming from some aspect of their profession as a teacher is said to be experiencing teaching-related stress, often known as "teacher stress."

A condition that is out of balance in this system will cause stress experience, which will then result in stress reaction. Teachers who are stressed out are those who experience unpleasant emotions including anger, anxiety, pressure, and disappointment as a result of their job-related activities.

In this case, a stressed teacher is someone who is experiencing uncomfortable feelings in response to cultural changes in education that compel teachers to impart their knowledge while also preparing their students to be responsible members of society. Teachers must put in more hours by performing administrative tasks, creating lesson plans and teaching aids, and attending training sessions. These call for teachers to modify their methods of instruction. High levels of stress frequently result in unsatisfactory work, absences from work, and abandoned projects. A teacher's response to stress may include psychological (anxiety and grief), physiological (headache, elevated blood pressure), and attitude-related reactions

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(alcohol and smoking addiction, life style and insomnia). Unpleasant working conditions will increase tension and result in subpar work. A teacher will eventually want to leave their career. The following equation illustrates the notion of stress:

STRESSORS + INDIVIDUAL "Make-up" = Stress

Physical, social, and psychological stress are the three different types of stress. Heredity and environmental elements both affect an individual's "Make-up." The interaction between the stressor and the person, as changed by that person's current state, results in the stress reaction.

Need and Significance of The Study

According to the "Teacher Stress Model," both job and organisational characteristics account for a number of the elements that influence occupational stress experienced by teachers in terms of both projected directions and magnitudes (Fimian,1984). Bullying of young female teachers led to their loss of confidence and consideration of leaving the field. Few people will contest the fact that teaching is a stressful profession and that the stress that comes with the job is significant (Maguire, 2001). The effects of stress on teachers and work values among female secondary school teachers revealed that these instructors were less devoted to their job and less attached to their institution (Singh, 2007). More stressful than their urban counterparts are rural teachers. Teachers with less than 15 years of classroom experience were shown to be more stressed than those with more than 15 years. Negative consequences of occupational stress include absenteeism, teacher turnover, illness, and early retirement. Job satisfaction, job stability, and a suitable atmosphere should be provided to them in order to lower the stress factor (Mohanraj, 2013). The study's findings made the case for maintaining a busy schedule of productive work in order to develop into a contributing member of society (Malik, 2014). The study's findings showed that teachers' stress levels are significantly influenced by demographic factors such as their gender, type of school, and marital status, whereas their professional qualifications, school location, medium of instruction, and years of teaching experience did not significantly affect the level of professional stress component (Anbu, 2015). Another study's findings revealed significant differences between government and private teachers in terms of personality and system characteristics, but not in terms of interpersonal ones. Additionally, private teachers exhibit more signs of stress (Praveena & Sreedevi, 2015). The finding of another study revealed that a significant level of anxiety, depression and stress among women in teaching profession specially ages between 31 years to 50 years (Datta & Rej, 2020). The individuals' mind, as well as the complete personality structure, are made up and shaped by the emotions. In the present scenario, stress is one of the most prevalent phenomena and it affects people from all walks of life. From the moment of birth until the last breath is taken, a person is constantly exposed to different stressful situations. People frequently experience stress, which can be harmful to their health and cause laziness, disinterest, and a lack of physical and mental vitality. While stress in its simplest form may not be dangerous, as it persists, it can lead to worry, a loss of interest in life, and a propensity to avoid doing any work. Overachievers are frequently linked with professional stress. These people typically experience high degrees of self-inflicted stress. But it also connected to situations that are considered to be under load. Work status and employment level were found to be related to self-esteem. Stress levels were higher when one had lower self-esteem. Even at work, working under pressure is just as stressful as working under load. A person who works under load is not challenged by their work and may experience times of boredom or exhaustion brought on by boredom. More anxiety, despair, and physical sickness may result from a job under load than from a job overload. The educators who have a positive impact on the standard of instruction and its contribution to societal advancement are the ones who determine one's future. According to experts in psychology and health who are predicting how men will live in the 21st century, men will be comparatively more concerned with maintaining their physical and mental health. Thus, the study of workplace stress among teachers acquires its own importance.

Objectives of The Study

1. To study the stress among female College teachers.
2. To study the difference in the level of stress between Degree College female teachers and B.Ed. College female teachers.
3. To study the difference in the level of stress amongfemale college teachers with respect to their Locale (Rural and urban).
4. To study the difference in the level of stress among female college teachers with respect to their marital status (Unmarried and Married).
5. To study the difference in the level of stress among female college teachers with respect to their designation (Lecturer and Assistant Professor).

Hypotheses of The Study

1. There will be no significance difference in the level ofstress between Degree College female teachers and B.Ed. College female teachers.
2. There will be no significance difference in the level of stressamong female College teacher with respect to their Locale (Rural and urban).
3. There will be no significance difference in the level of stress among female College teacher with respect to their marital status (Unmarried and Married).
4. There will be no significance difference in the level of stress among female College teachers with respect to their designation (Lecturer and Assistant Professor).

Research Method

In the present study, the investigator used the Descriptive Survey Method, which seems to be most appropriate.

Population of The Study

In the present study, the population constituted all Degree Colleges and B.Ed. Colleges of District Kathua.

Selection of The Sample

In the present study, the sample was randomly selected. For this purpose, the investigator made a complete list of all Degree College and B.Ed. College of District Kathua. Each College was allotted a serial number and by lottery method 9 Colleges were selected for the data collection. The heads of the institutions were contacted personally and ultimately 9 College heads gave permission for data collection. The sample was drawn from Degree College'sfemale teachers and B.Ed. Colleges female teachers of District Kathua as per the study. A sample of 120 female Teachers was taken which included Degree College's female teachers and B.Ed. Colleges female teachers of District Kathua.

Table 1: Showing the details of samples selected from different Govt. & Private B.Ed. Colleges and Degree Colleges of District Kathua

S.No.	Name of B.Ed.& Degree College	Female
1	Govt. G.L. Dogra Memorial Degree College Hiranagar	23
2	Govt. Degree College Billawar	15
3	Govt. Degree College Kathua	17
4	Govt. Degree College for Women Kathua	20
5	Bhagat Kabir College of Education Kathua	7
6	Vivekananda College of Education Kathua	7
7	Ashoka College of Education Kathua	7
8	Lal Bahadur Shastri College of Education Kathua	6
9	Rajiv Gandhi Memorial College of Education Kathua	18
	TOTAL	120

Tool Used: In the present study, the researcher used standardized tool i.e Stress Scale developed by Dr. Prerna Puri Nee Kumar and Professor Manju Mehta for the data collection.

Statistical Techinques Used: The following statistical techniques were used for the present study:

- Mean
- Standard deviation
- t- ratio

Analysis and Interpretation of Data

Table 2: Showing the different level of stress among female College Teachers

S. No.	Level of Stress	Number of Teachers	Percentage
1.	Low stress	27	22.5%
2.	Average	60	50%
3.	High Stress	33	27.5%

From the table 2, it can interpret that 22.5% of the teachers having level low stress and 27.5% of the teachers having high level of stress and remaining teachers 50% having moderate level of stress.

Table 3: Showing the value of N, Mean, S.D and t-ratio computed for the difference in the level of stress between Degree College female teachers and B.Ed. College female teachers

Category	N	Mean	S.D.	't' value	Level of significance
Degree College female teachers	75	51.86	2.08	0.47	Not Significant
B.Ed. College female teachers	55	50.88			

Table 3 clearly showed that the calculated value of t is 0.47 which is less than 1.96 and 2.58 level of significance. So the hypotheses stating "there will be no significance difference in the level of stress between Degree College female teachers and B.Ed. College female teachers" is accepted. Hence, there is no difference in stress level of degree college female teachers and B.Ed. College female teachers.

Table 4: Showing the value of N, Mean, S.D and t-ratio computed for the difference in the level of stress between Rural and Urban female teachers

Category	N	Mean	S.D.	't' value	Level of significance
Rural Female Teachers	59	51.59	1.927	0.37	Not Significant
Urban Female Teachers	61	52.31			

Table 4 clearly showed that the calculated value of t 0.37 which is less than 1.96 and 2.58, this means that the result is not significant at any level of significance. So the hypotheses stating "there will be no significant difference in the level of stress among female teachers with respect to their Locale (Rural and urban)" is accepted. Hence there is no difference in stress level of female urban teachers and female rural teachers.

Table 5: Showing the value of N, Mean, S.D and t-ratio computed for the difference in the level of stress between Married and Unmarried female teachers

Category	N	Mean	S.D.	't' value	Level of significance
Married female teachers	73	54.49	2.144	3.56	Significant
Un-married female teachers	47	46.85			

Table 5 clearly showed that the calculated value of t 3.56 which is more than 1.96 and 2.58, this means that the result is significant at 0.05 level of significance. So the hypotheses stating "there will be no significant difference in the level of stress among female College teacher with respect to their marital status (Unmarried and Married)" is rejected. In this table, the high value of mean of married female college teachers showed their high stress level because of working in dualistic nature. Hence, there is significant difference in level of stress between married and unmarried female teachers.

Table 6: Showing the value of N, Mean, S.D and t-ratio computed for the difference in the level of stressbetween Assistant Professor and Lecturer female

Category	N	Mean	S.D.	't' value	Level of significance
Assistant Professor	64	53.19	4.335	0.79	Not Significant
Lecturer	56	49.73			

Table 6 clearly showed that the calculated value of t= 0.79 is less than 1.96 and 2.58; this means that the result is not significant at any level of significance. So it can be concluded that there is no difference in stress level ofAssistant Professor and Lecturer female college teachers. Hence the hypotheses stating "there will be no significant difference in the level of stress among female College teachers with respect to their designation (Lecturer and Assistant Professor)" is accepted. The reason behind that the designations of individuals have stress at their own position.

Suggestions

- Teachers play a fundamental role for students; they tend to become a point of reference with which students create an emotional and cognitive link. The educational process involves affective and emotional skills that imply a heavy involvement from teachers.
- There is need for improving the working conditions of College teachers which would make their job decent and respectable. The authorities should realize the problems of College teachers and should pay attention towards them to improve such problems.
- It is well know that teachers shape the destiny of a nation in classroom but if they are not themselves satisfied with their job then they are not guide the younger generation in a better way. So, offering better service conditions and better environment to attract a part of cream of the educated to teaching profession are, therefore as important as improving the classroom situation by reducing the class strength and by providing necessary equipments for effective teaching.

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Study of Academic Achievement, Metacognition and Learning Styles among Secondary School Students

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Abstract

The current study investigates the relationship between academic achievement, metacognition, and learning styles among secondary school science students. The sample comprises of 140 ninth-grade students from two government and two private Amritsar schools. The research investigated two independent variables, namely metacognition and learning style. Academic achievement in science was the dependent variable. The tools were used to collect data. For academic achievement, the percentage of marks obtained in the eighth-grade science subject was used, and the mean scores for metacognition and learning style were calculated. In the data analysis, statistical methods such as Mean and SD were utilised. The t-test was computed to determine the significance of differences in means between variables. A significant relationship was found between academic achievement, metacognition, and learning style of secondary school pupils in the Science subject, as determined by the findings.

Introduction

Education can be defined as the systematic process by which individuals acquire and enhance their capacities and potentialities, with the ultimate goal of equipping them with the necessary skills and knowledge to thrive and achieve success within a particular society or cultural context. Education plays a pivotal role in facilitating many transformations within individuals and society at large. Education is intended to make one's existence truly civilized, cultured, and progressive. It aids in bringing out the best in one's intellect and spirit. Academic achievement is regarded as a key criterion for evaluating a person's total potentialities and capacities in our society. Therefore, academic achievement plays a crucial role in both education and the learning process. To maximize learning opportunities for each student, it would be ideal for all schools and instructors to create a teaching environment that is compatible with each student's learning style and metacognitive abilities.

Academic Achievement

The scholastic achievement of students at the completion of an educational programme or the competence they exhibit in the school subjects in which they have received instruction are referred to as achievement. The accomplishment or acquired proficiency in an individual's performance with respect to a certain knowledge or skill is referred to as achievement. Thus, achievement is the gleaming crown that shows the achievers' sincerity, candidness, and tenacity. Different people have defined the term in various ways.

Stagner (1962) provided a definition of achievement as the level of proficiency or advancement shown by students in their mastery of academic subjects". According to Crow and Crow (1969), "achievement refers to the degree to which a learner derives benefit from instruction in a specific area of learning, i.e. achievement reflects the degree to which a person has acquired knowledge or skill as a consequence of the training he has received.

Metacognition

Metacognition is defined as "thinking about thinking" or "cognition about cognition". It is an awareness of what one already knows and a correct understanding of the learning task. Metacognition enables us to become effective students and has been linked to intelligence. It originates from the Greek root "meta" which means beyond. As 'cognition' is derived from the Latin word 'congnocere', which means 'to know' or 'to perceive'. It can take many forms and includes knowledge of when and how to use learning and problem-solving strategies.

The word 'metacognition' was originally introduced by John Flavell. Flavell (1979) believes that metacognition

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encompasses two fundamental components, namely metacognitive knowledge and metacognitive experiences or regulation. Metacognitive information pertains to the knowledge that is gathered regarding cognitive processes, which can afterwards be utilised to regulate and manage those cognitive processes. Flavell's categorization of metacognitive knowledge encompasses three distinct areas, namely knowledge pertaining to person variables, task variables, and strategy variables. The concept of metacognition was first established in the field of psychology more than three decades ago. The exploration of metacognition as a research area originated with the pioneering work of John Flavell, widely recognised as the seminal figure in the field. Since then, a substantial body of empirical and theoretical research has been conducted, focusing on various aspects of metacognition.

The various components of metacognition

Metacognition can be categorized into three distinct components:

Metacognitive knowledge pertains to an individual's understanding of their own cognitive processes or cognition in a broader sense. This study encompasses various ideas pertaining to cognitive processes, including self-perception of knowledge, self-intelligence, self-memory, attention, and study habits, among others. The metacognitive awareness encompasses three distinct types:

(i) ***Declarative knowledge*** encompasses an individual's understanding of oneself as a learner and the various elements that can impact one's performance. It has been observed that proficient learners had a greater understanding of their own memory capabilities and are more inclined to effectively utilize their existing information compared to less proficient learners.

(ii) ***Procedural knowledge*** pertains to the understanding and use of procedural abilities. Individuals that possess a substantial level of procedural knowledge have a heightened tendency to employ skills in an automatic manner. Moreover, they are more inclined to efficiently arrange methods in a sequential manner and utilise distinct techniques of a qualitative nature when confronted with problem-solving tasks

(iii) ***Conditional knowledge*** encompasses the understanding of the appropriate circumstances and rationale behind the utilisation of different cognitive processes. The tool enables students to efficiently allocate resources and employ effective techniques. Students employ several tactics that are best suitable for each setting in order to effectively regulate their learning.

(II) Metacognitive regulation pertains to the cognitive processes involved in regulating and controlling one's own thinking and learning activities. The process of regulating one's thinking or learning encompasses three fundamental skills: planning, monitoring, and evaluation.

(III) Metacognitive experiences refer to subjective experiences that are directly related to the ongoing cognitive processes at hand.

Learning Style

"Learning refers to the process of acquiring habits, information, and attitudes. It involves new methods of doing things, and it operates in an individual's attempt to overcome obstacles or to adjust to new situations. It signifies progressive changes in behavior...it enables him to gratify his interests and achieve his objectives" (Crow and Crow, 1973).

The concept of "Learning Styles" pertains to the belief that individuals possess distinct ways of learning. Over the past few decades, there has been a gradual increase in the prominence and impact of the notion of learning styles. The concept of learning styles is widely accepted not only by educators, but also by parents and the general public. The acceptance of the learning styles concept can be attributed to the active promotion of vendors who provide various tests, assessment devices, and online technologies to assist educators in identifying their students' learning styles and adjusting their instructional methods accordingly" (Pashler *et al.*, 2008).

According to Stewart and Felicetti (1992), learning styles can be described as the specific educational circumstances in which a student is most inclined to acquire knowledge. The concept of learning style pertains to an individual's internal representation of experiences and their ability to retain or comprehend information. It encompasses six primary learning styles, specifically Enactive Reproducing, Enactive Constructive, Figural Reproducing, Figural Constructive, Verbal Reproducing, and Verbal Constructive. The operational definitions provided are as follows :

1. **Enactive reproducing:** It signifies a preference for action-based, concrete experiences, with an emphasis on imitation and practise. It is geared towards reproduction.
2. **Enactive constructive:** It pertains to the inclination

to conceptualise one's experiences by processing enactive information.

3. **Figural reproducing:** It refers to the preference for visual experiences involving the creation of diagrams, charts, pictures, maps, and photographs, with an emphasis on imitation and practice. This approach is focused on reproducing visual representations
4. **Figural constructive:** It pertains to the inclination towards processing figural experiences, which subsequently contribute to the formation of conceptualizations.
5. **Verbal reproducing:** It pertains to the communication of subject-related information through the use of written or spoken language.
6. **Verbal constructive:** It pertains to the inclination towards thoughtful, adaptive, and abstract cognitive processes in order to cultivate conceptual understandings of a certain subject matter.

The first and second categories mentioned can be categorised as the "enactive learning style." The third and fourth categories can be grouped together as the "figural learning style." Similarly, the fifth and sixth categories can be combined to represent the "verbal learning style." When considering the first, third, and fifth categories collectively, they can be referred to as the "reproducing learning style." However, the second, fourth, and sixth categories can be merged to form the "verbal constructive learning style.

Need and Significance

Education is a dynamic process that is constantly evolving in response to societal demands. Our culture is transitioning into an era of working with communications rather than factories. With these societal changes, the educational model is also evolving. On the one hand, this transformation generates chaos and confusion, while on the other; it offers immense opportunities and new possibilities. Now, the circumstances demand that we become more adaptable, experimental, and collaborative.

Metacognitive abilities are empowering instruments for the learner. Pupils frequently fail to recognise learning as a cycle that requires revisiting previous work to determine where it can be improved, recognising the value of errors, and planning improvements based on this information. However, empirical evidence suggests that individuals tend to attribute their achievements to fortunate circumstances and their failures to personal inadequacy. These erroneous ideas contribute to a sense of helplessness among certain students, leading them to believe that they have limited power in influencing the results of academic performance, often referred to as the "lottery" of achieving high grades. We can encourage students to take responsibility for their education by showing that learning is an active process, indicating them that they have control over how they study, how they organise their work, and how they reflect on what they have learned. Learning is not something that "happens" automatically if you spend enough time in a classroom or read the same page over and over again. It is essential for the student to develop the self-regulatory skills of planning, monitoring, and assessing in order for them to have the opportunity to experience learning in the holistic manner that is intended by the learning cycle. With the advancement of research on learning style and its application in the field of education, there is a great deal of interest in metacognitive education, but there are very few studies that focus on the application of metacognitive skills in the classroom. In the context of India, there is a scarcity of research studies in this particular topic. The existing body of research on metacognitive learning indicates the need to ascertain if this pedagogical approach is only a passing trend in education or if it holds significant potential for enhancing academic performance among students nationwide. The current study is centred on examining the effectiveness of learning styles and metacognitive skills based learning on academic achievement.

Objectives

1. To study metacognition among secondary school students in science subject with respect to gender.
2. To study learning style among secondary school students in science subject with respect to gender.
3. To study the relationship between metacognition and academic achievement of senior secondary school students in science subject.
4. To study the relationship between learning style and academic achievement of senior secondary school students in science subject.

Hypotheses

H_1: There exists no significant difference in metacognition among boys and girls of secondary schools students in science subject.

H_2: There exists no significant difference in learning style among boys and girls of secondary school students in science subject.

H_3: There exists no relationship between academic achievement and metacognition of secondary school students in science subject.

H_4: There exists no relationship between academic achievement and learning style of secondary school students in science subject.

Method of Research

The present study is an attempt to explore academic achievement in relation to learning styles and metacognitive skills of secondary school students. So, descriptive survey method of research is employed as this method is concerned with surveying, describing and investigating the existing phenomena or issues, conditions and relationships that exist.

Sample

Sample refers to the sub group of a larger population which is selected for the participation in the study. In the present study, 140 students of secondary school of Amritsar state are taken as sample of the study in which 70 boys and 70 girls are selected from Government and private schools. The technique of random sampling was used.

Tools Used

The following tools were employed in the current study:

1. Metacognitive Inventory (MCI) by Punita Govil (2003)
2. Learning Style Inventory by K.S.Mishra (2012)
3. Academic Achievement is taken as the percentage of marks obtained in Science subject in class VIII.

Procedure

After selecting all the tools, the process of final data selection was started by the investigator. The investigator herself visited the secondary schools where she interacted with the Principals and apprise him/her of the purpose of visit. The Principal assured to provide full support in collection of data with the help of faculty members. Before collection of data, the students were selected randomly from each school. Rapport was established with them and standardized instructions were read out for each tool verbally. Respondents were encouraged to give correct information. They were assured that information provided by them shall be used for research purpose only. The investigator gave necessary directions to fill correctly the Learning Style Preference Inventory and Metacognitive Awareness Inventory. The time limit was fixed to be 45 minutes for each inventory. After all the items were completed by all the students, the investigator carefully collected the response sheets.

Statistical Techniques Used

The data was analysed using the following statistical techniques:

1. Descriptive statistical technique such as mean and standard deviation will be used to see the nature of distribution of the scores.
2. Graphical techniques will be used for descriptive analysis of the data.
3. For testing the significance of difference between the means related to different groups and different variables, t-test will be employed.
4. For testing the relationship between different variables, Pearson's coefficient of correlation will be computed.

Analysis and Interpretation of the Results

Analysis of Descriptive Statistics

The scores of the students studying in different secondary schools were subjected to descriptive statistics such as mean and S.D. The obtained scores of meta-cognition of girls and boys have been given in table 1.

Table1: A summary of descriptive statistics on metacognition of girls and boys students

Variable	Gender	N	Mean	SD
Metacognition	Girls	70	89.69	10.00
	Boys	70	88.70	8.67

A Bar diagram has been drawn to depict the mean scores on metacognition of girls and boys has been presented in figure 1.

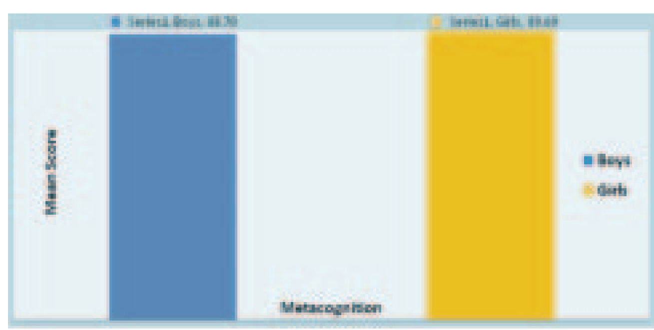

Figure 1: Bar graph showing comparison of mean score of metacognition of girls and boys

Tabular representation and graphical representation of figure 1 shows that the mean score of metacognition of girls is 89.69 and those boys is 88.70. In both the cases, the value of mean is quite proximate to each other. The distribution can therefore be considered as normal.

Analysis of Significance of Mean Scores on Metacognition

In order to test the hypothesis H1, the value of t-ratio for difference in mean scores on metacognition of boys and girls of IX class students was calculated.

Table 2: Demonstrating difference in mean scores on metacognition regarding Mean, S.D and t-value of Girls and Boys of secondary school students

Variable	Gender	N	Mean	SD	t-value
Metacognition	Girls	70	89.69	10.00	0.623
	Boys	70	88.70	8.67	

**Significant at 0.05 level   **Significant at 0.01 level (Critical value 1.98 at 0.05 level and 2.61 at 0.01 level, df 138)*

For the verification of the hypothesis, it is clear from the result given in table 2 that mean scores of metacognition obtained by girls and boys students is 89.69 and 88.70 and SD is 10.0 and 8.67 respectively. Further, value oft comes out to be 0.623. The obtained value of tis less than both the table values which is 1.96 at 0.05 and 2.61 at 0.01 level of confidence respectively. Hence, the t-value does not exhibit statistical significance at the 0.01 and 0.05 levels of confidence. Therefore, it is evident that there is no substantial difference in the metacognitive abilities between girls and boys of secondary school students in the field of science.

Careful analysis from the figure 1 and from the discussion of the result shown in table 2 as well as statistical computation of 't' value, we come to this conclusion that the hypothesis framed in the beginning which is stated as there exists no significant difference in the metacognition among girls and boys of secondary school students in science subject is accepted. It may be therefore said that girls and boys of secondary schools do not differ significantly in metacognition in science subject.

Analysis of Gender on Learning Style

Analysis of Descriptive Statistics

The scores of the students studying in different secondary schools were subjected to descriptive statistics such as mean and S.D. The obtained scores of learning style of girls and boys have been given in table 3:

Table3: A summary of descriptive statistics on learning style of girls and boys students

Variable	Gender	N	Mean	SD
Learning style	Girls	70	139.4	17.56
	Boys	70	119.5	12.16

A bar diagram has been drawn to depict the mean scores on learning style of girls and boys has been presented in figure 2.

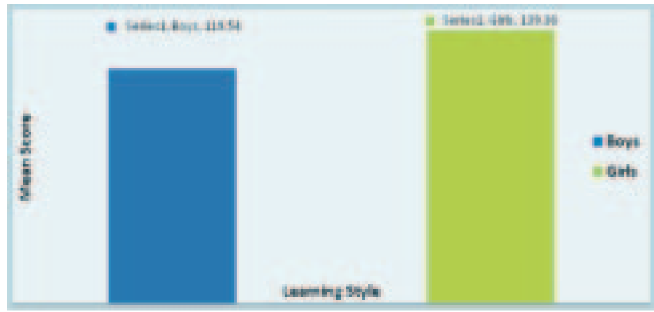

Figure 2: Bar graph showing comparison of mean score of learning style of girls and boys

Tabular representation 3 and graphical representation 2 showsthat the mean score of learning style of girls is 139.4 and for boys is 119.5. In both the cases, the value of mean is not proximate to each other. Therefore, the distribution can't be taken as normal.

Analysis of Significance of Mean Scores on Learning Style

In order to test the hypothesis $\mathbf{H_2}$, the value of t-ratio for difference in mean scores on learning style of boys and girls of IX class students was calculated.

Table 4: Demonstrating difference in mean scores on learning style regarding Mean, S.D and t-value of Girls and Boys of secondary school students

Variable	Gender	N	Mean	SD	t-value
Learning style	Girls	70	139.4	17.56	7.76**
	Boys	70	119.5	12.16	

**Significant at 0.05 level   **Significant at 0.01 level*

(Critical value 1.98 at 0.05 level and 2.61 at 0.01 level, df138)

For the verification of the hypothesis, it is clear from the result given in table 4 that mean scores of learning style obtained by girls and boys students is 139.4 and 119.5 and SD is 17.56 and 12.16 respectively. Further, value of 't' comes out to be 7.76. The obtained value of 't' is more than both the table values which is 1.98 at 0.05

and 2.61 at 0.01 level of confidence respectively. Therefore, 't' value is significant at 0.01 level of confidence. As a result, it is obvious that there is significant variation in the learning styles of girls and boys in secondary school science students.

Careful analysis from the figure 2 and from the discussion of the result shown in table 4 as well as statistical computation of 't' value, we come to this conclusion that the hypothesis framed in the beginning which is stated as there exists no significant difference in the learning style among girls and boys of secondary school students in science subject is rejected. It may be therefore said that girls and boys of secondary schools differ significantly in learning style in science subject.

Analysis of relationship between Academic Achievement and Metacognition of Secondary School Students in Science Subject

In order to test the hypothesis H_3, Pearson correlation of academic achievement and metacognition of secondary school students in Science subject was calculated. The scores of Pearson correlation of academic achievement and metacognition of secondary school students has been shown in the table 5:

Table 5: Analysis of relationship between academic achievement and metacognition of secondary school students

Correlations		Metacognition
Academic achievement	Pearson Correlation N	.329** 140

**significant at 0 .05 level **significant at 0.01 level*

(Critical value 0.159 at 0.05 and 0.208 at 0.01 level, df138)

The table 5 reveals that coefficient of correlation between academic achievement and metacognition of secondary school students was found to be 0.329. The calculated value of 'r' exceeds the critical value from the table, indicating that the 'r' value is statistically significant at a confidence level of 0.01. Hence, it becomes clear that there is significant relationship between the two variables i.e. academic achievement and metacognition of secondary school students in Science subject.

Careful analysis from the result shown in table 5 as well as statistical computation of 'r' value, we come to this conclusion that the hypothesis framed in the beginning which is stated as H_3 there exist no significant relationship between academic achievement and metacognition of secondary school students is rejected. Thus, the result reveals that there is significant relationship in academic achievement and metacognition of secondary school students in science subject.

Analysis of relationship between academic achievement and learning style of secondary school students in science subject

In order to test the hypothesis, pearson correlation of academic achievement and learning style of secondary school students in science subject was calculated. The scores of pearson correlation of academic achievement and matacognitionof secondary school students has been shown in the table 6.

Table 6: Analysis of relationship between academic achievement and learning style

Correlations		Learning styles
Academic achievement	Pearson Correlation N	.292** 140

**significant at 0.05 level **significant at 0.01 level*

(Critical value 0.159 at 0.05 and 0.208 at 0.01 level, df138)

Table 6 presents the correlation coefficient of 0.292, which indicates the relationship between academic achievement and learning style among secondary school students. The obtained value of 'r' is greater than the table value, therefore, 't' value is significant at 0.01 level of confidence. Hence, it becomes clear that there is significant relationship between the two variables i.e. academic achievement and learning style of secondary school students in Science subject.

Careful analysis from the result shown in table 6 as well as statistical computation of 'r' value, we come to this conclusion that the hypothesis framed in the beginning which is stated as H_4 there exist no significant relationship between academic achievement and learning style of secondary school students is rejected. Thus, the result reveals that there is significant relationship in academic achievement and learning style of secondary school students in science subject.

Discussion of Results

The findings of present study reveal that girls and boys of secondary schools do not differ significantly in metacognition in science subject. Hence, the hypothesis H_1**:** there exists no significant difference in the metacognition among girls and boys of secondary school students in science subject is accepted. The results of the study were supported by the findings of Khan and Panth (2017) found that there was no difference in metacognition between groups on the basis of gender but the scores differ with the performance in academics. Singh (2018) found that both male and female students are equally competent in using their metacognitive ability. Mir and Peerzada (2022) revealed that there is no difference between mean scores of males and females on metacognition.

The results of the study were contradicted by the findings of Singh (2012) shows that metacognitive ability of girl students was higher than boy students. Sangeetha and Govindan (2022) found that there is statically significant difference in metacognition with respect to their gender, locality of school, type of the management of school and nature of the school.

The findings of present study reveal that girls and boys of secondary schools differ significantly in learning style in science subject. Hence, the hypothesis **H_2:** there exists no significant difference in the learning style among girls and boys of secondary school students in science subject is rejected. The results of the study were supported by the findings of Severiens and Geert (1994) found that there were differences between learning style among girls and boys. Kia, Aliapour and Ghaderi (2008) who also found significant differences existed in learning style among boys and girls of secondary school students.

The results of the study were contradicted by the findings of Vincey and Pugalenthi (2016) concluded that there is no significant difference between boys and girls of XIth standard level school students learning style. Patil (2022) who found that no significant differences in the learning style among boys and girls at high school level.

The results of the present study indicate that there is a significant relationship between the academic achievement and metacognition of science students in secondary school. Hence, the hypothesis **H_3:** there exist no significant relationship between academic achievement and metacognition of secondary school students is rejected. The results of the study were supported by the findings of Ozsoy (2011) found a significant and positive relationship between metacognition and mathematics achievement. Owo and Ikwut (2015) conclude that both metacognition and attitude correlate significantly with academic achievement. Singh (2018) found that metacognitive ability is related positively to academic achievement of students.

The results of the study were contradicted by the fingings of Cetinkaya and Erktin (2002) examined no significant correlations were found between the metacognition scores and the achievement in the Turkish, Science and Mathematics courses. Veenman and Spaans (2005) explored to what extent the development of metacognitive skills is associated with intellectual growth or academic achievement. Result showed that metacognitive skillfulness develops alongside, but not fully dependent on intellectual ability.

The results of the current study suggest a significant correlation between the academic performance and learning style of secondary school pupils in the field of science. Hence, the hypothesis **H_4:** there exist no significant relationship between academic achievement and learning style of secondary school students is rejected.The study's findings had been verified by Singh and Singh's (2008) research, which revealed a significant correlation between learning style and academic achievement. According to the findings of Maqbool (2015), there exists a significant correlation between learning style and academic achievement. Khanal et al. (2019) found that learning style has significant effect on academic achievement.

The results of the study were contradicted by the findings of Hall and Fullick (2003) investigated that students learning styles may have an independent effect on their academic success in a sociology class. Gill (2020) collected the data with the help of Learning Style Inventory (2012) developed by Karuna Shankar Mishra to find correlation with academic achievement. The correlation between Enactive, Figural, and Verbal Learning styles and academic achievement is positive, but the value of the correlation is not statistically significant.

Findings

1. No significant difference was found in metacognition among girls and boys of secondary schools in Science subject.
2. A significant difference was found in learning style among girls and boys of secondary schools in Science subject.
3. A significant relationship was found between academic achievement and metacognition of secondary school students in Science subject.
4. A significant relationship was found between academic achievement and learning style of secondary school students in Science subject.

Educational Implications

In the light of findings of the present study it is found that the development of metacognition among the science students is very advantageous in improving their achievement at present level and as well as for lifelong learning. Therefore, it is suggested that:

- Metacognitively well trained science students will become an indispensable asset for the developing nations like India.
- The present study reveals the three is positive correlation in metacognitive ability and academic achievement which means that high achievers have high metacognitive ability. So, teacher should identify those students and provide training to them to enhance their metacognitive skills.
- The ultimate goal in teaching metacognition would be moving the students toward absolute cognition which defines as, automatically knowing how to learn and applying the right strategies at the right time. This automatic understanding of which learning strategies to employ is what differentiates a novice learner from a more expert learner.
- To increase the efficiency of learning styles in learning process, firstly, it may be beneficial to explain illustratively how students benefit from learning styles. Teachers can also advise parents on how to create an environment conducive to their children's individual learning styles.
- Based on learning styles and metacognitive skills, it may be recommended that students may be encouraged to adopt or develop their own learning styles to enhance their academic achievement. Not only this, students should be imparted knowledge regarding various types of learning styles and to make use of variety of styles in the classroom so that various types of goals may be attained successfully.

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A Study of Self Regulated Learning of Secondary School Students with reference to Gender and Academic Achievement

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Abstract

The present research was an attempt to study self-regulated learning of secondary school students with reference to gender and academic achievement. All secondary school students who study in the Bulandshahr district rural areas schools of UP Board are selected as this research population. Random Sampling technique was using by researcher for selecting the sample. Firstly, researcher was prepared a list of schools of Bulandshahr district. Lottery technique was used by selection of rural areas schools randomly. Total 120 students from secondary school were selected as sample for this research. In order to accomplish the objectives of the present research, the researcher had been used the Descriptive Survey method for the study. The results showed that the self-regulation has an impact on academic achievement of secondary school students. In this study, genderis not affect onSelf Regulated learning.

Introduction

Self-regulation is the ability to understand and manage students own behavior and reactions to feeling and think happening around them. Self-regulation is a task that helps student reach metacognition which plays an important role in deep understanding.

Self-regulation is a self-directive process. It is helping a student transform her/ his cognitive ability into academic skills. Learning is like an activity which is effect by teaching (Zimmerman, 2001). Zimmerman and Schunk (1989) define self-regulated learning is a systematic learning. This type learning is helpful for students' self-developed thoughts, feelings, or actions and achievement of their own goals. Berk (2003) also explains that Self-regulation is a process which is helping a person continuously monitoring the progress of her/his goal, outcomes, and rechanneling the unsuccessful attempt.

Student's cognition, behaviour, emotions and motivation are control by self-regulation. It is a ways to achieve their establish goals (Panadero & Alonso-Tapia, 2014). Corsi (2010) viewed self-regulated learning is like a system. It is cultivate the higher thinking skills in students by their innate strengths. It is help to finding a good solution of student's problems using their natural qualities and abilities. This type of learning techniques permission the students to learn and manipulate their environment by using their different learning method to interact with it. According to Winnie and Perry (2006), self-regulated students are aware to their weaknesses and strengths of academic performance. Self-regulation is also helpful selection of suitable strategies for every day challenges of a student's academic works. Therefore, self-regulation is a way which is help to achieve student systematic learning. Systematic learning is help to achieve student's learning goals freely.

Dimensions of Self-Regulated Learning: After an extensive survey of available literature in the concerned area, the functional concepts of following six self-regulated learning dimensions were adapted for quantitative measure:

(a) **Self-Awareness:** Self-awareness is an individual's capacity to notice the self. It is a key to realize one's own strengths and weaknesses.

(b) **Planning and Goal Setting:** Planning involves thinking, analysing, organizing the activities and allocating resources that are required to achieve a desired goal.

(c) **Self-Motivation:** Self-Motivation involves action to undertake or carry on a work or activity without another's prodding or supervision.

(d) **Self-Control:** Self-control is essential to regulating learner's behaviour. It is a cognitive process.

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(e) **Self-Evaluation:** Self-evaluation involves the evaluation of the effectiveness of learning strategies as well as of study skills used.

(f) **Self-Modification:** Self-modification involves various kinds of reactions and reflections on the self and the task or context. It helps in replacing undesirable behaviour with more desirable behaviour.

Actively increase the level of motivation, meta-cognition and behaviour by academic self-regulation. The academic self-regulation islike a level. It is help to active learning process and achieving the goal. The academic self-regulation is a degree to which students are motivationally, meta-cognitively and behaviorally active in their learning process and in accomplishing their goals (Zimmerman, 2000). According to Pintrich (2003) research, she is being sure that self regulation is help the students achieve to set goals. Monitoring, management and control of cognition are parts of self regulation. All of these are improve the learner's motivational behavior and environment. It is indeed that learners are actively improve participants of their own learning. The academic achievement of physics performance of learners can improve by theSelf-regulation learning (Achufusi-Aka & Offiah, 2010). They found that self regulated learning and academic achievement is a strong relationship with undergraduate students (N.A. Bakar, A. Shuaibu, R. Abu Bakar, 2017). Hong Kong student's self-regulated learning is directly related to academic performance like reading, mathematics problems and science aspect (Esther Sui-Chu Ho, 2003). The study of above researches we could be findings that self-regulation is a very importance role for students's learning process.

The present study aims to study Self-Regulated Learning and the impact of self-regulation on academic achievement of secondary school students in Rural Area of Bulandshahr.

Objectives of The Study

In this research, researcher was worked with the following objectives:

1. To study the self-regulation of secondary school students.
2. To compare the self-regulation of girls and boys students studying in secondary classes.
3. To find out the impact of self-regulation on academic achievement of secondary school students.

Hypotheses

H_1: There is no significant difference between the self-regulation of girls and boys students studying in classes.

H_2: There is no significant impact of self-regulation on academic achievement of secondary school students.

Research Design

All IXth class students who study in the Bulandshahr district rural areas schools of UP Board are selected as this research population. Random Sampling technique was using by researcher for selecting the sample. Firstly, researcher was prepared a list of schools of Bulandshahr district. Lottery technique was usedby selection of rural areas schools randomly. Total 120 students from Class IX were selected as sample for this research. In order to accomplish the objectives of the present investigation, the researcher had been used the Descriptive Survey method for the study.

In this study researcher was used to measure self-regulation by Dr. Madhu Gupta & Ms. Dimple Mehtani's Self-Regulated Learning Scale and Ms. Dimple Mehtani and final achievement tests scores were considered for academic achievement.

Results and Discussion

To explore self-regulated learning of secondary school students, descriptive statistics was calculated as whole and on dimensions of Self-Regulation Scale. Details of descriptive statistics are given in following table:

Table 1: Descriptive Statistics related to Self-regulated learning of secondary school students

Dimensions of Self-Regulated Learning	Mean	S.D.	Md(Q2)	Mode	Range	Min	Max	Q1	Q3	Q4
Self-Awareness	23.97	5.42	23	20	21	14	35	20	29	35
Planning and Goal Setting	17.38	4.43	17	19	18	10	28	13.75	20	28
Self-Motivation	23.65	4.52	24	28	19	14	33	20	27	33
Self-Control	26.56	5.64	26	26	30	11	41	23	30	41
Self-Evaluation	28.58	5.91	28	22	22	19	41	23.75	32.3	41
Self-Modification	25.02	7.09	26	26	25	12	37	18	30.3	37
Self-Regulated Learning (Total)	145.2	28.1	146.5	156	112	92	204	124	161	204

Table 1 reveals that secondary school students got mean score on self-regulation individual as 145.2 which shows moderate level of self-regulation. Value of mean and median are close but mode is slightly higher which shows that few students are on extreme high side on self-regulation. Students got highest mean score on self-evaluation and lowest mean score on planning and goal setting. It can be interpreted that students are good evaluator of their learning process but they are not certain about their study goals and planning. However, they are average on all the dimensions.

H_1: There is no significant difference between the self-regulation of girls andboysstudents studying in secondary classes.

Table 2: Mean Standard Deviation & t-value of self-regulation of boys and girls students

Groups	Value on self-regulation			Degree of freedom	t-value	Level of significance
	N	Mean	S.D.			
Boys	60	143.2	21.24	118	0.77	Not Significant
Girls	60	147.15	13.00			

*0.05 = 1.98 **0.01 = 2.63

After data calculation researcher show it above table-2. Researcher found that value of calculated - t is 0.77, it is lower than table t-value 1.98 at degree of freedom 118 and level of significance 0.05. It is clearthat difference between means of both groups is not significant at 0.05 level. So, hypothesis H_1 isaccepted for research. On thebasis girls and boysof means scores are mostly similar in Self-Regulated Learning. So, we can say that gender is not effect on Self-regulated learning.

H_2: There is no significant impact of self-regulation on academic achievement of secondary school students.

Table 3: F-value of Academic achievement of High, Average and Lower self-regulated learners

Groups	N	Sum	Average	Variance
High Self Regulated Learners	36	2321	64.47	14.88
Average Self Regulated Learners	43	2630	61.16	4.28
Low Self Regulated Learners	41	2107	51.39	22.99

Source of Variation	SS	Df	MS	F
Between Groups	3649.37	2	1824.68	131.73
Within Groups	1620.58	117	13.85	
Total	5269.96	119		

The table 3 show that calculated F-value is 131.73 which is higher than table F-value 4.78 at degree of freedom (2,117) and level of significance 0.01. According to among groups means is significant difference at 0.01 level. So, the related hypothesis isrejected. Therefore, it may be concludedthat there issignificant difference amonghigh, average scorer lower self-regulated learners on academic achievement of secondary school students. The results showed that the self-regulation learning has an impact on academic achievement of secondary school students.

Here, ANOVA test shows that groups have significant difference in academic achievement, but this significant F value does not pinpoint exactly where the differences exist. For this purpose, t-test is calculated between all combinations of groups one by one.

Table 4: Mean, SD & t-value of academic achievement of high, average and low self-regulated learners

SN	Groups	Academic Achievement			D f	t-value	Level of significance
		N	Mean	S.D.			
1	High Self-Regulated Learners Average Self-Regulated Learners	36 43	64.47 61.16	3.86 2.07	51	4.62	Significant at 0.01 level
2	Average Self-Regulated Learners Low Self-Regulated Learners	43 41	61.16 51.39	2.07 4.8	54	12.03	Significant at 0.01 level
3	High Self-Regulated Learners Low Self-Regulated Learners	36 41	64.47 51.39	3.86 4.8	74	13.25	Significant at 0.01 level

The table 4 unveils that calculated t-value between all the groups is higher than table t-value. Hence, the difference between means is significant at 0.01 level. Therefore, it may be concluded that there is significant impact of self-regulation on academic achievement of secondary school students. High self-regulated learners got high scores on academic achievement and low self-regulated learners have low academic achievement.

Findings of The Study

1. The girls and boys students studying in secondary classes did not have difference on self-regulation learning.

2. Level of Self regulated learning is average/ moderate in secondary school students.

3. Self regulated learning has an effecton academic achievement of secondary school students.

4. High scorer on Self Regulated Learning is higher than Average scorer on Self regulated Learning in educational achievement.

5. Average scorer on Self Regulated Learning is higher than Low scorer on Self regulated Learning in educational achievement.

6. High scorer on Self Regulated Learning is higher than Low scorer on Self regulated learning in academic achievement.

Discussion of Findings

Self-regulation has important role in our life. It helps in development of life-long learning skills. Findings showed that the academic skill elements were almost related to the self-regulation elements. In explaining this, it can be said that students who use more self-regulated learning will perform good in their academics. On the basis of this results researcher found that self-regulation is perform a importance to improve academics skills. Researcher should be advised teacher, administration and parents to pay consideration to learner's information and learning. If learners get skilled in self-awareness, self-monitoring and planning of their education, their academic achievement will be higher definitely.

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Emotional Stability and Self Concept A Contributor in Mental-Health: A Study on College Preparatory School Students

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Abstract

As much as physical health is necessary for students, mental-health is also important. It is said that health is life, healthy mind exist in a healthy body. It is very important that students should be physically healthy as well as mentally healthy also. If the students remain mentally healthy then they will be able to move forward in their life. Adolescence is that important time of life when the students are going through a delicate phase where their physical structure is also changing due to the effect of hormones, and they become mentally disturbed. In this stage, it is very important for children to be mentally healthy. Through this research, an attempt has been made to find out what is the level of mental-health of secondary school students at present. For this, descriptive survey method used and 120 students were shortlisted by random sampling method. After analysis it is found that maximum numbers of students have moderate mental-health, only 3.33% students have good mental-health, but no student holds excellent mental-health.

Introduction

In 2005, European Ministerial Conference on Mental-health World Health Organisation (WHO) gave the declaration "No health without mental-health". This declaration shows the power of mental-health. It is essential and plays dynamic role in life. According by WHO, (2005) a person is in a condition of mental-health when they are able to handle the tension of daily life, remain productive, and give back to their group. NEP2020 also shows the importance of mental-health. NEP, 2020 states "Children are unable to learn optimally when they are undernourished or unwell. Hence, the nutrition and health (including mental-health) need to be addressed through healthy meals and the introduction of well-trained social workers, counsellors, and community involvement into the schooling system" [pg.9 & p2.9]. Today's children become tomorrow's future. Along with the physical health of these children, it is equally important to remain mentally healthy. Therefore it becomes very important that we find out what is the current status of mental-health of the students.

Rationale of The Study

In this competitive era everyone is trying to beat each other. Even students could not remain untouched in this competition. Only the one who is mentally healthy will be victorious in this competition because mental-health is added with all respect of health such as- physical, emotional, social etc. and all these aspects have their own effect on each other. The National Education Policy (NEP), 2020 is not talked about only cognitive development of the students, but also forced for making complete and smart students and building character also. It plays key role for every student's holistic development. It is necessary for us to search out the present status of mental-health among students. In this research, a significant effort has been made to assess the mental-health status among students.

Review of The Literature

Literature review gives us path for our research in every steps. It is a broad summary of previous research. J., Spencer, Jessiman, P., Kidger, L. *et al.* (2022) main aim of this qualitative study was action research and study determine how shifts in school culture affecton student mental-health. After that it is found there is inter-dependence of the four dimensions in determining the culture of a school. Saikia, Chahana (2022) used descripted survey method in her study. Total 1412 students selected by stratified random sampling method. Maximum number of students have poor mental-health. No secondary students have excellent and good mental-

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health. M.J., Patte, Duncan & Leatherdale, K.A., S.T. (2021) had tried to search the mental illness and mental-health are related to self-reported measures of grade and education behaviour and found MH factor were attenuated by education behaviour. Talwar, Chanamma D. (2021) Mental-health, personality and socio economics status were independent variable in this study. It is found that girls have higher MH compare to boys. Zou P, Wang K, Cui Z, Lin Z, Luo Y, Wang J., He J (2020) were found frequent mental-health problems such as academic stress and single parents families were notably linked to more severe issues. Jani, Kalpesh J. (2020) had selected 9 schools and 2500 students of English medium of class 11th from each area of Ahmadabad city by random method and descriptive research method used. This research found most of the students have medium level of mental-health. Odenbring, Y. (2019) 6 to 9th grade students of three college preparatory school used in this study. It was thematic analysis, data collect by interview and observation method. It was found to recognise and problematize student M.health. There were need to more protective work on student welfare in school and society. Kaur, Satinder (2018) used descripted research method and selected 600 students from 30 school of six district of Punjab. Vijay kumar Rai MH scale used for data collection. Positive and significant correlation found between mental-healthand emotional intelligence.

Research Questions

Research questions of the study are followings :

1. How well-adjusted are pupils in college preparatory school mentally?
2. Does the gender have influence on mental-health of college preparatory school students?

Research Objectives

This research consist following objectives:

1. To determine the gender-specific degree of mental-health among college preparatory school pupils.
2. To ascertain gender differences in the mental-health of college preparatory schools tudents.
3. To compare emotional stability of female and male students.
4. To compare the self-concept of male & female students.

Research Hypotheses

On the basis of objectives research consist following hypotheses:

1. There is no significant distinction between boys and girls corresponding to mental-health.
2. There is no marked difference between male & female pupils corresponding to emotional stability.
3. There is no marked difference betweenmale & female pupils corresponding to self concept.

Research Design

Detailed (descriptive) survey method used for this research. All college preparatory school students of govt. and private of CBSE board and UP board of Lucknow city were the population of this study. 60 boys and 60 girls of govt. and private schools were selected by Simple random sampling method and selected total 120 students of Lucknow city who were studying in class ix. Battery of MH by Singh and Gupta used for data collection. This battery consist 130 items which is divided in six dimension. This research paper based on emotional stability and self-concept dimension only. Collected data were analysed by t test.

Data Analysis and Interpretation

Objective 1: To determine the gender-specific degree of mental-health among college preparatory school pupils.

Table 1: Computation of Mental-health on Basis of Gender

S. No.	Sexual category	Level of Mental-health					
		1 (Vey below to average or very Poor)	2 (Below to average or Poor)	3 (Average)	4 (High to average or Good)	5 (Very high to average or Excellent)	Total
1.	Girls	10 (16.67%)	11 (18.33%)	36 (60%)	3 (5%)	-	60
2.	Boys	8 (13.33%)	12 (20%)	39 (65%)	1 (1.67%)	-	60
	Total	18 (15%)	23 (19.17%)	75 (62.5%)	4 (3.33%)	-	120

Fig. 1

Interpretation of Table 1: Most of the students 36 girls and 39 boys out of 120 have average mental-health (62.5%). 10 girls and 8 boys total 18 students (out of 120) have very poor mental-health this percentage is 15%. 11 girls and 12 boys (out of 120) have poor mental-health and percentage of this section is 19.17%. Only 3.33 % total 4 students out of 120 in which 3 girls and 1 boys have good mental-health. In this research nobody have excellent mental-health. Maximum number of students have average mental-health.

Objective 2: To ascertain gender differences in the mental-health of college preparatory school students.

Null Hypothesis: There is no significant distinction between boys and girls corresponding to mental-health

Table 2: Comparision of Mental Health on Basis of Gender

Mental-health	Sexual category	N	Mean	S.D.	t value	df	Remark
	Boys	60	81.133	13.2031	-.297	118	Not significant at
	Girls	60	80.417	13.2745			.05 level

Interpretation of Table 2: Mean value for boys are 81.133 and standard deviation is 13.2031 and girls have 80.417 mean value and 13.2745 standard deviation. After applying t test it is found calculated t value is lesser than tabulated value so null hypothesis will be accepted. There is no significant differences found on mental-health between boys & girls.

Objective 3: To compare emotional stability of female and male students.

Null Hypothesis 3: There is no marked difference between male & female pupils corresponding to emotional stability.

Table 3: Comparision of Emotional Stability on Gender Basis

Emotional stability	Sexual category	N	Mean	S.D.	t value	df	Remark
	Boys	60	10.167	2.6178	-2.429	118	Significant at
	Girls	60	8.967	2.7920			.05 level

Interpretation of Table 3: Mean value for boys are 10.167 and standard deviation is 2.6178 and girls have 8.967 mean value and 2.7920 standard deviation. After applying t test it is found that the calculated t value is bigger than tabulated value at .05 level. So null hypothesis will be rejected. There is significant differences found between boys & girls in relation to emotional stability. Mean value for boys is greater than girls .On the basis of analysis we can say that boys have more emotional stability than girls.

Objective 4: To compare the self- concept of male & female students.

Null Hypothesis 4: There is no marked difference between male & female pupils corresponding to self-concept.

Table 4: Comparision of Self-concept on Gender Basis

Self-Concept	Sexual category	N	Mean	S.D.	t value	df	Remark
	Boys	60	8.050	2.0036	1.474	118	Not significant
	Girls	60	8.617	2.2024			at .05 level

Interpretation of Table 4: Mean value for boys are 8.050 and standard deviation is 2.0036 and girls have 8.617 mean value and 2.2024 standard deviation. After applying t test it is found calculated t value (1.474) is lesser than tabulated value so null hypothesis will be accepted. There is no significant differences found on Mental-health between boys & girls. Both are equal on dimension of self-concept.

Discussion of The Study

In this research it is found that maximum number of students have average mental-health level such as this study supported Jani, Kalpesh J (2020) and Saikia, Chahana (2022) research which also reveal most of students have mediun level of MH and contradictory result found with Akhtar, Afroza (2021) research. This study also supported research of Gulnaz (2004) and Chawala (2009) that there is no significant differences found between girls & boys on MH but contradictory result with Shashikala Singh (2015) who found male students were more mentally healthy than female and kumari, Ruby (2015) found girls were better than boys on MH level.

Conclusion

Emotional stability and self-concept play important role for determining the mental-health. Mental-health is very necessary for healthy life. If students remains mentally healthy then they will be able move forward in their life. In this research it is found that boys have more emotional stability comparison to girls and both are equal on the basis of self-concept dimension. Overall it is found that majority of students 62.5% have average mental-health, 15% have very poor and 19.17% have poor mental-health. Only 3.33% have good mental-health and nobody have excellent mental-health.

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Scale for Identifying The Categories of Learners': Exploratory Study on Middle School Students

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Abstract

There are individual differences found in students and this is the reason each child performs in a different way though taught by the same teacher under same settings. There are advanced learners who are identified based on their performances in the class as well as in class tests and there are slow learners whose performancesare below the average. The objective of the present study is to identify the Categories of Learners at Middle school Level. The sample of the data consists of 1200 middle school students from class 6th to class 8th. The scale was developed by the Researcher to identify the different categories of learners.

1. Introduction

It happens many times that students in regular classes fail to understand the subject, such students need extra attention in the form of remedial classes (Jimenex *et al.,* 2016). Similarly, there are exceptional advance students who need proper direction to channelize their energy (Dunn, 1963). If the categories of learners are known, then a gap between what a student knows in class and what he is expected to know can be identified (Melton, 2014). Identifying the categories of learners especially slow learners help to raise the confidence among them and helps to remove the weaknesses, a good strategy meant for slow learners helps to enhance their skills with respect the process of learning (Hartini *et al.*, 2017). Identification of slow learners and implementation of some strategies on them remove the fear of study from them and vis-à-vis efforts are made to bring slow learners and advance learners at an equal level. Slow learns can act as a creative and innovative if proper attention is given on them (Malik *et al.*, 2012)

Various strategies to identify weak students in class includes asking oral question during the classroom, through the marks obtained by them, by checking the home assignments of these students or according to their results.

According to Vasudevan (2017) slow learner students can be identified and various remedies can be applied on them which included arranging separate classes for them, help them through personal attention on difficult topics, conducting easy class tests to motivate them, explanation of topics with practical examples, explaining the topics from basics, etc.

For Advance Learners' various provisions include organizing experts' lecture to enhance their knowledge, special guidance for skill developments, conducting surprise tests, participating in different competitive exams of their age group, etc.

2. Literature on Categories of Learners and Slow Learners

Chauhan S. (2011) mentioned in his paper that still in the present scenario are not trained enough to deal with the slow learners. A need of Special Educational Programmes for advanced and slow learners.

Vasudevan (2017) discussed in his paper about the need of special education, factors responsible for poor performance and suggested different ways to tutor such children.

Curtis and Shaver (1980) in his book discussed about the contemporary problems which are there in teaching slow learners. Also they have discussed about various educational programs which can be included.

Kaur *et al.* (2015) through this paper highlighted that how one can use technology of Data Mining in the field of Education and can find Slow Learners. The technology can also be used for future projects in education.

3. Objective

To identify the categories of Learners among Middle School Learners

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4. Operational Definition of Variable

1. Categories of Learners: The categories of Learners are divided into three categories
2. Middle School Learners refers to those students who are in their 6th grade to 8th grade.

Dimensions of Categories of Learners

- **a. Concentration** refers to all the abilities to acquire and hold the knowledge.
- **b. Retention** is time length of acquired knowledge whereas attention simplifies the ability to focus on acquiring knowledge or acquired knowledge.
- **c. Logic Reasoning and General Knowledge:** Logical reasoning is the ability that allows an individual to relate any situation with its background, reason of occurring, and further consequences. Whereas general knowledge refers to the idea and individual has about the issues, situations, circumstances around him /her.
- **d. Language :** It is a medium of exchanging views and showing ideas through manual or verbal means. Through language, the people understand the surrounding and the people. It has a major role in Academics.
- **e. Social Issues :** It generally refers to those issues which take place publicly and have direct impacts or consequences on the person.
- **f. Motor Skills:** This skill represents the physical exercise of a student or a person. It is the ability to exhibit the physical movement of a person once learned by a mentor or inherited by parent.

5. Tool Construction Procedure

(a) Identification of Categories of Learners

Following steps were used for the construction of these tools

- **Planning:** In this step, planning is done by the investigator with reference to the construction of tool and its components. The researcher identified the components for the tool of "Identification of Slow Learner". Interviews from expert of educational psychology and interviews from bright and dull students of class. Instructions were decided once the dimensions are finalized. Responses in the form of Yes and No were taken by the researcher.
- **Preparation of Draft One:** In this step pool of items were written for the tool considering the target group i.e. Middle School students. Statements related to them are included in the item. Researcher consulted various reference books, journals, psychological tools and discussions from the experts, for item writing. Total 74 items were written in the first draft which includes 50% favourable and 50% unfavourable items. After writing down the items with their scores it was shown to the experts for expert's opinion. Experts help was taken from both education department and psychology department to get better shape of questionnaire. Based on criticisms and suggestions given by various experts, the researcher modified the tool and prepared draft one.
- **Preparation of Final Draft:** Researcher followed following steps for preparing final draft of the tool :
  - ❑ **First Administration of the tool:** Researcher administered Draft One of the tool on the sample of 20 Middle School students for getting knowledge of any gross defects, ambiguities in items and instructions. During the administration researcher tried to know the difficulties of the sample about the tool. Researcher noted down the ambiguous, difficult words/statements based on results of the first administration and 6 items were modified and corrected the tool.
  - ❑ **Second Administration of the tool:** Tool was administered again for getting data for Item Analysis. This was the second administration of the tool.

    "Item Analysis is a technique through which those items which are valid and suited to the purpose are selected and the rest are either eliminated or modified to suit the purpose."

    For Item analysis 200 students were selected. For Item Analysis researcher didscoring of the tool and then total was made of all the 200 students. The data then arranged from highest to lowest scores on the basis of total scores. After than researcher made two groups one of top 27% and another bottom 27%. t-value was obtained by comparing these two extreme groups to test the significance of the difference between the proportions of these two groups. After Item Analysis 12 items were eliminated from the scale. Final Draft of the tool contained total 42 items under 6 different dimensions.

Table-1: Dimension-wise items before and after item analysis

Item 1	14.42	Item 28	8.91
Item 2	14.70	Item 29	10.19
Item 3	11.78	Item 30	1.53
Item 4	11.46	Item 31	11.79
Item 5	11.94	Item 32	8.11
Item 6	1.71	Item 33	10.04
Item 7	7.5	Item 34	1.45
Item 8	12.36	Item 35	11.46
Item 9	0.10	Item 36	7.15
Item 10	4.64	Item 37	5.93
Item 11	1.11	Item 38	1.81
Item 12	4.64	Item 39	9.59
Item 13	8.16	Item 40	12.23
Item 14	1.05	Item 41	9.84
Item 15	1.85	Item 42	1.34
Item 16	13.65	Item 43	3.57
Item 17	11.57	Item 44	5.25
Item 18	7.91	Item 45	8.21
Item 19	8.96	Item 46	8.84
Item 20	6.03	Item 47	5.71
Item 21	1.28	Item 48	3.77
Item 22	7.14	Item 49	1.39
Item 23	4.68	Item 50	2.27
Item 24	3.83	Item 51	7,68
Item 25	3.70	Item 52	7.56
Item 26	12.61	Item 53	3.82
Item 27	8.50	Item 54	0.10

Table-2: t values of 54 items

Sr. No.	Dimensions	No.of Items (Before Item Analysis)	No.of Items (After Item Analysis)
1	Concentration	10	08
2	Retention	08	07
3	Logical Reasoning and General Knowledge	09	06
4	Language	09	06
5	Social Skills	09	08
6	Motor Skills	09	07
	TOTAL	54	42

(b) Reliability of Tools

Reliability refers to the precision, or accuracy of the measurement or scores. Researcher applied split half method for estimating internal consistency of the tool. Sample for estimating reliability was taken 200 Middle School students. Research applied Karl Pearson's Correlation for finding the reliability of the tool. For splitting the tools odd-even method was used. The researcher tool all the odd numbered items (like 1,3,5,7,..) for constituting one part of the tool and all even numbered items (like 2,4,6,8….) to constitute second part of the tool. Now researcher got two sets of scores and she computed reliability coefficient for the tool. Calculated reliability of "Identification of Slow Learner Scale" found to be 0.824 through Pearson's Correlation and 0.885 through Cronbach Alpha which showed high reliability of the tool.

Table-3: Internal Consistency of the Scale through Cronbach Alpha

Sr.No.	Dimension	Cronbach Alpha Value
1	Concentration	0.87
2	Retention	0.89
3	Logical Reasoning and General Knowledge	0.92
4	Language	0.89
5	Social Skills	0.94
6	Motor Skills	0.92
	TOTAL	0.885

The value obtained through Cronbach's Alpha for Internal consistency is Excellent for the values of $0.9 \leq \alpha$ and Good for the values between $0.8 \leq \alpha \leq 0.9$

(c) Validity of the Tool

- **Content Validity :** The content validity of the scale was established by carrying out critical discussions with the research experts at the time of development of preliminary draft of the tool. The experts were of the opinion that the statements of the scale are fully adequate and relevant to identify the slow learners. In addition to this, only those items were retained in the preliminary draft of the present scale for which there had at least 80% agreement amongst experts about relevance of items to the various dimensions of identification of Slow Learners. Thus, the scale possessed adequate content validity.
- **Item Validity:** The scale can be considered to be

valid enough in terms of item validity because only those items were retained in the final form of the scale which having t-value greater than 2.33 at 1% (highly discriminating items).

- **Face Validity:** The face validity was established by getting the comments from research experts, Professors in the field of Education, Educational Psychology and Pure Psychology towards present scale. They were of the opinion that present scale seemed to be valid enough for identification of Slow Learner.

Table-4: Exploratory Factor Analysis (EFA) of Tool for Identification of Categories of Learners'

ITEMS	1	2	3	4	5	6
Item 12	.490	Concentration				
Item 13	.580					
Item 18	.444					
Item 19	.561					
Item 23	.442					
Item 10	.663					
Item 2		.669	Retention			
Item 3		.653				
Item 11		.470				
Item 25		.411				
Item 20	Logic Reasoning and General Knowledge		.618			
Item 22			.600			
Item 26			.532			
Item 27			.438			
Item 21			.464			
Item 6	Language			.594		
Item 7				.632		
Item 4.				.663		
Item 5	Social Issues				.589	
Item 15					.614	
Item 17					.486	
Item 1					.494	
Item 16					.584	
Item 9	Motor Skills					.563
Item 24						.544
Item 14						.558
Item 8						.562

(d) Detailed Description of Final Draft of Tool Identification of Category of Learners

- **Components of Tool for Identification of Categories of Learners:** Total six components of Components of Tool for Identification of Slow Learners were identified by the researcher. Identified dimensions were as follows:

1. Concentration
2. Retention
3. Logical Reasoning and General Knowledge
4. Language
5. Social Skills
6. Motor Skills

(e) Description of Items

a. **Total number of Items:** Final draft of Tool for Identification of categories of Learners consisted of total 27 items.

b. **Component wise Items:** Every dimension consisted minimum 3 items. Description of dimension wise number of items is shown in Table.

Table-5: Components of Identification of Slow Learner and their items in the Tool for Identification of Slow Learner

Sr. No.	Dimensions	Item Numbers	Total Items
1	Concentration	12,13,18,19,23,10	6 items
2	Retention	2,3,11,25	4 items
3	Logical Reasoning and General Knowledge	20,22,26,27,21	5 items
4	Language	6, 7, 4	3 items
5	Social Skills	5, 15, 17, 1, 16	5 items
6	Motor Skills	9, 24, 14, 8	4 items

Final form of the scale thus comprised of 27 items.

(f) Scoring:

Table-6: Scoring procedure of Favourable Items of Tool

Responses	Scores
Yes	1
No	0

Table-7: Scoring procedure of Unfavourable Items of Tool

Responses	Scores
Yes	0
No	1

Table-8: Correlation Matrix of Categories of Learners' Score and Its Dimensions

Dimensions	Concentration	Retention	Logic Reasoning and General Knowledge	Language	Social Issues	Motor Skills	Total
Concentration	1.000	0.494**	0.318**	0.420**	0.305**	0.543**	0.791**
Retention		1.000	0.235**	0.490**	0.267**	0.434**	0.710**
Logic Reasoning and General Knowledge			1.000	0.322**	0.370**	0.331**	0.605**
Language				1.000	0.265**	0.441**	0.680**
Social Issues					1.000	0.312**	0.597**
Motor Skills						1.000	0.738**
Total							1

**Significant at 0.01 Correlated Uniqueness

Table 8 reveals inter-correlations for the total score of categories of Learners' and its dimensions. Each dimension is significantly correlated with the Total Score significant at 0.01. The correlated relationship of first dimension (Concentration) and Total score is 0.791, second dimension (retention) and total score is 0.710, third dimension (Logic Reasoning and General Knowledge) and Total Score is 0.605, fourth dimension (Language) and Total Score is 0.680, Fifth dimension (Social Issues) and total score is 0.597 and sixth dimension (Motor Skills) and Total Score is 0.738. Dimension-wise scanning of these inter-correlations points out that a moderate level of correlation exists between all the factors. All dimensions are correlated significantly with each other. It can be said that the dimensions are distinct from each other and at the same time, are also related to the categories of Learners'.

6. Findings

Table-9: Identificationof Slow Learners

Category	Obtained Score	z-value	Number of Students
Slow Learners	Below 15	Below -0.43	353
Moderate Learners	16 - 20	-0.43 to 0.50	455
Quick Learners	20 and above	0.50 and Above	392
		Total	1200

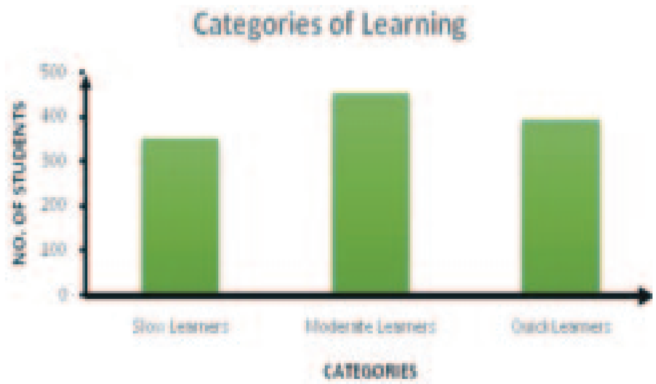

Figure 1: Categories of Learning

Figure 1 depicts different categories of students according to their learning ability. The data is collected using the scale of Identification of Slow Learners, the responses of the recipients were divided into three categories viz. Slow Learners, Moderate Learners and Quick Learners. Out of 1200 students at Middle School, 353 students belong to the category of Slow Learners, 455 Students belong to the category of Moderate Learners and 392 students belong to the category of Quick Learners.

The research by Kaur *et al.* (2015) predicted the students' performance as well as slow learners among them through classification technique by Data Mining.

7. Conclusion

It can be concluded that there are different categories of learners at Middle School Level. Slow Learners, Moderate Learners and Advanced Learners. Identification of learners' is important to make the decisions in the class regarding the improvement of the performance of the students.Slow learner students once identified, various remedies can be applied on them which included arranging separate classes for them, help them through personal attention on difficult topics, conducting easy class tests to motivate them, explanation of topics with practical examples, explaining the topics from basics, etc.

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A Cross-sectional Study of Nutritional Awareness of Various Nutrients amongst Urban and Rural Parents: A Survey Study of Meerut (UP)

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Abstract

Background: The main objective of this research was to know the knowledge of nutritious diets among urban and rural people.

Subjects: The researcher chose a total of hundred individuals at random while keeping in mind the main goal of this investigation. Selected participants ranged in age from 30 to 50 years and were all natives of Uttar Pradesh.

Scale: For measuring nutritional knowledge among rural and urban the researcher employed the General Nutrition Knowledge Questionnaire (GNKQ-88 Questions).

Methodology: The design of the present study was descriptive, with a survey administered through a standardized questionnaire. The current study's design was descriptive, with the survey conducted through a standardized questionnaire. The researcher sent the questionnaire through WhatsApp to 100 selected participants who were 50 rural parents and 50 urban parents with the help of Google Form. the question paper was in two languages, one English and the other Hindi, so each participant could answer the question at his convenience.

Hypothesis: It was hypothesized that a significant difference would be found between the knowledge of nutritious diets among rural and urban parents.

Statistics: Descriptive Statistics was used to obtain (M, Me, SD) z-Test was used to find out the significant difference between Nutritional knowledge among rural and urban parents.

Results: The results revealed that there was a statistically significant difference was found between rural and urban parents' ('z' -2.00, $p \leq 0.05$). The result specified that there was a statistically significant difference between both groups at 0.05.

1. Introduction

Before 1785, several academics published their theories about how the food we eat is utilized by our bodies, but its primary components weren't discovered until the so-called "Chemical Revolution" in France in the late eighteenth century. With the advancement of chemical analysis techniques, both new and old theories can be evaluated quantitatively and scientifically. There is one exception to this generality, which we will discuss later. It is understandable that activists today know little about the late eighteenth-century scientists who caused this "revolution" and, as a result, value it less. But we must bear in mind that they were pioneers, before us in what is known as "the dark forest of animal chemistry" (Carpenter, 2003).

Nutrition is an important component of health and growth. A stronger immune system, safer pregnancy and delivery, lower risk of non-communicable diseases (including diabetes and cardiovascular disease), and longer life span are all associated with better nutrition. Healthy children learn better. Well-nourished people are more productive and can open the door to slowly ending the cycles of hunger and poverty. All types of malnutrition pose serious risks to human health. Both undernutrition and overweight are major causes of malnutrition in today's world, particularly in low- and middle-income countries. Malnutrition can take many different forms, such as under nutrition (wasting or under nutrition), vitamin or mineral deficiencies, overweight or obesity, and resulting in food-related non-communicable diseases. The global burden

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of malnutrition is substantial and long-lasting. Impacts on individuals and their families as well as communities, nations, and economies (World Health Organization, 2023).

The nutrients we consume through food play an important role in our physical development, maintaining healthy body functions, physical exercise, and overall health. Therefore, to sustain life and activity, a nutritious diet is required. All essential nutrients should be present in our diet in adequate quantity. Depending on age, gender, physical status, and physical activity, different critical nutrient requirements are needed. Food intake that is less or more than the body needs can result in undernutrition (deficiency diseases) or overnutrition (effect-related diseases), respectively. Eating too much at any age or too little at certain critical stages of life, such as infancy, childhood, adolescence, pregnancy, and lactation can have adverse effects. All the nutrients we need must be obtained through a proper diet (Krishnaswamy, 2011).

A similar study was found; *Objective:* Promoting healthy eating habits is highly dependent on nutrition and health knowledge, which is linked to socio-demographic characteristics. Yet the evidence available is sparse and conflicting. We wanted to determine how well-informed citizens of Wuhan were about nutrition, health, and the factors influencing them, as well as provide a scientific basis for implementing targeted nutrition education campaigns. *Method:* Wuhan residents aged 18 to 64 years were selected by stratified random sampling for a self-administered questionnaire survey. We used a structured questionnaire to collect information on sociodemographics, information on nutrition and health, and the learning styles of respondents. Dietary Guidelines recommendations, foods and nutrients, nutrition and disease prevention, and nutrition skills are among the topics covered in nutrition and health literacy. Associations between overall awareness rate and sociodemographic characteristics were tested using chi-square testing. To examine the influencing factors of diet and health awareness, multiple linear regression models were used. *Results:* A total of 33,436 valid questionnaires were collected, with a response rate of 97.8%. The overall awareness rate was 20.4%, with nutrition and disease prevention rated highest (72.7%) and nutrition skills rated lowest (46.3%). Respondents with higher awareness rates were between the ages of 35 and 44 (23.3%), female (22.8%), academic employees (24.8%), with a master's degree or higher (34.1%), living in urban centers. were more likely to happen, region (23.1%), and no history of chronic disease (24.6%) (all P 0.001). Results of multiple linear regression models indicated that the following variables may influence an individual's nutrition knowledge: age, gender, education level, occupation, residential address, and history of chronic disease (Yating Wu, 2022).

In another similar study, the researcher conducted a study on the students at the Government Degree College for Boys in Sopore, Jammu and Kashmir, to determine their knowledge of nutrition. 100 students from different departments at the Government Degree College for Boys in Sopore, Jammu and Kashmir were chosen at random to form the sample. Questionnaires created by Dr. Sweyta were used to gauge the student's knowledge of nutrition. 52 questions on nutrition and health status related to nine variables, including nutrition, health-related fitness, avoiding chemical dependency, stress management, personal hygiene, disease prevention, disease awareness, emotional wellbeing, personal safety, and environmental health and protection, are included in nutrition awareness and health status questionnaires (Muzafar Ahmad, 2018).

Another similar study on Nutritional, food habits, and health attitudes of Chinese university students found; *Method:* A self-reported questionnaire was administered to 540 students aged 19 to 24 years. The study included medical students from Beijing University in northern China (135 men and 150 women) and Kunming Medical College in southern China (95 men and 160 women). The student's t-test was used to analyze parametric variables. Non-parametric variables were subjected to chi-square analysis. *Results:* Results showed that 16.6% of students were underweight and that 80.5% of students had normal BMIs, making the prevalence of obesity in this study population with a BMI>30 quite low. Young Chinese female students wanted to be thinner than male students (62.0%) (47.4%). Regular eating routines and consumption of vegetables were rated as habits, and these constitute behaviors that should be supported. (Ruka Sakamaki, 2005)

2. Materials and Methods

2.1. Research Design

The design of the present study was descriptive, with a survey administered through a standardized questionnaire. Keeping in mind the aims and objectives of the present research study, the research scholar determined two different groups of participants, a rural groupand an urban group.

2.2. Participants

The researcher chose a total of hundred individuals at random while keeping in mind the main goal of this investigation. To conduct this study, two groups were pre-selected, with fifty participants who were rural parents and fifty people who were urban parents. Selected participants varied in age from 30 yearsto 50 years and were all natives of Uttar Pradesh.

2.3. Intervention

All the participants were sent a questionnaire in the form of Google form through WhatsApp from the researcher asking them to finish it after reading every question carefully.

2.4. Measures

For measuring nutritional knowledge among rural and urban the researcher employed the General Nutrition Knowledge Questionnaire (GNKQ - 88 Questions) (Carpenter, 2003). The aforementioned instrument had a good level of reliability and adequate construct validity.

2.5. Collection of Data

According to the factors chosen with the aid of his supervisor and research expert, the research scholar used the General Nutrition Knowledge Questionnaire (GNKQ-88 Questions) questionnaire to collect the data for the current research study. All of the participants were encouraged by theresearcher to carefully study the instructions and questions inside the Google formbefore the data collection. The questionnaire contained instructions on how to tick one of the statements (Mavhandu-Mudzusi *et al.,* 2022).

2.6. Statistical Technique

1. Descriptive Statistics was used to obtain (M, Me, SD).
2. z-Test was used at 0.05 level of significance to find out if urban and rural parents differ in nutritional knowledge or not.

3. Hypothesis

- Keeping with the objectives of the present research, it was hypothesized that there might be a statistically significant difference found between the selected subjects' Rural, and Urban parents at 0.05.
- It was also hypothesized that the results of this research may have been different if we had taken subjects other than rural and urban parents.

4. Results

As per Table 1, the mean, median, and standard deviation of Rurals were found (M=11, Me=10.5±SD= 6.477). The mean, median, and standard deviation of Urbans were found (M=16.78, Me=17±SD=5.273).

Table 1: Mean, Median, and Standard Deviations between Rurals and Urbans of Uttar Pradesh

Rurals	Score	Urban	Score
Mean	11	Mean	16.78
Standard Error	0.9160696	Standard Error	0.745758
Median	10.5	Median	17
Mode	9	Mode	17
Standard Deviation	6.4775908	Standard Deviation	5.273306

N = 100
** Sig = 0.05

The mean and standard deviation were found between Rural and Urban (11 ± 6.47 and 16.78 ± 527), respectively, in Table 2. It was evident from Table 2 that there was a significant difference found between the selected groups and as 't' -2.00, $p \leq 0.05$. The result specified that there was a statistically significant difference between both groups at 0.05.

5. Discussion and Findings

The comparison of measures of nutrition knowledge between rural and urban parents in the study was strictly comparative. Alternatively, we can define nutrition knowledge as an awareness of nutrition-related practices and concepts including adequate food intake and well-being, food intake, and disease, foods representing major sources of nutrients, and includes dietary guidelines (Lisa M. Soederberg Miller, 2015). There has been a lot of research examining nutrition knowledge in physical education, but this study was chosen because it was groundbreaking. For this study, it was predicted that there would be differences in nutritional knowledge between rural and urban parents. When we collected data from parents of children from both regions, statistical data revealed that There was a difference in the knowledge of nutrition elements between the parents of both areas, this difference was found to be statistically significant at 0.02 on one-tail and 0.05 on two-tail. After that, we reviewed the research related to the present research which was as; According to them, no difference was found between the knowledge and awareness of nutritious food between rural and urban people (Jeinie *et al.,* 2021).

(Payghan *et al.*, n.d.) A difference was found between rural and urban pregnant women in this study. (Nasih *et al.*, 2021) as per the results of this study, there was a difference between rural and urban school students.

Major Findings

The major finding of this current research was found that there was a statistically significant difference between rural and urban parents.

Table 2: - z-Test: Paired Two Sample for Means between Rurals and Urbans

z-Test: Paired Two Sample for Means	Rurals	Urbans
Mean	21.6	33.12
Variance	5854.653061	13551.66
Observations	50	50
Pearson Correlation	0.996542546	
Hypothesized Mean Difference	0	
df	49	
t Stat	-2.00338731	
P(T<=t) one-tail	0.025341137	
P(T<=t) two-tail	0.050682274	

N = 100
** Sig = 0.05

Conclusions

Based on the analysis and within the limitations of the present study, it was concluded that the region where we live has a direct impact on our nutritional knowledge and dietary patterns.In the comparison between rural and urban parents, our research findings indicate that there was a statistically significant difference between urban and rural parents. This difference was found mainly because rural parents were less educated than urban parents, they did not have more knowledge about essential nutrients, whereas, urban parents were more literate and had important knowledge of nutrients. it was observed that the rural people are mostly busy with their daily activities, so they had less knowledge and awareness about nutritious food. It was also observed that these parents did not have any means of awareness about nutritional elements. On the other hand, urban parents had the necessary knowledge and resources to provide the necessary nutrients.

Recommendations

Based on the conclusions drawn in this study following recommendations have been made:

1. Similar studies may be conducted based on the economic status of parents.
2. Similar study may be undertaken based on educated and uneducated parents.
3. A study may be conducted with a large number of subjects and with more variables.
4. A study may also be conducted on parents' nutritional knowledge and its impact on their child's health.
5. According to the results of the research, we recommend that the Government of India should do mass communication about nutritional elements through TV channels and radio so that rural people can become aware.
6. We suggest that a panel of nutritionists be convened for information about nutritious food and the discussion about nutritious food can be telecasted through live telecast.

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A study to find Impact of Cloud Computing on the IT Capabilities and Organizational Agility

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Abstract

One of the important factors for the success of a firm is its ability to foresee the changes in business environmental and ability to respond quickly to those changes. In this paper, an attempt is made to define business agility and identify the cloud computing attributes which affect the business agility of an organisation. There is little empirical study available linking the cloud computing and it's impact on the business agility of an organisation. There are many literatures available linking information technology with business process optimisation. This study provides a structure to evaluate the cloud computing attributes that are conducive for achieving business agility in today's fast changing business environment. Technologies like IoT, machine learning, robotics; Artificial Intelligence is fuelling the digital transformation of the businesses across different industry domains. This study attempts to suggest a methodology using cloud computing attributes to evaluate the business agility in the context of SMSE in India. The connection between the characteristics of cloud computing and business agility is identified in this study using the fuzzy synthetic assessment and a decision-making trial and evaluation laboratory (DEMATEL) technique. The proposed framework is able to identify cloud computing attributes and its impact on business agility as well as is able to draw specific managerial implications.

Introduction

In the dynamic landscape of contemporary business operations, the role of information technology (IT) has become increasingly pivotal. With the advent of cloud computing, a technological paradigm shift has occurred, reshaping the way organizations harness IT capabilities and, consequently, their ability to adapt and thrive in a rapidly changing environment. This study embarks on a comprehensive exploration to unveil the profound impact of cloud computing on IT capabilities and its consequential influence on organizational agility.

Cloud computing represents a groundbreaking approach to the provisioning and utilization of IT resources. This transformative technology encompasses various service models, including Infrastructure as a Service (IaaS), Platform as a Service (PaaS), and Software as a Service (SaaS). By offering scalable and on-demand access to computing power, storage, and applications, cloud computing has revolutionized the traditional IT landscape (Benlian & Hess, 2011). Organizations are presented with the opportunity to enhance their IT capabilities while minimizing capital expenditures, thanks to the pay-as-you-go model that cloud computing offers (Benlian & Hess, 2011).

The concept of IT capability encompasses several critical dimensions that are integral to an organization's capacity to effectively utilize IT resources. These dimensions include IT supply management, IT-business partnerships, proactive IT posture, and change preparedness (Weill & Ross, 2004). IT supply management ensures that an organization's IT infrastructure is equipped to meet the demands of its business operations. Collaborative partnerships between IT and business units foster the adaptability and responsiveness of an organization's processes. Proactive IT posture is centered on the organization's ability to anticipate and rapidly respond to shifts in the market landscape. Finally, change preparedness encompasses both technical and organizational change management, which are essential for aligning IT with the evolving needs of the business (Weill & Ross, 2004).

Cloud computing plays a pivotal role in reshaping each of these dimensions of IT capability. It streamlines the process of provisioning and managing IT resources, enabling organizations to scale their infrastructure rapidly and efficiently (Benlian & Hess, 2011). Cloud-based services emphasize high service quality, including security, availability, and scalability, which underpin collaborative IT-business partnerships (Benlian & Hess, 2011).

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Moreover, cloud computing's agility and flexibility empower organizations to embody a proactive IT posture, enabling them to pivot swiftly in response to market changes (Carroll *et al.,* 2011). The transformative nature of cloud technologies often necessitates organizational change, thereby bolstering change preparedness and further aligning IT with the broader business goals (Weill & Ross, 2004).

In light of the transformative potential of cloud computing, this study endeavors to unravel the intricate relationship between cloud computing, IT capabilities, and organizational agility. By conducting a comprehensive examination of these interrelated aspects, we aim to provide both theoretical foundations and practical insights into how organizations can harness cloud computing to optimize their IT capabilities and enhance their organizational agility.

Cloud Computing: A Game-Changer for IT Capabilities

Cloud computing offers organizations the potential to elevate their IT capabilities while minimizing costs. Unlike traditional IT models that necessitate substantial capital expenditures, cloud computing operates on a pay-as-you-go model, allowing organizations to scale resources as needed. This flexibility is a cornerstone of its appeal (Benlian & Hess, 2011).

One of the key facets of IT capability is IT supply management. In this regard, cloud computing proves invaluable, ensuring that an organization's IT infrastructure can seamlessly meet the demands of the business. The ability to dynamically allocate resources, coupled with the rapid scalability provided by the cloud, empowers IT supply management (Weill & Ross, 2004).

Moreover, collaborative partnerships between IT and business units are crucial for organizational success. Cloud computing fosters these partnerships by simplifying IT service utilization and maintenance. Security, availability, and scalability are paramount in cloud service quality (Benlian & Hess, 2011). This focus on quality translates into IT-business partnerships that can respond effectively to evolving business needs.

Proactive IT posture, a critical component of IT capability, entails anticipating and reacting swiftly to market changes. Cloud computing equips organizations with the agility to do just that. Studies underscore agility as a hallmark feature of cloud computing (Carroll *et al.,* 2011). The cloud streamlines IT service utilization and maintenance, thereby enabling organizations to pivot in response to market shifts.

Change preparedness, the final element of IT capability, involves both technical and organizational change management. As organizations adopt cloud technologies, they often undergo significant transformations in their IT and business processes. These changes are instrumental in aligning IT and business, further promoting agility and responsiveness (Weill & Ross, 2004).

Enhancing Organizational Agility through Cloud Computing

Cloud computing, with its inherent flexibility and scalability, serves as a potent catalyst for enhancing organizational agility. Agility, in today's ever-evolving business landscape, is a defining characteristic that empowers organizations to swiftly adapt to changing circumstances, seize emerging opportunities, and remain competitive. This section explores how cloud computing contributes to organizational agility, drawing insights from previous research and empirical studies.

Cloud computing expedites the deployment of IT resources, fostering a competitive edge. Research has emphasized agility as a central feature of cloud computing, underlining its ability to simplify IT service utilization and maintenance while ensuring high service quality standards, including security, availability, and scalability (Carroll *et al.,* 2011; Benlian & Hess, 2011). This emphasis on agility is reflected in the transformative potential of cloud computing.

Collaboration between IT and business units is essential for establishing organizational agility. Cloud computing, by providing a unified platform for both IT and business operations, facilitates seamless collaboration. It simplifies IT service utilization and maintenance, fostering trust and synergy between these entities (Weill & Ross, 2004). Furthermore, cloud technologies enable a rapid innovation process, essential for adapting to market dynamics. The ability to make quick decisions, especially in turbulent circumstances, is a hallmark of cloud-powered agility (Brown & Eisenhardt, 1997). Anticipating technological advancements becomes possible through cloud technologies, driving IT-powered business innovations (Lu & Ramamurthy, 2011).

Expediting Deployment and Increasing Competitiveness

Cloud computing significantly accelerates the deployment of IT resources and solutions. This accelerated pace translates directly into improved competitiveness for organizations (Benlian & Hess, 2011). By reducing the time and effort required to provision and manage IT infrastructure, cloud computing allows businesses to focus on innovation and strategic growth.

Studies emphasize agility as a core feature of cloud computing, highlighting its ability to simplify IT service utilization and maintenance while ensuring high service quality, including security, availability, and scalability (Carroll *et al.*, 2011; Benlian & Hess, 2011). This emphasis on agility is reflected in the transformative potential of cloud computing.

Fostering Collaboration between IT and Business

To establish organizational agility, trust and collaboration between IT and business units are paramount. The partnership and synergy between these two entities result in better decision-making, more effective strategic applications, and streamlined systems implementation (Weill & Ross, 2004). Cloud computing acts as a catalyst for these collaborations, providing a common platform for both IT and business to work together seamlessly.

Furthermore, cloud computing facilitates a swift innovation process, essential for responding to market dynamics. The ability to make quick decisions, especially in turbulent circumstances, is a hallmark of cloud-powered agility (Brown & Eisenhardt, 1997). Anticipating technological advancements becomes possible through cloud technologies, driving IT-powered business innovations (Lu & Ramamurthy, 2011).

Research objectives

- To investigate the impact of cloud computing on IT capabilities, such as scalability, agility, and cost-effectiveness.
- To examine the relationship between cloud computing and organizational agility, defined as the ability of an organization to quickly adapt to change.
- To identify the key mechanisms through which cloud computing can enhance IT capabilities and organizational agility.
- To develop recommendations for how organizations can best leverage cloud computing to improve their IT capabilities and organizational agility.

Research methodology

- ***Literature review:*** A comprehensive review of the literature on cloud computing, IT capabilities, and organizational agility will be conducted to identify the key concepts, theories, and findings.
- ***Survey:*** A survey of organizations that have adopted cloud computing will be conducted to gather data on their IT capabilities, organizational agility, and cloud computing usage.
- ***Case studies:*** Case studies of organizations that have successfully leveraged cloud computing to improve their IT capabilities and organizational agility will be analyzed to gain insights into their experiences and best practices.

Research Aim and Contribution

The primary aim of this comprehensive study is to investigate and unveil the multifaceted impact of cloud computing on IT capabilities and its consequential influence on organizational agility within the context of contemporary business operations. In an era characterized by rapid technological advancements and dynamic market landscapes, understanding how cloud computing reshapes the IT landscape and empowers organizations to thrive in a constantly evolving environment is of paramount importance.

At its core, this study seeks to elucidate the transformative potential of cloud computing as it relates to IT capabilities. It endeavors to provide a holistic understanding of how cloud technologies, including Infrastructure as a Service (IaaS), Platform as a Service (PaaS), and Software as a Service (SaaS), enable organizations to enhance their IT capabilities. By examining the dimensions of IT supply management, IT-business partnerships, proactive IT posture, and change preparedness (Weill & Ross, 2004), this research aims to shed light on how cloud computing streamlines IT resource provisioning, fosters collaborative partnerships between IT and business units, facilitates proactive IT management, and drives organizational change to align IT with broader business goals.

Furthermore, this study makes a significant contribution to the field of IT management and organizational agility. It delves into the profound impact of cloud computing on organizational agility - the ability to adapt swiftly to changing circumstances, seize emerging opportunities, and maintain a competitive edge. By exploring how cloud computing expedites IT resource deployment, fosters collaboration between IT and business, and promotes rapid innovation, this research offers valuable insights into how organizations can leverage cloud technologies to bolster their agility in an increasingly competitive business landscape.

In sum, this study aspires to bridge the gap in our understanding of the transformative potential of cloud computing in reshaping IT capabilities and driving organizational agility. It aims to provide both theoretical foundations and practical insights into how organizations can harness cloud computing to optimize their IT capabilities and enhance their ability to thrive in the face of evolving challenges and opportunities.

Proactive IT Posture and IT Infrastructure Competence

Our research aligns with prior findings that highlight the significance of proactive IT posture and IT infrastructure competence in enhancing organizational agility (Panda & Rath, 2018). Proactive IT posture involves anticipating and reacting to market changes swiftly. Cloud computing empowers organizations to embody this proactive stance (Carroll *et al.*, 2011).

IT infrastructure competence, in conjunction with the flexibility offered by cloud computing, bolsters organizational agility (Saputro *et al.*, 2022). As organizations adopt cloud technologies, they invest in IT infrastructure components that, when combined with the cloud's flexibility, amplify overall business agility.

Industry and Location Variations

The impact of cloud computing on IT capabilities and organizational agility is not uniform across industries and geographic locations. This section explores how variations in industry characteristics and geographic locations can influence the way organizations experience and leverage the transformative potential of cloud technologies.

In terms of industry variations, the adaptability and relevance of cloud computing can be influenced by the unique needs and challenges of specific sectors. For instance, research conducted by Saputro *et al.* (2022) highlights that the coal mining industry has recognized the value of cloud computing in enhancing organizational agility. The ability to rapidly scale IT resources and streamline operations aligns with the sector's demand for flexibility in response to market dynamics. However, it's important to note that the impact of cloud computing may differ in industries with distinct regulatory requirements, such as healthcare or finance. These sectors often face stringent data security and compliance standards, which can shape how cloud technologies are adopted and integrated into IT capabilities (Saputro *et al.*, 2022).

Moreover, geographic location plays a pivotal role in determining the applicability of cloud computing solutions. The infrastructure and connectivity available in different regions can influence the feasibility of cloud adoption. Urban centers with robust digital infrastructure may find it easier to harness the benefits of cloud computing, while rural or remote areas might face challenges related to connectivity and infrastructure readiness (Saputro *et al.*, 2022). Hence, the impact of cloud computing on IT capabilities and organizational agility can vary significantly based on the geographic location of the organization.

In conclusion, industry and location variations are critical factors that shape how organizations experience the impact of cloud computing on their IT capabilities and organizational agility. While cloud technologies offer transformative potential, their applicability and effectiveness are contingent on industry-specific needs and the digital infrastructure available in different geographic locations.

The Relationship between IT Capability and Organizational Performance

The relationship between IT capability and organizational performance is contingent on internal and external factors, varying with the competitive landscape (Melville & Kraemer, 2004; Stoel & Muhanna, 2009). IT proactive stance positively influences organizational performance through organizational agility (Queiroz *et al.*, 2017; Felipe *et al.*, 2019).

Organizational agility, significantly impacting performance, plays a central role in responding to internal and external factors that necessitate change (Worley & Lawler, 2010; Felipe *et al.*, 2019). This underscores the critical nature of agility in driving superior organizational performance.

Cloud Computing and Business Model Innovation

Enhancing proactive IT posture through cloud computing can stimulate business model innovation (Govindaraju *et al.*, 2018). Effective leadership and architectural planning are instrumental in magnifying the impact of proactive posture on organizational agility (Govindaraju *et al.*, 2018). Given the finite lifespan of IT and software assets, the capacity for effective change management is indispensable (Govindaraju *et al.*, 2018). Innovation performance remains a cornerstone of an organization's competitive edge (Wiengarten *et al.*, 2012).

Conclusion

In conclusion, cloud computing is reshaping IT capabilities and bolstering organizational agility.

Collaboration between IT and business is fundamental to harnessing the potential of cloud technologies. Proactive IT management and a profound understanding of the unique impacts of IT capability components are essential for achieving enhanced performance and competitiveness in the modern business landscape.

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Emotions at Workplace:A Literature Review

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Abstract

Individuals bring their own affective states and characteristics and emotional "buttons" to work; leaders try to create passion and enthusiasm in followers for the organization and its well-being; groups talk about Esprit de corps; and organizational consultants aim to increase job satisfaction, commitment, trust and loyalty. Organizational members rarely do their jobs objectively, based on cold, cognitive calculation and work experiences include a series of work events that can be pleasant and invigorating or stressful and frustrating. Without a doubt, emotions are an integral part of the workplace. Evidences from four areas of organizational behavior: customer service, group decision, negotiate and lead & Multilevel model of emotions: (a) within-person, (b) between-person (personality; attitudes), (c) interpersonal behaviors (perception & communication), (d) group level (leadership & teams), and (e) organizational level (culture and climate) were reviewed.

Introduction

Emotions a conscious mental response (such as anger or fear) that is subjectively experienced as a strong emotion, usually directed at a specific object, and usually accompanied by physiological and behavioral changes in the body play a very significant role in a human's life. Emotions are supreme and play an important role in improving positive work outcomes and can reduce negative work outcomes.

The Emotions We Feel at Work

1. ***Individual emotions***
   - positive: euphoria, happiness, joy, gladness, enthusiasm
   - negative: agitation, anguish, anxiety, disappointment, disgust, displeasure hurt, worry, anger 1, feeling of injustice, frustration, stress, fear, sadness, unease.
2. ***Cognitive emotions***
   - positive: curiosity, enthusiasm, surprise
   - negative: boredom, disorientation.
3. ***Attachment emotions***
   - positive: feeling of belonging, sympathy, tenderness
   - negative: dislike, anger 2, envy 1, jealousy 1
4. ***Image and Self-Image emotions***
   - positive: gratification, pride, feeling of power, feeling of superiority, feeling of being useful, satisfaction.
   - negative: envy 2, jealousy 2, guilt, embarrassment, dissatisfaction, feeling of inadequacy, feeling of insecurity, feeling of impotence, feeling of inferiority, feeling of uselessness, humiliation, shame, feeling of exclusion, feeling of alienation.
5. ***Other-Image emotions***
   - positive: gratitude, esteem, admiration
   - negative: empathy, pity, compassion, contempt.

"Emotional intelligence (EI) is perceiving, understanding, managing and using the emotions for our betterment." Before the 1990s, EI had been an overlooked part of human nature - recognized intuitively sometimes, but not examined according to rigorous, scientific criteria. Scientific research has uncovered a legitimate new human ability in emotional intelligence, and this has implications for the workforce.

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The Five Level Model of Emotions in Organization

Figure 1. A Five Level Model of Emotions
(Ashkanasy, 2003)

The model exceeds five levels of analysis: Level 1, which includes temporal variations of emotions and behavior as well as this is called intra-individual variability. Level 2 refers to inter-individual variability such as personality and emotional intelligence. Level 3 deals with the role of emotions in human relationships- including feeling and communicating emotions - and emotional work. Level 4, analysis moves to group phenomena, including team leadership. Finally at level 5 the focus is on the organization as a whole, such as emotional culture and climate.

Cross Level Model of Emotions

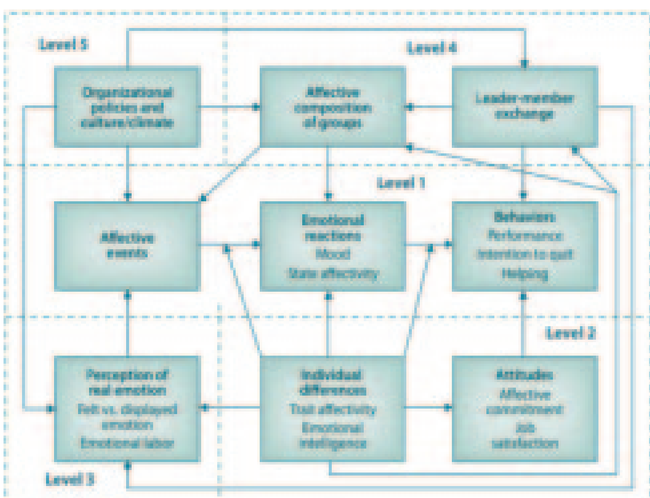

Figure 2. Cross-level view of emotions at five levels analysis

In this review, we used five-level model, which includes the following levels: a) intrapersonal time effects, b) interpersonal factors, c) interpersonal behavior, d) group and team leadership and e) cross-organizational vision. As shown in Figure 1, five levels are strongly interconnected both between and among levels of analysis. Actually, feelings and Their assumptions and effects in workplaces cannot really be understood except as a multi-level phenomenon of reciprocal and recursive relations. At the heart of this version the model is AET (level 1). These relationships are in turn directional, affective and moderated based on individual differences (level 2). Effective events themselves are largely caused by human relationships insights (level 3) and conclusions derived from individual differences (level 2) and organizational context (level 5). Finally, affective events (level 1) also have direct effects processes occurring in groups (level 4), which in turn are affected by individual differences (level 2) and organizational context (level 5).

Literature Review

Australian corporation, 2009 investigated on the issue "Stress, appraisal and work routine in wartime: Past research has devoted little attention to the role of work routine (i.e., adherence to a consistent pattern of attending work in a regular, predictable manner) in civilians' lives during wartime. The current study offers competing theoretical arguments on how work routine and gender combine to moderate the association between primary appraisal and war-related stress among civilians during the second Lebanon war (July-August 2006). Data were collected using telephone interviews (based on a structured questionnaire) with 2072 civilians. The sample was obtained using a within-strata random-sampling method. The association between negative affect and appraisal was attenuated among individuals engaging in regular work routine and among men. Moreover, the positive relationship between work routine and appraisal was stronger among women than among men. South korean institute of psychology, 2009 "Workplace injustice and self-reported disease and absenteeism in South Korea." An average of 7.2% of workers reported experiencing at least one workplace injustice over the past 12 months. Female workers were significantly more likely to experience age and gender discrimination, and unwanted sexual attention than male workers. Both male and female workers who experienced any workplace injustice (i.e., discrimination, harassment, or violence) reported approximately two- to threefold increased risk for physical and mental health problems (i.e., backaches, muscular pain, stomach pain, overall fatigue, headaches, anxiety/ depression, sleeping problems, and injury) and absenteeism due to accidents or due to health problems."Sustainable Work: Health, Wellbeing and Productivity- A Symposium: The Sustainable Work Symposium being held on 17 July 2014 will explore the complex connections between work, wellbeing and productivity. The event will feature presentations by researchers and practitioners from a diverse range of organizations including the University of Sydney, NSW Health, Comcare, Davidson Trahaire Corpsych, National Employment Services Association, the Black dog Institute and the Centre for Work + Life, University of South Australia. "Effect of Psychosocial Stress on The Level of Anxiety, Depression and Behavioral Risk Factors of Cardiovascular Diseases in Men.: High level of stress was associated with older age ($p < 0.01$), stressful occupation (locomotive drivers) ($p < 0.001$), threat of emergency situations ($p = 0.0007$), history of early cardiovascular diseases ($p = 0.02$), insufficient consumption of vegetables and fruits ($p = 0.02$), higher body mass ($p = 0.02$), insufficient sleep duration ($p = 0.02$), subclinical, clinical anxiety and depression, work place AH ($p = 0.002$). Ohio Corporation Limited, 2013 investigated on "Work-related stress factors associated with problem drinking: A study of the Spanish working population. "Moderate and high levels of exposure to a noxious working environment (OR = 2.15 [95% CI = 1.51-3.06] and OR = 2.23 [95% CI = 1.49-3.36]) and a high level of lack of social support (OR = 1.62 [95% CI = 1.16-2.28]) were associated with heavy drinking, and precariousness with binge drinking for both moderate (OR = 1.22 [95% CI = 1.01-1.46]) and high (OR = 1.33 [95% CI = 1.04-1.70]) levels (OR = 1.21; 95% CI = 1.04-1.40) in men. Significant associations among women were only found when stress factors were analyzed separately.

Research Methodology

During the first stage of collecting review data, we investigated peer-reviewed scientific journals focusing on emotions at workplace. These journals were chosen in line with purposive sampling, with a focus on journals elaborating emotional issues among employees and in work environments in different ways.

The journal selection criteria also required that all journals be peer-reviewed and international in scope. In reviewing these journals, we sought articles elaborating emotions among adults, employees, leaders, and managers.

During the second stage of data collection Google Scholar and ERIC databases were utilized to confirm and complement the review data collected during the first stage. In selecting appropriate articles for review, the same procedure, criteria, and keywords from the first stage were utilized.

Analysis and Interpretation

With the extensive literature review done, it is clear that emotions in the workplace are too an important criterion to be studied and then taken care of. Emotions strongly influence our work life. Research has shown that both individual and organizational success is affected by how employees manage their emotions. Several terms have been introduced to describe the management of employees' emotions, such as emotional regulation and emotional labor. Regardless of the label chosen, employee emotion management has been linked to a range of work-related outcomes, such as work attitudes, individual well-being and performance. Emotions can dominate a human being's actions. The actions can be negative or either be positive so it is important to make sure that all the actions taken shall be positive or at least stable so that they don't interfere in the working of organization and leave a negative impact on it. Being able to not only control your emotions, but gauge the motions of those around you and effective influence them is imperative to success in the workplace. "Toxicity in the workplace is a regular occurrence and an occupational hazard. That is why the success of many projects, and the organization itself, depends on the success of "handlers," the people (usually managers) whose interventions either assuaging individuals' pain from toxicity or eliminate it completely. As a result, to be effective, leaders must manage emotional contagion so that it does not change get out of hand In this regard, argue that managers must practice "emotional management" as a way to regulate their emotions. Thus, effective leaders engage in authentic emotional expression or (at least) deep action model emotions that correspond to the given situation; this feeling is likely to arise from group members (by contagion), resulting in the whole team acquiring (heart) feelings.In addition to its immediate role, emotion affects the formation of relationships between leaders and the group There is also evidence that emotions play a role in broader leadership patterns. In fact, there is even data to suggest that the core skill of transformational leaders is skill helping followers cope with negative emotional events. For example, in a study of research and development teams found that leaders improve performance by helping their followers make transactions. One can conclude that the ability to effectively deal with emotions and emotional information in the workplace assists employees in managing occupational stress and maintaining psychological well-being Psychological and Emotional- "Individuals experiencing job insecurity have an increased risk for anxiety, depression, substance abuse, and somatic complaints". We identify five directions for future research. First of the problem is that according to recommendations. (Researchers have been more consistent in their definitions of key terms, especially regarding differentiation affects, feelings, mood and emotions. The terms are still used interchangeably literature that causes ambiguity and uncertainty about the nature of definitions and relationships. First of all, authors must carefully define all terms and clarify which aspect is involved under a magnifying glass. In addition, researchers have generally tried to limit their research to positive and negative impact; rather than dealing only with the effects of discrete emotions must exist one pays more attention to particular emotions. It's not just about positive or negative impact, but also within each limit. For example, anger, fear and sadness are all negative examples effect, but they refer to different modes of action. Second, although the study of within-person effects using diary or ESM methods is becoming more common, there is a growing need for Level 1 studies that group variables over time. In addition, part Level 1 research shows how everyday affective experiences determine employees' attitudes toward the future organization and reflect the person-organization relationship. Previous studies have mainly focused on the psychological aspects of employees and ignore the organizational aspect. employees' feelings about organizational events affect individual and organizational commitment and also emphasizes that improving organizational performance can improve an employee's psychological functioning from the point of view. Our third recommendation for future research is based on an idea that researchers are exploring Organizational research also needs to pay more attention to the role of context, especially in cross-cultural research. For example, used a large sample A mainland Chinese study of general organizational commitment linked to specific emotions in an organizational environment. They report findings from Western samples consistent with previous theory, indicating that the multilevel model of AET is broadly applicable. Also, Emotional granularity has been increasingly associated with social and emotional well-being and is theorized as a key factor in emotion regulation. For example, individuals with high granularity are found to have better emotion regulation skills, while low granularity is associated with poor emotion regulation strategy performance. Therefore, positive emotional intensity can be beneficial in terms of social relationships. A capacity for emotional accuracy can help better understand the emotional states of others and facilitate interpersonal communication. studies have shown that individuals with high emotional differentiation were better able to categorize and recognize the facial expressions of others, and individuals with high emotional detail were better able to assess the emotions of their romantic partners. Although these studies focused on the discrimination of negative emotions, the discrimination of positive emotions can also be useful for understanding other emotions.

Li *et al.* (2016) found that responses to emotional injury differed between American and Chinese samples; found cross-cultural differences in secondary misconduct overview Based on these findings and given the prevalence of MNCs, researchers should prioritize researching issues in organizations at all emotional levels in a multicultural context. As the workforce grows and technology advances, we also need to look at the impact of globally distributed teams and remote workers team dynamics. In addition, points out that collective versus individualistic group members can significantly influence the affective dynamics of a team.Marital and Family- Spouses and children can feel the crossover effects of burnout brought home from the workplace. Depleted levels of energy which effect home management is another consequence. Organizational- Negative feelings at work effect "employee morale, turnover rate, commitment to the organization". Not being able to control personal emotions and recognize emotional cues in others can be disastrous in the workplace. It can cause conflict between you and others, or simply cause you to be seen in a negative light and result in missed opportunities. Not having a strong base to things like drama and gossip can also disrupt a functioning business. Lisa McQuerrey gives a definition for drama: "Drama is usually defined as spreading unverified information, discussing personal matters at work, antagonizing colleagues or blowing minor issues out of proportion to get attention." McQuerry wrote an article giving solutions to stop drama and conflict between coworkers. There are eight important solutions to ending conflict in a workplace according to McQuerrey, first being to set a policy in an employee handbook making drama unacceptable. With this, there needs to be a list of consequences. Second, being that the roles of employees need to be clarified. Other examples in her article include: Stopping gossip before it makes its rounds, confronting employees about changes at work yourself instead of having a rumor mill, report drama if there is a regular instigator. McQuerrey goes on with saying that if situations go on, there should be a meeting held where management mediates the people who gossip. It is also important to follow up with your policy and give warnings about the consequences. Employees may be unaware of how their actions impact their coworkers, bringing in a behavioral expert into your business is usually a positive reinforcement when there's nothing else you can do. This indicates that stress reduction and health protection could be achieved not only by decreasing work demands (stressors), but also by increasing the personal resources of employees, including emotional intelligence. The increasing of EI skills (empathy, impulse control) necessary for successful job performance can help workers to deal more effectively with their feelings, and thus directly decrease the level of job stress and indirectly protect their health".

Practical Implication and Conclusion

From a practical perspective, we believe that this review has many advantages, especially that some emotional responses require careful and appropriate management. For example, managers can help their employees increase their emotional resilience or self-efficacy - which was it has been shown to improve performance. This can also be done by increasing positive resources (the influence of self-efficacy factors).

Primary prevention can be implemented by rescheduling a task or job environment, creating more flexible work schedules or creating unified teams. The strategy for the prevention of work-related psychological disorders includes a number of recommendations to reduce work stress, including avoiding overload and creating work schedules. compatible and flexible with employees, avoiding ambiguity in promotional opportunities, providing opportunities for social interaction and emotional support, and creating tasks that are meaningful and ability to use skills.However, secondary prevention concerns the rapid detection of perceived stress and raising awareness and improving a person's stress management skills through training. Secondary prevention is essentially having few limitations and thus does not involve takingaction to solve the cause of the problem. Tertiary prevention focuses on the treatment of those who would have experienced poor mental or physical health due to stress and this is reflected in assisting staff programs (EAP) or counseling services to help employees deal with workplace stressors and the ripple effects of working life. Finally, another way for organizations to reduce stress and destructive emotions is working for health and safety validated by financial incentives such as tax credits organizations to link risk assessment and stress prevention strategies to insurance premiums.

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सतत् विकास लक्ष्यों की प्राप्ति के सन्दर्भ में एसओएस बाल ग्राम की भूमिका

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सारांश

सतत् विकास की अवधारणा पर्यावरण एवं विकास के बीच सामंजस्य-संतुलन पर आधारित है। सतत् विकास शब्दावली को सर्वप्रथम पर्यावरण-विकास पर वैश्विक आयोग (ब्रंटलैण्ड कमीशन) ने अपनी रिपोर्ट 1987 में प्रयुक्त किया। "ट्रांस्फॉर्मिंग आवर वर्ल्डः द 2030 एजेंडा फॉर सस्टेनेबल डेवलपमेंट" के संकल्प को जिसे सतत् विकास लक्ष्यों के नाम से भी जाना जाता है। भारत सहित 193 देशों ने सितम्बर, 2015 में संयुक्त राष्ट्र महासभा की उच्च स्तरीय पूर्ण बैठक में स्वीकार किया था और एक जनवरी, 2016 को यह लागू किया गया। इसके तहत 17 लक्ष्य तथा 169 उपलक्ष्य निर्धारित किए गए थे जिन्हें 2016-2030 की अवधि में प्राप्त करना है।

एसओएस बाल ग्राम मूलतः द्वितीय विश्व युद्व के अनाथ बच्चों की देखभाल के लिए स्थापित किया गया था। लेकिन बाद में संगठन ने अन्य बच्चों जैसे परित्यक्त, दुर्व्यवहार, उपेक्षित और कठिन परिस्थितियों में रह रहे बच्चों की देखभाल करना शुरू कर दिया। एसओएस बाल ग्राम गरीबी समाप्त करने, सभी के लिए गुणवत्तापूर्ण शिक्षा सुनिश्चित करने, रोजगाार के अवसर उपलब्ध कराने, असमानता कम करने व शांतिपूर्ण और समावेशी समाजों को बढ़ावा आदि द्वारा सतत् विकास लक्ष्यों में योगदान दे रहा है। प्रस्तुत शोध प्रपत्र विवरणात्मक शोध प्रारूप पर आधारित रहेगा जिसमें एसओएस बाल ग्राम द्वारा कैसे बच्चों के विकास के लिए आवश्यक संसाधन उपलब्ध कराकर सतत् विकास लक्ष्यों की प्राप्ति में योगदान दे रहा है, को जानना है।

प्रस्तावना

सतत् विकास का अर्थ है, मानव का सर्वांगीण विकास। यह विकास की वह अवस्था है, जिसमें वर्तमान समय की आवश्यकताओं की पूर्ति हो सके, आने वाली पीढ़ियां भी अपनी आवश्यकताओं की पूर्ति कर सके और विकास की इस प्रक्रिया में हमारा परितंत्र भी स्वस्थ एवं सतत् अवस्था में बना रहे।[1] सतत् विकास की अवधारणा की उत्पत्ति सर्वप्रथम ब्रंटलैण्ड आयोग द्वारा 1987 में जारी एक पत्र **"हमारा साझा भविष्य"** (Our Common Future) से हुई। ब्रंटलैण्ड आयोग को पर्यावरण एवं विकास पर वैश्विक आयोग भी कहा जाता है। "हमारा साझा भविष्य" के अनुसार- **"ऐसी विकास नीति जो हमारी वर्तमान आवश्यकताओं को पूरा करने के साथ ही साथ भविष्य के साथ बिना समझौता किए अगली पीढ़ियों की आवश्यकताओं को पूरा करने की समताओं को सुरक्षित रखे।"**[2] सतत् विकास के लक्ष्य यानि एसडीजी संयुक्त राष्ट्र के सदस्य देशों के बीच एक समझौता है। सितम्बर, 2015 में भारत सहित 193 देशों ने इन्हें वैश्विक विकास की दृष्टि से अपनाया। ये जनवरी, 2016 से प्रभावी हुआ। सतत् विकास लक्ष्य का उद्देश्य 2030 तक विश्व भर से गरीबी को समाप्त कर सभी नागरिकों को एक समान, सुरक्षित और उत्कृष्ट जीवन देना है। विश्व स्तर पर इस बड़े उद्देश्य को पूरा करने के लिए इसे 17 लक्ष्यों में बांटा गया है।[3] इसे वैश्विक लक्ष्यों के रूप में भी जाना जाता है। देखा जाए तो यह **सहस्त्राब्दि विकास लक्ष्य** (Millennium Development Goal 2000-2015) का ही परिवर्तित रूप है।

संयुक्त राष्ट्र का एजेंडा 2030 (17 सतत् विकास लक्ष्य)

1 गरीबी के सभी रूपों की पूरे विश्व में समाप्ति।

2 भूख की समाप्ति, खाद्य सुरक्षा और बेहतर पोषण और टिकाऊ कृषि को बढ़ावा।

3 सभी आयु के लोगों में स्वास्थ्य, सुरक्षा और स्वस्थ जीवन को बढ़ावा।

4 समावेशी और न्यायसंगत गुणवत्तायुक्त शिक्षा सुनिश्चित करने के साथ ही सभी को सीखने का अवसर देना।

5 लैंगिक समानता प्राप्त करने के साथ ही महिलाओं और लड़कियों को सशक्त करना।

6 सभी के लिए स्वच्छता और पानी के सतत् प्रबंधन की उपलब्धता सुनिश्चित करना।

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7 सस्ती, विश्वसनीय, टिकाऊ और आधुनिक ऊर्जा तक पहुँच सुनिश्चित करना।

8 सभी के लिए निरन्तर समावेशी और सतत् आर्थिक विकास, पूर्ण और उत्पादक रोजगार तथा बेहतर कार्य को बढ़ावा देना।

9 लचीले बुनियादी ढाँचे, समावेशी और सतत् औद्योगीकरण को बढ़ावा।

10 देशों के बीच और भीतर असमानता को कम करना।

11 सुरक्षित, लचीले और टिकाऊ शहर और मानव बस्तियों का निर्माण।

12 स्थायी खपत और उत्पादन पैटर्न को सुरक्षित करना।

13 जलवायु परिवर्तन और उसके प्रभावों से निपटने के लिए तत्काल कार्यवाही करना।

14 स्थायी सतत् विकास के लिए महासागरों, समुद्री संसाधनों का संरक्षण और उपयोग।

15 सतत् उपयोग को बढ़ावा देने वाले स्थलीय परिस्थितियों प्रणालियों, सुरक्षित जंगलों, भूमि क्षरण और जैव-विवधता के बढ़ते नुकसान को रोकने का प्रयास करना।

16 सतत् विकास के लिये शांतिपूर्ण और समावेशी समितियों को बढ़ावा देने के साथ ही साथ सभी स्तरों पर इन्हें प्रभावी, जवाबदेहपूर्ण बनाना ताकि सभी के लिए न्याय सुनिश्चित हो सके।

17 सतत् विकास के लिये वैश्विक भागीदारी को पुनजीर्वित करने के अतिरिक्त कार्यान्वयन के साधनों को मजबूत बनाना।

एसओएस बालग्राम

यह एक स्वतन्त्र, गैर-लाभकारी, गैर-सरकारी अन्तर्राष्ट्रीय विकास संगठन है जिसका मुख्यालय इंसब्रुक, आस्ट्रिया में है। यह ऐसे बच्चों के लिए कार्य करता है जिसने जैविक परिवार का प्यार और सुरक्षा खो दिया है और वे बेसहारा हैं। इन बच्चों के लिए एसओएस बालग्राम वैकल्पिक परिवार प्रदान करने का प्रयास कर रहा है और उनकी आधारभूत आवश्यकताओं को पूरा करने व उनके हितों तथा अधिकारों की रक्षा के लिए कार्य कर सतत् विकास लक्ष्य को पूरा करने में सहायता कर रहा है। एसओएस के मुख्य कार्यकारी अधिकारी नार्बर्ट मेडर ने कहा, "एसओएस बाल ग्राम एक बाल देखभाल संगठन के रूप में सभी बच्चों को प्रतिष्ठा, सुरक्षा और सम्मान के साथ बढ़ने या विकास का समान अवसर देता है, जैसाकि हर बच्चा इसका हकदार है।"

मेडर ने कहा, "माता-पिता की देखभाल से वंचित बच्चों की देखभाल और सुरक्षा के लिए हमारा कार्य भी एसडीजी में निहित कुछ बहुत ही महत्वाकांक्षी लक्ष्यों को पूरा करने में विश्व की सहायता करने में एक अभिन्न भूमिका निभाता है।"

एसओएस बालग्राम उन लाखों बच्चों तक पहुंचने पर केन्द्रित है, जो माता-पिता की देखभाल से वंचित हैं। यह ऐसे बच्चों के लिए गुणवत्तापूर्ण वैकल्पिक पारिवारिक वातावरण प्रदान कर सतत् विकास लक्ष्यों को पूरा करने में अग्रणी भूमिका निभा रहा है।[4]

अध्ययन की आवश्यकता

किसी भी समाज का भविष्य कैसा होगा, यह वहां के बच्चों की वर्तमान स्थिति पर निर्भर करता है, अर्थात् देश के उत्थान और पतन में बच्चों की अहम् भूमिका होती है।[5] एक अच्छे भविष्य के लिए आवश्यक है कि उनकी देखभाल पारिवारिक वातावरण में ही हो। बच्चे के अधिकारों पर संयुक्त राष्ट्र अधिवेशन प्रत्येक बच्चे को अपने पारिवारिक वातावरण में अपनी सामर्थ्य व क्षमता को जीवित रखने, बढ़ने और विकसित करने के अधिकारों का उल्लेख करता है।[6] परन्तु दुर्भाग्यवश बहुत से बच्चे ऐसे हैं जिनका कोई परिवार नहीं है, वे अनाथ हैं। भारत लगभग दो करोड़ से अधिक अनाथ और परित्यक्त बच्चों का घर है। इन बच्चों के पास कोई अपना कहने वाला नहीं होता, रहने के लिए कोई जगह नहीं होती और न ही खाने के लिए भोजन होता है जिसके कारण अक्सर ये बच्चे सड़कों पर बड़े होते हैं।[7] ऐसे बच्चे सामाजिक अन्याय के शिकार होने और मानव विकास के लिए उपयुक्त साधनों से वंचित होने की सम्भावना अधिक होती है। इस तरह के बच्चों और युवा लोगों के विकास के लिए एसओएस बालग्राम जो एक वैश्विक गैर-सरकारी संगठन है, एक पारिवारिक वातावरण प्रदान करने का प्रयास कर रहा है। इसके साथ ही यह उनके मानवाधिकारों की रक्षा करते हैं।

एसओएस बालग्राम प्रत्यक्ष रूप से या साझेदारी के साथ बच्चों को सबल बनाने, सामाजिक सुरक्षा प्रदान करने, हिंसा, शोषण से बचाव करने, शिक्षा व व्यावसायिक प्रशिक्षण देने, स्वास्थ्य देखभाल करने, विषम परिस्थितियों में सहयोग कर विश्व भर में सैकड़ों हजारों बच्चों की देखभाल और सहायता प्रदान कर रहा है। इन सभी क्षेत्रों को सितम्बर 2015 में संयुक्त राष्ट्र द्वारा अपनाए गए और सतत् विकास लक्ष्यों के तहत प्राथमिकताओं के रूप में मान्यता दी गई है। एसओएस बालग्राम अपने कई कार्यों और कार्यक्रमों के क्रियान्वयन के माध्यम से सरकार का समर्थन कर सतत् विकास लक्ष्यों को प्राप्त करने में सहयोग कर रहा है। प्रस्तुत शोधपत्र एसओएस बालग्राम द्वारा बच्चों के लिए किए जा रहे इन्हीं कार्यों और कार्यक्रमों पर प्रकाश डालेगा जो लोगों में इस विषय पर जागरूकता व ज्ञान को बढ़ायेगा, जिससे एसओएस बालग्राम को लोगों व सरकार का और सहयोग प्राप्त होगा जो उसे सतत् विकास लक्ष्यों की प्राप्ति में सहयोग करेगा।

अध्ययन का उद्देश्य

प्रस्तुत शोध पत्र का उद्देश्य एसओएस बालग्राम द्वारा कैसे बच्चों के विकास के लिए आवश्यक संसाधन उपलब्ध कराकर सतत् विकास लक्ष्यों की प्राप्ति में योगदान दे रहा है, को जानना है।

अध्ययन की पद्धति

प्रस्तुत शोध पत्र विवरणात्मक शोध पद्धति पर आधारित है। तथ्यों के संकलन के लिए द्वितीयक स्रोतों का प्रयोग किया गया है।

सतत् विकास लक्ष्य और एसओएस बालग्राम

सतत् विकास लक्ष्यों (एसडीजी) को 2015 में सभी संयुक्त राष्ट्र सदस्य राज्यों द्वारा 15 वर्ष की कार्य योजना के लिए प्रतिबद्ध किया। सतत् विकास के लिए 2030 एजेंडा में कुल 17 सतत् विकास लक्ष्य शामिल है जिसमें सतत् विकास लक्ष्य 1, 3, 4, 5, 8, 10, 16 और 17 को प्राप्त करने में एसओएस बालग्राम योगदान देता है। हालांकि, पांच सतत् विकास लक्ष्य- 1, 4, 8, 10 और 16 इसके कार्यक्रमों और रणनीति के लिए केन्द्रीय हैं।

सतत् विकास के लक्ष्यों की प्राप्ति में एसओएस बालग्राम की भूमिका

एसओएस बालग्राम सतत् विकास लक्ष्यों को प्राप्त करने के लिए भागीदारों और राज्यों के साथ काम करता है, जिसका सबसे अधिक प्रभाव वंचित बच्चों और युवाओं पर पड़ता है। निम्नलिखित सतत् विकास लक्ष्य इसके रणनीति और रोजमर्रा के केन्द्र में है[8]:

लक्ष्य 1 गरीबीसमाप्तकरना : गरीबी के बिना दुनिया बनाना सतत् विकास लक्ष्यों में से एक है। गरीबी बच्चों के विकास में बाधा डालता है। इससे पारिवारिक विघटन या पारिवारिक अस्थिरता भी हो सकती है। निर्धन परिवार अपने बच्चों की आधारभूत आवश्यकताओं की पूर्ति में असमर्थ होते हैं। एसओएस बालग्राम गरीबी को कम करने और परिवार के टूटने व अलगाव को रोकने में सहायता करता है। जब बच्चे अपने माता-पिता साथ नहीं रह सकते हैं तो यह गुणवत्तापूर्ण वैकल्पिक देखभाल प्रदान करता है। अपने कार्यक्रमों में प्रत्येक बच्चे को उनके व्यक्तिगत विकास में सहायता करता है और एक स्वस्थ एवं स्थायी भविष्य बनाने मेंउ नका सहयोग करता है।

लक्ष्य 4 सभी के लिए गुणवत्तापूर्ण शिक्षा सुनिश्चित करनाः हर बच्चे और युवा को गुणवत्तापूर्ण शिक्षा का अधिकार है, चाहे उनकी पृष्ठभूमि कुछ भी हो। माता-पिता की देखभाल के बिना या विषम स्थितियों में बच्चों और युवाओं को अक्सर शैक्षिक अवसरों तक पहुंचने का प्रयास करते समय अतिरिक्त चुनौतियों का सामना करना पड़ता है। एसओएस बालग्राम ऐसे प्रत्येक बच्चे और युवा को शिक्षा प्राप्त कराने में सहायता करता है। नर्सरी स्कूल से लेकर व्यावसायिक प्रशिक्षण या विश्वविद्यालय तक की शिक्षा प्राप्त कराने में अग्रणी भूमिका निभा रहा है। यह प्रत्येक बच्चे या युवा व्यक्ति के कौशल और क्षमताओं को विकसित करने में सहायता कर रहा है।

लक्ष्य 8 सभी के लिए समान रोजगार के अवसर प्रदान करनाः एसओएस बालग्राम बेसहारा युवाओं को कौशल और आत्मविश्वास विकसित करने में सहायता करता है और उन्हें आत्मनिर्भर बनाने के साथ-साथ अच्छे रोजगार प्राप्त करने में सहायता करता है। युवा बेरोजगारी विश्व भर के युवाओं को प्रभावित करने वाली एक वैश्विक चुनौती है। जब माता-पिता बेरोजगार होते हैं या अस्थिर या कम वेतन वाली नौकरियों में कार्य करते हैं, तो उनके बच्चों की देखभाल करने की उनकी क्षमता क्षीण होती है। वे अपने बच्चों का भरण-पोषण करने में सक्षम नहीं हो पाते और ये सब इन बच्चों के स्वास्थ्य, विकास और सुरक्षा को प्रभावित करते हैं। एसओएस बालग्राम कमजोर परिवारों के माता-पिता को व्यावसायिक प्रशिक्षण प्राप्त करने में सहायता करते हैं ताकि वे अच्छा काम पा सकें और अपने बच्चों को एक उज्जवल भविष्य दे सके।

लक्ष्य 10 देशों के भीतरऔर उनके बीचअसमानताको कम करनाः किसी को भी जाति, लिंग, धर्म, दिव्यांगता, संस्कृति या पारिवारिक पृष्ठभूमि के आधार पर भेदभाव नहीं होना चाहिए और अवसरों तक समान पहुंच से वंचित नहीं किया जाना चाहिए। जिन बच्चों और युवाओं के रक्षा करने और उनका मार्गदर्शन करने के लिए देखभालकर्त्ता की कमी होती है, उनके शिक्षा, स्वास्थ्य, देखभाल, नागरिकता और सुरक्षा जैसे अधिकारों के मिलने की सम्भावना कम होती है। एसओएस बालग्राम उन कानूनों और प्रथाओं को प्राथमिकता देता है जो समान अवसर, सामाजिक समावेश और सुरक्षा सुनिश्चित करते हैं। इसके साथ ही एसओएस बालग्राम का उद्देश्य गरीबी और बहिष्करण के चक्र को तोड़ने में मदद करना ताकि आने वाली पीढ़ियां समाज में सक्रिय और समान भागीदार बन सकें।

लक्ष्य 16 शांतिपूर्ण और समावेशी समाजों को बढ़ावा देनाः सभी बच्चों को हिंसा, दुर्व्यवहार, शोषण या उपेक्षा से बचाना चाहिए, परन्तु जो बच्चे बिना परिवार या माता-पिता के होते हैं उन्हें हिंसा, दुर्व्यवहार, उपेक्षा या शोषण का अधिक खतरा होता है। एसओएस बालग्राम बच्चों की सुरक्षा के लिए कार्य करता है। इसके अतिरिक्त यह बाल शोषण और उपेक्षा के बारे में जागरूकता उत्पन्न कर सभी बच्चों के लिए बेहतर सुरक्षा का समर्थन करता है। एसओएस बालग्राम बच्चों के प्रतिहिंसा को

रोकने के लिए परिवारों को मजबूत करते हैं, परवरिश कौशल और सकारात्मक अनुशासन तकनीक सिखाते हैं। इस प्रकार एसओएस बालग्राम अपने कार्यों और विभिन्न कार्यक्रमों के क्रियान्वयन द्वारा सतत् विकास लक्ष्यों की पूर्ति में अग्रणी भूमिका निभा रहा है।

भारतमें एसओएस बालग्राम और सतत् विकास लक्ष्य

सतत् विकास लक्ष्यों को प्राप्त में भारत में स्थापित एसओएस बालग्रामों द्वारा भी अग्रणी भूमिका निभाया जा रहा है। भारत में देखा जाए तो एसओएस बालग्राम की स्थापना 1964 के आस-पास किया गया। यह भारत में लगभग सत्तावन से अधिक वर्षों से जरूरतमन्द बच्चों की देखभाल करने में अग्रणी रहा है। इससे बच्चों की एक पहचान बन रही, परिवार मिल रहा जिसे अपना कह सकते हैं। आज सम्पूर्ण भारत में लगभग 34 एसओएस बालग्राम विभिन्न राज्यों में कार्यरत है जो लगभग 29,000 बच्चों को सहायता प्रदान कर रहा है।[9]

भारत में स्थित एसओएस बालग्राम के कार्यों की गुणवत्ता को इन पर हुए विभिन्न अध्ययनों से प्राप्त निष्कर्ष द्वारा देखा जा सकता है कि ये कैसे बच्चों की देखभाल व उनके विकास के लिए आवश्यक संसाधन उपलब्ध कराकर सतत् विकास लक्ष्यों की प्राप्ति में योगदान दे रहा है।

- जसदीप कौर (2019) ने पंजाब के राजपुरा एसओएस बालग्राम में रह रहे 10-13, 13-15 व 15-19 आयुवर्ग के बीच के 100 बच्चों जिसमें 50 लड़के व 50 लड़कियों का चयन सम्भाव्यता (Probability) निदर्शन द्वारा किया। अध्ययन का उद्देश्य एसओएस बाल द्वारा बच्चों को प्रदान की जाने वाली शैक्षिक व्यवस्था को जानने के साथ-साथ सामाजिक-मनोवैज्ञानिक संदर्भों में एसओएस बालग्राम के बच्चों की सामाजिक सुरक्षा का अध्ययन करना है। मात्रात्मक व गुणात्मक दोनों दृष्टिकोणों को अपनाया गया है व शोध प्रारूप वर्णनात्मक है। अध्ययन में यह पाया गया कि राजपुरा एसओएस बालग्राम द्वाराबच्चों को गुणवत्तापूर्ण शिक्षा प्रदान की जा रही है, साथ ही यहाँ बच्चों को सामाजिक रूप से सुरक्षित वातावरण मिलता है जिससे उन्हें भावात्मक और सामाजिक मजबूती मिलती है। बच्चों को यहाँ घर, कपड़े, भोजन, शिक्षा, अतिरिक्त ट्यूशन, व्यावसायिक प्रशिक्षण, खेल मैदान, कम्प्यूटर लैब आदि जैसी सुविधाएं प्रदान की जा रही है और बच्चे 25 वर्ष की आयु तक शिक्षित व जीवन में आत्मनिर्भर हो जाए, इसके लिए भी प्रयास किया जा रहा है।[10]
- दुर्गा छेत्री (2010) ने नेपाल के सनोथिमी एसओएस बालग्राम के 16 घरों में रहने वाले 158 बच्चों में 15 प्रतिशत बच्चों अर्थात् 24 बच्चों का चयन सरल यादृच्छिक (Random) निदर्शन द्वारा किया। अध्ययन का उद्देश्य अनाथ बच्चों के लिए एसओएस बालग्राम द्वारा किए जाने वाले योगदान को जानना, बच्चों के समग्र विकास के लिए की जाने वाली पाठ्येत्तर (Extra curricular) गतिविधियों की पहचान तथा साथ ही उनकी शारीरिक, सामाजिक और शैक्षणिक स्थिति का पता लगाना। साक्षात्कार और अवलोकन पद्धति को अपनाया गया है और शोध प्रारूप वर्णनात्मक और व्याख्यात्मक है। अध्ययन में पाया गया है कि एसओएस बालग्राम बच्चों को माँ के प्यार और देखभाल के साथ-साथ भावी जीवन में सक्षम और स्वावलम्बी बनाने के लिए शिक्षा और विभिन्न व्यावसायिक प्रशिक्षण प्रदान किए जा रहे। इस प्रकार एसओएस बालग्राम सनोथिनी द्वारा दी जा रही सुविधाओं ने एसओएस में रहने वाले बच्चों की शारीरिक, शैक्षिक और सामाजिक आवश्यकताओं को पूरा कर रहा है और पाठ्येत्तर गतिविधियों के माध्यम से एसओएस बालग्राम में रहने वाले बच्चों का समग्र विकास सुनिश्चित हो रहा।[11]
- बीना सिंह और अंजू त्रिपाठी (2019) ने छत्तीसगढ़ के रायपुर एसओएस बाल के परिवेश का अध्ययन किया। अध्ययन में उन्होंने उद्देश्यपूर्ण निदर्शन प्रविधि द्वारा 12-18 वर्ष की आयु के 40 अनाथ बच्चों का चयन किया। अध्ययन में यह पाया गया कि सभी बच्चे इस बात से पूर्णतः सहमत थे कि वह यहाँ माँ, भाई, बहन के साथ एक पारिवारिक वातावरण में प्यार, स्नेह के साथ रहते हैं और वे यहाँ सुरक्षित महसूस करते हैं।[12]
- महीदा अकरम, फैजा अंजुम और निदा अकरम (2015) ने अनाथ बच्चों की सामाजिक-आर्थिक स्थिति के सन्दर्भ में संस्था की भूमिका को जानने के साथ-साथ उनके विकास और उपलब्धि पर वहाँ के वातावरण का क्या प्रभाव पड़ रहा है, का अध्ययन किया। इसके लिए मुल्तान, फैसलाबाद और लाहौर ये तीन एसओएस बालग्राम के 8 से 14 वर्ष की आयु के लगभग 125 बच्चों का चयन किया। अध्ययन में पाया गया कि एसओएस बालग्राम इन बच्चों के जीवन में महत्वपूर्ण जीवन निभाता है क्योंकि अधिकांश बच्चे यहाँ प्राप्त होने वाली सभी सुविधाओं से सन्तुष्ट थे। संस्था बच्चों को यहाँ जो वातावरण प्रदान कर रही हैं, वह उन्हें समाज का एक अच्छा नागरिक बनाता है।[13]

निष्कर्ष-

इस प्रकार देखा जा सकता है कि कैसे एसओएस बालग्राम अपने विभिन्न कार्यों द्वारा सतत् विकास लक्ष्यों की प्राप्ति में अग्रसर भूमिका निभा रहा है।

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The Impact of Technology on Classroom Communication -A Study of Opportunity & Challenges of Animated Educational Content

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Abstract

Incorporating technology into classroom learning has transformed imparting educationand offered new options for teaching and learning. Animated educational content has emerged as a powerful tool with the ability to improve the learning experience. The research is to investigate the impact of technology, primarily animated educational content, on classroom learning by examining its opportunities and challenges. The study is focused on qualitative research methods to gather comprehensive data. The analysis is based on available data, observations of classroom learning and available tools to examine'teachers' and 'learners' perceptions and experiences regarding the use of animated educational content.To address these challenges, the research paper discusses the strategies and best practices for effectively integrating animated educational content by analysing the research conducted in these areas. The research also identifies challenges associated with the use of animated educational content in the classroom. Distractions caused by technological devices and the potential for students to become overly reliant on technology are concerns that require careful consideration. The need for reliable access to technology and the potential for animation to overshadow other crucial aspects of education, such as face-to-face interactions between teachers and students, are also explored. Overall, this research paper contributes to the existing knowledge on the impact of technology on classroom learning by specifically focusing on the opportunities and challenges of animated educational content. The insights provided in this study can inform educators, policymakers, and curriculum developers in making informed decisions regarding the integration of animated educational content into classroom learning environments, ultimately fostering more effective and engaging learning experiences for students.

1. Introduction

The use of technology in the educational system has revolutionised traditional classroom practices in recent years, bringing up new options for interesting and successful learning experiences. The use of animated instructional content, which uses multimedia and visual aids to improve student comprehension, engagement, creation of E-Contents and recall of academic topics, is a crucial component of this technological shift. Animated educational content is a broad category of digital media that includes videos, simulations, and interactive applications that bring instructional subjects to life through visual narrative and dynamic representations.

This research paper aims to examine the impact of animated educational content on classroom learning. Specifically, this study aims to investigate the opportunities and challenges associated with integrating animated educational content into educators' instructional practices. By exploring these factors, educators, policymakers, and instructional designers can better understand the potential benefits and limitations of animated educational content, thus enabling them to make informed decisions regarding its implementation in the classroom.

1.1 Opportunities for Animated Educational Content:

One of the key opportunities animated educational content offers is its ability to captivate students' attention and foster engagement. Animated content, with its visually appealing and dynamic nature, has the potential to spark curiosity and stimulate students' interest in the subject matter. Moreover, the incorporation of storytelling elements, interactive features, and gamification techniques within animated educational content can further enhance

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students' motivation to learn, promoting active participation and knowledge acquisition.

Additionally, animated educational content has the power to simplify complex concepts by visually representing abstract ideas and processes. Through animations, students can visualize and comprehend challenging concepts more effectively, as visual aids often provide a clearer and more intuitive understanding compared to traditional textual explanations.

1.2 Challenges of Animated Educational Content:

Despite the numerous opportunities presented by animated educational content, it is crucial to acknowledge the challenges associated with its implementation. One primary concern is the potential distraction caused by the visual and interactive nature of animated content. If not appropriately designed and integrated into instructional strategies, animated content may lead to reduced focus and decreased learning outcomes. Therefore, striking a balance between engagement and cognitive load becomes imperative in optimizing the effectiveness of animated educational content.

Moreover, the availability and accessibility of animated educational content pose challenges for educators and institutions. The creation and curation of high-quality animated content require technological expertise, time, and financial resources. Furthermore, equitable access to technology and animated content across various educational settings and socio-economic backgrounds must be addressed to prevent the digital divide from widening and to ensure equal opportunities for all students.

2. Methodology

The findings of this study were obtained through a comprehensive analysis of secondary data. This involved conducting desk research by thoroughly reviewing research papers, web-references, and other relevant resources. By utilizing a range of reliable and authoritative sources, a robust foundation of information was established to support the research outcomes.

2.1 Research Objectives:

Considering the opportunities and challenges, this research paper aims to achieve the following objectives:

2.1.1 Explore the impact of animated educational content on student engagement, motivation and learning outcomes

2.1.2 Investigate the effectiveness of animated educational content in simplifying complex concepts and enhancing students' understanding and retention.

2.1.3 Examine the factors influencing the successful integration of animated educational content into instructional practices.

2.1.4 Identify strategies and best practices for effectively utilizing animated educational content in diverse classroom environments.

2.1.5 To address the challenges associated with the implementation of animated educational content, including issues of distraction, cognitive load, and equitable access.

By addressing these objectives, this research paper focuses to contribute valuable insights and recommendations to inform various stakeholdersabout optimal classroom learning experiences.

Source: Joshi (2023)

Figure 1 : Advantages of Animation in Education

3.` Findings

Kay, R (2012) analysed the data from several studies to examine the effects of computer gaming and interactive simulations on learning outcomes.

Meta-analysis is a significant research tool that combines the findings of several studies to provide a thorough examination of a certain topic. The researcher likely used a systematic search to find relevant studies that matched inclusion criteria. They would have looked at research that investigated the use of computer gaming and interactive simulations as educational tools and measured learning outcomes across multiple domains.

By concluding the data from these studies, the authors haveanalysed the collective findings to identify common trends and patterns. They would have examined factors such as the types of games or simulations used, the target audience, the subject matter, and the specific learning outcomes assessed.

Vogel J.J, *et al.*(2006) explored the role of animation in enhancing multimedia learning experiences. The paper aims to provide a comprehensive review of existing literature on the topic, analysing the benefits and limitations of animation as an instructional tool.

Researchers begin by exploring the theoretical underpinnings of multimedia learning as well as the cognitive processes involved in learning through multimedia presentations. They dive into the cognitive theory of multimedia learning, which emphasises the relevance of dual channels for information processing-verbal and visual-as well as the need for cognitive integration for efficient learning. Following that, the study focuses on the usage of animation in multimedia presentations. It investigates how animation's particular properties, such as motion, dynamic images, and temporal sequencing, can improve learners' cognitive processes.

Overall, the research paper concludes that animation can be a powerful aid to multimedia learning, offering numerous benefits in terms of comprehension, engagement, and knowledge transfer. However, the effective integration of animation requires careful consideration of instructional design principles and learner characteristics. The authors emphasize the need for future research to explore optimal strategies for incorporating animation into educational contexts and to address the remaining gaps in our understanding of this topic.

Guo, P.J, *et al.* (2014) stated the impact of video production techniques on student engagement in Massive Open Online Courses (MOOCs). The paper presents an empirical study that investigates the relationship between various video production elements and students' engagement levels.

Initially highlighting the increasing popularity of MOOCs as an online learning platform and the critical role that videos play in delivering instructional content, they emphasise the need of understanding how diverse production styles used in MOOC videos affect students' engagement and learning outcomes.

The research is done by analysing a huge dataset that includes video usage data, demographic information, and engagement indicators from a major MOOC platform. They thoroughly investigate numerous video production components such as visual cues, instructor presence, multimedia integration, and video duration.

It establishes major conclusions about the impact of video production techniques on student engagement through their investigation.They observe that videos with higher production values, such as professional editing and higher visual quality, tend to result in increased engagement levels. Furthermore, they find that incorporating instructor presence in videos, such as the instructor appearing on-screen or using a narrator's voice, positively influences engagement.

In conclusion, this study adds to our understanding of how video creation influences student participation in MOOCs. The authors present evidence-based recommendations for using video production techniques to boost student engagement and the overall efficacy of online learning experiences by performing an empirical study and analysis.

Kizilcec, *et al.* (2020) explores the impact of instructor presence, specifically showing the instructor's face in video instruction, on information retention, visual attention, and the effecton learners. The paper presents a study that investigates the effects of instructor face presence on these key factors in the context of educational videos.

Itbegins by acknowledging the increasing prevalence of video-based instruction in educational settings and the potential role of instructor presence in enhancing the effectiveness of instructional videos. They emphasise the significance of comprehending how displaying the instructor's face can affect students' learning results and emotional responses.

The authors discover noteworthy data regarding the effects of instructor face appearance in video training through their analysis. They discovered that movies with the instructor's face visible result in higher levels of information retention among learners than ones without the instructor's face. This implies that including the instructor's face can help learners encode and retrieve information, thereby improving their learning results.

Taber-Doughty, T. & Huang, H. (2017) examined the impact and effectiveness of using videos in the context of flipped instruction. The paper presents an empirical study that investigates the role of video content in facilitating student learning and engagement within a flipped classroom model.

Initially highlighting the growing popularity of the flipped classroom approach, in which students access educational content via videos prior to attending class, allowing for more participatory and collaborative learning activities during class time. They emphasise the need of understanding how videos contribute to the efficacy of flipped training.

The authors use a mixed-methods research approach to conduct their study, integrating quantitative data from student questionnaires and performance assessments with qualitative data from student interviews and classroom observations. The study investigates students' perceptions of the benefits, obstacles, and preferences for using video in the flipped classroom.

Through their analysis, the authors uncover important insights into the role of video content in flipped instruction. They find that students generally perceive videos as valuable resources for learning, as they provide flexibility, convenience, and the opportunity for self-paced learning. Students appreciate the ability to revisit and review video content as needed, enabling deeper understanding and knowledge consolidation.

Finally, the research article emphasises the importance of video content in the flipped instruction model. The authors give significant insights for educators and instructional designers intending to optimise the use of videos in flipped classrooms by studying student perspectives, performance outcomes, and classroom observations. The findings emphasise the significance of careful video design, instructor presence, and matching video content to students' interests and learning goals.

Atkinson, R. *et al.* (2005) explores the influence of an animated agent's voice on fostering social agency in multimedia learning environments. The paper presents a study that investigates the effects of the voice characteristics of an animated agent on students' social agency, which refers to their sense of control and efficacy in social interactions.

It discusses the significance of social agency in learning and the potential of animated agents to enhance students' engagement and self-perception in educational contexts. They emphasize the need to understand how different voice characteristics of animated agents can impact students' social agency.

The researcher uses an experimental methodology in their study, in which participants are exposed to multimedia learning materials containing an animated agent with varying voice characteristics. They use self-report measures to assess students' social agency and investigate how alterations in the agent's voice affect students' feelings of control, self-efficacy, and engagement. Research find that an energetic agent with a warm, welcoming, and encouraging voice creates more social agency in students than a neutral or monotonous agent.

In conclusion, the study highlights the importance of congruence between the animated agent's voice and the instructional content. When the agent's voice characteristics align with the material's nature and intended learning outcomes, students are more likely to experience a sense of coherence and connection, further enhancing their social agency.

Clark, R.E & Mayer, R.E. (2016) focuses on providing evidence-based guidelines for consumers and designers of multimedia learning in the context of e-learning. The paper explores the science of instructional design and presents practical recommendations for creating effective and engaging e-learning experiences.

The authors begin by emphasising the growing popularity of e-learning and the significance of employing effective instructional design concepts to improve learning results. They stress the importance of closing the gap between research findings and practical application in e-learning design.

To do so, the authors use research from cognitive science and instructional design to offer tried-and-true standards for multimedia learning. They investigate many elements that influence learning and retention in e-learning environments, such as multimedia design principles, instructional tactics, and cognitive processes.

The paper provides concrete guidelines for consumers and designers of multimedia learning, offering recommendations on how to effectively present information, optimize cognitive load, incorporate multimedia elements, and promote meaningful learning. The authors outline practical strategies for organizing content, using visuals and text, leveraging animations and graphics, and integrating interactive elements to enhance engagement and comprehension.

In summary, this research paper serves as a valuable resource for consumers and designers of e-learning, providing evidence-based guidelines rooted in the science of instruction. By synthesizing research findings and practical recommendations, the paper offers insights and strategies to create effective and engaging multimedia learning experiences in the realm of e-learning.

4. Conclusion

The objectives of this study were aimed at exploring the impact of animated educational content on student engagement, motivation, and learning outcomes. Through the investigation of its effectiveness in simplifying complex concepts and enhancing understanding and retention, it was found that animated educational content holds great potential in facilitating student learning.Additionally, by examining the factors influencing the successful integration of animated educational content into instructional practices, this study shed light on the importance of teacher training, technological infrastructure, and curriculum alignment. Understanding these factors can contribute to the effective utilization of animated educational content in diverse classroom environments.

Moreover, strategies and best practices were identified to guide educators in maximizing the benefits of animated educational content. These strategies encompassed the thoughtful selection of content, interactive engagement, and incorporating reflection and assessment. By following these practices, educators can foster meaningful learning experiences for students.

This research provides valuable insights into the potential of animated educational content, emphasizing its positive impact on student engagement, understanding, and retention. By addressing the challenges and adopting effective strategies, educators can leverage animated educational content to enhance the learning experiences of their students in diverse classroom settings.With the examination of research articles and web resources, the findings of this study shed light on the complex link between technology and education, highlighting both the positive features and the potential problems. The possibilities for animated educational content in the classroom are tremendous. Students can engage with visually appealing and engaging learning materials through the incorporation of technology, which can improve their knowledge and memory of complicated concepts. Animated educational content can make learning more entertaining and accessible by accommodating diverse learning styles and encouraging student involvement.

To summarise, while animated instructional content has the potential to revolutionise classroom learning, its adoption must be approached wisely and strategically. When incorporating technology into their teaching practises, educators should consider the various requirements of their pupils, potential distractions, and the digital divide. By doing so, we may use technology's transformative power to build interesting and effective learning environments that prepare students for the challenges of the modern world.

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Futuristic Trends in Management: A Bibliometric Analysis

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Abstract

In an era characterized by rapid technological advancement and shifting business paradigms, the study of futuristic trends in management emerges as an essential pursuit. This comprehensive exploration spans the years 2000 to 2023 and employs a systematic approach to curate relevant literature from the Scopus database. Selecting English-language articles, conference papers, book chapters, and books adhering to stringent criteria, the study delves into the intersection of management practices and transformative influences. Through the utilization of bibliometric analysis via the VOS Viewer software, co-occurrence of keywords, abstract content, citation patterns, and co-citation networks are unveiled within the curated materials. By shedding light on evolving trends, this study equips decision-makers with invaluable insights to drive innovation and adaptability in a swiftly changing business landscape.

Introduction

In the rapidly evolving landscape of business and technology, the field of management has continuously adapted to embrace emerging trends and paradigms. As organizations navigate an era characterized by unprecedented technological advancements, global connectivity, and shifting consumer preferences, the study of futuristic trends in management becomes not only relevant but imperative[1]. This study embarks on a comprehensive exploration of these trends, spanning the years from 2000 to 2023, to unveil the intricate interplay between management practices and the transformative forces that have shaped them.

Employing a systematic approach, this study meticulously selected pertinent literature sources from the Scopus database, ensuring a rigorous selection process that encompasses English-language articles, conference papers, book chapters, and books. The refined search criteria encompassed considerations of publication year, subject areas such as Business, Management and Accounting, and Decision-Making, along with exclusions based on document types. Through this stringent selection process, a curated collection of materials was assembled, reflecting top-quality and contextually relevant insights into futuristic management trends within the defined temporal scope.

By harnessing the power of bibliometric analysis, the study examines the intricate web of concepts, relationships, and influences that define the landscape of futuristic management trends.[3,4] The VOS Viewer software, renowned for its capacity to visualize and dissect bibliometric networks, was utilized to unravel the co-occurrence of keywords, the content of abstracts, citation patterns, and co-citation analyses present within the selected articles.[3]

As organizations and decision-makers grapple with the complexities of an ever-evolving business environment, this study stands poised to provide a panoramic view of the key trends that have driven and will continue to drive management practices into the future.[2] By understanding the forces that have underpinned these trends, we gain valuable insights that can inform strategic decision-making, drive innovation, and foster adaptability in the face of change. Through this exploration of futuristic management trends, this study serves as a guiding light for navigating the uncharted waters of tomorrow's business landscape.

Methods

A. *Selecting of data:*

In this study, a systematic approach was employed to select pertinent literature sources from the Scopus database, concentrating on futuristic trends in management spanning the years 2000 to 2023. The initial search formula, "Futuristic Trends" AND "Management" was refined to encompass English-language articles,

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conference papers, book chapters, and books. The refined formula incorporated criteria such as publication year, subject areas (Business, Management and Accounting and Decision-Making), and exclusions based on document type.This stringent selection process ensured the incorporation of top-quality and relevant materials for the study's scope, paving the way for an in-depth exploration of futuristic management trends during the specified timeframe.[6,7] The article selection process for this study is summarized in Fig.1. As a result, 15142 papers were meticulously identified and extracted in CSV format for subsequent analysis which are demonstrated in Fig. 2 and Table 1.

Fig.1. Article selection process for this study

Table 1: The top 10 countries or regions with publications related to Futuristic trends on Management

Distribution of Dataset by Document Type.			
S.no.	Type of Document	Count	Percentage
1	Article	8749	57.8 %
2	Conference Paper	4328	28.6 %
3	Book Chapter	1500	9.9 %
4	Book	565	3.7 %

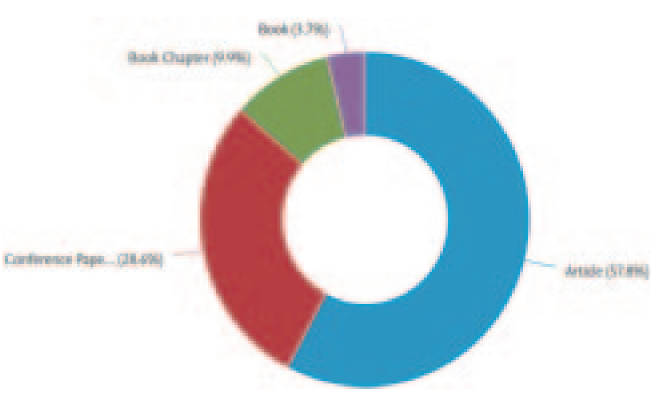

Fig. 2. Distribution of Dataset by Document Type

B. Data coding and Analysis:

For bibliometric analysis, the VOSViewer software was used to reveal network visualization of co-occurrence of the most used keywords, words used in abstracts, citation analyses and co-citation analyses in the articles.[7]

Findings

The result analysis provides valuable insights into the distribution of publications based on publication year, countries or regions, and top institutions. The bibliometric analysis was conducted using VOS viewer, a powerful tool for visualizing and analyzing bibliometric networks.[3,4] Let's delve into the key findings:

Distribution by publication year:

The analysis reveals a steady growth in the number of publications over the years, with the highest number of publications recorded in the year 2022 (1439 publications). The trend indicates a substantial interest and research activity in the field, which has continued over the subsequent years as shown in Fig.3.

Fig. 3. Distribution of Articles by Publication Year

Countries or Region:

The United States (USA) emerges as the leading contributor in terms of publications, with a significant count of 2800 publications. The China follows as the second highest contributor with 2361 publications, while UK, India, and Australia also demonstrate strong research output with 1330, 896, and 715publications, respectively. The top 10 countries or regions are dominated by major global players, indicating a widespread interest in the subject matter and a diverse geographical involvement in the research as shown in Table 2 and Fig. 4.

Table 2: The top 10 countries or regions with publications related to Futuristic trends on Management

Table Column Head		
S.No	Countries or Region	Count
1	United States	2800
2	China	2361
3	United Kingdom	1330
4	India	896
5	Australia	715
6	Germany	700
7	Russian Federation	620
8	Italy	570
9	Canada	457
10	Spain	414

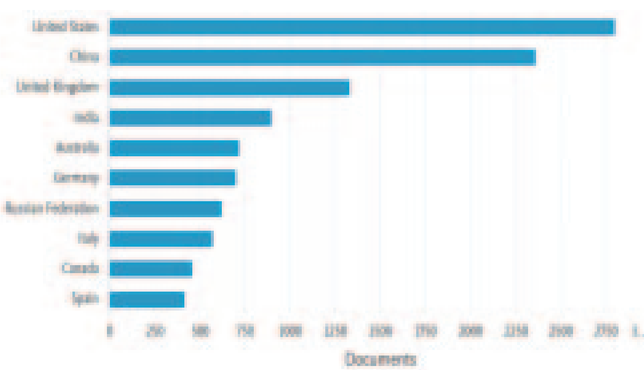

Fig. 4. Document by country or territory

Fig. 5. Abibliometric map created based on author keywords co-occurrence

Fig. 6. Interlinked nodes with Cluster 1 'Sustainability'

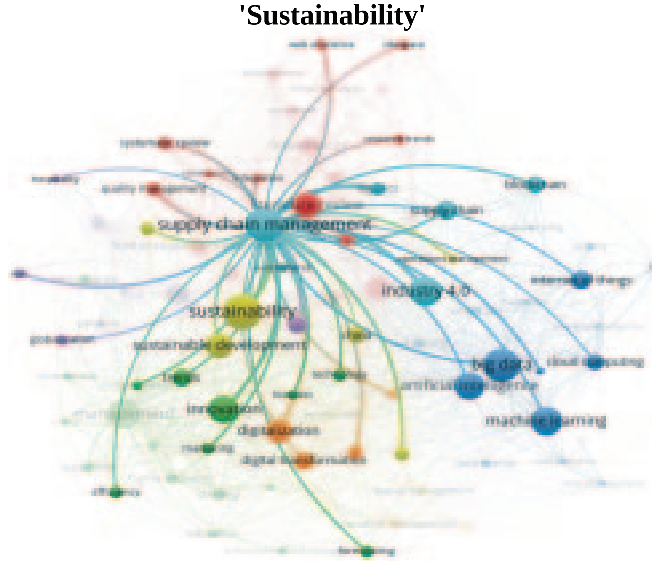

Fig. 7. Interlinked nodes with Cluster 2 'Supply Chain Management'

Bibliometric mapping analysis findings

In order to create a map based on text data for the most used keywords, co-occurrence analysis was used, and author keywords were selected. The minimum number of occurrences of a keyword was set as 20 and the number of keywords to be selected was automatically given as 85. The map created is illustrated in Fig.5. It shows there are Seven clusters, and the most used keyword is 'Sustainability' (f = 187), followed by 'Supply chain management' (f = 183). In addition, it is revealed for Cluster 1 'Sustainability'and Cluster 2 'Supply chain management' that 'Big data' (f = 173), 'Industry 4.0' (f = 146), 'Machine Learning' (f = 143), 'Digitalization' (f = 108) and 'Internet of Things' (f = 81) are the most used keywords as shown in Fig.6 and Fig.7.

Conclusion

Considering the detailed analysis presented, it is evident that the study of futuristic trends in management is a dynamic and vital area of inquiry. The analysis of publication distribution over the years reveals a consistent and substantial growth, signifying a sustained interest and research vigor within this domain. The global landscape is engaged, as reflected by the leading contributions from prominent players such as the United States, China, the United Kingdom, India, and Australia. These findings underscore the widespread interest and diverse geographic involvement in the exploration of futuristic management paradigms. Furthermore, the insights obtained through bibliometric mapping analysis shed light on the central concepts that define the landscape, with keywords like 'Sustainability,' 'Supply chain management,' 'Big data,' 'Industry 4.0,' 'Machine Learning,' 'Digitalization,' and 'Internet of Things' taking the forefront. As these trends continue to shape the trajectory of management practices, this study offers valuable guidance to decision-makers navigating the evolving business environment, ensuring that they remain equipped with the insights necessary to steer their organizations into the future.[1,2]

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Anti-Substance Advertisementsand its impact on Users

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Abstract

Smoking is considered as a burning issue of today's time especially due to its widespread use despite compelling proof on the health hazards. Smoking has also significantly increased in the past 10 years among youth as they are more vulnerable to peer and societal pressure. Anti-smoking advertisements (e.g. print based ads on cigarette packets, media ads in television, etc.) rely heavily on emotional reasoning to persuade people not to smoke, but the effect of anti-smoking advertisements on smokers is yet to be understood. Hence, aim of this research is to find out the influence of anti-smoking advertisements on smokers. To achieve this aim, our objectives assessed were the role of anti-smoking advertisements on quit attempts made in the past, reduction in smoking habits and willingness of an individual to quit smoking.

Introduction

One of the most prevalent reason of deaths across the world leading to dangerous diseases like cancer and premature death is tobacco[1]. Tobacco can be consumed in different forms, such as with or without smoke. In America, Asia, Australia and Asia, tobacco is mainly consumed in the form of Hookah, vapor, cigarettes and cigars[2]. Cigarette smoking is one of the major forms of tobacco consumption in the world. Compared to other forms of tobacco, cigarettes contain the most carcinogens. Hence, it is regarded as the most dangerous type of tobacco since it leads to passive smoking as well[3]. Tobacco use has many health effects such as heart disease, heart stroke, death from cancer and others[4]. Smoking cessation depends on various social and personal factors. Several attempts are made by smokers to quit smoking, but eventually fail to abstain from smoking[5].

Review of Literature

The economic and health costs of smoking have led to a significant amount of research to identify smoking reduction, prevention and cessation methods[6,7,8]. Smoking remains prevalent in North America and is increasing in other parts of the world too. Currently, approximately 46.2 million Americans and 5.4 million Canadians smoke, with the majority of smokers in the "young adult" group (18-24)[9]. Therefore, it is very important to increase our understanding on the factors that may contribute to smoking reduction or cessation among young adults. Research on the effectiveness of antismoking advertisements has focused on type of message and recipient characteristics- e.g., differences in levels of fear arousal (high/low), fear type(physical/social, short-term/ long-term), message format, smoking status and gender[6,7,10]. There is little evidence that non-converts (eg, smokers) evaluate fear-based messages by assessing consequences, while converts (eg, non-smokers) are influenced by appeals that elicit high fear[11]. Anecdotal evidence collected through focus groups and in-depth interviews indicates that nonsmokers take more extreme positions after exposure to antismoking messages and are motivated to engage smokers in cautionary discussions[12,13,14]. Such conversations may enhance or moderate the immediate effects of health communication by influencing smokers' discounting or responsivity. Whether such interventions strengthen or weaken the original message and variations in persuasion based on the source of such interventions are aspects that have not been sufficiently studied.

Peer and opinion leader influence have ensured continued interest in research on negative behaviors (e.g. tobacco use, sexual activity) especially in relation to peer pressure[15,16] and advocacy[17]. Research shows that group has a strong influence on negative behaviors such as alcohol[18,19], smokeless tobacco[20] and drugs[21] and can be key in anti-smoking campaigns. Generally, peer effects have been studied for their negative effects on other group members[16], but positive effects may be possible as well[13,22,21]. Positive effect based on social influence can strengthen mass media communication by generating debate about antismoking messages.

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Influence on Parents

According to[23], conceptualization of norms hashappened from a variety of theoretical perspectives in a variety of fields.Injunctive norms mirror people's impression of what ways of behavior get endorsement or dissatisfaction from persuading others, while individual normalludes to a person's own endorsement/ dissatisfaction with regards to specific ways of behavior[24]. Norms stand out from other theory-based constructs like attitudes since they emphasize on approval or disapproval of behavior as opposed to evaluationof those behaviors[24]. One could, for instance, think it is exciting to drink alcohol, but, disapprove.

Empirical studies disclose that various types of norms have unrestrained effects on the desire to use substances. [25]identified that personal norm of anti-substance consumptionresulted in lower recent and lifetime substance use, thus reducing the desire to consume or to accept offers of substance.

Substance specific prevention

Communication on substance use prevention plays a crucial role in an individuals' substance use pattern apart from parental injunctive norm[26,27,28]. For example, parent & child discussion about anti-tobacco use and tobacco abstinence was observed very effective in avoiding initiation of smoking among adolescents[29]. Some significant contributions have been made by family scholars towards enhancing our knowledge on parent-child communication regarding use of substances and its effect on an individuals' substance consumption behavior.

Materials and Methods

Method:

The research methodology used in this study was exploratory cum descriptive in nature. Both primary data & secondary data have been used to conduct this study. Secondary data was mainly in the form of online literature, research journals, etc. whereas primary data was collected from survey. Judgmental sampling and convenience sampling techniques were used to select the participants in the study.

Sample:

The survey was carried out in the form of questionnaire and conducted at Technologies company. In order to ensure that the respondent decodes the questions in the way the researcher intended, clarity of the questionnaire structure was a dominant factor. The questionnaire was sent out via e-mailto known contacts of the researcher which resulted in the sample size of 104 individuals. Participation was voluntary and the questions were designed in English. The response rate was 82% and the sample represented both youth and adults.

Measurement:

Respondents completed self-administered questionnaire which ensured anonymity. Role of anti-smoking advertisements was measured with item "How much role has anti-smoking advertisement played" and the response categories were 1 = very low, 2 = low, 3 = somewhat, 4 = high, and 5 = very high

Participants and Procedures:

The survey data was collected from Technologies company during October to February period. A total of 104 individualscompleted the survey via Google forms which were sent to their personal email ids.

Statistical Analysis:

The survey data obtained were analyzed using SPSS software (Version 22.0). Cronbach's alpha test was used to check the internal consistency of questionnaire. Chi squared test was used to compare the observed output with expected output and Probability value (P) <= 0.05 was considered statistically significant.

Results

The research objectives aimed to determine the influence of anti-smoking advertisements on smokers are: (1) the role of anti-smoking advertisements on quit attempts made in the past one year; (2) the role of anti-smoking advertisements on reduction in smoking habits; and (3) the role of anti-smoking advertisements on willingness of an individual to quit smoking.

Reliability Test

Reliability Statistics

Table 1: Cronbach's alpha reliability test

Cronbach's Alpha	N of Items
.734	24

Cronbach's alpha: 0.734, which indicates a high level of internal consistency for our scale.

Age:

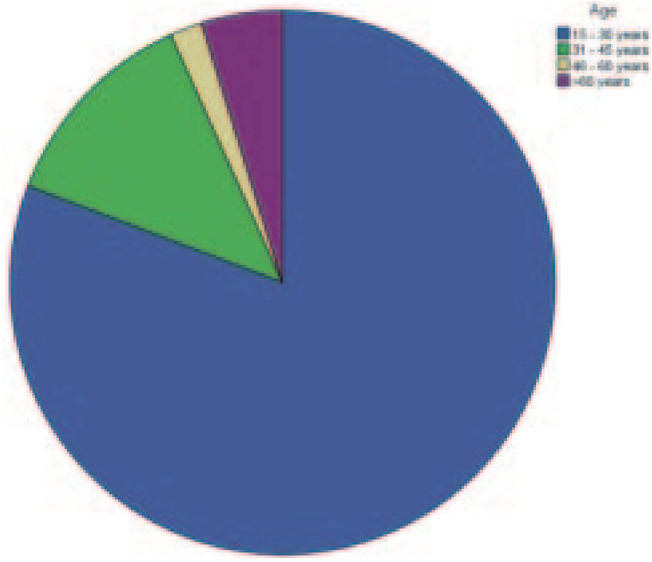

Figure 2 Pie chart depicting the age group of respondents

Changes among youth:

Table 2: Changes Among Youths Aged 15 to 30 Years in Cigarette Use Cognitions and Behavior

Outcome	Month					Change[a] From October to March (95% CI)
	Oct	Nov	Dec	Jan	Feb	
All youths, %						
Lifetime use of cigarette	23.6	24.8	25.5	23.7	23.5	-0.1 (-2.9, 2.8)
Past-year use of cigarette	17.1	16.9	17.7	17.4	16.7	-0.4 (-2.6, 1.9)
Past-month use of cigarette	7.8	8.6	9.6	8.5	8.2	0.4 (-1.4, 2.2)

Note: CI = confidence interval [a]Percentage-point change. *P < .05

Youth reported significant exposure to Anti-smoking advertisements. 74% respondents who have seen the warning in cigarette packs were unable to recall the space used for written warning and around 70% respondents were unable to recall the written warning message printed on cigarette pack, while 73% respondents who have seen warning were able to recall the pictorial warning on cigarette packs. Significant increase in anti-smoking beliefs were not accompanied by similar gains in desire of not to consume or self-efficacy (Table 2).

Role of anti-smoking advertisements on quit attempts:

Have you made quit attempts in the past one year? * How much role has anti-smoking advertisement played? Cross tabulation Count

Table 3: Cross-tabulation to find out the role of anti-smoking advertisements on quit attempts

		How much role has anti-smoking advertisement played?					Total
		Very Low	Low	Somewhat	High	Very high	
Have you made quit attempts in the past one year?	No	6	14	15	5	2	42
	Yes	9	13	13	23	4	62
	Total	15	27	28	28	6	104

Chi-Square test was conducted for the test of association between quit attempts and the role of anti-smoking advertisements:

Hypothesis:

H_0: There is no association between the quit attempts and the role of anti-smoking advertisements

H_1: There is an association between the quit attempts and the role of anti-smoking advertisements

Table 4 Chi-Square Test

	Value	df	Asymp.Sig. (2-sided)
Pearson Chi-Square	9.524[a]	4	.049
Likelihood Ratio	10.133	4	.038
Linear-by-Linear Association	3.102	1	.078
N of Valid Cases	104		

a. 2 cells (20.0%) have expected count less than 5. The minimum expected count is 2.42.
Significance value: .049

A significance value of 0.049 which is less than 0.05 (P<=0.05) indicates that role of anti-smoking advertisements was significant in smoking quit attempts. We reject the null hypothesis and accept the alternative hypothesis to conclude thatthere is strong evidence that quit attempts and role of anti-smoking advertisements are associated.

Role of anti-smoking advertisements on reduction in smoking:

Have you reduced smoking in the past one year? * How much role has anti-smoking advertisement played? Crosstabulation

Table 5: Cross-tabulationto find out the role of anti-smoking advertisements on reduction in smoking

Count

		How much role has anti-smoking advertisement played?					Total
		Very Low	Low	Somewhat	High	Very high	
Have you reduced smoking in the past one year?	No	2	2	15	19	3	41
	Yes	6	17	16	18	6	63
	Total	8	19	31	37	9	104

Hypothesis:

H_0: There is no association between reduction in smoking and the role of anti-smoking advertisements

H_1: There is an association between reduction in smoking and the role of anti-smoking advertisements

Table 6: Chi-Square Test

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	10.728[a]	4	.030
Likelihood Ratio	12.035	4	.017
Linear-by-Linear Association	4.264	1	.039
N of Valid Cases	104		

a. 3 cells (30.0%) have expected count less than 5. The minimum expected count is 3.15.
Significance value: .030

A significance value of 0.03 which is less than 0.05 (P<=0.05) indicates that role of anti-smoking advertisements was significant in change in smoking habits. We reject the null hypothesis and accept the alternative hypothesis to conclude thatthere is strong evidence that reduction in smoking and role of anti-smoking advertisements are associated.

Role of anti-smoking advertisements on the intent to quit smoking:

Do you wish to quit smoking? * How much role has anti-smoking advertisement played? Cross tabulation

Table 7: Cross tab to find out the role of anti-smoking advertisements on the intent to quit smoking

Count

		How much role has anti-smoking advertisement played?					Total
		Very Low	Low	Somewhat	High	Very high	
Do you wish to quit smoking?	No	0	2	6	14	2	24
	Yes	10	18	24	22	6	80
	Total	10	20	30	36	8	104

Hypothesis:

H_0: There is no association between the intent to quit smoking and the role of anti-smoking advertisements.

H_1: There is an association between the intent to quit smoking and the role of anti-smoking advertisements.

Table 8: Chi-Square Test

	Value	df	Asymp.Sig. (2-sided)
Pearson Chi-Square	10.174[a]	4	.038
Likelihood Ratio	12.224	4	.016
Linear-by-Linear Association	7.714	1	.005
N of Valid Cases	104		

a. 3 cells (30.0%) have expected count less than 5.
The minimum expected count is 1.85.
Significance value: .038

A significance value of 0.038 which is less than 0.05 (P<=0.05) indicates that role of anti-smoking advertisements was significant in the intent to quit smoking. We reject the null hypothesis and accept the alternative hypothesis to conclude that there is strong evidence that desire to quit smoking and role of anti-smoking advertisements are associated.

Findings & Conclusion

Majority of people who have made attempts to quit smoking in the past one year believe that anti-smoking advertisements have played a critical role. Similar association of anti-smoking advertisements have been derived for people who wish to quit smoking or have reduced smoking. Even after mass awareness campaigns on the negative impacts of smoking via print and electronic media, 34% of population were unaffected which shows the precedence of addiction over potential health impact. Another important finding is that though 76% population showed the intent to quit smoking getting influenced by anti-smoking advertisements, however only 60% have been successful in either quit attempts or reduction in consumption, which further highlights the need to increase the effectiveness of anti-smoking advertisements. The focus of the research is to extend work on warnings to an experimental paradigm incorporating advertisements for reducing the number of smokers and on advertising appeals that create different levels of fear arousal and increase the effectiveness of anti-smoking messages, along with the effects of peers and individual factors in mediating the effectiveness of such messages. The study also wishes to imply that while many smokers have reduced or attempted to quit smoking in the past one year, but in no way, it means that status quo is maintained. There is always an element of relapse observed which should be studied deeply along with the reasons for such relapse which overpowers human mind even after understanding the ill effects of smoking and more importantly having the willingness to quit.

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An Examination of The Relationship Between Adolescents' Career Maturity and Their Home Environment

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Abstract

The current research undertook an exploration of the relation between adolescents' maturity for careers and the environments of their homes. Utilizing a descriptive survey approach, data was sourced from Dr. Nirmala Gupta's Career Maturity Inventory (CMI) (2013) and Karuna Shankar Mishra's Environment Inventory (2020). A sample group of 200 eleventh-grade students from Lucknow schools, evenly split between males and females, was chosen using simple random sampling method. To determine correlations and compare group means, both correlation techniques and t-tests were employed. The primary outcomes were suggests that gender does not play a distinguishing role in an adolescent's career maturity.Similarly, the home environment for male and female adolescents doesn't differ significantly.Interestingly, there isn't a significant relation between an adolescent's career maturity and their home environmentThese findings emphasize that the evolution of adolescents' career paths isn't solely their own responsibility. The home environment plays a pivotal role in molding adolescents' objectives and aptitude for problem-solving. By updating parents on the latest career possibilities and various routes, counselors can provide invaluable assistance.

Introduction

During their teenage years, young people are actively shaping their future professions, and choosing a career path becomes a crucial challenge to tackle (as per Creed *et al.*, 2007:379). Super's theory from 1957 on one's self-perception suggests that an individual must attain a certain level of self-awareness and preparedness, termed "career maturity", to effectively select a profession. But with the evolving job landscape due to global competition and technological shifts, there's an urgent need for adolescents to reassess their self-perception in relation to their job aspirations.

The concept of career maturity is pivotal for teenagers to judiciously decide on a profession, seeing it as a continuous journey of growth. A high level of career maturity, paired with a robust support structure, is a strong indicator of one's capability to make informed career decisions, believe in their professional abilities, and set realistic job-related goals (as noted by Conkel-Ziebell, 2010).

The home environment plays a pivotal role in shaping behavior within the family unit. Despite the many changes in Indian society's structure in recent times, the family remains a cornerstone of a child's social interactions. During the formative years, family members are often the most influential figures in a child's life. It's within this familial setting that the foundation for behavior, attitudes, and ultimately, personality and intellectual growth is laid. The family provides emotional and physical security, catering to both tangible and psychological needs. It offers guidance during challenging times and fulfills the desires and instincts of its younger members. Moreover, the family is a reservoir of affection, care, and companionship.

Need of The Study

Selecting a career is a pivotal decision that significantly shapes a person's future. For most, career progression is a continuous journey of navigating the employment realm, making choices from the opportunities presented. Similarly, as lack of timely interventions can hinder physical and intellectual growth, the organic evolution of vocational growth can be impeded without systematic and well-planned support.Hence, picking a career isn't purely a logical exercise of evaluating various options. Decisions often result from the interplay between career readiness and various socio-psychological elements. The intricate mix of these elements determines an individual's preparedness to tackle tasks related to distinct career development stages. These influences can vary across cultures, races, and genders, being shaped by specific psychological, educational, and demographic

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determinants. This research, therefore, was initiated to explore how adolescent'scareer maturitycorrelateswith home environment and gender.

Review of Related Literature

Salami (2008) explored the relationship between identity status and career maturity among secondary school students. Suman Kumari Katoch (2017) Based on Super's theory of career behavior development, this study evaluated the career maturity of senior secondary school students in Mandi district. Results indicated no significant differences in career maturity based on gender, locality, or type of school Identity status significantly predicted career maturity, but gender did not. Zakaria *et al.* (2013) studied the effects of gender on career maturity levels of counseling students of a public university of Malaysia. Results indicated higher career maturity in female participants in comparison to their male counterparts. The significant role of gender on one's career maturity was supported by the results of this study. A study by Lohita & Satsangi (2013) focused on the relationship between career maturity and the family setting for senior secondary students. Their findings highlighted a significant link between the two. Bradley (1985) asserted that the home environment typically has a more pronounced impact on cognitive growth, which in turn contributes to enhanced career maturity. Singh (2020) The study's outcomes indicated that factors like gender, geographical location, and the nature of the school they attended did not show significant variations in their career maturity levels. Badola (2013) Indicated that the aspects of the home environment, such as control, protectiveness, social isolation, deprivation of privileges, and rejection, have notable differences in their impact on career decision readiness. Heo (2009) who examined that while parental guidance can be beneficial in fostering self-confidence and constructive career contemplation for adolescents, it can also hinder their career development if it's seen as too intrusive or dominant. Therefore, it's crucial for parents to strike a balance, offering support and information while also respecting their children's autonomy and individual decision-making abilities.

Objectives

1. To find out gender differences in Career Maturity of adolescents.
2. To find out gender differences in Home Environmentof adolescents.
3. To find out the correlation between Career Maturity and home environment of adolescents.

Hypotheses of The Study

1. There is no significant difference in Career Maturity between male and female of adolescents.
2. There is no significant difference in Home Environment between male and female of adolescents.
3. There is no significant relation between Career Maturity and the home environment of adolescents.

Population

Population of the study includes the students of government and private senior secondary schools of U.P Board, Lucknow district, U.P.

Sample of The Study

For this study, our target group consisted of Eleventh grade students from secondary schools in Lucknow District. From this group, we randomly selected a sample of 200 students, balanced in gender with 100 boys and 100 girls, from Govt. and private schools.

Sampling Procedure

Considering the nature of the study, random sampling method was employed to select participants the sample consisted of 200 students (100 boys and 100 girls) of 11th class studying in govt. and private schools of Lucknow city.

Method of Study

In this research, the current study was conducted by usingnormative survey approach.

Tools Used

The subsequent instruments were employed to gather data for evaluating the variables under investigation in the study.

Career Maturity: Career Maturity Inventory (CMI) by Dr. Nirmala Gupta (2013) Department of Education Psychology Counselling and Guidance, N.C.E.R.T., NewDelhi

Home Environment: Home Environment Inventory by Karuna Shankar Mishra (2020) Professor & Head Department of Education Allahabad University Prayagraj (U.P.)

Statistical Techniques

Data was amassed quantitatively from the chosen subset of the population using specific instruments. To interpret this data, we employed statistical methods such as Mean, Standard Deviation, t'-test, the Correlation Coefficient.

Analysis and Interpretation

Research Objective-1: To find out gender differences in Career Maturity of adolescents.

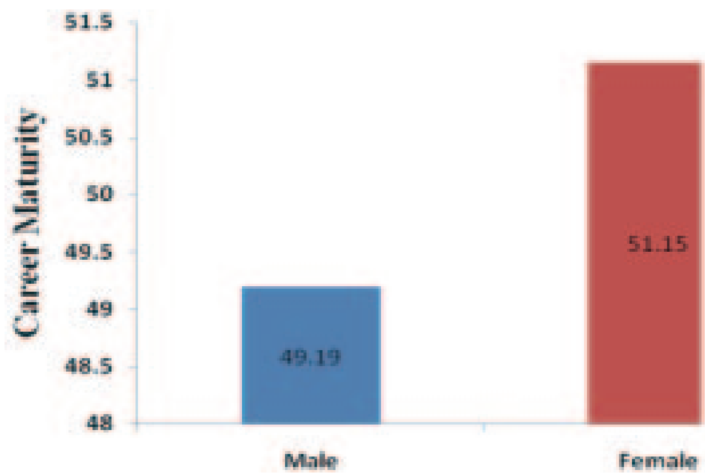
H01: There is no significant difference in Career Maturity between male and female of adolescents.

Table-1: Comparison of Mean scores of the Career Maturity of male and female adolescent

Variable	Gender	N	Mean	S.D	df	Calculated 't'-Value	Significance
Career Maturity	Male	100	49.19	13.154	198	-1.079	Not Significant
	Female	100	51.15	12.520			at 0.05 level

Interpretation

It is clear the table no. 1 that the mean score of the male adolescent on the variable 'Career maturity' is 49.19 and S.D. is 13.154, while the mean score of the female adolescent is 51.15 and S.D. is 12.520. When these two means were put to t-test to know the significance of difference between them, the calculated 't' value was found as -1.078, which is insignificant at .05 level of significance and 198 degree of freedom. Therefore, null hypothesis is accepted and it may be concluded that there is no significant difference inCareer maturity of male and female adolescents.



Graphical representation of Mean scores of Career Maturity of Male and Female

Research Objective-2: To find out gender differences in Home Environment of adolescents.

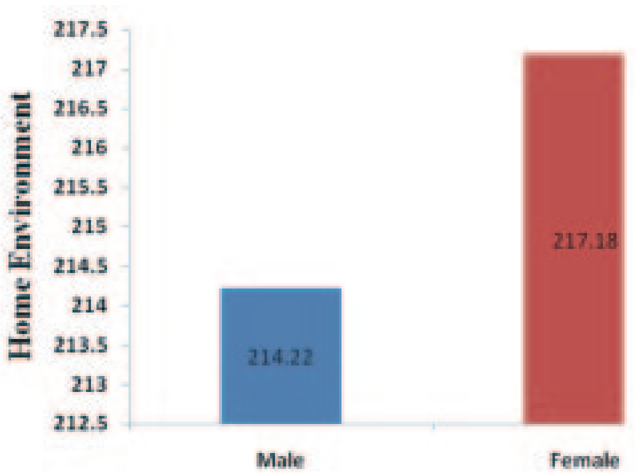
H02: There is no significant difference in Home Environment between male and female of adolescents

Table-2: Comparison of Mean scores of the Home Environment of male and female adolescents

Variable	Gender	N	Mean	S.D	df	t-Value	Significance
Home	Male	100	214.22	38.05	198	-.558	Not Significant
Environment	Female	100	217.18	36.99			at 0.05 level

Interpretation

It is clear the table no. 2 that the mean score of the male adolescent on the variable 'Home Environment' is 214.22 and S.D. is 38.05 while the mean score of the female adolescent is 217.18 and S.D. is 217.18. When these two means were put to t-test to know the significance of difference between them, the calculated 't' value was found as -.558, which is insignificant at .05 level of significance and 198 degree of freedom. Therefore, null hypothesis is accepted and it may be concluded that there is no significant difference in Home Environment of male and female adolescents.



Graphical representation of Mean scores of Home Environment of male and female

Research Objective-3: To find out the correlation between Career Maturity and home environment of adolescents.

H03: There is no significant relation between Career Maturity and the home environment of adolescents.

Table-3: Shows the r value between Career Maturity and Home Environment of adolescents

Variable	Career Maturity	Home Environment	Significant
Career Maturity	1	. 019	Not significant
Home Environment	.019	1	at 0.05 level

df=100-2=198

Interpretation

Table 3 indicates that the value of Pearson correlation coefficient (r) is .019 which is lesser than table value of (r) at 0.05 level of significance at 198 degree of freedom *i.e.* .019. Hence the hypothesis that there is no significant relation between career maturity and home environment of adolescentsis not rejected. This weak correlation suggests that, within the sample studied, changes in one variable are barely associated with changes in the other. If the coefficient is statistically non-significant when compared to the table value, it implies that the observed correlation could have arisen by chance.

Findings

The findings of the study lead to the conclusion that:

- The study revealed no significant difference in career maturity between male and female adolescents.
- The research also indicated no significant difference in the home environment of male and female adolescents.
- There is no significant relation between career maturity and home environment of adolescents.

Conclusions

In conclusion, the research emphasizes that gender doesn't delineate career maturity and the type of home environment in adolescents. Moreover, while home environments are foundational to an adolescent's upbringing, they might not be the primary determinant of their career maturity. Career maturity might be influenced by various factors, such as individual ambition, educational experiences, peer influence, and more. The home environment might play a role but might not be the predominant factor for all individuals.

The study has shown that when it comes to preparedness for their future careers, male and female adolescents are on equal footing. This suggests that gender does not play a distinguishing role in an adolescent's career maturity.Similarly, the home environment for male and female adolescents doesn't differ significantly. This implies that both genders experience similar influences at home. Interestingly, there isn't a significant link between an adolescent's career maturity and their home environment. This indicates that while home surroundings are essential for many aspects of development, they may not directly influence one's readiness or maturity concerning careers.

Since, the importance of the home environment in shaping adolescents' goal selection and problem-solving skills. Counselors can play a crucial role in this by educating parents on current career opportunities and various paths. This knowledge can empower parents to guide their children without pressuring them, allowing the youngsters to make independent choices and face challenges effectively.

Acknowledgement

The researcher is very grateful to her supervisor Dr. Azkiya Waris for giving her valuable suggestions and overall guidance whenever needed to complete the research paper. I also pay my sincere thanks to all my seniors. Researcher is also very thankful of faculty members of doctoral studies and research, Integral University, Lucknow for providing me the manuscript

communication Number-IU/R&D/2023-MCN0002256 which gives an authentication to my research paper.

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Case Reports using continuous glucose monitoring: Analysis for application of digitalization in management of diabetes mellitus

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Abstract

Diabetes has emerged as a burgeoning health challenge in the last two decades. To be specific, there is an alarming rate of adult-onset diabetes mellitus, which is a point of high concern. Therefore, cohesive steps are essential for the management of symptoms of diabetes mellitus in order to regulate its prevalence rate globally. Continuous glucose monitoring (CGM) technology can aid in this effort by allowing for safe therapy intensification with HbA1c (haemoglobin-a1c) reduction and by assisting in the lowering of some of the psychosocial impacts of diabetes. We aim to analyse the application of digital device, Freestyle Libre Pro, in management of diabetes mellitus. Using Free Style Libre Pro CGM system, we analyzed the datasets for eight patients over a duration of 14 days. Regular 12-hour data was monitored on a fortnight basis. Out of the eight cases, two patients were on insulin and rest were administered oral medications for diabetes care. Ambulatory Glucose Profiles, Average Glucose Levels, Time in Range, Time Below Range, Time Above Range, and afterwards calculation of HbA1c levels were determined for eight patients using the Free Style Libre Pro system's current glucose measurements. We observed that for four patients, the average glucose levels were maintained in range and for four patients the average glucose levels were above range. In terms of Time above range, four were above range and four were in range. Our analysis shows that the Freestyle Libre Pro offers an alternative to current CGM devices for professional use as it may aid clinics as well as patients.

Introduction

Globally, 422 million people have been inflicted with diabetes mellitus, which is anticipated to overtake homicide as the seventh leading cause of mortality, if current morbidity trends continue. The BG levels in diabetic patients can vary greatly during the entire course of the day, and this can result in serious complications like kidney disease, strokes, cardiac failures, hypertension, loss of vision, and coma[2,3]. The abnormal concentration of BG is produced as a result of lack of insulin secretion (type I diabetes, T1D) or by defective insulin secretion and activity (type 2 diabetes,T2D). However, in both the scenarios of type 1 and type 2 diabetes, abnormal BG levels could be finely controlled byinsulin. For T2D and T1D patients, the BG concentration should be measured at least twice a day and four times a day, respectively, along with a combinational therapy that includes medication, exogenous insulin administration, food, and physical exercise. With the introduction of glucose sensors, the patients can now, keep a track of their blood glucose levels themselves, in order to control their insulin levels and reduce their risk of developing diabetes mellitus. Electrochemical glucose sensors are the main component of conventional glucose detection devices.

Diabetes Ranges and Profiles

Normal fasting blood glucose concentrations are estimated to be between 70 mg/dL (3.9 mmol/L) and 100 mg/dL (5.6 mmol/L). When fasting blood glucose levels range from 100 to 125 mg/dL (5.6 to 6.9 mmol/L), lifestyle adjustments and glycaemic monitoring are advised. Diabetes is diagnosed when fasting blood glucose levels are 126 mg/dL (7 mmol/L) or greater on two independent tests. Low fasting blood glucose concentration (hypoglycemia)- less than 70 mg/dL (3.9 mmol/L)- causes dizziness, sweating, palpitations, blurred vision, and other symptoms that must be monitored. Hyperglycemia (high fasting blood glucose concentration) is a sign of an increased risk of diabetes. Fasting blood plasma glucose (FPG) levels in an individual may be normal because the individual is not diabetic or because of efficient therapy with glucose-lowering medication in diabetics. At the

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national level, mean FPG is used as a proxy for both the promotion of healthy diets and behaviours and the treatment of diabetes.

Type 1 diabetes (also known as juvenile diabetes with β-cell destruction, usually leading to absolute insulin deficiency)

Type 2 diabetes

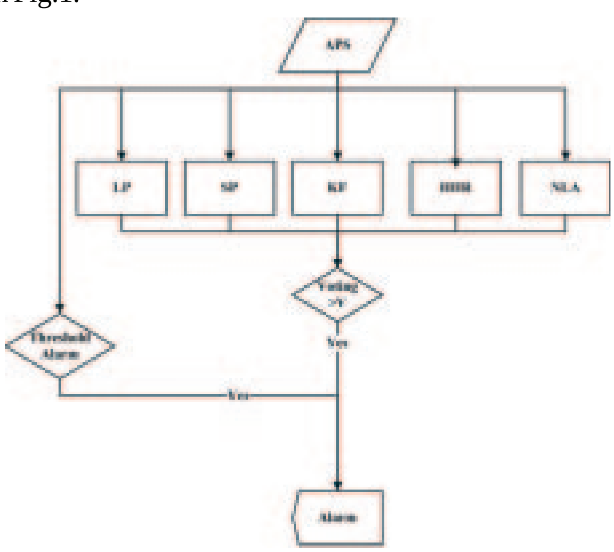
Other specific types of diabetes

1. Genetic defects of the β-cell.
2. Genetic flaws in insulin action-
3. Diseases of the exocrine pancreas-
4. Drug- or chemical-induced diabetes-
5. Gestational diabetes mellitus-

Glucose management indicator

With the increasing availability of CGM, the mean glucose and TIR may be easily calculated. From the mean glucose, an estimate of the expected A1C may be calculated, which is now known as the Glucose Management Indicator (GMI) to emphasise that it is not a direct A1C test. This GMI, which is incorporated in Clarity and other software, provides a critical input that may be obtained with just a few days of CGM readings, eliminating the need to wait three months for a direct measurement of A1C.

A new advanced algorithm that detects pending hypoglycemia and then suspends basal insulin delivery is also introduced in the market known as hypoglycemia prediction algorithm (HPA). This approach can provide a solution to the problem of nocturnal hypoglycemia, a major concern of patients with diabetes. This device runs with programmed algorithm and alarm system, as shown in Fig.1.



The study aims to assess the Freestyle Libre Pro device impact on blood glucose control, and its ability to monitor and manage diabetes.

Objectives

1. To evaluate the accuracy and reliability of the Freestyle Libre Pro device in measuring blood glucose levels compared to traditional methods of monitoring.
2. To assess the impact of using the Freestyle Libre Pro device on patients' blood glucose control and their ability to manage their diabetes.

Methodology

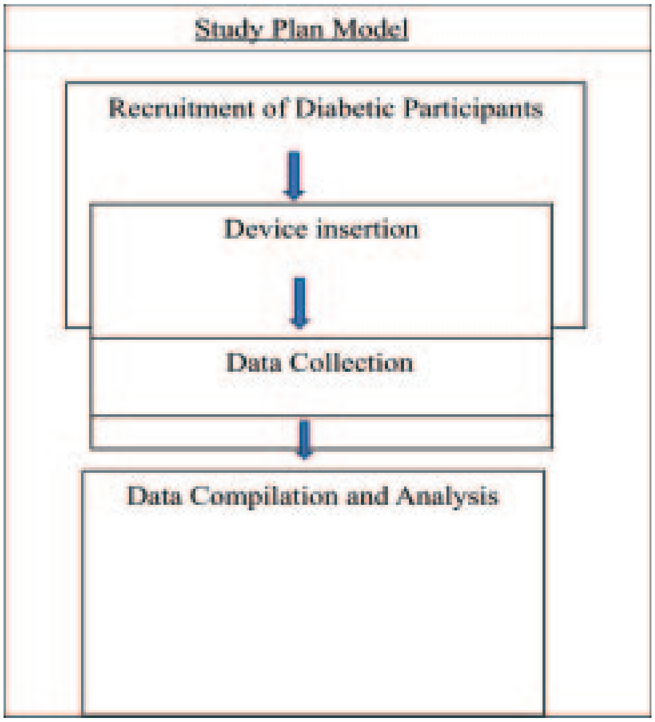
Study setting: Using Free Style Libre Pro CGM system, we analyzed the datasets for eight patients selected randomly suffering from diabetes mellitus. We monitor them over a duration of 14 days regularly, 12-hour data was monitored on a fortnight basis. Out of the eight cases, two patients were on insulin and rest were administered oral medications for diabetes care. Ambulatory Glucose Profiles, Average Glucose Levels, Time in Range, Time Below Range, Time Above Range, and afterwards calculation of HbA1c levels were determined for eight patients using the Free Style Libre Pro system's current glucose measurements.

Device: The Freestyle Libre Pro measures the levels of interstitial fluid glucose using subcutaneous, linked enzyme glucose sensing technology[48]. Values are stored for 15 minutes and are measured automatically every minute. When a glucose reading is required, the Libre Reader is put close to the sensor. The reading device will then show the eight-hour glucose history, along with the glucose level right now, a trend graph, and a trend arrow. The direction and speed of the patient's current glucose level are shown by the arrow. Patients do not need to calibrate this technology using blood sample glucose meter data because it is factory calibrated.

Data collection: Standardised continuous glucose monitoring (CGM) metrics for clinical care:

- CGM wear time - recommend 14 days minimum
- Percentage time for which CGM is active - recommended time 70% of data from 14 days
- Mean glucose
- Glucose management indicator (GMI)
- Percentage Time Above Range(TAR)>13.9 mmol/L
- Percentage Time Above Range (TAR) 10.1-13.9 mmol/L

- Percentage Time in Range (TIR) 3.9-10.0 mmol/L
- Percentage Time Below Range (TBR) 3.0-3.8 mmol/L
- Percentage Time Below Range (TBR)



Outcomes: The Freestyle Libre Pro competes with CGM substitutes. It promotes user friendliness and raises clinic income. Thanks to the Freestyle Libre for personal use, patients now have another way to check their blood sugar levels. It can take the place of a glucose meter and reduce the number of finger sticks required to get glucose readings, giving patients access to that data whenever they need it. It may not be appropriate for everyone, but it will give patients and medical providers another choice.

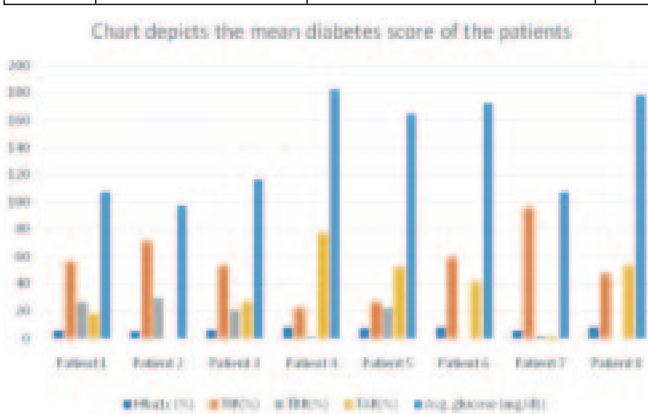
Results

Using Free Style Libre Pro CGM system, we analyzed the datasets for eight patients over a duration of 14 days. Regular 12-hour data was monitored on a fortnight basis. Out of the eight cases, two patients were on insulin and rest were administered oral medications for diabetes care.

Ambulatory Glucose Profiles, Average Glucose Levels, Time in Range, Time Below Range, Time Above Range, and afterwards calculation of HbA1c levels were determined for eight patients using the Free Style Libre Pro system's current glucose measurements (supplementary data).

Table 1: The data in this table depicts the diabetic score of the enrolled participants over the 14 days

S.no.	RFNO	Estimated hbA1c	TIR%	TBR%	TAR%	Avg glucose
1.	PID-001	5.4 %	56 %	26 %	18 %	107 mg/dL
2.	PID-002	5.0 %	71 %	29 %	0 %	97 mg/dL
3.	PID-003	5.7 %	53 %	20 %	27 %	116 mg/dL
4.	PID-004	8.0 %	22 %	1 %	77 %	182 mg/dL
5.	PID-005	7.3 %	26 %	22 %	52 %	164 mg/dL
6.	PID-006	7.6 %	59 %	0 %	41 %	172 mg/dL
7.	PID-007	5.4 %	96 %	2 %	2 %	107 mg/dL
8.	PID-008	7.8 %	47 %	0 %	53 %	178 mg/dL



We observed that for four patients, the average glucose levels were maintained in range and for four patients the average glucose levels were above range. In terms of Time above range, four were above range and four were in range.

Therefore, using CGM in place of or in addition to self-measured blood glucose levels can be helpful in reducing self-measured blood glucose inaccuracies caused by human error, physiological discrepancies, medication interference, or extreme environmental conditions, and may be thought to be more tolerable by patients and research participants.

Discussion

To determine similar values for Time in Range (TIR), Beck *et al.*[50] had examined central laboratory assessments of HbA1c in persons with type 1 diabetes.

- A TIR of 70% is similar to a HbA1c of 53 mmol/mol (7.0%), according to their research.
- A 50% TIR, which corresponds to a HbA1c of 64 mmol/mol (8.0%).

Additional research by the same team supported the association between TIR and the advancement of diabetic retinopathy and development of microalbuminuria in individuals with diabetes. Consequently, this implies the following:

- More issues are observed when less time is spent in the target range.
- There is a greater risk ratio for a 64% rise in retinopathy for every 10% drop in TIR.

Therefore, continuous glucose monitoring throughout a cycle of 14 days may be able to explain and present the information in this way, as well as guide patients and physicians down a new route for optimal diabetes care.

Metrics of glucose control

In order to foresee and develop future strategy, it is useful to look at both past and present practice and measures. People with diabetes are also conditioned by these practices after using HbA1c for years to determine how well their blood glucose is being managed. Clinicians and CGM research have long utilized HbA1c as their main focus and goal parameter. This recognizes the established relationship between increasing HbA1c levels and the onset of chronic issues.

HbA1c measures the average glucose level over the previous 60-90 days, however it cannot measure the frequency or severity of hypoglycemic episodes[50]. Moreover, the accuracy and usefulness of the test are compromised by other medical diseases include haemoglobinopathies, iron insufficiency, pregnancy, and chronic renal disease. Despite this, HbA1c will continue to be used in clinical practice because it is the only measure for risk of long-term diabetes problems that has undergone prospective evaluation.

Time In Range

HbA1c goals are embedded in diabetes treatment, but the benefits of CGM and its ability to show real-time glucose data, together with other components of glucose fluctuation, enable a change in focus and the creation of a new therapeutic story. Time In Range (TIR), which quantifies how much of the day is spent with blood glucose levels between, by consensus, 3.9 and 10.0 mmol/L, is the most crucial of these new indicators. According to recent studies, TIR and clinical outcomes as well as HbA1c have a high link.

These correlations might be used to explain to CGM users, for example, that a TIR of 70% (i.e., 70% of time spent with blood glucose levels 3.9-10.0 mmol/L) equates to a HbA1c of 53 mmol/mol (7.0%); or that a 10% increase in TIR would decrease their HbA1c by 5 mmol/mol.

With CGM, it is possible to identify Time Below Range (TBR), Time Above Range (TAR), and Time Outside of Range (TIR), but even learning the new nomenclature is challenging. TBR and TAR are commonly referred to by people with diabetes as "hypos" and "hypers," or "running high," to characterize their blood sugar levels. Some of the challenges in comprehending these novel notions can be solved by the graphical representation of the glucose data. For people with type 1 and type 2 diabetes, the TIR goal is to stay within this range for at least 70% of the time.

This approach may be changed so that users are informed and motivated to undertake lifestyle and treatment regimen adjustments that will improve glucose control and, in turn, diabetes management. Given the suggestions about glucose measures from CGM data and how these are shown alongside the AGP, this is plausible.

Ambulatory glucose profile

Concentrate on TIR; the ideal glucose range is 3.9-10.0 mmol/L.

Physician must explain to patients that 60% TIR, or a HbA1c of 58 mmol/mol (7.5%), is a relatively excellent level of control.

Even greater control, though, is indicated by a TIR of 70%, which is equivalent to a HbA1c of up to 53 mmol/mol (7.0%).

Conclusion

The Freestyle Libre Pro CGM system may offer a number of benefits. The clinic pays very little up front for the Pro version. Patients are only given disposable parts of the system to take home. No reusable components need to be cleaned in between patients. All patients are read by the same handheld equipment, which is always carried by the healthcare provider. The clinic can use LibreView, a free programme for downloading and reporting, without charge. Patients can also get the Freestyle Libre Pro system from retail pharmacies. It doesn't require authorizations through specialized distributors like other CGMs on the market.

Additionally, the only acetaminophen-unaffected CGM device available is the Freestyle Libre. It is possible to keep the sensor's accuracy without regularly calibrating it using data from a blood glucose meter. This makes it possible to acquire important glucose data even when people check their blood sugar infrequently. As a consequence, practically every healthcare setting may benefit from the Freestyle Libre Pro as a tool for care coordination. From the moment the sensor is implanted at the healthcare provider's office, patients have 14 days to remove and return it.

Following that, the necessary treatment modifications can be made over the phone or through the patient portal/electronic medical record. The sensor is a small, covert device that is around the size of a quarter. Without too much disturbance to their daily activities, patients can wear it for 10 to 14 days.

Future Clinical Implication as an Operational Innovation Tool

As can be seen from the case studies, the Freestyle Libre Pro offers an alternative to current CGM devices for professional use. It increases revenue for clinics and facilitates user-friendliness. Due to its use for private purposes, patients now have another means to check their blood sugar. Patients can avoid multiple fingersticks and obtain glucose information on demand by using it in place of a glucose meter. It may not be appropriate for everyone, but it will give patients and medical professionals another good option for the critical treatment of both type 1 and type 2 diabetes mellitus.

Tables

Table 1: Properties of antihyperglycemic drugs

Drug name	Special properties	Typical application
Metformin	side effects on GIT system	the initial line of defence against type II diabetes
Sulfonylureas	recognised as effective antihyperglycemic medications combination with metformin	affordable substitute for metformin in the event that the latter is not well tolerated; economical
Glinides	Because of their quicker onset and shorter duration of action than sulfonylureas, they are more versatile.	superior to sulfonylureas for individuals with renal failure and for irregular or unreliable mealtimes.
DPP-4 inhibitors	Better advantage as compared to GLP-1 receptor agonists	overweight, increased risk of hypoglycemia, inadequate glycemic control with metformin alone
SGLT-2 inhibitors	concurrent weight reduction and a higher incidence of genital urosepsis	increased risk of urino-genital infections and concurrent weight loss
GLP-1 Receptoragonists	Compared to DPP-4 inhibitors, subcutaneous injection is more efficient and has the added benefit of promoting weight reduction.	Metformin alone may not provide appropriate glycemic control, and overweight and increased risk of hypoglycemia
Acarbose	Side effects on GIT system	Early stage type 2 diabetes, or else as a partner in a combination
Pioglitazone	Increased risk of bone fractures, fluid retention, and heart insufficiency; may be increased risk of bladder cancer	combination medication for people with severe renal insufficiency and an increased risk of hypoglycemia
Insulin		Useful in severe illness stages; may be coupled with metformin

Table 2: Diagnosis guidelines for diabetes

1. A1C ≥ 6.5%. A technique that is NGSP accredited and standardized to the DCCT assay should be used to conduct the test in a lab.
OR
2. FPG less than 126 mg/dl (7.0 mmol/l). No calorie intake for at least 8 hours is considered to be fasting.
OR
3. During an OGTT, 2-h plasma glucose was less than 200 mg/dl (11.1 mmol/l). The World Health Organisation recommends doing the test with a glucose load that is equivalent to 75 g of anhydrous glucose dissolved in water.
OR
4. A random plasma glucose reading of less than 200 mg/dl (11.1 mmol/l) in a patient with hyperglycemia or hyperglycemic crisis.

Supplementary data (files S1-S8) - Freestyle Libre Pro data for PID 1-8

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Impact of Internet Addiction on Mental Well Being and Adjustment among College Students

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Abstract

The main objective of this study to find out the impact of internet addiction on Mental wellbeing and adjustment among college students. The present study was conducted on a sample of 100 undergraduate and postgraduate students (Males & Females) of government and self-financed professional colleges from different colleges of Ghaziabad District and all these colleges are affiliated from Chaudhary Charan University, Meerut. The research was carried out through questionnaire that included questions about the internet addiction, Adjustment Inventory and Mental wellbeing. The sample was collected by using simple random sampling technique. Organization of data-editing, classification, and tabulating, before it can any worthwhile purpose. Data obtained were analysed using descriptive statistics mean, median, standard deviation, and 't' test. Out of 100 students, the study's findings indicate that 36 students had a light addiction, 20 students used the internet on a regular basis, and 44 students had a serious addiction. The level of addiction did not significantly differ between male and female students. However, men had higher addiction rates than women. Most of the time, people used the internet primarily to connect with friends and family, surf the web, view movies, and listen to music.

Introduction

The "network of networks" known as the Internet connects computers all over the world. It is a global network made up of millions of computers, making it a huge repository for people, information, and multimedia. It makes good communication possible. Communication with those in the adjacent building is simple. Students can get a lot from the internet, including access to research, social interaction, entertainment, and a means of communication with family and friends. According to the International Telecommunication Union, as of 2017, more than 50% of the world's population-or over 3.2 billion people-were online, with developed countries using the internet 81% of the time and developing countries the remaining 20%. It is without a doubt a very good source for "information, communication, entertainment, advertisements, educational support, economics, culture, and scientific knowledge" when used appropriately. Academic issues, phobias, despair, anxiety, a change in lifestyle, hostility, sleeping and physical illnesses, and a change in attitude toward their emotions are all displayed by internet addiction students. If used continuously, it can have major negative effects on one's lifestyle while ignoring their health and important social activities.

The capacity to adequately adapt to one's surroundings on the level of reality is referred to as Mental wellbeing. "A state of well-being in which the individual realizes his or her own abilities, can cope with the typical stresses of life, can work productively and fruitfully, and is also able to make contribution to his or her community," according to the definition of Mental wellbeing. Kuppuswami claims that having good Mental wellbeing entails being able to balance one's feelings, desires, goals, and ideas. It denotes the capacity to comprehend and deal with life's truths.

In the 1930s, the term "adjustment" became widely used in psychology, and Shaffer's landmark work Lawrence gave it a significant endorsement. Haffers explains that "adjustment is the process by which a living organism maintains a balance between his needs and the external factors that affect how those needs are met."

Literature Review

Nalwa (2003) analysed the degree of Internet addiction in school children between 16 to 18 years of age. The data were assessed by Davis's Online Cognitive Scale. "The UCLA Loneliness Scale" further controlled on the contents, remarkable functional usage and behavioural argument are observed among the groups. Dependent subjects are found to impediment other works to spend their time on networking site, feel life boring

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without internet and lose their sleep due to late night logons. The hours depleted on internet by dependent subjects are higher than non-dependent subjects. A significant difference was also observed on Loneliness measure between two groups. Dependent subjects are found to feel more feelings of loneliness than non-dependent subjects.

Kumar (2006) examined the utility of internet and its related concerns in teachers and students at colleges of engineering in India. The study was conducted in Punjab, Himachal Pradesh, and Haryana. A questionnaire was dispensing among a total of 63 1980 teachers and students. Almost 91 per cent respondents responded. The finding revealed that 48.30 percent educational community is used the internet 2 to 3 times in a week. Forty percent subjects use it each day as well as 5.6 per cent subjects use internet 2 to 3 times around a month. The findings further represented that majority of the subjects i.e. (69.40 per cent) utilize the internet facility for education purpose, while near half i.e. 51.9 per cent utilize it for research purpose and a significant number of them, i.e. 34.7 per cent use it for research purpose, 47.4 per cent for communication and a significant number of them i.e. 34.7 per cent use it for entertainment purpose.

Fang & Chan, 2007. This study's objective is to investigate how young people in Hong Kong use both traditional and online media. The use of interpersonal as well as computer-mediated communication has altered significantly because of the Internet's quick development. Because it helps social and commercial marketers to completely comprehend the function of mass-mediated communications in young people's life, a study of how youth and traditional media are used is crucial. The market must adopt the newest trends to appeal to the younger generation as the youth market grows and electricity usage rises. The survey discovered that among young people in Hong Kong, the Internet plays a significant role. Most respondents, who ranged in age from 15 to 24, used the Internet daily for one to three hours. The Internet was primarily used for amusement and for listening to music. was the preferred media choice for activities driven by the Internet; magazines continued to be important for shopping and amusement, while television continued to be important for news and current events. The majority of respondents used search engines to locate helpful websites. To find out information about delicate subjects, interpersonal information sources gave way to the internet.

Wang (2009) analyzed the total utilization of internet at school and at home in students of America and China, he also explored the Internet use by students and investigated how use of internet in students was inter-linked to their learning. Significant differences were found in networking activities among American pupils and Chinese pupils at educational institutions, but not at house. Brief analysis revealed the separate educational exercise of these two social environments has conducted the students to diverse uses of Internet among pupils of America and China. A significant difference was found between home and school in using internet for students of America, but no remarkable differences found in Chinese pupils regarding use of Internet at home as well in schools. It is surprising to note that remarkable similarities were found between students of America and China in relation to the most popular activities they did online.

According to the study's findings, according to Mazman & Usluel (2010), men utilize social networking sites more frequently than women. Males use Facebook and Twitter at rates of 16.4% and 26%, respectively, compared to female usage rates of 8.3% and 13%, respectively. Lenhart (2015) discovered similar results, showing that girls are more likely than boys to visit Facebook frequently (45% boys vs. 36% girls). Instagram (used by 23% more girls than boys) and Tumblr (used by 6% more girls than boys) are both more popular among females. Studies have shown that while women primarily use social networking to maintain and find old relationships, men usually seek social media help to build new relationships (Chathoth *et al.*, 2013).

Anwar (2014) study conducted on 300 male and female students. Excessive use of the internet was found in secondary school students. The result has shown that the internet usage pattern of male students was quite higher than the female students. It was found that average to high use of internet positively influenced academic achievements while no use and extremely high usage harmed the academic achievements of the students.

It has also been stated by Bhatia *et al.* (2016) that mobile and Internet technology are becoming more crucial to adolescents' social and academic lives. Teenagers make up about 35% of India's internet users, thus 300 kids from three private schools in the Madhya Pradesh city of Gwalior participated in this cross-sectional poll. And put your attention on determining how common Internet use is among teenagers who are in school. According to the report, 38.66% of pupils claimed to have started using the internet before the age of 12, compared to 61.34% of children who stated they started using it after turning 12 years old. 4 hours or more were spent online by students (26.33%) every day. 28.66% of the students reported that because they spent more time online, their assignments were frequently late or unfinished. Out of 300 pupils, 24.00% (72) scored in the moderate addiction range (50-79), and 04. 33% (19) scored in the severe addiction category (i-100). Teenagers should be consulted by their parents and schools regarding appropriate Internet usage and how much time should be spent doing online research, studying, and engaging in outdoor physical activity.

Statement of The Problem

Impact of Internet Addiction on Mental wellbeing and adjustment among college students.

Objectives of The Study

The Study has the following objectives:

1. Examine the prevalence of Internet addiction among college students.
2. Research the impact of Internet addiction on college students' mental health.
3. Examine how Internet addiction affects college students' ability to adjust.
4. Determine the gender-specific prevalence of Internet addiction.
5. Identify any significant differences between college students with mild Internet addiction and those with severe Internet addiction in terms of their mental health.
6. Examine any possible variations in adjustment between college students who have light Internet addiction and those who have severe Internet addiction.

Hypothesis of The Study

1. There won't be a noticeable difference between college students who use the internet excessively and those who use it lightly in terms of their mental health.
2. There won't be a noticeable difference between college students who are somewhat and severely hooked to the internet in terms of their level of adjustment.
3. There won't be a discernible difference in how internet addiction affects college students' mental health.
4. The level of adjustment and Internet addiction will not be significantly correlated.

Research Methodology

Research methodology refers to the organized steps taken by the investigator from the time the problem is first identified until it has been solved. There are many research methodologies, but the Ex-Post facto approach was applied in this study. Ex-Post Facto research combines elements of experimental, descriptive, and co-relational research. The present study consists of 100 college students studying only in professional colleges situated in the Ghaziabad District of Uttar Pradesh. All these professional colleges are affiliated with Chaudhary Charan Singh University, Meerut.

For measuring the addiction of Internet, a questionnaire "Internet Addiction Questionnaire" constructed by Dr. Kimberley Young has been used. This IAT includes 20 item questionnaire which further divided intolight, moderate, and severe levels of Internet Addiction. For measuring the Mental wellbeing "Mental wellbeing Battery" constructed by Arun Kumar Singh and Alpana Sengupta has been used.and finally, for the Adjustment among college students "Adjustment Inventory" by V.K. Mittal has been used. For the Interpretation of result the data was analyzed by using Mean, Standard Deviation, and t- test and Pearson Coefficient Correlation was used all the result was interpreted at the 0.05 and 0.01 level of significance.

Analysis and Interpretation of Results

Students Internet Addiction was studied with the help of Internet addiction Questionnaire.

Category	Sample	Mean	S.D.	% of		
				Light	Moderate	Extreme
Girls	50	45.22	9.45	30	28	42
Boys	50	47.66	12.34	36	14	50
Total	100	46.44	11.01	33	21	46

The table above demonstrates that typical students have a light internet addiction. On the other hand, 36% of boys are lightly hooked to the internet, 14% of boys are moderately addicted to the internet, and 50% of boys are extremely addicted. Of the girls, 30% are lightly addicted, 14% are moderately addicted, and 42% are extremely addicted. Because guys' means are higher than girls' means, it is obvious that boys are more addicted to the internet than girls.

Hypothesis 1: There will be no significant difference in the Mental wellbeing of Lightly Internet Addicted and Extremely Internet Addicted college students.

Table 1: Mean SD and 't'-value of lightly internet addicted and extremely internet addicted students

S.No.	Group	N	Mean	S.D.	't' value
1.	Lightly Internet addicted	32	55.8	9.4	2.257
2.	Extremely Internet addicted	38	51.2	8.5	

According to the table above, light internet addiction affects students at a mean value of 55.8 and severe internet addiction affects students at a mean value of 51.2. Thus, it may be inferred that the pupils are in better Mental wellbeing than the students who are very dependent on the internet.

Hypothesis 2: There will be no significant difference in the level of adjustment of lightly internet addicted and extremely internet addicted college students.

Table 2: Mean SD and 't'- value of lightly internet addicted and extremely internet addicted students

S.No.	Group	N	Mean	S.D.	't' value
1.	Lightly Internet addicted	32	56.8	8.5	1.09
2.	Extremely Internet addicted	38	54.5	8.9	

The table above shows that the mean score for students who are only lightly hooked to the internet is 56.8, and the mean score for those who are extremely addicted is 54.5. Thus, it may be inferred that kids who are only marginally addicted to the internet are better adjusted than those who are extremely addicted.

Hypothesis 3: There will be no significant difference on the Impact of Internet addiction and Mental wellbeing among college students.

Correlation between Internet addiction and Mental wellbeing of college students

Sample size	Degree of Freedom	'r' value	Level of Significance Result		Result	
100	98	-0.92	0.05	0.01	0.05 level	0.01 level
			0.186	0.245	Significant	Significant

Interpretation: The table shows that the calculated value of r= -0.92 is significant for all 98 degrees of freedom at both levels of significance (0.05 level & 0.01 level). The null hypothesis is disproved since it demonstrates a substantial inverse relationship between Internet addiction and college students' Mental wellbeing. Further interpretations include the propositions that as internet addiction rises, Mental wellbeing declines, and as Internet addiction falls, Mental wellbeing rises.

Hypothesis 4: There will be no significant impact of Internet addiction on adjustment of college students.

Sample size	Degree of Freedom	'r' value	Level of Significance Result		Result	
100	98	-0.12	0.05	0.01	0.05 level	0.01 level
			0.175	0.245	Significant	Significant

The table shows that there is a significant negative relationship between college students' Internet addiction and adjustment, with the obtained value of r=0.12 being significant at both levels of significance. Thus, the null hypothesis is disproved. It can also be said that as internet addiction rises, adjustment falls, and as internet addiction falls, adjustment rises.

Conclusion

In this survey, we discovered that the main uses of the internet were for academic purposes, amusement, and communication with family and friends. Lack of enough sleep, inability to focus on their studies and poor academic performance were the issues faced by college students because of their Internet use.

The usage of the internet for academic and personal purposes as well as commerce has become indispensable. The internet has influenced every part of our life, for better or worse. The level of society nowadays makes it difficult, if not unavoidable, to survive without the internet. Additionally, studentsat colleges are the biggest Internet users. Students who use the Internet too much risk developing addictions and having psychological effects. In fact, the study found that increased internet use causes college students' levels of Mental wellbeing and adjustment to decline. Internet addiction is therefore directly tied to Mental wellbeing, Internet, and Adjustment. The internet can also be said to have a significant influence on students' psychology.

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Governance, Sustainable Development Agendas, and Public Policy in India

*Siddhartha Sankar Manna

Abstract

Democracy and Good governance have always been essential instruments for the development of sustainable development and decisive components that should be incorporated into sustainable development strategies. As a consequence of this, the problems associated with governance have been painstakingly linked to the processes and mechanisms that are in place to ensure that individuals have access to money and resources. These democratic practices contribute to the maintenance of a harmonious and well-balanced community. If democratic principles and procedures were in place, then the functions of governance would be carried out to their full potential.

In this article, I'm interested in investigating how to ensure and prepare for the future, how to maintain strategic consistency through vertical and horizontal management, how to implement sustainable development policies in collaboration with local communities, and so on. In this theoretical framework, I highlight the interconnected nature of democracy, governance, and sustainable development. The goal is to strengthen governance by establishing accountable and diverse institutions as well as an active civil society. In addition, I find that India's SDG localization paradigm is highly dynamic across its many levels of policymaking.

The work delves at the systemic relationship between governance at many levels, including national, regional, and local levels, as well as among civil society organizations, local groups, marginalised populations, and private entities. Within this context, I have highlighted a number of Indian programmes and plans intended to mitigate environmental damage and preservation.

Introduction

Human capital, inflation, political stability, economic freedom, and consumer choice have all been shown to increase in democracies. It is crucial to note that the evolution of educational institutions and healthcare has tightly linked democracy with economic grounds for growth, such as education levels and lifespan. Growing scepticism of democratic institutions, procedures, and elected governments has characterised the global discussion on democracy in recent years. In spite of this, the world is making an effort to "promote peaceful and inclusive societies for sustainable development, provide access to justice for all, and build effective, accountable, and inclusive institutions at all levels" as part of Sustainable Development Goal 16. In this chapter, I highlight the potential presented by the 2019 ministerial segment of the UN Economic and Social Council to expedite arrangements surrounding the development of Goal-16 and to foster a thematic discourse on democracy. Despite the fact that no single model of democracy has emerged and every nation must work towards a kind of democracy best suited to its circumstances, all democracies and representative governments have certain fundamental characteristics.

Effective governance has long been recognised as a key systemic factor impacting development. It supports "accountability", "transparency", "efficiency", and the "rule of law" at many points, allowing for the efficient use of human capital, natural resources, and economic resources for reasonable and sustainable development and guaranteeing the participation of civil society in policy-making processes. A representative democracy is characterised by a system of checks and balances whereby the will of the people is prioritised over special interests. This calls for its own set of procedures and protocols in management. Sustainable development is the result of a coordinated effort from all levels of society and a comprehensive government strategy. According to sustainable development, current resource use and practise should lessen the potential for damage and loss to future resource use in society.

Sustainable development has been seen as the

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political response and retort to a number of problems in the context of democratic governance, and governance is the process of coordinating and synchronising that response. Therefore, sustainable development is a system that may be developed and formed through governance. The cornerstone to the steady growth of the monetary economy has been sustainable development, which means progress should be made without undermining ecological systems, and current progress shouldn't jeopardise the needs of future generations. Transparency and accountability have been essential characteristics of the concerns and discourse on governance because of the presence and increasing participation of civil society.

Governance refers to the processes through which power is exercised and resources are managed (World Bank, 1994). As a result, the means by which citizens get access to power and resources have been intricately intertwined with governance challenges. These comprise matters of *property rights, social relationships and gender, as well as social capital through which people access resources* (World Bank, 1994). Policies have been effective in expanding the reach of management at lower levels, but shifting the balance of power and gaining sway over relationships have proven to be more complex and complicated than originally anticipated. The peaceful transition of power through democratic elections is central to the concept of democracy. Receptive and accountable governance is essential, as it guarantees the rule of law, protects human rights, and encourages people to take part in political and decision-making processes. A peaceful and well-balanced society is strengthened by these democratic practices. If democratic ideals and procedures were in place, the government would run more smoothly. To that end, it promotes the development of inclusive and accountable institutions and a robust civil society. They advocate for public participation in societal and political processes and work to improve human rights, objectivity, and the rule of law. As a result, the values of democracy and good government are inextricably interwoven.

Public policy

Public policy is a course of action that is accepted and pursued by the government and administration. Generally speaking, public policy can be thought of as a proclamation made by an administrative entity or its parliament outlining a set of rules, controlling acts, procedures for functions, and a specific topic. When a government body or its representatives establish a set of rules, regulations, policies, and priorities with regards to a certain issue, this is known as public policy. Policy prescriptions that have positive outcomes and help many people may not be 'appropriate' if they infringe on the constitutionally protected rights of Indian citizens. A plan of action developed by government officials to achieve a broad goal that will have a major impact on a sizable population The government's policy decisions and problem-solving techniques are moulded by the inputs provided to the public policy process. It is possible for public policy objectives to be both lofty and practical. To motivate citizens to participate in ways that further policy goals, governments often create public apparatuses that employ a mix of incentives and sanctions. The results of government intervention are known as public policy effects.

Public policy is goal-oriented and is considered the response of the political system to the challenges and issues emerging from society and the environment. It is generally articulated by administrative management and government authorities. Various measures are used to categorise several forms of public policy on the basis of functions and works like education, physical condition, transport, line of work and business, public security, and ecological protection. Theodore J. Lowi, an American political scientist, projected an article entitled "American Business, Public Policy, Case Studies, and Political Theory". He has rightly pointed out four categories of policy (Lowi, 1964), i.e., (i) distributive; (ii) redistributive; (iii) regulatory; and (iv) constituent. Distributive policies refer to the allocation of resources to a definite section of society and the state. It incorporates all public support and welfare programmes of the government, like adult education plans, food relief, social protection, employment opportunities, etc. It encompasses the distribution of goods and services to members of a society.

Redistributive policies have been an important factor of stratagems for diminishing disparity and inequity that help to promote the sustainable development in its three different fields in society i.e., *economic, social and environmental* (Kohler, 2015). Pierre Kohler correctly pointed out that a redistributive programme is one in which a smaller number of people or organisations bear the burden of the policy's costs while a larger group of people or organisations is anticipated to reap the policy's benefits. Protecting the public interest through the regulation of businesses and other organisations is the goal of regulatory policy. Distributional initiatives include things like Early Childhood Development (education), Medicare (health care), TANF (income support), and food projects like SNAP (Supplementary Nutritional Aid Programme).

The term "Regulatory Policy" refers to the imposition of specific rules and regulations by a governing body, typically supported by a variety of enforcement mechanisms to ensure strict compliance. The primary goal of any regulatory plan should be to guarantee regulatory functions for shared interests. There have been two major kinds of regulation in this respect: i) economic regulation and ii) social regulation. It sets limits on the action. Interactions between laws and regulations and their constituent policies establish decision- and policy-making authority units. In some contexts, the fiscal rule is also addressed through constituent policies. The development of a government organisation, the establishment of rules, or the taking of actions related to the organisation of government are all examples of policies. It has to do with determining how present and future government initiatives will divide up power and responsibilities.

In the field of political science, the policy cycle has been an instrument used to consider the development and progress of a policy. It can also be considered a "stagist approach", "stages heuristic," or "stages approach" (Laswell, 1971). It is thus a rule of thumb rather than the actual reality of how policy is created, but it has been influential in how political scientists look at policy in general. Harold Lasswell, the renowned American political scientist and communications theorist, amplified this type of model of theory. He had categorically assumed that the popular pattern of the policy series divided the procedure into seven different stages. He revealed the significant questions of both how and why public policies should be formulated and made (Laswell, 1971). The policy seeks to coordinate this process with the underlying policy application, with the stages extending from Howlett (2011): i) intelligence; ii) promotion; iii) prescription; iv) invocation; v) application; vi) termination; and vii) appraisal.

On the other hand, James E. Anderson postulated another form of public policy in his 'Public Policy-Making' (1974). He has pointed out the following stages:

I. **Agenda setting (Problem identification) :** The recognition of certain subject as a problem demanding further government attention;

II. **Policy formulation :** Involves exploring a variation of options or alternative courses of action available for addressing the problem. (Appraisal, dialogue, formulation, and consolidation);

III. **Decision-making :** Government decides on an ultimate course of action, whether to perpetuate the policy status quo or alter it. (Decision could be 'positive', 'negative', or 'no-action');

IV. **Implementation :** The ultimate decision made earlier will be put into practice;

V. **Evaluation :** Assesses the effectiveness of a public policy in terms of its perceived intentions and results. Policy actors attempt to determine whether the course of action is a success or failure by examining its impact and outcomes.

Peter Bridgman, a senior executive in the Queensland public service, and Glyn Davis, a distinguished professor at the Australian National University, predicted and estimated an eight-step programme in their work entitled "The Australian Policy Handbook"

a) Issue identification;

b) Policy analysis;

c) Consultation (which permeates the entire process);

d) Policy instrument development;

e) Building coordination and coalitions;

f) Program Design: Decision making;

g) Policy Implementation;

h) Policy Evaluation.

Bridgman and Davis's conceptual framework for government action has been marked by experimentation and dialogue. The intent is to control rather than analyse. In this respect, policy cycles have typically been characterised as taking a classical approach, and processes have typically been described from the perspective of authorities for policymaking and decision-

makers. As a result, some post positivist thinkers have argued that cyclical models are too passive, theoretical, and idealistic (Young & Mendizabal, 2009) and have instead advocated systemic and more complex models. They consider a broader range of units or participants in the policy system, including the structures of civil society, the media, academics, policy research groups, firms, activists, etc.

The United Nations Development Program (1997) defines governance as the exercise and implementation of *economic, political, and administrative* authority to deal with the activities of the state at different stages. It includes the state apparatuses, methods of functions, and organisations through which people and groups of people enunciate their welfare and interests, carry out their legal rights, fulfil their responsibilities, and facilitate their changes, and recognises the essential features of good governance: involvement, rule of law, consensus orientation, equality, efficiency, responsiveness, effectiveness, responsibility, and the planned concept. The notion of governance can be understood regarding regional sustainable development policy-making and decision-making (Berger, 2003) or relating to the rule of law (Sachiko & Durwood, 2005).

The UNDP also has provided to the development of good governance by concentrating on the following six different areas:

i. parliamentary development;

ii. assistance with electoral systems and processes;

iii. improvement of access to justice and human rights;

iv. promotion of access to information;

v. support for decentralization and local governance; and

vi. reform of public administration and civil service.

Governance for sustainable development

In international politics, the concept of sustainable development has played a significant role. It includes global and local long-term influence and development initiatives. Despite repeated assurances at the international and national levels, the traditional paradigms of governance, controlled by the regulatory authority of recognised state organisations, have not been prepared to implement the changes that sustainable development indicates and have shown their limits. As the issues and difficulties of sustainable development have become more complex, so too has the need for a methodical approach that may provide a proper framework for a unified perspective of all the mechanisms at play in the process. Sustainable development policies provided the solutions.

The Commission for Sustainable Development revealed that (Kardos, 2012) Sustainable development can be explained as the technique of achieving national and local economic, environmental, and social goals in an organised, participative, and regenerative (repeating) pattern. By institutionalizing methods for consultation, negotiation, mediation, and consensus building on critical social issues when interests diverge, it enables more educated decision-making across sectors and regions. Kemp, Parto, & Gibson (2005) claim that the government has made governance clear through any number of policy mechanisms and that a crucial encounter is ensuring that multi-player governance rules provide a realistic logic of idea and obligation and exhibit dimensions for organising, directing, and reorienting towards sustainability. The SDS policies place an emphasis on the regularity and structure of the governance process, with the expectation that the system of arrangements will play an increasingly important role.

The transparency and effective public involvement in the policy-making has been essential features of governance for sustainable development. It is important to state that accountability, transparency and democratic empowerment in decision making on environmental matters were included in the principle-10 of Rio Declaration (1992) (Kardos, 2012). In this regard, Mihaela Kardos properlyreveal that all citizens should care deeply about sustainable development since it involves decisions about basic elements of our way of life. In this light, sustainable development depends on the extent to which society plays a role in forging an understanding of the vision, aims, and objectives of sustainable development in the face of competing economic, environmental, and social interests. In order to shift global responsibility to groups with immediate answers and unique concentration, efforts must be made to involve all citizens effectively, and dedication from the government, the business community, and civil society is necessary. The traditional mechanism of governance has repeatedly proven to be inadequate, so these new alliances are required to provide greater dynamism and influence. Good governance entails public agencies adhering to established processes for decision-making and encouraging citizen participation in policymaking.

Decentralization in this context calls for improved efficiency and coordination across all levels of government, both at the international, national, and subnational levels (i.e. "vertically") and within each level of government (i.e., "horizontally") (Kardos, 2012). Lafferty (2002) offers some suggestions for ecologist-led vertical and horizontal principle development in this setting. The most significant ecological repercussions of rules and actions are arranged, a structure for negotiation and discussion is established, sectoral policies for modification are enacted, activities are regulated, finances are managed, and monitoring systems are put in place; all of these are components of vertical integration. He recommends communication programmes, national action schemes with levels of feedback and reconsideration and conflict resolution, and the use of governing organizations entrusted with total management, control, and oversight of the coordination of the integration procedure as means towards achieving horizontal integration.

Ensuring Sustainable Development Agendas to Move in India

The Sustainable Development Goals (SDGs), often known as the Global Goals, are a set of 17 objectives designed to pave the way towards a brighter and more secure future for humanity. In 2015, the SDGs were officially adopted by the UN General Assembly. These objectives, collectively known as agenda 2030, are expected to be met by that year. The 17 SDGs are: (i) No Poverty; (ii) Zero Hunger; (iii) Good Health and Well-being; (iv) Quality Education; (v) Gender Equality; (vi) Clean Water and Sanitation; (vii) Affordable and Clean Energy; (viii) Decent Work and Economic Growth; (ix) Industry, Innovation and Infrastructure; (x) Reduced Inequality; (xi) Sustainable Cities and Communities; (xii) Responsible Consumption and Production; (xiii) Climate Action; (xiv) Life Below Water; (xv) Life On Land; (xvi) Peace, Justice, and Strong Institutions; (xvii) Partnerships for the Goals. By exposing the principle of Sabka Saath Sabka Vikaas (Collective Efforts for Inclusive Development), India hopes to demonstrate its commitment to the SDGs and their convergence with its national development programme. In adopting, implementing, and monitoring the SDGs at the State and district levels, India implemented the dynamic policies of the localization paradigm. India collaborates with a wide variety of stakeholders, including local and regional governments, nonprofits, community groups, individuals in vulnerable situations, and the commercial sector. In response to environmental disaster and ecological deterioration, the Indian government implemented a number of programmes and policies. The following initiatives and programmes further illustrate India's progress towards the SDGs.

a) Sashakt Bharat : Sabal Bharat, or Strong India (Empowered and Resilient India), describes how India has lifted over 271 million people out of poverty across multiple dimensions through economic growth and individual agency. The government of India (GoI) takes numerous steps to ensure that the poor and vulnerable have adequate nutrition, child health care, education, sanitation, water, electricity, and shelter. The results of these efforts have been a reduction in social inequality;

b) Swachh Bharat (Clean and Healthy India): On October 2, 2014, the GoI initiated the Swachh Bharat Mission to attain 100 percent sanitation and hygiene in villages in India. This sanitation programme and campaign reduce child and maternal mortality rates. It is important to state that under this programme, 100 million toilets were constructed in rural areas of India. This mission seeks to attain 'open-defection-free status in all villages of India. The government emphasises a health care protection scheme, i.e., Ayushmaan Bharat (the world's largest health protection scheme), that provides health care facilities and services. It provides approximately 500 million people, covering 100 million families in India;

c) Samagra Bharat : Saksham Bharat (Inclusive and Entrepreneurial India): It postulates social inclusion through nutrition, health conditions, social security, and developing capacities for entrepreneurship and service.

a. Enhance employability (need based training)
b. Open routes of progression
c. Develop industry benchmarked standards
d. Independent Assessments
e. Quality Assurance
f. Provide credible certification
g. Assist in employment/ self-employment

d) Satat Bharat : Sanatan Bharat (Sustainable India): India took several environmental policies to reduce ecological pollution and environmental calamities. It develops effective energy schemes, strong arrangements to tackle environmental calamities, and an organised ecosphere. In the Sanatan Bharat project, India planned to electrify 100 percent of its villages. The electrification of its villages reduces 38 million metric tonnes of CO2 per year. It has provided pure cooking gas to 80 million marginalised families and set an objective to establish 450 GW of renewable power and reinstate 26 million hectares of disgraced landscape by 2030. In this regard, India concentrated on the development of disaster management infrastructure and solar systems;

e) **Sampanna Bharat-** Samriddh Bharat (Prosperous and Vibrant India): India is one of the most rapidly expanding markets thanks to its large and growing youth population. Its ultimate goal is to create novel approaches to advancing commercial infrastructure. The GDP of India is a target of this initiative. The policy's implementation led to a 2.72 trillion-dollar increase in GDP growth between 2018 and 2019. By 2025, India hopes to have an economy of roughly $5 trillion, and it has set a target date for that year. It has a flourishing system of trade and innovation. The government of India is committed to fostering economic growth that benefits all citizens through initiatives that encourage manufacturing, structural organization, investment, entrepreneurship, and technology modernization.

Challenges in attaining sustainable development

The challenges to development have been affected by the emergence of socio-economic differences, demographic complexes, technological developments, and environmental tendencies. These tendencies complement each other's behaviours, which create some challenges and problems. These tendencies are considered the basic changes that transform society and have a significant impact on individuals. Sustainable development has not been properly achieved due to several types of socio-political problems and hurdles:

i. Rise of illiteracy rate;

ii. Weak infrastructure;

iii. Deficiency of monetary resources to carry out sustainable development scheme;

iv. Lack of human resources;

v. Inadequacy of drinking water;

vi. Lack of housing facilities;

vii. Disparities in per capita income;

viii. Corruption;

ix. Lack of health facilities;

x. Population growth;

xi. Gender disparity;

xii. Lack of sufficient food;

xiii. Natural disasters and incidents can create a threat to sustainability;

xiv. Ethno-religious struggles;

xv. Nonexistence of efforts at a municipal level;

xvi. Misuse of natural resources;

xvii. Absence of hi-technologies;

xviii. Environment change.

Policies to overcome these challenges and issues

There are several types of policies to overcome these challenges and problems for sustainable development that have emerged as social phenomena. The following factors could overcome the challenges and hurdles:

a) Non-renewable resources must have to be reduced;

b) Depletion of resources;

c) Investment of substitute sources of energy and power;

d) Safeguard of human rights;

e) Practice of the finest accessible knowledge;

f) Make a planning to form a responsible and accountable citizen.

Conclusion

In this paper, I pointed out several types of challenges and prospects for introducing redistributive policies with the benefit of sustainable development. A system of governance and a multidimensional plan arranged by the government for sustainable development Sustainable development claims that the existing use and practice of means should reduce the degree of destruction and loss in the future usage of resources in society. The study finds some suggestive sanctions for adopting the planned methods of the SDS in democratic governance. Despite several limitations, the study develops a system of relationships between democracy, governance, and sustainable development policies.

It depends on receptive and accountable governance that ensures the rule of law, safeguards human rights, and encourages the participation of people in the political and decision-making processes. These democratic methods reinforce a peaceful and balanced society. The operative governance would be effective with the existence of democratic principles and democratisation processes. It seeks to consolidate governance by introducing inclusive and responsible organisations and a vigorous civil society. Redistributive and other strategies restructure the essential framework for diminishing inequity and overthrowing the illegitimate practice of natural resources. The reforms that are required for the different patterns and political economies that recognise the inherent economy of society and the environment that seek to maximise human welfare and human security

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Impact of Digital Financial Literacy on Financial Technology Adoption

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Abstract

Purpose: This paper studies the impact of digital financial literacy on financial technology product adoption by banking customers. The paper attempts to measure the impact of digital and financial literacy on fintech adoption using the TAM model.

Research Design & Approach: Customers of public and private sector banks in Uttarakhand, India, were surveyed to measure digital literacy, financial literacy and perceptions of fintech adoption. The purposive sampling method is used to collect data from 546 bank customers. The study tries to measure the effect of digital literacy and financial literacy on fintech adoption. SmartPLS 4 software was used for data analysis. The measurement model was used to establish reliability and validity, while the structured model was used to test the hypotheses and to establish model explanatory power, effect size and predictive power for future observations.

Findings: The study observes that there is a significant effect of digital literacy and financial literacy on fintech adoption. The dependent variables viz. financial ease of use, perceived usefulness and relative advantage have a high degree of model explanatory power. The independent constructs of digital literacy and financial literacy have a strong effect on all three dependent variables. The study establishes a high degree of predictive relevance for future observations.

Originality/value: This research attempts to contribute to fintech adoption by attempting to use PLS-SEM to understand the level of digital literacy and financial literacy and the perception of fintech adoption with Indian data consisting of public and private sector banks in India. The study will provide insights to banks, financial institutions and fintech firms to develop strategies for improving fintech adoption.

Introduction

The COVID-19 pandemic accelerated an unprecedented shift in the way individuals interacted with various aspects of daily life. This abrupt transformation necessitated a rapid adaptation to digital channels for almost every kind of work, which was otherwise done manually. For individuals with access to smart mobile phones, the necessary digital literacy was often lacking, prompting individuals to take support from their social and professional networks. Activities such as online education, telehealth, remote work, e-commerce, and financial transactions become integral to daily existence (Pokhrel *et al.,* 2021).

In this era, where digitalization pervades every facet of our lives, from financial activities such as investment decisions to nonfinancial activities such as internet search and social media engagement, the need for digital literacy is paramount. COVID-19 expedited the adoption of digital methods, irrespective of individual readiness. This transition impacted all segments of society, businesses, government organizations, and social institutions, all of which were compelled to establish a digital presence to remain viable in their respective domains (Candy *et al.,* 2022). Digital literacy, an individual's ability to effectively utilize digital devices such as smartphones and computers, access the internet, and employ digital tools such as search engines and applications, assumes a critical role in this new digital paradigm (Gilster, P. 1997). Financial literacy, traditionally centered on retirement planning, has had to evolve to encompass the complex landscape of contemporary investment opportunities, including stock markets and fintech innovations (Hung *et al.,* 2009). It equips individuals with the skills necessary to manage their finances, enabling them to make informed decisions regarding savings, investments, and borrowing while understanding the nuances of tax planning. Digital financial literacy, however, represents a novel intersection of these concepts, encapsulating an individual's capacity to engage with digital finance-related tools, websites, and

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applications. It enables real-time financial goal setting and planning, online investments such as stocks and mutual funds, and the purchase of insurance products (Lyons *et al.*, 2021).

Fintech, financial technology, digital finance and sometimes digital banking terms are used interchangeably and refer to innovation in the financial sector using modern technologies, which may result in better availability, lower cost, convenience and financial inclusion (Pant, S.K. 2020). India is a global leader in the fintech sector and the fastest-growing market in fintech adoption, with digital payments as the most popular and used product (Global fintech adoption. 2019).

This paper explores the relationship between digital literacy, financial literacy and fintech adoption in India. The study aims to uncover the challenges individuals may encounter when utilizing digital financial channels. By doing so, it offers valuable insights to fintech firms, banks, financial institutions, and other stakeholders aiming to understand customer perspectives toward fintech adoption.

Literacy

Literacy in common parlay is an individual's ability to read and write in a specific language. Individuals acquire this skill by listening, speaking, and attempting to form words in their native or daily communication language. Some definitions limit literacy to social practices that involve printed or written text. Nonetheless, more comprehensive definitions broaden the scope of literacy to encompass various modes of communication, including visual, gestural, spatial, and other forms of representation (Perry, K.H., 2012). This definition encompasses a broader spectrum of communication methods and expressions. Moreover, another definition takes literacy a step further, considering it as the relationship between the learner and their world (Freire *et al.*, 1998).

Digital literacy

The term "digital literacy" was coined as late as in late 1990, and due to continuous emerging technologies, the definition keeps changing. Digital literacy is seen as the engaged involvement in a set of activities centered on digital tools and media, intricately integrated into particular contexts or tasks (Meyers *et al.*, 2013). The Internet and web technologies are instrumental in bringing everything online, such as newspapers, entertainment, and telecommunication. Digital literacy encompasses the ability to use digital devices, digital communication, and digital technology effectively and responsibly (Gilster, P. 1997). Digital literacy encompasses the skills necessary for individuals in the twenty-first century to effectively utilize digital tools to accomplish their goals within various life contexts (Fu., 2013).

Financial literacy

The term "financial" pertains to matters related to money, including aspects such as deposits, investments, and borrowings. Financial literacy, therefore, signifies a crucial understanding of financial concepts and the acquisition of financial skills. These skills encompass setting financial goals, undertaking financial planning to achieve those goals, budgeting, investing, and comprehending the risks involved in making specific financial decisions. Financial literacy is important in planning for life milestones, such as children's education, housing, and retirement (Carlin *et al.*, 2012). There is evidence that financial literacy complements financial decision-making by individuals. It is important to note that financial literacy and financial decision-making are interdependent-neither can fully substitute the other (Kadoya *et al.*, 2020). Individuals who have undergone financial literacy training and acquired these skills can leverage financial information effectively when making financial decisions. There is a global concern raised by various studies on financial literacy. Regardless of the developing or developed nations and the growth of the financial sector, studies observe that in general, financial literacy was notably low (Lusardi *et al.*, 2011), along with disparities, with women exhibiting lower financial literacy than men, older individuals having lower financial literacy than younger generations, and a substantial portion of the population failing to engage in retirement planning.

Fintech-Finance & Technology

Fintech, financial technology, digital finance or digital banking are generally used interchangeably and have the same context. Financial technology is a new industry that innovatively uses technology to transform and improve financial products and services (Schueffel, P. 2016). Another definition of fintech considers it a technological innovation that can result in new business models, applications, processes, products, or services with an impact on financial institutions (Schindler, J.W. 2017). Fintech marries the worlds of finance and technology, harnessing newer technologies such as cloud, artificial intelligence, blockchain, robotics, and mobile internet to transform traditional financial industry practices (Gomber, 2017).

Fintech adoption

Fintech's primary contribution is flexible and convenient access to individuals to complete a financial activity without the necessity of visiting a physical financial institution, all with a few taps on a digital device. Fintech has broadened financial inclusion, improving access to financial services to a larger population, even in regions with limited or no traditional banking infrastructure (Yoshino *et al.*, 2020). The main attributes of the Technology Acceptance Model (TAM) in the fintech context are perceived ease of use, perceived usefulness, and relative advantage and influence various variables on consumer behavior and intentions (Davis *et al.*, 1989). Perceived ease of use is the extent to which customers believe that their effort will be reduced by using a particular system or technology. Perceived usefulness reflects a customer's belief that the system will directly enhance their performance (Venkatesh *et al.*, 2000). One study observes that there is a positive association of the increase in relative advantage to technology adoption by users (Geng *et al.*, 2023). To adopt fintech products and services, prospective customers require essential information about the products, a comprehension of the underlying technology, and a grasp of the overall benefits. This knowledge is the foundation of the user's awareness of these innovative financial solutions (Laforet *et al.*, 2005).

Challenges

The rapid growth of fintech has been instrumental in significant advancements in financial services; however, it has posed a host of challenges, especially concerning technology and security. The risk of technology failures and disruptions is a critical concern for financial institutions, as they can result in service interruptions and financial losses (Zakaria, 2023). There is a need to protect sensitive financial data from breaches and cyberattacks by fintech firms, and they should invest in robust security measures to safeguard customer information. The interconnected world of fintech is highly vulnerable to cyber threats, including hacking and data breaches. The evolving nature of these threats requires constant vigilance and adaptation (Pejkovska, 2018). The fintech industry's rapid evolution has outpaced existing regulations. This necessitates the need for new and updated regulations to address the changing business models and risks associated with fintech companies. The fintech sector has witnessed a surge in startup entrants; however, there have been many instances of fintech firm failures and fraudulent activities, such as SIM identity theft, OTP fraud, and personal data theft (Feyen *et al.*, 2023).

Research Gap

We are now in a digital age, where almost everything is available online, and the users need to be digitally literate. Fintech has the potential to improve financial inclusion and is the backbone for money-related online transactions. Digital financial literacy is increasingly becoming a basic need so that individuals understand the advantages of using digital channels and are aware of the risks that the digital channel brings along and can mitigate online financial frauds and scams. There is a need to study the association of digital literacy and financial literacy in the context of fintech adoption, especially as the millennial generation is increasingly using digital platforms, including for financial transactions. There are further studies needed on digital financial literacy, as this is a new topic that has emerged within the last decade, and there are very few studies available. Considering the importance of the digital age and fintech, this paper studies fintech adoption by bank customers and their digital financial literacy level in India. In an era characterized by rapid digitalization and an evolving financial landscape, the fusion of financial literacy and technology is indispensable.

Objectives of this study

The main objective is to study the impact of digital financial literacy on fintech adoption among bank customers in India.

Operational definitions

Digital literacy: Digital literacy refers to the bank's customers' level of understanding of the features of smart mobile phones, ability to use mobile internet and apps for carrying out online transactions, and awareness of cyber frauds and scams while carrying out digital transactions.

Financial literacy: Financial literacy refers to the bank's customers' ability to plan and review their financial goals and to make financial decisions based on their understanding of financial products and associated financial risks.

Fintech Adoption: Fintech adoption refers to a bank's customer's perceived ease of use, perceived usefulness and relative advantage toward fintech. The perceived ease of use measures the bank's customer's perception that using fintech on smart devices easily provides flexibility, meets their needs, and can increase the use of fintech. The perceived usefulness of fintech measures banking customers' perception that using fintech increases their productivity and efficiency, and they save time in completing financial transactions online instead of visiting a bank branch. The fintech relative advantage measures the bank's customer's perception that the fintech products launched by their bank use newer technology and that their banks regularly introduce new useful products.

Public Sector Banks: Banks where the holding of the Government of India is more than 50%.

Private Sector Banks: Banks where the majority holding is of the private sector,

Variables: This study has digital literacy and financial literacy as the independent variables and fintech adoption - perceived ease of use, perceived usefulness and perceived relative advantage as the dependent variables.

Hypothesis: The six main hypotheses are as follows:

Table 1: Hypothesis

No.	Hypothesis	Independent Construct	Dependent Construct
H1	Financial literacy has a direct association with the fintech adoption perceived ease of use	Financial Literacy	Fintech Adoption - perceived ease of use
H2	Financial literacy has a direct association with the fintech adoption perceived usefulness		Fintech Adoption - perceived usefulness
H3	Financial literacy has a direct association with the fintech adoption Relative advantage		Fintech Adoption - Relative advantage
H4	Digital literacy has a direct association with the fintech adoption perceived ease of use	Digital Literacy	Fintech Adoption - perceived ease of use
H5	Digital literacy has a direct association with the fintech adoption perceived usefulness		Fintech Adoption - perceived usefulness
H6	Digital literacy has a direct association with fintech adoption Relative advantage		Fintech Adoption - Relative advantage

Research Methodology

This research is multidisciplinary, spread across digital literacy, financial literacy, banking, information and communication technology, and behavioral sciences. The technology acceptance model is used, as fintech is primarily a technology-led innovation in the financial sector. The study uses quantitative research methodology, specifically, a descriptive research method, to gather information, analyze data, and describe characteristics of the population in the sample data analysis. The model has independent constructs of digital literacy and financial literacy on the left-hand side and dependent constructs of fintech adoption- perceived ease of use, perceived usefulness and perceived relative advantage on the right-hand side.

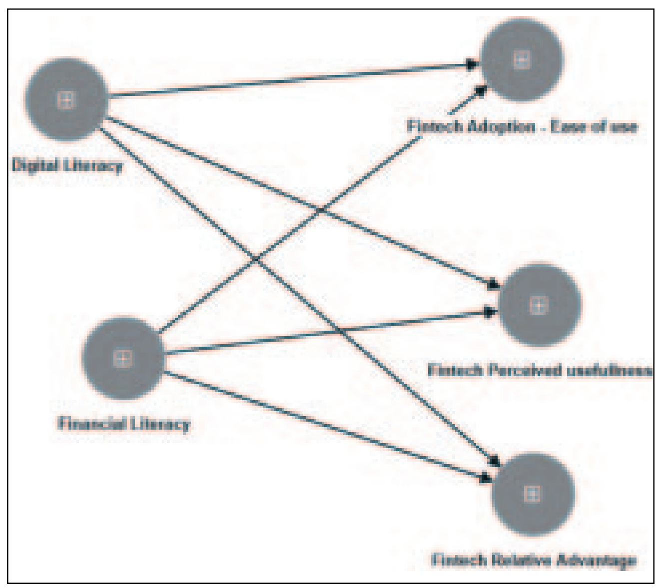

Figure 1: Fintech Adoption Model
(*Source:* SmartPLS 4.0)

Survey and Survey Administration: This was an online survey conducted among bank customers in Uttarakhand, India. Since bank customers are geographically spread over the state, the purposive sampling method was chosen for this study. The minimum sample size needed with a margin of error of 5% and a confidence level of 95% was 267. A sample size of 267 or more was considered adequate (Adam, A.M. 2020). There were 560 responses, of which 14 were invalid, and a balance of 546 was considered for data analysis. Based on a review of the literature on digital literacy, financial literacy and fintech adoption, a survey tool was developed for this study. This tool had 5-point Likert scale questions and a few open-ended questions. The content validity of the survey tool was established with discussions and feedback on the survey tool from peer review and experts from the banking and technology sector. The reliability of the survey tool was established by the test and retest method using Cronbach's alpha for 30 participants with a gap of four weeks. The Cronbach's alpha value for the test and retest was computed using the MS Excel data analysis tool, and a value of 0.86 was recorded, which is higher than 0.70. The survey was open to respondents from May 1, 2023, to July 1, 2023, using Google Forms. Microsoft Excel 2016 and SmartPLS 4.0 tools were used for the data analysis. The SmartPLS tool has a measurement model to establish reliability and discriminant validity statistics, and a structured model is used for accepting or rejecting the hypothesis and to validate model explanatory power, effect size, and model predictive power for future observations. This tool provides statistics even for very small sample sizes, nonnormal data, and high model complexity and supports theory development and exploratory research (Magno *et al.*, 2022).

Delimitation of the Study

The population for this study was bank customers located within the state of Uttarakhand in India. The study's timeframe was from May 1, 2023, to July 1, 2023.

Limitation of the Study

The research employed a survey method using a convenient sampling approach. This limitation was necessitated by the dispersion of bank customers across a wide geographical area.

Ethics: All participants were informed of the survey's purpose, and they willingly and voluntarily consented to participate. Their participation was not influenced by any external factors. The participant responses will be kept confidential, and data privacy will be maintained.

Data Analysis

There were 546 respondents, of which 470 respondents were customers of the public sector undertaking banks in Uttarakhand, while 76 respondents were customers of private sector banks in Uttarakhand. There are 413 respondents, i.e., 76%, who are male, while 133 or 24% of respondents are female. There are 94 respondents aged 29 years, 175 respondents aged 29 to 41 years, 166 respondents aged 42 to 54 years, 95 respondents aged 55 to 67 years, and 16 respondents aged 68 or older. Forty-one respondents are homemakers, 53 respondents are students, 68 respondents have retired, 115 respondents have their own business, 121 respondents work in the government sector, and the remaining 158 respondents work in the private sector. The educational qualification of 21 respondents was high school, 28 had intermediate/higher secondary school education, 273 were graduates or postgraduates, 188 had technical or professional education and the remaining 36 had doctorate educational qualifications. Forty respondents use BHIM UPI, 101 use PayTM, 112 use their bank app, 246 use GPay, and 30 use miscellaneous other apps for payments and transfers. Seventeen respondents did not use any app for payments and transfers.

Table 2: Respondent's Profile

	Type	Numbers	%
Bank Type	Private Banks	70	13%
	PSU Banks	476	87%
	Total	546	100%
Gender	Male	413	76%
	Female	133	24%
	Total	546	100%
Age	up to 29 years	94	17%
	29 to 42 years	175	32%
	42 to 55 years	166	30%
	55 to 68 years	95	17%
	68 years or more	16	3%
	Total	546	100%
Qualification	High school	21	4%
	Intermediate	28	5%
	Graduate/Postgraduate	275	50%
	Technical/Professional	186	34%
	Doctorate	36	7%
	Total	546	100%

Job/ Profession	Homemaker	31	6%
	Student	53	10%
	Pvt Sector	155	28%
	Govt Sector	121	22%
	Businessmen	118	22%
	Retired	68	12%
	Total	546	100%
fintech app name	BHIM UP	39	7%
	PayTM	102	19%
	My bank app	115	21%
	GPay	243	45%
	Others	30	5%

	Do not use	17	3%
	Total	546	100%
App used for	Payments & Transfers	497	91%
	Savings & Investments	20	4%
	Borrowings	2	0%
	Insurance	2	0%
	Not used	25	5%
	Total	546	100%

Most of the respondents for the independent construct digital literacy fully agreed with all the questions, except for the question on online frauds and scams, where 14% of responses were neutral, and only 27% of respondents fully agreed.

Table 3: Digital literacy questionnaire response summary

Digital literacy	Survey Question/Indicator	Fully Disagree	Disagree	Neutral	Agree	Fully Agree
DL1	I understand the features of a smart device like a mobile phone, laptop, etc.	0%	1%	1%	31%	67%
DL2	I own a smart device like a mobile phone and I use the internet on this device.	0%	0%	1%	20%	79%
DL3	I can install, set up and use apps on my mobile phone.	1%	1%	6%	24%	67%
DL4	I understand online cyber frauds and scams while using the internet on mobile phones, laptops etc.	0%	1%	3%	35%	61%
DL5	My bank keeps me updated on new online frauds and scams while using online banking services.	1%	3%	14%	54%	27%

There were mixed responses to the questions on the independent construct of financial literacy. Forty-two percent of respondents had never taken up financial literacy training, while 27% of responses were neutral. Twenty-five percent of respondents did not prepare financial plans, while 44% of the responses were neutral. Thirty-one percent of respondents were neutral in understanding investment avenues.

Table 4: Financial literacy questionnaire response summary

Financial literacy	Item/ Indicator	Fully Disagree	Disagree	Neutral	Agree	Fully Agree
FL1	I understand banks' products like savings, fixed deposits and loans/borrowings.	0%	3%	9%	55%	32%
FL2	I understand investment options like retirement funds, mutual funds, share investments, etc.	2%	9%	31%	38%	21%
FL3	I understand the risks associated with financial investments.	1%	4%	26%	46%	23%
FL4	I set and regularly review my financial goals.	2%	7%	37%	37%	16%
FL5	I prepare my financial plan using my bank app.	13%	12%	44%	21%	11%
FL6	I have undertaken financial literacy training.	13%	29%	27%	21%	11%

The responses for all the questions on fintech adoption ease of use were 80%.

Table 5: Perceived Ease of Use Questionnaire Response Summary

Perceived ease of use	Item/Indicator	Fully Disagree	Disagree	Neutral	Agree	Fully Agree
AEU1	I believe using new features of online banking apps on my smartmobile phone, laptop, etc., is easy.	1%	2%	12%	51%	34%
AEU2	Using online banking applications on my smartmobile phone, laptop, etc., provides me flexibility.	0%	1%	9%	48%	41%
AEU3	I find the banking app on my mobile phone useful for my banking needs.	0%	2%	13%	48%	37%
AEU4	Using the newer technology increases the usage of banking apps on my mobile phone.	0%	1%	13%	50%	36%
AEU5	Using my bank app, I can pay bills, carry out prepaid recharge, etc., easily.	0%	3%	12%	42%	43%

For the dependent construct, fintech adoption perceived usefulness, the responses were mixed, with 74% or more responses agreeing or fully agreeing; however, many respondents varying from 8% to 21% were neutral.

Table 6: Perceived Usefulness Questionnaire Response Summary

Perceived usefulness	Item/Indicator	Fully Disagree	Disagree	Neutral	Agree	Fully Agree
APU1	By adopting online banking, my efficiency and productivity will increase.	0%	1%	11%	54%	34%
APU2	I save time using banking apps as against visiting my bank branch.	1%	1%	8%	45%	46%
APU3	I can easily use my bank payment gateway for making payments from other websites like e-Commerce, Travel booking, etc.	0%	5%	21%	48%	26%
APU4	My bank has a UPI facility for payments and transfers and it works well with other mobile wallet providers like Google Pay, PayTM, etc.	0%	1%	10%	50%	38%

Seventy-nine percent+ responses for the dependent construct fintech relative advantage agreed or fully agreed, while 9% to 19% of respondents chose to be neutral.

Table 7: Relative Advantage Questionnaire Response Summary

Relative Advantage	Item/Indicator	Fully Disagree	Disagree	Neutral	Agree	Fully Agree
ARA1	The new online products and services introduced by my bank are useful and save time to complete online transactions.	1%	1%	12%	45%	41%
ARA2	My bank uses newer technologies in online products and services.	1%	2%	19%	46%	33%
ARA3	My bank regularly introduces new online banking products and services and keeps me informed.	1%	3%	17%	53%	26%
ARA4	My bank keeps me informed of precautions to be followed while using online banking.	1%	2%	10%	56%	30%
ARA5	Online banking minimizes my need to visit bank branches.	1%	1%	9%	48%	41%

The Excel sheet data were imported into a new project in SmartPLS. The outer model or measurement model was created by dragging indicators on the canvas. The constructs were suitably named and connected so that the inner model or structured model could be defined. The model diagram along with factor loading is shown in the figure below.

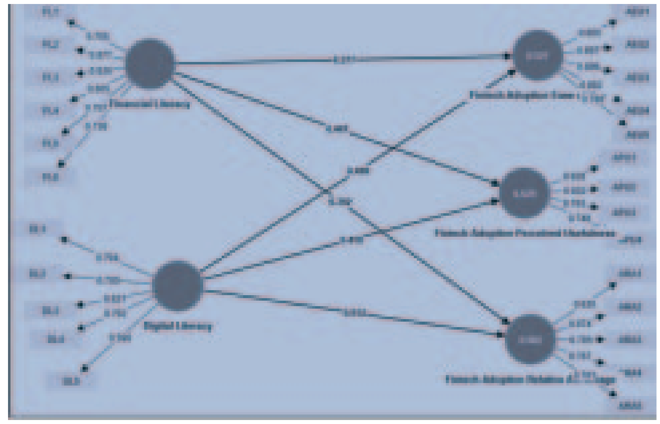

Figure 2: Measurement and Structured Model (*source:* SmartPLS 4.)

Construct Reliability and Validity: The construct validity was established by calculating the factor loading for the measurement model from each of the independent constructs toward the dependent construct. The statistics for Cronbach's alpha, composite reliability and convergent validity were computed as follows:

Table 8: Measurement model statistics

Dependent Construct	Constructs Relationships	Outer loadings	Cronbach Alpha	Composite reliability	AVE
Adoption ease of use	AEU1 <- Fintech Adoption - ease of use	0.850	0.914	0.936	0.746
	AEU2 <- Fintech Adoption - ease of use	0.897			
	AEU3 <- Fintech Adoption - ease of use	0.896			
	AEU4 <- Fintech Adoption - ease of use	0.882			
	AEU5 <- Fintech Adoption - ease of use	0.789			
Adoption Perceived usefulness	APU1 <- Fintech Perceived usefulness	0.828	0.803	0.871	0.629
	APU2 <- Fintech Perceived usefulness	0.802			
	APU3 <- Fintech Perceived usefulness	0.793			
	APU4 <- Fintech Perceived usefulness	0.748			
Adoption Relative Advantage	ARA1 <- Fintech Relative Advantage	0.835	0.852	0.895	0.631
	ARA2 <- Fintech Relative Advantage	0.874			
	ARA3 <- Fintech Relative Advantage	0.785			
	ARA4 <- Fintech Relative Advantage	0.767			
	ARA5 <- Fintech Adoption Relative Advantage	0.701			
Digital Literacy	DL1 <- Digital Literacy	0.794	0.788	0.855	0.544
	DL2 <- Digital Literacy	0.700			
	DL3 <- Digital Literacy	0.821			
	DL4 <- Digital Literacy	0.762			
	DL5 <- Digital Literacy	0.590			
Financial Literacy	FL1 <- Financial Literacy	0.705	0.87	0.903	0.609
	FL2 <- Financial Literacy	0.877			
	FL3 <- Financial Literacy	0.835			
	FL4 <- Financial Literacy	0.805			
	FL5 <- Financial Literacy	0.707			
	FL6 <- Financial Literacy	0.738			

The Cronbach's alpha and the composite reliability for all the constructs are greater than the minimum threshold of 0.70. The convergent reliability statistics are more than the 0.50 threshold. There are two indicators, DL2 & DL5, with factor loading values less than or equal to the threshold value of 0.70. The variance inflation factor (VIF) was calculated, and the VIF was below the threshold of 0.50 for all constructs. As a rule of thumb, the VIF should have a value of 5 or lower (i.e., a tolerance level of 0.2 or higher) to avoid collinearity (Hair *et al.,* 2011). In light of these findings, a factor loading below 0.70 for two indicators is acceptable, and the data can be considered reliable (Hair *et al.,* 2019).

Table 9: VIF Outer Model Dependent & Independent indicators

Dependent Indicators Variance Inflation Factor (VIF)									
AEU1	2.562	AEU2	3.361	AEU3	3.475	AEU4	3.063	AEU5	1.865
APU1	1.899	APU2	1.825	APU3	1.596	APU4	1.479		
ARA1	2.621	ARA2	3.064	ARA3	2.239	ARA4	1.968	ARA5	1.485

Independent Indicators Variance Inflation Factor (VIF)											
DL1	1.858	DL2	1.581	DL3	1.903	DL4	1.772	DL5	1.118		
FL1	1.752	FL2	3.117	FL3	2.621	FL4	2.281	FL5	1.775	FL6	1.919

Discriminant Validity:

To check discriminant validity, the heterotrait-monotrait ratio (HTMT) was computed as in the table below. The HTMT value highlighted in bold is above the threshold of 0.90 and does not establish discriminant validity. To validate this, cross-loading was computed, and discriminant validity was achieved, as all cross-loading was below 0.90 (Chin, W.W. 1998).

Table 10: Discriminant Validity HTMT

Heterotrait-monotrait ratio (HTMT)	
Financial Literacy <-> Digital Literacy	0.419
Fintech Adoption Ease of Use <-> Digital Literacy	0.731
Fintech Adoption Ease of Use <-> Financial Literacy	0.616
Fintech Adoption Perceived Usefulness <-> Digital Literacy	0.719
Fintech Adoption Perceived Usefulness <-> Financial Literacy	0.723
Fintech Adoption Perceived Usefulness <-> Fintech Adoption Ease of Use	0.958
Fintech Adoption Relative Advantage <-> Digital Literacy	0.773
Fintech Adoption Relative Advantage <-> Financial Literacy	0.664
Fintech Adoption Relative Advantage <-> Fintech Adoption Ease of Use	0.878
Fintech Adoption Relative Advantage <-> Fintech Adoption Perceived Usefulness	0.905

Table 11: Discriminant Validity Cross Loading

Cross Loadings					
	Digital Literacy	Financial Literacy	Fintech Adoption Ease of Use	Fintech Adoption Perceived Usefulness	Fintech Adoption Relative Advantage
AEU1	0.563	0.453	0.850	0.658	0.671
AEU2	0.587	0.463	0.897	0.735	0.698
AEU3	0.549	0.470	0.896	0.715	0.686
AEU4	0.545	0.505	0.882	0.696	0.694
AEU5	0.497	0.519	0.789	0.736	0.617

APU1	0.474	0.537	0.667	0.828	0.646
APU2	0.459	0.439	0.737	0.802	0.616
APU3	0.496	0.498	0.661	0.793	0.625
APU4	0.433	0.468	0.538	0.748	0.499
ARA1	0.560	0.497	0.740	0.669	0.835
ARA2	0.555	0.481	0.648	0.614	0.874
ARA3	0.493	0.389	0.476	0.464	0.785
ARA4	0.534	0.400	0.525	0.497	0.767
ARA5	0.454	0.520	0.682	0.729	0.701
DL1	0.794	0.226	0.472	0.474	0.445
DL2	0.700	0.199	0.357	0.327	0.338
DL3	0.821	0.283	0.551	0.504	0.498
DL4	0.762	0.227	0.414	0.356	0.418
DL5	0.590	0.365	0.485	0.442	0.634
FL1	0.315	0.705	0.407	0.509	0.463
FL2	0.312	0.877	0.514	0.548	0.49
FL3	0.305	0.835	0.491	0.527	0.486
FL4	0.231	0.805	0.358	0.409	0.418
FL5	0.327	0.707	0.472	0.465	0.462
FL6	0.190	0.738	0.325	0.375	0.361

The reliability and discrimination validity for all the constructs are established and acceptable.

Structural Model:

In this section, the inner VIF values are computed to ensure that there are no multicollinearity issues among the predictor constructs. The VIF values for the inner model or structural model are in the next table, and all are well within the threshold limit.

Table 12: VIF Inner Model

Variance Inflation Factor Inner Model	
	VIF
Digital Literacy -> Fintech Adoption Ease of Use	1.154
Digital Literacy -> Fintech Adoption Perceived Usefulness	1.154
Digital Literacy -> Fintech Adoption Relative Advantage	1.154
Financial Literacy -> Fintech Adoption Ease of Use	1.154
Financial Literacy -> Fintech Adoption Perceived Usefulness	1.154
Financial Literacy -> Fintech Adoption Relative Advantage	1.154

The bootstrap results of the path analysis are shown in the table below, where the p value is used to check whether the hypothesis is supported by the statistics. All the p values are zero, i.e., p value < 0.05 or the 95% confidence interval and are supported (Hair *et al.*, 2019).

Table 13: Path Analysis

Hypotheses	Relationships	Path Coefficient	p value	Decision
H1	Digital Literacy -> Fintech Adoption - Ease of use	0.499	0	Supported
H2	Digital Literacy -> Fintech Perceived usefulness	0.420	0	Supported
H3	Digital Literacy -> Fintech Relative Advantage	0.519	0	Supported
H4	Financial Literacy -> Fintech Adoption - Ease of use	0.376	0	Supported
H5	Financial Literacy -> Fintech Perceived usefulness	0.459	0	Supported
H6	Financial Literacy -> Fintech Relative Advantage	0.342	0	Supported

From the above results, it is clear that bank customers' digital literacy and financial literacy have a significant direct association with fintech adoption perceived ease of use, fintech adoption perceived usefulness, and fintech adoption relative advantage. All six hypotheses are thus supported. The R2 statistical method was used to check the model's explanatory power, and this statistic has a value of more than 0.52 or 52% for all three dependent variables, signifying that the model has high explanatory power. The model is capable of fintech adoption with a relative advantage of 56%, followed by ease of use and perceived usefulness to the extent of 52%.

Table 14: Model Explanatory Power

Model Explanatory Power		
Dependent Variables	R-square (in sample prediction)	Interpretation
Fintech Adoption - Ease of use	0.527	The model has a high degree of Explanatory Power
Fintech Perceived usefulness	0.529	
Fintech Relative Advantage	0.562	

The structural or outer model was validated for the effect of independent constructs on dependent constructs. Table 15 shows that the independent constructs of digital literacy and financial literacy have a strong effect size on the dependent constructs.

Table 15: Effect Size

Effect Size (f-square)				
Independent Constructs	Fintech Adoption - Ease of use	Fintech Perceived usefulness	Fintech Relative Advantage	Interpretation
Digital Literacy	0.454	0.323	0.520	Strong effect size (> 15%)
Financial Literacy	0.260	0.390	0.304	

The structural model predictive relevance was computed using Q2 statistics for all fourteen direct variables or indicators, and the model has strong predictive power for future observations. The strongest prediction power of 40% is for perceived ease of use AEU2, where respondents agree or fully agree that using the banking app on their smartmobile phones provides them flexibility in carrying out banking transactions. Similarly, in relative advantage ARA1, the respondents agree or fully agree that the online products and services are useful for them and save them time in banking-related transactions.

Table 16: Model Prediction Power

Direct Variables (indicators)	Q^2predict	Interpretation
AEU1	0.380	The structural or outer model has strong predictive relevance for future observations
AEU2	0.407	
AEU3	0.377	
AEU4	0.400	
AEU5	0.366	
APU1	0.371	
APU2	0.286	
APU3	0.355	

APU4	0.294	
ARA1	0.407	
ARA2	0.392	
ARA3	0.285	
ARA4	0.325	
ARA5	0.332	

Findings and conclusion

1. The findings on digital literacy are as follows:

   - A total of 98% of participants agree that they have an understanding of the features of a smartphone.
   - Ninety-nine percent of participants agree that they have a smart device and use the mobile internet.
   - Ninety-one percent of participants could install, set up and use the app on their mobile phone, whereas 6% were neutral, and the remaining 3% disagreed with this.
   - Ninety-six percent of participants agreed that they were aware of online cyber frauds and scams while using the internet on their mobile devices, while 3% were neutral and 1% disagreed with this.
   - Eighty-two percent of participants agreed or fully agreed that their bank keeps them updated on new online frauds and scams while using online banking; however, 14% were neutral, and 4% did not agree with this.

   The above findings confirm that the majority of banking customers have smart devices, they use the internet on these devices, they know the features of the smart device, and they can install and use the app.

2. The findings on financial literacy are as follows:

   - Eighty-seven percent of the respondents agree or fully agree that they understand the bank's products, such as savings, investments, and loans & borrowings, while 9% of respondents prefer to be neutral, and 3% of respondents disagree with this.
   - Only 58% of the participants agreed that they understood investment options such as retirement funds and mutual funds, 31% were neutral, and the balance disagreed.
   - Only 69% of respondents understood the risks associated with financial investments, 26% were neutral, and the remaining 5% disagreed or fully disagreed with this.
   - Only 54% of the respondents could set and regularly review their financial goals, while 37% were neutral and the remaining 9% disagreed with this.
   - Only 31% of the respondents could prepare their financial plan using the bank app, while 44% were neutral and the remaining 25% disagreed with this.
   - Only 31% of the respondents had undertaken financial literacy training, while 27% were neutral and the remaining 42% disagreed with this.

3. The findings on fintech adoption- ease of use are as follows:

   - Eighty-six percent of the participants believed that using the new features of online banking apps on smartmobile phones is easy, 12% were neutral, and 2% disagreed.
   - Eighty-nine percent of the participants agreed or fully agreed that using the online banking app on smart mobile phones provides them flexibility, while 9% were neutral and 1% disagreed.
   - Eighty-five percent of the participants believed that they found the banking app on their mobile phone useful for their banking needs, 13% were neutral, and 2% disagreed with this.
   - Eighty-six percent of the respondents agree or fully agree that using the newer technology increases the usage of banking apps on mobile phones, 13% were neutral, and only 1% disagreed.
   - Eighty-five percent of the respondents agree or fully agree that by using the bank's app, they can pay bills, carry out prepaid recharge, etc., easily, while 12% were neutral and 3% disagreed.

   Although most banking customers have a positive perception of the ease of use of fintech products, there is still scope for improvement by further increasing awareness of ease of use for neutral customers.

4. The findings on the perceived usefulness of fintech products by banking customers are as follows:

   - Eighty-eight percent of the respondents agree or fully agree that by adopting online banking, their efficiency and productivity will increase, while 11% were neutral and 1% disagreed.
   - Ninety percent of the participants believed that they could save time using banking apps against visiting a bank branch, while 8% were neutral and 2% disagreed.
   - Seventy-four percent of the participants agreed that they could easily use the bank's payment gateway for making payments from other websites, such as e-Commerce and travel booking, while 21% were neutral and 5% disagreed.
   - Eighty-eight percent of the respondents agreed that their bank has a UPI facility for payments and

transfers, which works well with other mobile wallet providers such as Google Pay and PayTM, while 10% were neutral and 2% disagreed.

The perceived usefulness of the fintech products can be further improved by carrying out intervention for 10% plus customers who choose to be neutral.

5. The findings on the relative advantage of using fintech products are as follows:
   - Eighty-six percent of the respondents agree that the new online products and services introduced by their bank are useful and save time to complete online transactions, while 12% were neutral and 2% disagreed.
   - Seventy-eight percent of the participants believed that their bank uses newer technologies in online products and services, 19% were neutral, and 3% disagreed.
   - A total of 78% of the participants agreed that their bank regularly introduces new online banking products and services and keeps them informed, 17% were neutral, and the remaining 5% disagreed.
   - Eighty-six percent of the participants agreed that their bank keeps them aware of precautions to be followed while using online banking, while 10% were neutral and 4% disagreed.
   - A total of 89% of the participants agreed that the use of online banking minimizes the need to visit bank branches, while 9% were neutral and 2% disagreed with this.

   The majority of the bank customers' response toward fintech adoption from a relative advantage perspective has been positive; however, banks should plan for suitable interventions to cover those customers with neutral and disagree responses.
6. This study confirms the positive association of digital literacy with perceived ease of use, perceived usefulness and relative advantage in fintech adoption.
7. This study confirms the positive association of financial literacy with perceived ease of use, perceived usefulness and relative advantage in fintech adoption.
8. Only 21% of the respondents use their bank app for their digital banking needs, while 45% of the respondents prefer Google's GPay, 19% prefer using PayTM, and 7% prefer using BHIM UPI. Banks need to understand and increase awareness of using their app.
9. Ninety-one percent of the respondents use fintech for payments and transfers, while only 4% use fintech for savings and investments. The banks need to increase awareness of the customers toward major features of the banking app so that customers start using other functionalities.

This study establishes a robust correlation between digital financial literacy and the adoption of financial technology (fintech). Fintech, marked by technological innovation, has significantly disrupted financial markets, becoming an integral force in reshaping the financial landscape and experiencing unprecedented growth. It has evolved to become the backbone of various industries, making it imperative for fintech firms to proactively address concerns related to online banking risks. The banks need to take a proactive approach to addressing customer challenges, particularly those less-explored features by their customers. Increasing awareness about online banking, educating users on precautions while engaging in digital banking activities, and deciphering why customers still opt for traditional branch transactions are pivotal aspects that require attention. There are substantial opportunities to enhance awareness to address customer concerns and increase digital financial literacy levels, consequently boosting fintech adoption. Improving digital financial literacy not only contributes to fintech adoption but also aligns with broader goals of financial inclusion. Enhanced literacy empowers customers with the ease and convenience of conducting financial transactions, ultimately saving time and potentially reducing costs.

While this study provides insight into the current landscape, the realm of fintech remains an evolving arena, offering ample opportunities for further exploration. Future research could explore fintech adoption in different geographical contexts and explore specific aspects, such as the adoption of fintech products beyond traditional saving and investment tools. By expanding the scope of the investigation, we can deepen our understanding of the dynamics at play in the ever-evolving landscape of digital finance and fintech adoption.

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Present Scenario of Blended Learning in Higher Education Institutions of West Bengal

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Abstract

Blended learning is a pedagogical approach that combines face to face and online activities as well as integration of synchronous and asynchronous learning tools for providing optimal effective learning. The U.G.C prepared 'Blended Mode of Teaching and Learning: Concept Note' for implementing the blended learning in all higher education institutions of India due to recommendation of NEP 2020. So, the researchers investigated about the present conditions/status of blended learning in Higher Education institutions of West Bengal through the descriptive survey method with help of self-made questionnaire. In this research we found that the majority of teachers felt comfortable and gave priority to use face to face mode for delivering lesson & accessing the learner's performance. Also, Most of the teachers used laptop; wherein most of the learners used smart phone for participating in teaching- learning process. Therefore, adaption of blended learning is taken at individual level not institutional level in higher education of West Bengal. Even, infrastructural facilities like hardware & software facilities and digital competencies of teachers are not sufficient for implementing the blended learning. Also, different challenges hindered to implement the blended learning at higher education of West Bengal. So, blended learning can be implemented through providing of facilities, solutions of challenges and arrangement of training in higher education institutions.

Introduction

Education brings progressive changes in society and humane mind. These changes are come out through proper implication of scientific& technological different inventions in education. In 21st century, different inventions like artificial intelligence, machine learning, deep learning, digital learning, blended learning, smart classroom, flipped classroom, and MOOCs courses etc influenced as well as enriched to our education system. Also, National education policy 2020 recommended 'extensive use of technology in teaching and learning' for bringing transformative changes and promoting digital education in Indian education system (NEP, 2020). Even, this policy accepted many modes of learning e.g. face to face mode, distance mode, online mode & blended mode and also recommended to use the blended modes of learning at all level of education from school to higher education (Blended Mode of Teaching and Learning: Concept Note, 2021.).

The term 'Blended Learning' is originated for maintaining balance between digital learning and traditional learning in teaching-learning process (Garrison & Vaughan, 2008; Blended Mode of Teaching and Learning: Concept Note, 2021). So, blended learning is explained and conceptualized as an instructional methodology/ a teaching and learning approach/ a pedagogical approach/ the educational practice that combines face to face and online activities as well as integration of synchronous and asynchronous learning tools for providing optimal effective learning (Blended Mode of Teaching and Learning: Concept Note, 2021). Also, in developed regions, 97% higher education institutions are creating blended learning one or more forms and it was already adopted by the 80% higher education institutions (Feng, 2022). But the creation & adoption of blended learning is being progressing in India.

Rational of the Study: TheNational Education Policy 2020 recommended to use the blended modes of learning at all level of education from school to higher education and The University Grants Commission prepared a report for implementation the blended learning in all higher education institutions of India (Blended Mode of Teaching and Learning: Concept Note, 2021). So, the researchers have studied to know the present conditions/

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status of blended learning in Higher Education institutions with respect of implementation of blended learning.

Research Question: What are the present conditions/ status of blended learning in Higher Education institutions?

Objective of the Study: To study the present conditions/status of blended learning in Higher Education institutions.

Methodology of the Study: The descriptive survey method was used for conducting this study and the researchers took as population all higher education institutions of West Bengal. Also, samples were collected through simple random sampling and six higher education institutions were chosen e.g. four Government Degree colleges and two Autonomous Degree colleges. Even, the researcher developed self-made questionnaire and it was standardized through expert opinion. This questionnaire was multiple -choice based open ended and closed endeditems. This questionnaire was administered to forty one teachers of higher education.

Discussion: After collecting data, the researchers have analyzed 40 respondent data because one respondent data was incomplete. Also, every respondent responded to more than one option in each items and following data has being represented in diagrammatically based on their respondents. Even, this data are presented as item wise under specific domain.

Table 01: Analysis of Knowledge about Blended Learning

Types of Institution ↓	Responses related to Knowledge about Blended Learning				
	An instructional approach	A combination of Synchronous and asynchronous learning tools	A learner centric, flexible, Engagement and interactive approach	Any others	Total responses
Government College	14 (27.45%)	05(9.80%)	11(21.57%)	02(3.92%)	32 (62.75%)
Autonomous College	10(19.61%)	06(11.76%)	03(5.88%)	00(00%)	19(37.25%)
Total	24 (47.06%)	11 (21.57%)	14(27.45%)	02(3.92%)	51(100%)

(*Source:* From the field work)

As per data mentioned in the table 01, the respondents of Government colleges and autonomous colleges responded respectively 62.75% and 37.25% about knowledge of blended learning. Also, they responded their different views like 47.06% respondents responded that blended learning is an instructional approach which integrates the face to face and online activities; 27.45% respondents said that BL is a learner centric, flexible, engagement and interactive approach;21.57% respondents responded that BL is a combination of Synchronous and asynchronous learning tools. Even, 3.92% respondents responded that BL based on uses of ICT and traditional teaching learning mode. Also, recording of interactive session between students and teachers is needed in BL. So, we can say that basis on their responses, the proper knowledge is not developed about blended learning among the teachers.

Table 02: Analysis of Modes of Classes at Present Scenario

Types of Institution ↓	Responses about mode of classroom teaching			
	Face to face mode	Online mode	Both modes	Total responses
Government College	19(47.50%)	00(00%)	08(20%)	27(67.50%)
Autonomous College	05(12.5%)	00(00%)	08(20%)	13(32.5%)
Total	24(60%)	00(00%)	16(40%)	40(100%)

(*Source:* From the field work)

As per data mentioned in the table 02,teachers used face to face mode and both modes or blended mode respectively 60% and 40%. So, most of the teacher used face to face mode in teaching learning process of higher education. But teachers of government colleges have focused to use the face to face mode 47.50%; wherein teachers of autonomous colleges have focused to use the face to face mode 12.50%. Even, teachers of both types of institution equally gave importance on blended mode as 20%.

Table 03: Analysis of Modes of Classes at Present Scenario

Types of Institution ↓	Responses about comfortable mode of classroom teaching			
	Face to face mode	Online mode	Both modes	Total responses
Government College	21(52.50%)	00 (00%)	06(15%)	27(67.5%)
Autonomous College	08(20%)	00(00%)	05(12.5%)	13(32.50%)
Total	29(72.50%)	00(00%)	11(27.50%)	40(100%)

(*Source:* From the field work)

As per data mentioned inthe table 03, the majority of teachers (72.50%) are comfortable to use the face to face mode and 27.50% teachers also are comfortable to use blended mode. But no teacher is comfortable to use the online mode. Also, themajority teachers of Government College (52.50%) are comfortable to use the face to face mode in classroom teaching. But some teachers are comfortable to deliver the teaching in blended mode. So, face to face mode of teaching is good for delivering lessons.

Table 04: Analysis of Modes of Classes at Present Scenario

Types of Institution ↓	Responses about mode of assessment			
	Face to face mode	Online mode	Both modes	Total responses
Government College	20(50%)	00(00%)	07(17.50%)	27(67.50%)
Autonomous College	09(22.50%)	01(2.50%)	03(7.50%)	13(32.50%)
Total	29(72.50%)	01(2.50%)	10(25%)	40(100%)

(*Source:* From the field work)

As per data mentioned in the table 04, most of the teachers (72.50%) gave priority for assessing learner's performance on the face to face mode. But 25% teachers gave priority for assessing learner's performance on the blended mode. Also, teachers of Government College are giving more priority towards using face to face mode of assessment than teachers of Autonomous College. Even,blended mode is used for accessing the learner's performance by the teachers of Government College and Autonomous College respectively 17.50% and 7.50%.

Table 05: Analysis of Supportive Requirement for Blended Learning Process

Types of Institution ↓	Responses about using gadgets by teachers				
	Smart Phone	Laptops	Digital Tablet	Desktop	Total responses
Government College	16(25%)	25(39.06%)	02(3.13%)	03(4.69%)	46(71.88%)
Autonomous College	08(12.50%)	07(10.94%)	02(3.13%)	01(1.56%)	18(28.13%)
Total	24(37.5%)	32(50%)	04(6.25%)	04(6.25%)	64(100%)

(*Source:* From the field work)

As per data mentioned in the table 05, half of teachers has been used laptops for taking online classes and others equipments like smart phone, digital tablet anddesktop are used by the teachers 37.50%, 6.25% and 6.25% respectively. Also, differences are observed for using different gadgets among the teachers of Government College and Autonomous College. Therefore, teachers of Government College have been used laptop device more (39.06%) and digital tablet less (3.13%). Moreover, teachers of Autonomous Colleges gavemore focus on Smart Phone (12.50%) and less focus desktop (1.56%).

Table 06: Analysis of Supportive Requirement for Blended Learning Process

Types of Institution ↓	Responses about using gadgets by Learners				
	Smart Phone	Laptops	Digital Tablet	Desktop	Total responses
Government College	27(45%)	08(13.33%)	01(1.67%)	02(3.33%)	38(63.33%)
Autonomous College	13(21.67%)	04(6.67%)	02(3.33%)	03(5%)	22(36.67%)
Total	40(66.67%)	12(20%)	03(5%)	05(8.33%)	60(100%)

(Source: From the field work)

As per data mentioned in the table 06,majority learners (66.67%) used the smart phone to participate the online classes and digital tablet is used by very few learners. Also, the learners of Government College used different gadgets like smart phone, laptops, digital tablet, and desktop e.g. 45%, 13.33%, 1.67% and 3.33% respectively. Therefore, the learners of Autonomous College used different gadgets like smart phone, laptops, digital tablet, and desktop e.g. 21.67%, 6.67%, 3.33% and 5% respectively. So, the majority participants used the smart phone in teaching learning process.

Table 07: Analysis of Supportive Requirement for Blended Learning Process

Types of Institution ↓	Responses about institutional initiatives				
	Adopted BL	Planning for BL adaption	Futuristic planning for adaption BL	Any others	Total responses
Government College	09(21.95%)	03(7.32%)	03(7.32%)	12(29.27%)	27(65.85%)
Autonomous College	07(17.07%)	04(9.76%)	01(2.44%)	02(4.88%)	14(34.15%)
Total responses	16(39.02%)	07(17.07%)	04(9.76%)	14(34.15%)	41(100%)

(Source: From the field work)

As per data mentioned in the table 07, the most of the respondents (39.02%) replied that blended learning is already adopted in their institutions. Also, more than 30% respondents replied different views in any others option like online mode is adopted during lockdown ; blended learning can be implemented as per Government order or controlling authority but this government focused on face to face mode. Even, some respondents responded that present planning and futuristic planning will be taken for adopting the blended learning e.g. 17.07% and 9.76% respectively. So, adaption of blended learning is taken at individual level not institution level in present time. Even, blended learning is not adequately adopted in higher education institutions of West Bengal.

Table 08:Analysis of Supportive Requirement for Blended Learning Process

Types of Institution ↓	Responses about infrastructure facilities					
	Smart classroom	Internet Connectivity	Power backup	Computer Facility	Any others	Total responses
Government College	13(14.94%0	20(22.99%)	04(4.60%)	15(17.24%)	05(5.75%)	57(65.52%)
Autonomous College	06(6.90%)	12(13.79%)	03(3.45%)	08(9.20%)	01(1.15%)	30(34.48%)
Total	19(21.84%)	32(36.78%)	07(8.05%)	23(26.44%)	06(6.90%)	87(100%)

(Source: From the field work)

As per data mentioned in the table 08, infrastructure facilities like Internet Connectivity, Computer Facility, Smart classroom and Power backup are available respectively 36.78%, 26.44%, 26.44% and 8.05%. So, those facilities are not sufficient for implement the blended learning in higher education institution. Also, some respondents did not respond properly about infrastructure facilities, those responses are included in any others option.

Table 09: Analysis of Supportive Requirement for Blended Learning Process

Types of Institution ↓	Responses about software facilities			
	Video Conferencing Software	Learning Management Software	Any others	Total responses
Government College	12(26.09%)	03(6.52%)	14(30.43%)	29(63.04%)
Autonomous College	08(17.39%)	05(10.87%)	04(8.70%)	17(36.96%)
Total	20(43.48%)	08(17.39%)	18(39.13%)	46(100%)

(*Source:* From the field work)

As per data mentioned in the table 09, the majorityrespondents (43.48%) responded that Video Conferencing Software facilities are available in their institution. But 39.13% respondents replied different views in any others option like some respondents did not reply about software facilities, some respondents replied that they useddifferent software like Ms Teams, Google meet, Google classroom, and Microsoft office.Also, responses of respondents are varying about software facilities within institutions. So, we can say that software facilities are not sufficient in higher education institution of West Bengal.

Table 10:Analysis of Supportive Requirement for Blended Learning Process

Types of Institution ↓	Responses about maintaining support			
	Skilled Personnel	Technical Support	Any others	Total responses
Government College	07(15.22%)	13(28.26%)	09(19.57%)	29(63.04%)
Autonomous College	06(13.04%)	10(21.74%)	01(2.17%)	17(36.96%)
Total	13(28.26%)	23(50%)	10(21.74%)	46(100%)

(*Source:* From the field work)

As per data mentioned in the table 10, the majority participants (50%) repliedthat the technical Support is available in their institution. Also, 28.26% respondents replied the Skilled Personnel is available in their institution. Even, more than 20% teachers of both types of institution responded that the technical Support is available in their institution. So, Skilled Persons are not available comparatively technical support in higher education institutions of West Bengal.

Table 11:Analysis of Using Supportive Requirement for Blended Learning Process

Types of Institution ↓	Responses about internet facilities			
	Only Faculty	Faculties & Non-teaching Staff	For all	Total responses
Government College	03(7.5%)	07(17.5%)	17(42.5%)	27(67.5%)
Autonomous College	03(7.5%)	05(12.5%)	05(12.5%)	13(32.5%)
Total	06(15%)	12(30%)	22(55%)	40(100%)

(*Source:* From the field work)

As per data mentioned in the table 11, the majority respondents (55%) responded that internet facilities are available as well as accessible for all. But others respondents replied that internet facilities are available for Faculties & Non-teaching Staff (30%) and Only Faculty (15%) in all higher education institution. So, we can say that internet facilities are available & accessible for all in higher education institution.

Table 12:Analysis of Using Supportive Requirement for Blended Learning Process

Types of Institution ↓	Responses about platforms for online activities				
	Google Meet	Zoom	Moodle	Any others	Total responses
Government College	27(48.21%)	10(17.86%)	02(3.57%)	02(3.57%)	41(73.21%)
Autonomous College	10(17.86%)	03(5.36%)	00(00%)	02(3.57%)	15(26.79%)
Total	37(66.07%)	13(23.21%)	02(3.57%)	04(7.14%)	56(100%)

(*Source:* From the field work)

As per data mentioned in the table 12, the majority respondents used Google Meet for online activities. But others platforms like Zoom, Moodle are used 23.21% and 3.57% respectively. Also, very few participants used Google classroom and Ms Teams that is presented in any others options. So, Google Meet is most useable platform for online activities.

Table 13:Analysis of Using Supportive Requirement for Blended Learning Process

Types of Institution ↓	Responses about platforms for online assessment and feedback					
	Gmail	WhatsApp	Telegram	Learning Management System	Any others	Total responses
Government College	21(40.38%)	13(25%)	00(00%)	00(00%)	03(5.77%)	37(71.15%)
Autonomous College	05(9.62%)	06(11.54%)	01(1.92%)	02(3.85%)	01(1.92%)	15(28.85%)
Total	26(50%)	19(36.54%)	01(1.92%)	02(3.85%)	04(7.69%)	52(100%)

(*Source:* From the field work)

As per data mentioned in the table 13, the majority teachers (50%) used Gmail for online assessment and feedback. Also, others platforms like WhatsApp, Learning Management System and Telegram are used 36.54%, 3.85% and 1.92% respectively. Even, more than 5% teachers used Google form for assessment that is presented in any others option. So, Gmail is most useable platform for online assessment and feedback in higher education of West Bengal.

Table 14: Analysis of Using Supportive Requirement for Blended Learning Process

Types of Institution ↓	Responses about useablesocial media					
	YouTube	WhatsApp	Telegram	Facebook	Any others	Total responses
Government College	12(20.34%)	24(40.68%)	02(3.39%)	00(00%)	01(1.69%)	39(66.10%)
Autonomous College	06(10.17%)	12(20.34%)	01(1.69%)	01(1.69%)	00(00%)	20(33.90%)
Total	18(30.51%)	36(61.02%)	03(5.08%)	01(1.69%)	01(1.69%)	59(100%)

(*Source:* From the field work)

As per data mentioned in the table 14, the majority participants (61.02%) used the WhatsApp in teaching learning process. But others social Medias like YouTube, Telegram and Face book are used respectively 30.51%, 5.08%, and 1.69%. So, WhatsApp is most useable social media in teaching learning process.

Table 15:Analysis of Using Supportive Requirement for Blended Learning Process

Types of Institution ↓	Responses about platforms for sharing documents				
	Gmail	WhatsApp	Telegram	Any others	Total responses
Government College	22(32.84%)	23(34.33%)	00(00%)	01(1.49%)	46(68.66%)
Autonomous College	08(11.40%)	10(14.93%)	02(2.99%)	01(1.49%)	21(31.34%)
Total	30(44.78%)	33(49.25%)	02(2.99%)	02(2.99%)	67(100%)

(*Source:* From the field work)

As per data mentioned in the table 15, said that morethan 40% respondents used WhatsApp and Gmail for sharing documents. But very few participants used other platforms like Telegram (2.99%), Ms Team (1.49%). So, WhatsApp is most useable platform for sharing documents.

Table 16: Analysis of Using Supportive Requirement for Blended Learning Process

Types of Institution ↓	Responses about perspective for embedding online courses					
	Compulsion	Optional	Extra Credit	None	Any others	Total responses
Government College	03(7.32%)	17(41.46%)	03(7.32%)	02(4.88%)	02(4.88%)	27(65.85%)
Autonomous College	04(9.76%)	06(14.63%)	02(4.88%)	02(4.88%)	00(00%)	14(34.15%)
Total	07(17.07%)	23(56.10%)	05(12.20%)	04(9.76%)	02(4.88%)	41(100%)

(*Source:* From the field work)

As per data mentioned in the table 16, the majority participants (56.10%) responded that online courses are embedded as optional. But others participants responded that online courses are embedded as compulsion (17.07%), extra credit (12.20%) and none (9.76%). Also, very few participants (4.88%) did not respond about it. So, online courses are embedded mostly as optional in their programme.

Table 17: Analysis of Using Supportive Requirement for Blended Learning Process

Types of Institution ↓	Responses about digital competencies of teachers						
	Basic knowledge of computer	Conducting online classes	Power point Presentation	Uploading & Sharing documents	Links sharing	Any others	Total responses
Government College	20(13.33%)	20(13.33%)	25(16.67%)	21(14%)	16(10.67%)	01(0.67%)	103(68.67%)
Autonomous College	10(6.67%)	13(8.67%)	10(6.67%)	09(6%)	05(3.33%)	00(00%)	47(31.33%)
Total	30(20%)	33(22%)	35(23.33%)	30(20%)	21(14%)	01(0.67%)	150(100%)

(*Source:* From the field work)

As per data mentioned in the table 17, said that 20% or more than 20% teachers have following digital competencies like Basic knowledge of computer, conducting online classes, Power point Presentation and Uploading &Sharing documents. Also, some teachers (14%) have competency of links sharing. So, we can say that digital competencies are not sufficient among the teachers for implementing the blended mode of teaching and learning.

Table 18: Analysis of Challenging for Blended Learning Process

Types of Institution ↓	Responses about digital infrastructure related challenges					
	Unavailability of digital infrastructure	Poor condition of digital infrastructure	Dysfunction of digital infrastructure	Insufficient of digital infrastructure	Any others	Total responses
Government College	07(14%)	08(16%)	07(14%)	11(22%)	03(06%)	36(72%)
Autonomous College	02(04%)	04(08%)	03(06%)	03(06%)	02(04%)	14(28%)
Total	09(18%)	12(24%)	10(20%)	14(28%)	05(10%)	50(100%)

(*Source:* From the field work)

As per data mentioned in the table 18, we said that teachers faced different digital infrastructure related challenges for implementing the blended learning like insufficient of digital infrastructure (28%), poor condition of digital infrastructure (24%), dysfunction of digital infrastructure (20%) and unavailability of digital infrastructure (18%). Also, digital infrastructure related challenges vary on types of institution e.g. most of the Government Colleges faced insufficient of digital infrastructure and most of the Autonomous College faced Poor condition of digital infrastructure. Also, some teachers said that in any others option, lack of students' equipment, internet issue. So, higher education institutions are not adequately equipped with digital equipments and facilities in West Bengal.

Table 19:Analysis of Challenging for Blended Learning Process

Types of Institution ↓	Responses about digital application/software related challenges				
	Unavailability of digital application	Inability for accessing digital application	Lack of training to access digital application	Any others	Total responses
Government College	04(9.30%)	05(11.63%)	14(32.56%)	05(11.63%)	28(65.12%)
Autonomous College	03(6.98%)	04(9.30%)	03(6.98%)	05(11.63%)	15(34.88%)
Total	07(16.28%)	09(20.93%)	17(39.53%)	10(23.26%)	43(100%)

(*Source***:** From the field work)

As per data mentioned in the table 19, the majority teachers (39.53%) faced the lack of training to access digital application. Also, they faced another digital application related challenges like inability for accessing digital application (20.93%) and unavailability of digital application (16.28%). Even, most of the Government College's teachers faced lack of training to access digital application.Also, few teachers said in any other option that they faced bandwidth network issue, lack of students' attention span, and no issue.

Table 20:Analysis of Challenging for Blended Learning Process

Types of Institution ↓	Responses about challenges for implementing the blended learning						
	Lack of financial support	Lack of administration support	Lack of competent faculty	Lack of training & experience	Lack of time & excessive workload	Any others	Total responses
Government College	13(19.70%)	04(6.06%)	02(3.03%)	10(15.15%)	05(7.58%)	10(15.15%)	44(66.67%)
Autonomous College	06(9.09%)	02(3.03%)	05(7.58%)	04(6.06%)	03(4.55%)	02(3.03%)	22(33.33%)
Total	19(28.79%)	06(9.09%)	07(10.61%)	14(21.21%)	08(12.12%)	12(18.18%)	66(100%)

(*Source:* From the field work)

As per data mentioned in the table 20, higher education institutions faced following challenges based on responses of teachers likelack of financial support (28.79%), lack of training & experience (21.21%), Lack of time & excessive workload (12.12%), Lack of competent faculty (10.61%) and Lack of administration support (9.09%) for implementing the blended learning. Also, some teachers disagreed to respond any positive responses about institution challenges in any other option. So, the researchers can't enforce any specific challenges for implementing the blended learning. Therefore, different challenges hinder for implementing the blended learning at higher education institutions of West Bengal.

Analysis and Interpretation: As per prior discussions, we can analysis and interpretation that the majority teachers (47.06%) responded blended learning is an instructional approach that integrates face to face and online activities. But others aspects of blended learning are not given proper importance. So, the proper knowledge is not developed about blended learning among the teachers. Also, most of the teacher (60%) used face to face mode in teaching learning process. Even, the majority of teachers (72.50%) are comfortable to use the face to face mode. Therefore, most of the teachers (72.50%) gave priority for assessing learner's performance on the face to face mode. So, we can say that face to face mode is comfortable for delivering lesson and assessing the learners' performance. The majority teachers (50%) used laptops for taking online classes and majority learners (66.67%) used the smart phone to participate the online classes. Even, blended learning is not adequately adopted in higher education institutions of West Bengal. Infrastructure facilities like Internet Connectivity, Computer Facility, Smart classroom and Power backup are not sufficient as well as software facilities are not sufficient for implement the blended learning in higher education institution. Skilled Persons are not available comparatively technical support in higher education institutions of West Bengal. Moreover, internet facilities are available & accessible for all in higher education institution. Even, different platforms are used for fulfillment of different purposes like, Google Meet

(66.07%) is most useable platform for online activities, Gmail (50%) is most useable platform for online assessment and feedback, WhatsApp (61.02%) is most useable social media in teaching learning process and WhatsApp (49.25%) is most useable platform for sharing documents. Online courses are embedded mostly as optional in their programme. Digital competencies like Basic knowledge of computer, conducting online classes, Power point Presentation and Uploading & Sharing documents are not sufficient among the teachers for implementing the blended mode of teaching and learning. Also,teachers faced different digital infrastructure related challenges for implementing the blended learning like insufficient of digital infrastructure (28%), poor condition of digital infrastructure (24%), dysfunction of digital infrastructure (20%) and unavailability of digital infrastructure (18%). But the majority teachers (39.53%) faced the lack of training to access digital application and another digital application related challenges like inability for accessing digital application (20.93%) and unavailability of digital application (16.28%).So, higher education institutions faced different challenges based on responses of teachers like lack of financial support (28.79%), lack of training & experience (21.21%), Lack of time & excessive workload (12.12%), Lack of competent faculty (10.61%) and Lack of administration support (9.09%) for implementing the blended learning. Therefore, different challenges hinder for implementing the blended learning at higher education institutions of West Bengal.

Delimitation of the Study

Only two divisions of West Bengal have purely Government Degree colleges and Autonomous colleges. So, the research focused on only those two divisions e.g. Presidency division and Medinipur division.

Conclusion

The majority of teachers felt comfortable and gave priority to use face to face mode for delivering lesson & accessing the learner's performance. Also, Most of the teachers used laptop; wherein most of the learners used smart phone for participating in teaching-learning process. Therefore, adaption of blended learning is taken at individual level not institutional level in higher education of West Bengal. Even, infrastructural facilities like hardware & software facilities and digital competencies of teachers are not sufficient for implementing the blended learning. Also, different challenges hindered to implement the blended learning at higher education of West Bengal. So, the blended learning can be implemented through appropriate actions e.g. providing facilities, solution of challenges and arrangement of training etc in higher education institutions.

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Folk Tellings of *Ramayan* and *Mahabharat*: Manifestations of the Indian Knowledge Tradition

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Abstract

Epics have played a significant epistemological and pedagogical role in the initiation, fostering and propagation of the Indian knowledge tradition among its people. While the written text has largely been seen as the carrier of this tradition, it is an undeniable fact that this tradition has thrived for thousands of years not just on the basis of the written classical learning but also through extensive contributions from the folk and oral streams. The reinforcement of a robust knowledge tradition, cherished by millions of people, requires endorsement from the grass root level. This reinforcement has been provided by many folk renderings of "mainstream" texts in case of the epics traditions of India.

The purpose of this paper is to investigate briefly a few of such folk tellings as well as performative traditions in order to engage with the underlying links between the oral and the writtentraditions.The paper demonstrates that the Indian folk tradition is immensely rich and deeply rooted in its psycho-social milieu. As an epistemological vehicle of the Indian knowledge tradition, it provides extremely significant pedagogical potential to us.

The ancient epics of India have played a very significant role in laying down and reinforcing the Indian knowledge system for the commoners. Being more narrative than didactic in nature, the epic traditions of India have vividly reached and shaped the Indian consciousness and unquestionably forged, through millennia, a close and implicit connection between people's views and their worldviews. These traditions are points of confluence between the folk and elite cultures. As meeting points of many smaller narratives in the folk and colloquial domain, the textual epic traditions are however not the only traditions that influence the general Indian psychology. It is rather the folk variants with their expansive reach and narrative appeal which perform the role of the moral mainstay of any given community as far as epics and their pedagogical role is concerned. Keeping this important intervention that only 'Lok' *sahitya* can make in the day-to-day moral lives of common people, this paper seeks to examine the uniqueness of a couple of folk versions of *Ramayan* and *Mahabharat*.

"How many *Ramayanas?* Three hundred? Three thousand?" Thus begins A.K.Ramanujan's iconic essay 'Three Hundred *Ramayanas:* Five Examples and Three Thoughts on Translation' on the multiplicitous nature of the Ramayana tradition. Almost three decades back he began wondering about the labyrinth of meanings *Ramayana* proved to be. The epic traditions of Indian subcontinent have received unprecedented attention in these last thirty years. *Ramayana* and *Mahabharat* have specifically been subject to detailed research and scrutiny both as texts and as traditions that have spawned a plethora of cultural forms worthy of academic attention. The many versions of both these epics have attracted scholars ever since literary theory took the culture studies turn. Some of the versions of *Ramayan* that have been studied in great detail are those by Valmiki, Kampan and Tulsidas, the Thai versions, Malaysian *Hikayat Seri Ram*, the Jain versions (especially Paumacariya), Kanadda, Bangla, Kashmiri and Telugu folk telling, *Adbhuta Ramayana*, *Satakantharavana*, some tribal versions like those of the Santhals and Mundas and the popular and performative versions such as Ramlilas, TV serials, cartoon shows, video games, calendar art, films, etc. This list by no means is an exhaustive one. But the absence of the Himachali folk versions from this list is simultaneously significant and problematic.The folk versions of the *Ramayana* in Himachal Pradesh throb with local fragrance and offer great entertainment and spiritual value to their audience. As a folk tradition languishing under the gravity of the 'mainstream' and 'official' versions by

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Valmiki in Sanskrit and Tulsidas in Avadhi, this form has a particular local flavor to it. It thrives on the proximity that is allowed by colloquial language, context and cultural reflection. This paper attempts to participate in the academic culture of breaking the hierarchies within the Ramayana tradition- the inclusion of sub-cultural, countercultural and even parallel-cultural texts or renderings of the epic involving varied geographical, lingual and cultural contexts. As we know, a recited or an enacted version of a text is often more fluid than a written one. The verbal and theatrical performances of *Ramayana* during festivals like Dushehra incorporate variations owing to this same fluidity. Thus the Himachali version, which is largely performative, derives its beauty from a constant shifting and changing, interpreting and reshaping of the 'main' narrative. For instance, the character of Sita in this version is that of a fiery and feisty one and Lakshman is portrayed as calm and mature while Ram is aggressive and impulsive. This is an inversion of the attributes given to the two brave brothers is unique as in most other versions Ram is portrayed as calm and mature, being the eldest among the siblings and also the King. Simple needs of the people of the mountains are incorporated into the story. For example, all the divine characters are non-vegetarian, a shift from the dominant North Indian renderings that emphasize on vegetarianism. The mythical characters are reflections of the people who idolize them and respond to their specific spatial-geographical needs.

A few of these retellings also resonate with one of the Jain Ramayan traditions which believe that Sita was Ravana's daughter though this fact is unknown to him. Some versions of the HimachaliRamayan relate the story of Ravanastealing the holy pitcher (Kalash) containing poison from a Yagya site and giving it to Mandodari for safe-keeping. One day, frustrated by Ravan's lack of attention to her, she tries to poison herself by drinking from this pitcher. However, instead of dying, she becomes pregnant and for fear of public humiliation, she buries her baby girl into the earth where eventually Janak finds her. In yet another version, Ravan learns from the astrologer that his new born daughter will become the cause of his death. He gets her buried alive in the distant land of Mithila to get rid of her. But fate works against him and she is rescued by Janak. Both these versions supplement the mainstream version of *Ramayan* with an element of tragic irony and, as noted by Ramanujan, an Oedipal guilt. This version also betrays heavy influence of the Krishna cult on the Ram and Sita story. The attempts of Ravana to get rid of a dangerous offspring parallel those of Kans and are reminiscent of the story of Krishna's birth.

If one ventures into the visual arts, the Kangraschool of painting focuses more on Shringar Rasa in Ramayana and represents Sita and Ram indulging in the pleasures of love. This portrayal is similar to the performative tradition of the *rasik sampraday* sect based in Ayodhya. "The theology and practices of the *rasik* tradition assume a telling of the Ramayana that foregrounds the time right after the wedding of Rama and Sita, when the couple savors the pleasures of love in their golden palace. The *Ramcharitmanas* of Tulsidas (generally known by the shorter title Manas) portrays this incident only briefly and discreetly; yet members of the *rasik* tradition elaborate on this account, prescribing various means to identify meditatively with the companions and servants of Sita and Rama during this period. Here we find not the heroic Rama but the erotic one, not the long-suffering Sita but one engaged in exploring life's pleasures. *Rasik* adepts say that the traditionally emphasized events- exile, war, coronation- constitute the conventional *Ramayana*, which is easily known; in contrast, true devotees seek the transcendent *Ramayana* of the love play between Rama and Sita, revealed only to initiates. Their interpretation of the Ramayana enables adherents to actualize heavenly play on earth through meditation" (Richman, 1991, p.13). The pictorial tradition of the Kangra school lies close to this interpretation of the love of Ram for Sita and provides with an alternative interpretation to the textual tradition of the Ramayan in the northern parts of India. Some paintings also represent the exiled trio of Sita, Ram and Lakshman having a gala time even in the forest. This subverts most of the other versions that focus on Viyog (separation) and Vir (bravery in war) Rasas invoked in many mainstream versions of the epic while depicting the royal couple's lives in exile. This also is a reminder of the prominent Krishna cult once again which has an overt emphasis on the erotic element of divine love.

The woman question is more pertinent in the Himachali rendering which negotiates between a repressive patriarchy and a socio-religious and economic system immensely dependent on its womenfolk. Sita's role as the ideal and 'chaste' wife therefore circumscribes her fiery nature. Her portrayal in modern folk renderings becomes even more complex because of the intertwining of the folk imagination with the popular culture and the easy availability thus of stereotypes from the television, films and commercial music industry. The image of Sita in many modern folk versions is a hybrid of all these elements available to the singer/performer. Hence the epic grows accommodating within itself newer and newer waves of change and evolution.

If one were to now venture into the folk domain of *Mahabharat*, and examine a very unique performative and narrative tradition from Nuh district of Haryana, *Pandunka Kada* emerges as a uniquely poised tradition with syncretic links drawn between Hinduism and Islam. Sung by *mirasis* of the Mev Muslim community, this folk epic tradition is a remnant of the age-old syncretic sharing of cultural material in India across religious and sectarian lines. The Mevs consider themselves as descendants of Arjun. Sung in Mewati (a mix of Haryanvi and Rajasthani tongues), the Kada or episodic retelling of *Mahabharat*, focuses on the martial and war-related scenes of the epic. The epic was essentially oral in nature but it is believed that in 16th century it was written down by Sadullah Khan, hence preserving it for the generations to come. Framed as a tale told by Guru Gorakhnath to his disciples to illustrate worldly knowledge and life, the epic takes off with the mutual jealousy between Kunti and Gandhari who try to outdo each other in a mutual show of their sons' prowess. Though the woman question gets framed very differently here, mostly in terms of the excessively patriarchal stereotypes of a predominantly male-oriented warrior like society, the central question here is related more to the coexistence of Hindu and Muslim storytelling patterns in one single tradition and more importantly, to our understanding of epics not as belonging to one particular religious group but actually to a spatial-geographic expanse which holds in itself various ethnic entities.

Another significant folk performative tradition focused around the *Mahabharat* is *Pandav Lila*. Every year in the Garhwal region of Uttarakhand, villagers perform the *Pandav Lila*, a ritual re-enactment of episodes from the *Mahabharata* through dancing, singing, and recitation. The *lila* is a cultural highlight of the year and is usually performed between November and February. Folk instruments of the region, dhol, damaru and two long trumpets bhankore, accompany the action. The actors, who are amateurs not professionals, often break into a spontaneous dance when they are "possessed" by the spirits of their characters.The weapons used in these performances are worshipped and are stored for the next performance with utmost care so that they do not touch the ground and lose their potency. Hosted by a different village each year, the festival ends up having a distinct flavor everytime, guided by the local preferences of the specific village where it is performed. The festival is seen as a tribute to the family members who have passed and is often therefore called the *Shraadhh*. Owing to the expansive nature of the epic itself, these performances, just like the *Pandunka Kada* are focused on certain episodes chosen by the amateur artists. The most popular episode picked up by the artists is the fight between Arjun and his son Nagarjun. The choice of episodes highlights the cultural uniqueness of the community and how they seethemselves posited in the epic tradition.

This brings us back to our original question related to the Indian knowledge tradition. Can this tradition be understood in monolithic terms as just the one which descends directly from the Sanskritic texts of the Aryans and their descendants? Or is it a multi- dimensional, polyphonic and diverse tradition that brings together under its roof thousands of linguistic, performative, discursive and cultural sub-traditions which are in constant conversation with each other? Even those smaller traditions which seem to be at odds and in dissonance with each other seem to be conversing and mutually borrowing. The Himachali *Ramayan* has odd similarities with the overly logical and reasoned Jain versions of the epic. And the Mewati rendering of the *Mahabharat* comes very close to the *Pandav Lila* of Garhwal. "The *Ramayana* does not belong to any one moment in history for it has its own history which lies embedded in the many versions which were woven around the theme at different times and places." This assertion by RomilaThapar frames these larger questions in the context of the two great epic traditions we are concerned with in this paper. She further elaborates: "The appropriation of the story by a multiplicity of groups meant a multiplicity of versions through which the social aspirations and ideological concerns of each group were articulated. The story in these versions included significant variations which changed the conceptualization of character, event and meaning." (qtd in Richman, 1991, p.4) Her emphasis that the homogenization of any narrative tradition results in cultural loss; other tellings of the epic story might be irretrievably submerged or marginalized, is suitably illustrated by the classic case of the gradual submerging of the *Pandunka Kada* which is steadily losing artists and audience in a scenario where lines exacting religious separation are drawn emphatically and the spaces of syncretism are shrinking at an alarmingly fast pace.

This reading ought to be extended to the larger discussions on the Indian Knowledge Tradition too. A careful definition of what after all is India or Indian is required lest we fall prey to a divisive politics which may end up shrinking the traditionally liberal boundaries of our composite culture. In conclusion, one can only assert that the folk domain provides immense possibilities to us to redefine or refashion our understanding of seemingly monolithic categories such as knowledge traditions and legacies.

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Effect of Computer Assisted Instructions on Developing Road Safety Skills among Children with Intellectual Disability at Secondary Level

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Abstract

Personal safety has always been a concern for children involves a complex combination of skills including judgment, estimating actions of others, problem solving and making rapid decisions. A child with intellectual disability may be very distracted by stimuli around the environment, may lose concentration while going out or walking. Their impulsivity can bring their life under threat or at risk. Computer Assisted Instructions was assessed as having significant features that could positively enhance the road safety skills. This study investigates the impact of computer assisted instruction on development of road safety skills among students with intellectual disability. One group pre and post test experimental research design was used in the present study. Sample size comprised of 5 students with moderate intellectual disability. The student's pre and post test scores of the present study was subjected to statistical analysis t-test. The findings of the study enablethe adolescence with moderate intellectual disability to perform basic road safety skills. On the basis of research findings recommendation can be made to develop CAI packages.

Introduction

Road Trauma is the leading cause of death and the second most frequent cause of hospitalization among children in several countries reported by World Health Organization, 2008 moreover children and young people are at significant on roads. Due to industrial growth our country is experiencing increase in road traffic and motorization. Road safety have conveyed that in this field the activities need to concentrate on items that properly belong to roads and, by extension, to the roads authorities, keeping a reduced scope of activities in a number of different areas, in spite of their potentially significant contributions.

Road safety is primarily meant about the protection and security of all those who travel on roads. It encapsulates all from pedestrians to animal-drawn vehicles and from two-wheelers to all types of multi-wheel transport. Highest risk among pedestrians to be for those under 10 years of age and those over 70 years (Jeffcoate, 1957).

Road safety has many facets and pedestrian safety is on very imperative aspect of this subject. The importance of this can be judged from the fact that according to our national statistical data, out of total reported accidents, 42% involve pedestrians on roads or the other and it is fact that children is much higher in comparison to those of adults. Road safety remains a significant issue for our young children with disability mainly intellectual disability. Intellectual disability is a disability that occurs before age 18 years. People with this disability experience significant limitations in two main areas which are intellectual functioning and adaptive behaviour. These limitation are expressed in the person's conceptual, social and practical every day skills. Skills are to be learned at lowest level and mastered before proceeding. While an instructor should use positive reinforcement and frequent repetition, with each new skill building upon previously acquired skills. Instructions should be carefully planned, implemented and evaluated since the purpose of instruction is learning. Computer assisted instructions (CAI) is an interactive instructional technique whereby a computer is used to present the instructional material and monitor the learning that takes place. It refers to the use of computers as a tool to facilitate and improve instructionwhere a computer acts as a tutor to teach new skills or concepts or providing practice for learners.

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According to Fourie (1999), Computer assisted instructions (CAI) is an interactive instructional technique whereby a computer is used to present the instructional material and monitor the learning that takes place. It is also known as computer assisted learning. CAI in the form of instruction plays very significant role in the development of various skills among children it can be used as an effective teaching method not only for children with disabilities but also to the children who don't have any disability.

Intellectual disability is also an umbrella term which mainly concerned withdifficulties related to understanding, following and applying things.Training in functional skills is required for children with intellectual disability to function independently. Intellectual Disability includes deficit in three major domains. First one is the conceptual domain which is closely related to cognitive functions and includes skills such problem solving, reasoning, language, reading, writing & Math.

Diagnostic and Statistical Manual (DSM-V) has classified intellectual disability on the basis of their severity level and adaptive behavior. Mild intellectual disability can live with minimum level of support and IQ ranges from 50-69 whereas moderate intellectual disability need more support and IQ ranges from 36-49 and they need more support to be independent in their daily living. Severe and profound disabilities have IQ range between 21-35 and below 20 respectively. The integration of ICT in teaching learning process has been adopted through the use of computers and other technological gadgets for curriculum content delivery (Ayuba & Timayi, 2018). CAI also refers to the use of computers as a tool to facilitate and improve instruction.

Based on the experiments of B F Skinner following basic principles can be used for development of software for CAI

- Principle of small step
- Principle of active responding
- Principle of immediate feedback and confirmation
- Self pacing
- Evaluation of the components of teaching and learning.

Instructions plays major role in learning the desired skills. Efforts have been made to restructure teaching learning practices by teachers in classroom as well as incorporation of technology. CAI can be effectively used as a strategy through which topics planned carefully, written and programmed in a computer which also could be run at same time in several computers and allows each student. This method of teaching needs to be complemented, more especially in the era of ICTs, where the role of a teacher has shifted from being the key source of information and transmitter of knowledge to that of becoming a collaborator and co-learner (Samaila, Makinde & Zambwa, 2016). Although a disputes exists in the literature about whether computers are developmentally appropriate for children are not certain. Literature search exhibits that technological advancement has positive effect on developing desirable behaviour and can be effectively used in teaching learning process of children with disability. Now days, CAI is being used for providing instructions to the students at different levels to update their knowledge. CAI is one of the most useful methods of providing individualized and self paced instructions to learners in the classroom situations.

Instruction plays a major role in learning desired skill and computer assisted instruction provides multiple approaches to content, process and the product. Majsterek & Wilson, (1993) reviewed several studies related to CAI that focused on teaching basic skill to students with learning problems. Moreover, instructions through computers are interactive in nature. Their flexibility and visually appealing display formats provide a enjoyable learning experience. Technology offers one avenue for enhancing instructional option for students with disabilities.In the field of teaching and learning computer plays an important role directly interacting with the learners. There are various instructional modes which can deliver through computer assisted instructions. Educational software can differ in method, mode and quality as well and there are various types of CAI which can be used for training of children with intellectual disabilities.

Tutorial Mode

In the tutorial mode learning content is presented in small form and learners' answers were assessed by computer and suitable opinion is given. In other words it provides step by step guidance related to a task or concept. New task or concepts can be easily taught through the tutorial mode of instructions. Tutorial modes also provide feedback effectively.

Drill and Practice

Drill and practice are used to provide repetitive exercise and excessively used for rote skills. It is beneficial for sustaining, refining or to acquire mastery over learnt skills.

Basic knowledge, intellectual skills, vocabulary, spelling and sentence constructions are easily taught through this technique. These skills are foundation for higher level intellectual activity.

Instructional Games

Instructional games are such software which is used to increase motivation by adding game rules to learning activities. Though instructional games aremost frequently used to reinforce factual knowledge that demands application skills in all levels.

Simulation

In simulation mode students encounters with scale down approximation of actual life situations. Hence, rational practices take place without any hazard. Simulation learning can be interactive also as the learners can manipulate the variables and settings. Various subjects which can be effectively taught using the simulation method.

Problem Solving

Problem solving is a process to overcome difficulties that appear to interfere into the attainment of goals. It is basically an ability to select among various responses in order to accomplish a task in best possible manner. Under CAI learner is exposed to a problem and possible solutions are also given. Learner has to select from these responses and provide the correct answer. In case of incorrect response, the computer also hints the correct one. These types of instructions can be used to teach reasoning, critical thinking and decision making.

Rationale for using Computer Assisted Instructions

There are numbers of exclusive features of computer assisted instructions which has makes it a unique field. It facilitates foundations which are as follows:

- Reduced learning
- Improved retention
- Learner centered environment
- Interactive learning
- Increased motivation
- Mastery learning
- Consistency and fairness
- Privacy
- Generate interest

Advantages of Computer Assisted Instructions

An effective teacher should be aware of students needs as CAI not only lessens the workload of teacher but also helps them to satisfy their learning needs.

Besides this CAI has many advantages which are enlisted as follows:

- Provide wide range of experiences, concepts can be explained using wide range of word problem, video, audio-visual and three dimensional figures etc.
- CAI produces learning experience effectively and efficiently. A good amount of information stored in computer is made available to the learner.
- CAI can be effectively used for small groups has a good opportunity to influence so that the learning is tailored to the individual needs of many students and unlike the totally individualized method of using CAI.

Objectives

In order to achieve the purpose of research following objectives were formulated.

- To assess the prevailing road safety skills among children having moderate intellectual disability at adolescent stage
- To find out the effectiveness of CAI in training the children for basic road safety at adolescent stage having moderate intellectual disability.

Hypothesis

- There will be no significant difference in the pre & post test scores of children on road safety skills, when trained through Computer Assisted Instructions (CAI).

Research Methodology

Researcher has relied upon a research design could be constructed either to test a hypothesis or to give a cause effect relationship to a situation.

Single group pre & post test experimental group design was used wherein the training of road safety skills were given through CAI and the acquisition of skill was assessed at post test.

Sample

Researcher has selected 5 students withmild intellectual disability using random sampling falling between the age ranges of 14-17 years from Government

Rehabilitation Institute for Intellectual Disabilities (Earlier known as RIMH), Chandigarh.

Tool Development

Researcher has prepared a tool in consultation with the experts in the area of intellectual disability on the basis of personal understanding of research. The checklist comprised of 21 questions related to basics of road safety skills utmost required for children with intellectual disability. The prepared tool was given to professional and experts for the purpose of validation. All the experts gave their feedback and recommendation based on the suggestions researcher has incorporated the feedback. Scoring has been obtained through formal and informal observation of child with intellectual disability and interview of class teacher and parents has been done to find out the reliability of scores which is marked as **Yes** or **No,** for quantification of items numerical scores has also been given as **0** for **No** and **1** for **Yes.**

Material Development

The researcher has developed CAI using computer based technology and technical expert and the software prepared were also converted into CD (storage). The software comprises of animation effectively used for explaining the concept using visual and sound effects. The CAI specifically focused on content and skill to be taught to children considering level of complexity. Help of multi-media projector and computer system/ laptopwereused to run the software and the intervention session comprises of road safety skills.

Procedure for Data Collection

Researcher with the help of checklist has collected pre-test data and assessed the existing current road safety skills among children with moderate intellectual disabilities. For conducting the intervention the investigator has arranged separate classroom equipment with all kind of technological devices. Computer assisted instruction has been used to give intervention within classroom setting. Intervention was given for 15 days on regular basis except weekends, duration of each session was 60 minutes including data recording by the researcher. During every session 10 minutes interval was given to students between the intervention and students were allowed to talk in between. At the end of every session scoring has been done based on student's performance and the post test was conducted using the same checklist.

Comparison between pre and post test score of road safety skills

Test	Mean Score	Standard Deviation (SD)
Pre test	5	1.73
Post test	8.6	2.8

Comparison of pre and post test scores using t-test

Test	Total Student	Mean Score	Standard Deviation (SD)	t-test	Sig. Diff.
Pre test	5	5	1.73	4.43	0.01
Post test	5	8.6	2.8		

P<0.05* df=4

Above table indicates the significant difference between pre and post test mean scores by conducting "t" test. The obtained t value is 4.4, which is higher than the table values i.e. 2.776. The difference between the mean scores is significant at $p<0.05$. Findings support the hypothesis that there will be significant difference in the mean scores of pre & post test of road safety skills obtained as a result through Computer Assisted Instructions (CAI).

Further, it can be interpreted that the computer assisted instruction has shown positive outcome and the strategy is proven effective in developing road safety skills among children with moderate intellectual disability.

Hence the hypothesis, "There will be a significant increase in the post test scores of the children on road safety skills when trained through CAI is accepted. Further in other words it can be interpreted that CAI has shown a positive outcome hence the strategy has been proven effective in developing road safety skill among children with moderate intellectual disability. CAI really proves advantageous for students with intellectual disability in such a case.

Conclusion

Traditional educational practices in Special Education may create a barrier for various meaningful skill training. The teacher plays a key role in modifying or alternating the instructions in terms of using technological devices and program like CAI in the classroom. The objectives of the present research were to assess the prevailing road safety skills and find out the effectiveness of CAI in training the children for basic road skills among children with moderate intellectual disability. During the time of data collection it was observed that prevailing road safety was not that much formal and participants were not aware of the significance of road safety skills in their life. The main conclusion which can be drawn from this study that computer mediated instructions are very beneficial for students (11-14 years old) with moderate intellectual disabilities. Additionally from the perspective of a special school such training on road safety skills are difficulty to impart when it comes to education and training of students with moderate intellectual disabilities. The finding of the present study enables the adolescence with moderate intellectual disability to perform basic road safety skills. Since the beginning of 1980, computer assisted instructions (CAI) has been used systematically in special education. The use of computers in the training of children with intellectual disability is having immense potential when compared with personal and manual instructions moreover it boosts the level of motivation of children while learning and makes them enthusiastic.

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Computational Thinking: A 21st Century Skill for Learners

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Abstract

Jeannette Wing focused on the term computational thinking in 2006. According to Jeannette Wing, Computational Thinking (CT) is a formative skill that must be taught as equally important as reading, writing, and arithmetic by placing computer sciencein the basic knowledge category. Computational thinking is defined as a mental tool used to represent a form of thought process and problem-solving skills. There is no fixed definition of the term computational thinking, many authors have described the term according to their own viewpoint and till now the definition is evolving. Proficiency in computational thinking helps us process information and tasks efficiently and systematically just like proficiency in basic language helps to make effective communication. The main purpose of this paper is to enlightenthe developing definition and the concepts of the term computational thinking and the importance of teaching this 21st century skill at the school level to shape the mindset of the learners. The discussion part of the paper focuses on the range of classroom activities that give a positive impact on the integration of computational thinking skills among learners and Computer Science Framework represents both behavioural practices and general practices as a component of computational thinking.

1. Introduction

Jeannette Wing has brought the term Computational Thinking to the forefront of the world of study. Computational Thinking is a problem-solving process that uses computer science techniques.

After hearing the term computational thinking the questions come to mind: What is the actual meaning of computational thinking and what is the possible way to apply its methodology to teaching at school? It is important to teach the concepts of computational thinking at the school level so that it shapes the mindset of the students benefiting them throughout their continued time of studies and in their working life whether they are from a computer science background or studying any other educational subjects.

Computational Thinking is a concept of high-rise, many countries USA, China, and Singapore have proposed to include the term in their national curriculum. Firstly, we must know the actual meaning of the term computational thinking. The term originates from the 50s/ 60s, at the time concept was popularly known as algorithmic thinking. Algorithmic thinking is a mental process of formulating a problem so that the problem had an input which results in an output. Then the concept of algorithmic thinking is used by several problems to figure out the given inputs resultingin possible outputs. The concept has evolved and now it has a broader meaning and includes several other terms such as abstraction, generalization, critical thinking, and problem-solving, and it uses mathematics to develop the algorithms to scale the well-defined solution of the problem.

The main purpose of this article is to focus light on the usability of one's thinking skills and to understand the concept of computational thinking, if students start thinking more computationally from an early age, they will embroil computational thinking skills with their world of study throughout their continued time.

2. Thinking

Human Beings involve every moment of their life in the process of thinking. The bits of information that come from the outside world are converted into the human nervous system and then transmitted to the brain to process the information into human thoughts (Spielman, Jenkins, & Lovert, 2020). Thinking is the process of understanding one's mind by transforming thoughts into words and speech or actions (Athreya & Mouza, 2017) or other forms such as sounds, shapes, pictures, numbers, emotions, tastes, touches, and smells (Ham, 2018).

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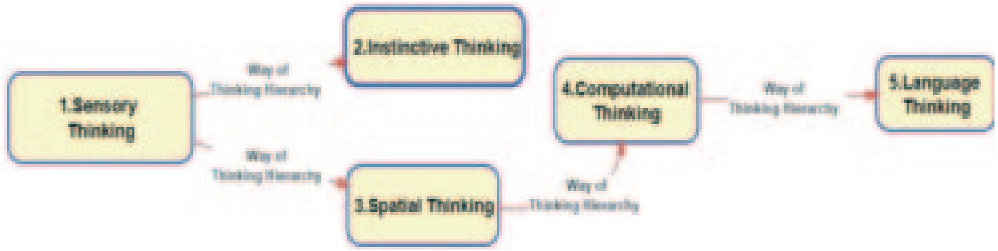

Figure 1: Five ways of Thinking Hierarchy (Ham, 2022)

Various forms of Thinking are there and the forms of Thinking are based on the nature of the questions or the problems faced by the learners. In 1993 Lewis and Smith with particular scholars allude to using the terminology of higher cognitive skills to relate to all forms of thinking (Athreya & Mouza, 2017). According to figure 1, five ways of thinking- sensory thinking, instinctive thinking, special thinking, computational thinking, and language thinking are stated (Ham, 2022). The author focuses on the need to discriminate betwixt the terms like ways of thinking, modes of thinking, and style of thinking each depicts different phases of the mind (Ham, 2022). The author describes their difference in a hierarchical manner, all modes of thinking are accompanied by a specific style of thinking. The concept of computational thinking encompasses both lower-order of thinking (e.g., following algorithms) and higher-order of thinking (e.g., generalizing). In the human mind, computational thinking encompasses both focused thought and diffuse thought. An individual's thoughts are a collection of data assembled in their heads, which are run by different rules and schemas. In the computational thinking process, a person is able to generate complex thoughts in their head using established rules and schemas. Computational thinking begins when discrete thought variables are assigned such as the conception of time and these discrete thought variables are grouped with special arrangements to make computational rules and incorporate them into generic schemas. There is an important aspect of learning that involves the thinking process, as certain skills and knowledge are expected to be transferred from one area to another. In comparison with lower-order thinking, higher-order thinking plays a more significant role. There remains an important question that to what limit as a high order thinking, computational thinking is addressable to other domains of the world of study and the answer of these question needs further investigation.

3. Computational Thinking

In this part, the term computational thinking has been exploredbased on different definitions and descriptions explored by different authors. The role of computational thinking and the components of computational thinking has been explored in a detailed manner.

3.1 Development of the Term

The idea of the term computational thinking is not new in the world of study previously the same idea reflects through the concept of algorithmic thinking and various other terms in several stages of technological progress. Algorithmic thinking is the term used in mind orientation to forge a problem intoa step-by-step process as the conversion of identified inputs to frame the possible outputs. The term Algorithmic Thinking is also described as developing algorithms through mathematics, thinking at multiple levels of abstraction, and testing them (Denning, 2009). The terminology such as computational ideas, computational metaphors, and computational models in the book "Mindstorms" (Papert, 1980). Seymour Papert believed that teachers could make learning procedural thinking easy and a joyous experience for children by integrating LOGO programming and turtles' physicality. ICILS (2020) showed that teachers with higher abilities in computer and information literacy placed a greater emphasis on computational thinking and computer literacy in their lessons. The competence of using modern Information and communication techniques to resolve arising problems exhibits as a second literacy. Computational literacy is a term which have more demands and also carries distinctive meaning than the terminology like computer literacy, digital literacy and information literacy (DiSessa, 2001). Both programming skill and coding skill is asignificant facet of the development of computational thinking, as they share the same fundamental structure and both skills use algorithmic thinking. People with computing skills bear more values and they are highly valued in both education and industry sector. The great principles framework introduces the four core practices of skill and ability which demonstrates the computing people- i) programming, ii) engineering of systems, iii) modelling, and iv) applying and the author professed that computational thinking projectedas a fifth practice (Denning, 2009). Denning suggests that computational thinking is the ability to convert inputs into outputs through algorithmic controls. Computational thinking has a long history and is innate to humans, and our ancestors used it to create models and represents the actuality by storytelling (Council *et al.*, 2010). The notion that computational thinking is innate is debatable, since others are claiming that it is not innate but rather needs training and guidance (Sanford & Naidu, 2016). Every people in their daily life are engaged with the concept of computational thinking (Council *et al.*, 2010).

3.2 Reviews of the Related Literature

Many papers have been reviewed to create the base of this article. Starting from the recent year 2022 gradually it ends up to early years, mainly this paper focuses on the revied papers to clarify the concept of computational thinking and its significance in the world of study.

Computational Thinking (CT) are indicated by many educational policymakers as important as 21st century skills. During the last years, many research works were devoted to both topics and an expansive number of studies have been performed and gained. Computational thinking is influencing research in nearly all disciplines, both in the sciences and the humanities. The invention of the computer and the internet has changed our lives and the education sector. It requires individuals to improve their competencies, especially to be digitally literate. Researchers are using computational metaphors to enrich theories ranging from proteomics to mind-body relationships. By using computers, researchers can ask new kinds of questions and accept new kinds of answers, such as questions requiring the processing of large quantities of data. A group of school students in collaboration with the students of South America using the Skype gathered around a computer screen conversing intently by looking at the charts and graphs. Together they collected the data to present a model to portray the rate of deforestation of the rain forest around the world. The students engaged themselves in discussing the changes they must make in presenting both the data and algorithm before executing the simulation. Directly the students engaged themselves in the process of thinking called computational thinking (Barr *et al.*, 2011).

Computational thinking has been defined as a cross-disciplinary set of cognitive skills derived from the discipline of computer science and the existing literature supports the inclusion of computational thinking within the K-12 curriculum, within multiple subjects, from primary grades to higher levels. The use of computers as a context for computational thinking skills is often possible, but c computational thinking must not be confused with programming or instructional technology, in general and research suggests that training preservice teachers in computational thinking can help them develop a more accurate and deep understanding of how it can be used in the classroom (Yadav *et al.*, 2017). Computational thinkingis arising as set of problem solving skills in the field of education and the author wants to detect the computational talented student means those who have high level of thinking among the computational thinker to advance their high level of computational capability before going to code and also wants to analyse the difference between the computational top thinkers and the computational regular thinkers those who have already gone for coding (Román-González *et al.*, 2018).

Over the past two decades, Indian schools have offered computer studies as a subject. There is very little emphasis on important thinking skills of broad applicability, such as computational thinking and 21st century skills. The author describes a 10 year long project, called Computer Masti, to integrate thinking skills into computer studies. As part of the project, curriculum will be developed across K-12 grades, textbooks will include explicit chapters on thinking skills in each grade, and teacher training will be provided to help teachers become proficient in teaching thinking skills (Kong & Abelson, 2019).

Computing thinking is increasingly viewed as a necessary skill for all students, like math and to equip every student with computational thinking skills, K-12 schools must provide computational thinking education, and teachers need to have the content knowledge and pedagogical skills to integrate computational thinking into the curriculum. The purpose of the study is to elicit and synthesize what leaders in computational thinking education know and experience about best practices of computational thinking in K-12 schools and teacher preparation (Li, 2021). Early 2000s gave rise to ambitious views to fundamental characteristics of Computational thinking under a huge number ofdivergent labels. The article evaluates the central concept of computational thinking from the perspective of practicing disciplinary ways of thinking and its justification, its aims and techniques that originate from various origins (Denning & Tedre, 2021). The study investedthe relationbetween the classroom management enriched in ICT courses, computational thinking, and technological pedagogical content knowledge (TPACK) (Saritepeci, 2021). Malaysia has introduced computational thinking skills as part of a curriculum integration update to meet the global trends in 21st-century education, focusing on empowering digital literacy and the study explores the feasibility of developing a localized E-learning system to train computational thinking skills among teachers (Ung *et al.*, 2022).

3.2.1 Rational of the term: Computational Thinking : In 21st century, computational thinking skill is a principal skill to everyone parallel to reading, writing and arithmetic as they are considered as the major part of core knowledge (Wing, 2006). The author defines computational thinking is a process of reformulating the difficult problem into solvable one by using the techniques of reduction, embedding, transformation and simulation. Computational thinking the term belongs to conceptualization not programming, it develops the power in a way that human tackle the difficult problems. The concept shows the necessity to involve the term in school curriculum including teachers, students and inducing everyone to think like a computer scientist (Wing, 2006). Jeannette M. Wing, reformist her definition and simplify it as "Computational thinking is the thought processes involved in formulating problems and their solutions so that the solutions are represented in a form that can be effectively carried out by an information-processing agent" Computational thinking is a mental process involves formulation of problems and their solutions in a way that an information-processing agent can effectively execute the solutions (Wing, 2011). In light of Jeannette M. Wing's clarification, computational thinking is defined as "the process by which problems are formulated so that their solutions can be expressed as computational steps or algorithms." (Aho, 2012). Computational thinking facilitates one's computation to bend according to their needs and it becomes a new literacy of the 21st century. Computational thinking is meant for everyone being able-

- to understand which form of the problem are feasible for computation,
- to assess the coordination among computational tools and techniques with the problem,
- to understand the functions and constrains of computational tools and techniques,
- Apply or adapt a computational tool or technique to a new use,
- to know the opportunities of computation and use it in a new way,
- use of computational techniques like 'divide and conquer' in the world of study (Wing, 2011).

The users of computational thinking like scientists, professional experts and engineers also validate the following abilities:

- practice new computational techniques to various problems,
- reframe the problems to be feasible to computational methods,
- discover of new techniques to deal with large scale data and has the potential to think questions with large scale data which are readily addressed computationally, and
- demonstrate the formulated problems and their solutions in computational terminology (Wing, 2011).

The study worked to reframe the definition of computational thinking based on the consistent usability of the concepts of computational thinking in other related literatures (Selby 2013).

Introduction of computational thinking as a problem-solving method includes the characteristics- the problems are formulated in a way so that the computer tools are involved to solve them. Logically organized and analysed data are presented through abstraction process like modelling and simulation. The representation of the automated solutions follows algorithmic thinking to show the effective implementation of the possible analysed solution with the combination of effective steps and resources and to generalise the possible effective and efficient solution to anample dimension of the problems (CSTA & ISTE, 2011). "The concept of computational thinking refers to recognizing aspects of computation and applying the tools and techniques of Computer Science to understand and reason about natural and artificial processes" (Royal Society, 2012).

3.3 Computational Thinking Concepts

Computational thinking includes logical reasoning, algorithmic thinking, decomposition, generalization, and evaluation. This section of the article illustrates each of these concepts.

- **Logical Reasoning:**

Logical Reasoning is the technique of consistently drawing conclusions based on given premises via a logical and methodical series of procedures. People can use logical reasoning to solve problems by studying given assertions and facts and thinking apparently and reasonably about the link between the facts. People use logical reasoning in their day-to-day life affairs to make sense of numerous types of problems ranging from the home to the professional world. Logical reasoning is used in computer programming to test and debug the source code to draw the correct output. Logical reasoning edges to the development of computational thinking skills like algorithmic thinking and abstraction (Livingstone & Saeed, 2017).

- **Algorithmic Thinking:**

Algorithmic Thinking is the process of getting the solution to a problem through the implementation of tangible steps. An algorithm is a procedure used for solving a particular problem or performing a computation. An algorithm acts as a set of instructions used to conduct specific actions in a step-by-step manner. The concept of algorithms is not only used in the computer world or the world of informatics but in everyone's daily life related to other domains. Outlining the process for checking books in the school library, showing the steps to do arithmetic operations like addition, subtraction, multiplication, and division in a mathematical classroom, cooking a special dish from grandmother's recipe book, or traveling to the destination point by using the route map, these all are considered as the examples of algorithmic thinking that requires to follow a certain set of instructions in a step-by-step mode. The algorithmic thinking process gives more than one solution to a framed problem.The performer identifies the best solution based onthe appropriateness of the solution. Good solutions following the logical order are clear to understand by the performer which makes the solution applicable to the specific task. One of the key competencies in coding and programming is algorithmic thinking, and successful programmers are also good algorithmic thinkers (Curzon & McOwan, 2017). The ability to think algorithmically is used in many contexts outside of programming.

- **Decomposition:**

Decomposition is the process of breaking a specific problem into submodules. Decomposition has the capacity to break down issues, and solutions into smaller components. Smaller parts can be independently understood, refined, designed, and evaluated, and this makes large complicated problems and systems easier to solve by enabling teams to work on the same task.

- **Abstraction:**

Abstraction is selecting data from a large pool to show the relevant information to the problem. An abstract is an approach to solving problems that involve choosing what details will be retained and what will be discarded (Livingstone & Saeed, 2017). The unwanted details are removed without losing important information, making it easy to deal with complicated problems. By following the process of abstraction, the learner thinks about the problem in an easy way by using relevant and convenient representations and models. Considering the handbook for freshmen and the handbook for Ph.D. students have been taken as an example where two handbooks provide different information related to the target group thus irrelevant information related to the student's life remain hidden. Abstraction is a key computational thinking skill that commonly follows from the procedure of generalization.

- **Generalization:**

The term generalization is used to solve new problems by recognizing the pattern of previously solved problems and their algorithms. The same algorithm can be adapted to solve a variety of related tasks and problems. Two important questions arise from the concept of generalization- "Is there any similarity between the new problem or task and the already solved/understood problem?", "in comparison, to the old problems/tasks/ systems which are already solved, understood, and designed, how will the new one differs?". The answers to these questions reflect the concept of pattern recognition and data processing (Livingstone & Saeed, 2017). The solution becomes more effective when a single-task algorithm is applied to a wider variety of problems. As a result, a general solution can be applied whenever a similar new problem arises.

- **Evaluation:**

The evaluation process involves evaluating how efficient, fast, and economical the solution/algorithm uses available resources and checking its correctness (Livingstone & Saeed, 2017). Answering these questions enables people to improve and adapt solutions/algorithms with a strong focus on attention to detail, as each case requires a different approach. For example, if a specific task deals with a contagious virus that is spreading worldwide, several phases are there to stop the spreading of the infection. Firstly, patients who have common symptoms need to be tested if the test became positive the patients and the recently contacted ones must be isolated from the others to stop the spreading. If the patient's condition gets worse then immediately get them hospitalized. Secondly, if the spreading increases, then shut down the infected area thus proper action must be taken in time. As per the example, each phase requires various resources thus approaches also vary. The judgment of the evaluation process plays a vital role to check whether the solution or algorithm gives an accurate result.

4. Discussions

Introducing the concept of computation, programming with digital competence now becomes a trend in school level education. Many countries involve the conception of computational thinking in their K12 curriculum. An early introduction of the concepts helps the learners to bind the knowledge with the others domain of education and benefitted to apply in real life problems. Integration of computational thinking is very easy in the computer science curriculum of school education. Computer science and informatics courses provides the power of computational thinking to the students which helps in better understanding of other scientific disciplines (Caspersen *et al.*, 2019). The computing subjects replaces the preceding concept of ICT, not only focuses on the programming part but also envelops the concept as a whole subject. The UK government established the concept of computational thinking as a heart in their educational curriculum and the advanced computing disciplines occurs in place of previous ICT. Computing considered as a central subject in the UK curriculum which convey the computational thinking concept to all. Royal Society identifies three stands of computing like computer science (CS), information technology (IT) and digital literacy (DL) is complementary to each other and bears a compelling priority in the successful preparation of the school leaners for the development of digital world of study (Furber, 2012).

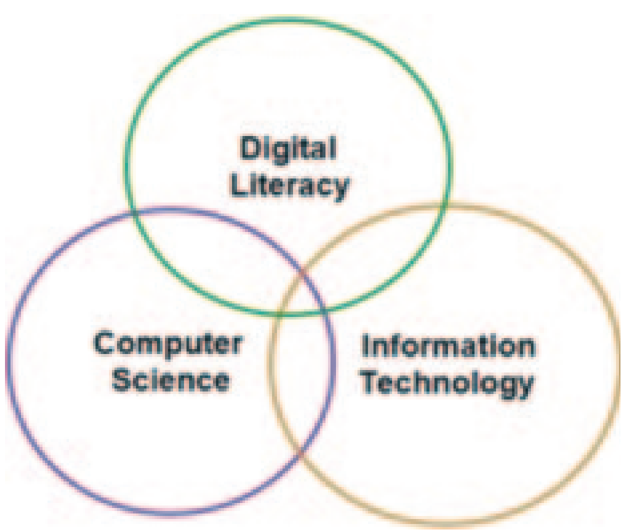

Figure 2: Three strands of Computing (Furber, 2012)

Day by day technology is progressing, the numerous digital tools which supports the development of the concept of computational thinking and the application is also increases.

There are various application tools like educational robotics and a range of classroom activities which facilitates the positive effect of the integration of computational thinking skills among the leaners. The study explore the implementation of programming as a technique to teach computational thinking skills and the relationship with the learning taxonomy (Selby, 2012). Starting from the preliminary level to the final grades the tendency of the students to learn new processes of problem solving by applying the concepts of computational thinking skills. UK computer science framework has designed a seven core practices- fostering an inclusive computing culture, collaborating around computing, recognizing and defining computational problems, developing and using abstractions, creating computational artefacts, testing and refining computational artefacts, and communicating about computing for K12 curriculum which shows the engagement of computational literate students with the subject computer science (K-12 Computer Science Framework Steering Committee, 2016). Figure 3 represents the lower part of the behavioural practices as the components of computational thinking and the upper parts are general practices.

Figure 3: The seven core practices in K-12 Computer Science Framework (K-12 Computer Science Framework Steering Committee, 2016)

The authors analyse and discuss the relationship between Digital competence and Computational thinking, in order to help educators and educational policymakers make informed decisions about how to integrate them in their local schools (Juskeviciene & DagienE, 2018). Figure 4 shows the characteristics of computational thinking and digital competence approaches based on the literature review were analysed. Eight CT components were identified- data analysis and representation, computing artifacts, decomposition, abstraction, algorithm, communication and collaboration, computing and society, and evaluation. Digital competencies are selected from the European Framework for the DC of Educators and have five components- information & media literacy, digital communication & collaboration, digital content, responsible use, and digital problem solving. The interconnections were developed from the matching of relationships between the details of components and features of CT and DC.

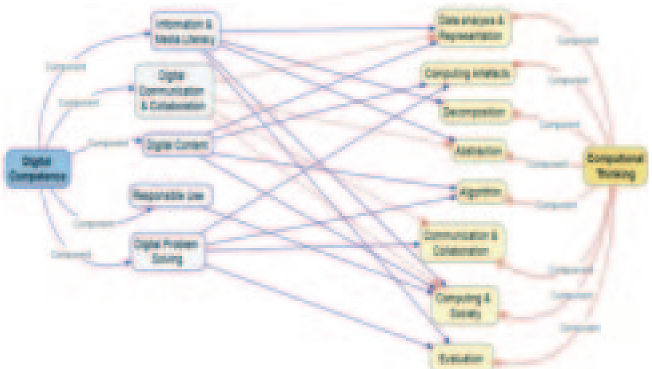

Figure 4: Interconnection between Digital Competence and Computational Thinking (Jukeviciene & DagienE, 2018).

5. Conclusion

Jeannette Wing has coined the term computational thinking in 2006, the author revised the definition of the terms in her article in the year 2008 and 2011. The author explains that the importance of the concept of the terminology computational thinking and every child should be skilled in computational thinking from their early school education. Many authors have worked with the term computational thinking and the researches open new dimensions of computational thinking skills. Many countries have included the concept computational thinking in their school curriculum so that an early introduction of this skill helps the learners to cohere the knowledge with the others domain of education and benefitting the learners to apply in real life problems. The courses like computer science and informatics provides the power of computational thinking to the learners which helps in better understanding of other scientific disciplines (Caspersen *et al.*, 2019).

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Use of Research Support Services by The Research Scholars of Science Disciplines in Kurukshetra University, Kurukshetra, Haryana

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Abstract

This study explored awareness and use of various types of Research Support Services (RSS) in Jawaharlal Nehru Central Library among researchers of selected science disciplines of Kurukshetra University, Haryana. This research used a quantitative approach to collect data from 121 research scholars of science disciplines using questionnaires to estimate the impact of RSS in their research study. The study found that most respondents were aware of RSS, and 97 (84.34%) respondents used ETD (Electronic Thesis and Dissertation) of research support services, followed by 95(82.60%) used Technological services/Internet Facilities/computer facility. It also revealed that 95 (82.60) respondents agreed that it expedited the research work among researchers.

Introduction

Library offers value-added facilities to the research community during their studies, university librarians must accommodate their reference requests and support research-related activities. Designated librarians should assist the researchers in finding resources and utilizing library facilities more efficiently for their academic needs. To do this, the library should regularly conduct user training and orientation programs to update the researchers about library resources, services, and other support facilities. Research Support Service (RSS) is top-rated and more in demand in higher educational institutions to strengthen the institution's research activities. It provides researchers with a wide range of support for their research work, such as searching the literature, writing/publishing research process, statistical software, and bibliographic management services. It may also include proposal writing, study design, qualitative data collection, quantitative data collection, data collection systems, data preparation/minimization, data cleaning, and processing. The University Library & Research Support Service is a world-class resource hub for the humanities, social sciences, and humanities with a focus on research and development innovative and meeting the needs of our country & industry. Si *et al.*, 2019 conducted a study and shows that out of 79 library sites 76 (96.2%) provided research support services in which USA (39.47%) UK (21.05%) and China (9.21%) had top three rank. They should build large and diverse collections and network with leading libraries to provide relevant information and facilitate smooth access to stakeholders. According to Hi Om *et al*. (2015) that academic libraries should implement RSS as modern tools and techniques to provide value-added services to support research, teaching, and learning. The University of Bristol is a research-intensive university ranked top five research institutions in the UK in 2014; offered services under Research Council UK (RCUK) projects are the Data Management Assistance service which is mandatory for all RCUK, advocacy & training, and the others most recent services. In a nutshell, we can say that RSS for strengthening the research activities by attending to user queries related to various research guide tools like; Use of Electronic Resources, Grammar and Spelling Check, Reference Style Guide that is Mendeley, Zotero etc., Author Identification/ ORCID, Citation Analysis like as Scopus, Web of Science (WoS) etc. and Check Plagiarism i.e. Urkund &Turnitin, etc.

Need of the study

Kurukshetra University central library has a lot of research support tools and services in its collection. Online Public Access Catalogue (OPAC), Anti-Plagiarism Software Urkund, Remote Access Facility, etc. Various

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research scholars are doing their research in various disciplines at Kurukshetra University. An effort is made to know about the awareness and use of these tools and services among researchers of Kurukshetra University. Kurukshetra. So, the study can be used to improve the library's services.

Scope of the study

The scope of the study was delimited to the Research Scholars of select Science disciplines of Kurukshetra University, Kurukshetra i.e. Chemistry, Physics, Botany, Biotechnology, Zoology, Biochemistry, Computer Application, Microbiology, and Home Science.

Objective of the study

- To know about the awareness regarding Research Support Services among the Research Scholars of Kurukshetra University.
- To know about using different types of Research Support Services in JLN Library KUK.
- To know about the benefits of Research Support Services on their research work among Research Scholars of KUK.
- To know about the satisfaction regarding Research Support Services among Research Scholars of KUK.

Review of Literature

Singh *et al.* (2022) concluded that most of the respondents were aware about research support services 73(14.23%) respondents use technical services/internet facilities for research support services. The study further shows that 68 (13.25%) respondents use remote login access services. Maryati *et al.* (2022) studied Research Support Services in Indonesian Academic Digital libraries. The study shows that the survey has nine key factors recommended for use by academic libraries to create digital libraries for research support services. The value and revenue obtained from using the model can encourage academic libraries to adopt it. Key activities and communication channels can provide insights for comparison with the existing services. An essential resource and cost structure are potential references for preparing the required resources. Manu (2018) explored that the researchers generate the research data irrespective of various types & formats. The study found that researchers are unaware of proper research data management and sharing. The author further revealed that many researchers are keen to avail library support in managing research data. From the study results, the author provides suggestions to improve the researcher's awareness of research data management by conducting training, consulting, special lectures, seminars, and workshops on research data management, sharing, and storage. Liu *et al.* (2018) studied Scientific Data Management in China Libraries and found that scientific data management has attracted widespread attention from many China Information Science scholars. However, the current study still presents obvious deficiencies; slow development of scientific data management service model, lack of scientific data management policy system, the introduction of new talent exists only at the theoretical level neglect of data and humanistic education. And put forward some suggestions on promoting the practice of scientific data management in China. Haddow & Mamtora (2017) analyzed the strengths and challenges that influence the potential for academic libraries to deliver effective and valued research support services. The potential lies in their access to and engagement with research support tools and their academic community. To realize this potential, however, there are several significant challenges to overcome. Research metrics are likely to become more complex and sophisticated, and academic libraries need staff skilled in working with them. Professional development in research metrics will provide academic librarians with an improved understanding and skills. Building collaborative relationships with the institution's research office will increase the potential for an academic library to engage more effectively with its research community. Holly's (2017) study shows that Academic libraries are taking advantage of open access repositories by advising researchers to use the available resources alongside their local repositories for data safe-keeping and sharing. McRostie (2016) concluded that the academic library is well positioned with its foundation as a keeper and curator of knowledge to support and add value to the research endeavor. Further, that study shows that while many of the traditional roles in the library are still relevant, it is clear that new skills and capabilities are required to be responsive (and proactive) to the needs of institutional researchers.

Research Methodology

The study primarily focuses on using awareness and use of research support services (RSS) of Jawaharlal Nehru Central library among Research Scholars of selected science disciplines of Kurukshetra University Kurukshetra, Haryana, India. Randomly questionnaires were distributed among 121 research scholars in selected main science disciplines at Kurukshetra University out of which 27 are from the Physics Department, 25 from Chemistry, 15 from the Biochemistry department, 12 from the Zoology and Biochemistry Department, 9 from the botany and Computer Application Department, seven from Microbiology department and five from Home Science department. Data were collected from research scholars of Kurukshetra University. Well-structured questionnaires were distributed randomly among research 131 scholars at Kurukshetra University, out of which 121 filled questionnaires were returned. The data were evaluated and presented in tabular and graphical form.

Data Analysis and Interpretation

Table 1: Department Wise Distribution of Respondents

Sr.No.	Department	Total n (%age)
1.	Physics	27 (22.31)
2.	Chemistry	25 (20.66)
3.	Biotechnology	15 (12.39)
4.	Zoology	12 (9.91)
5.	Biochemistry	12 (9.91)
6.	Botany	9 (7.43)
7.	Computer application	9 (7.43)
8.	Microbiology	7 (5.78)
9.	Home Science	5 (4.13)
10.	Total	121

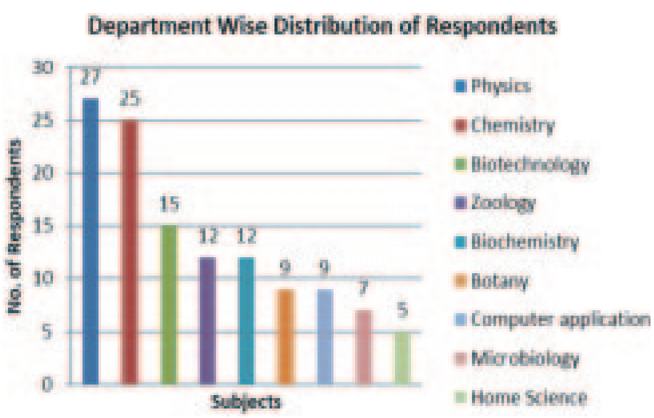

Figure 1: Department wise distribution of respondents

The above table shows that out of total 121 respondents, 27 (22.31%) 25 are Physics department, 25 (20.66%) Chemistry department, 15 (12.39%) Biotechnology department, 12 (9.91%) respondents from Zoology and 12 (9.91%) Biochemistry department and 9 (7.43%) Computer Application, 7 (5.78%) Microbiology and 5 (4.13%) Home Science department of Kurukshetra University, Kurukshetra.

Table 2: Usage of Library

Sr.No.	Use of Library	Total n (%age)
1.	Yes	85 (70.24)
2.	No	36 (29.75)

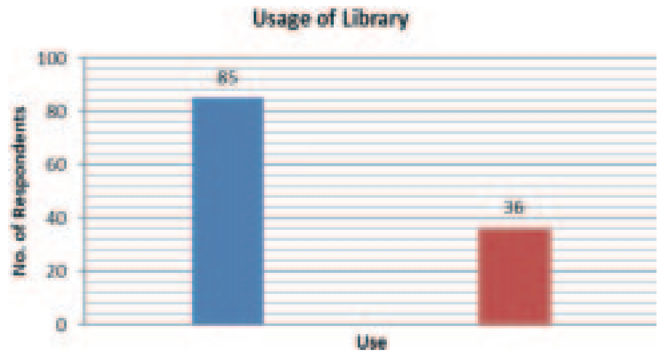

Figure 2: Usage of library

Table 2 shows that 85 (70.24%) respondents are using the library, whereas 36 (29.75%) respondents are not using the library. However, the result shows that most of the respondents used the library, but a small part of the respondents have not used the library.

Table 3: Awareness of RSS

Sr.No.	RSS Awareness	Total n (%age)
1.	Yes	115 (95.04)
2.	No	6 (4.96)
3.	Total	121 (100)

Table above table shows the awareness regarding research support services. 115(95.04%) research scholars of Kurukshetra University are aware of research support services, whereas 6 (4.96%) research scholars are not aware of it.

Table 4: Medium of Awareness about RSS

Sr.No.	Medium of Awareness	Total n (%age)
1.	Through workshop	112(97.39)
2.	Through Library staff	92 (80)
3	Faculty member/supervisor	76 (66.08)
4.	Read article about it	52 (45.21)
5.	Through social media	25 (21.73)

Note: Respondents give more than one answer.

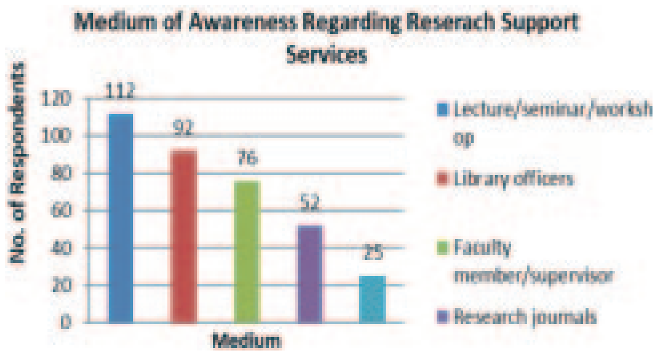

Figure 4: Medium of awareness regarding research support services

The above table shows that 112(97.39%) research scholars know about research support services through workshop followed by 92 (80%) by library staff, 76 (66.08%) faculty members 52 (45.21%)from reading article about it and 25 (21.73%) through social media.

Table 5: Researchers Engagement in research activity

Sr.No.	Research activity	Total n (%age)
1.	Ph.D.	121 (100)
2.	PDF	0
3.	Research Project	0
	Total	121 (100)

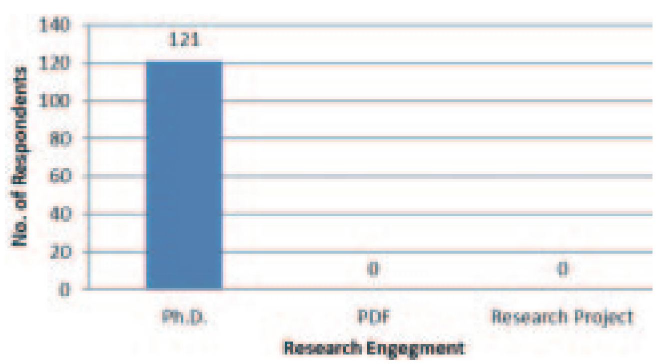

Figure 5: Researchers Engagement in research activity

Table 5 shows that 121 (100%) research scholars are doing Ph.D. work, whereas no respondents are not engaged with other research activities such as PDF and Research projects.

Table 6: Purpose of RSS Usage

Sr.No.	Purpose	Total n (%age)
1.	Research article writing	82 (71.30)
2.	Access thesis/ dissertation	78 (67.82)
3.	To access e-resources	76 (66.08)
4.	To keep yourself updated	75 (65.21)
5.	Reading research book	57 (49.56)

Note: Respondents give more than one answer.

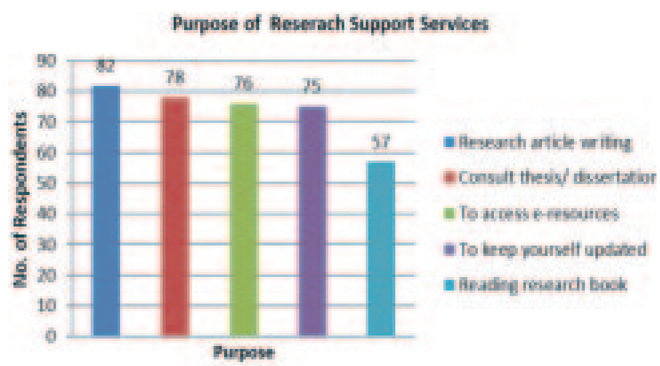

Figure 6: Purpose of research support services

The above table depicts that 82 (71.30%) researcher use the library specifically for writing article, 78 (67.82%) for consulting thesis and dissertation, 76 (66.08%) for accessing e-resources whereas 75 (65.21%) research scholars use the library to make yourself updated followed by 57 (49.56%) for reading research book.

Table 7: Use of Different RSS

Research Support Services (RSS)	No.of Respondents
Reference service	85(73.91)
Literature search	92(80)
SDI Services	0
Indexing and Abstracting Services	0
Research data Management	0
Research guides	0
Research consultation	0
Technological services /Internet Facilities /computer facility	95(82.60)
Remote access service	81(70.43)
ETD/Electronic thesis and dissertation	97(84.34)
New arrival list of researcher book	35(30.43)
Audio /video aids	0

Research carrels/separate space for Researchers	60 (52.17)
Scholarly publishing	0
Research impact	0
Research tools (Training programme/workshop/ seminar for researcher scholar, anti-plagiarism software, etc.	76 (66.08)

Table 7 shows that out of a total of 115 respondents, 95 (82.60%) respondents used technological services/ internet facilities and research support services, 92 (80%) used literature search, 85 (73.91%) used reference services, 60(52.17%) carrels/separate space for researcher, 81 (70.43%) remote access service, 76 (66.08%) research tools, 35 (30.43%) new arrival list researcher book service. The survey results show that SDI, indexing and abstracting services, research data management, research guide, research consultation, internet section, scholarly publishing, research impact, and literature access services are not provided by the JLN, Library.

Table 8: Benefits of RSS

S.No.	Benefits of RSS	No.of Respondents
1.	Expedited research process	95 (82.60)
2.	New innovation	94 (81.73)
3.	Quality of research work	93 (80.86)
4.	Time-saving	85 (73.91)
5.	Improved writing skills	83 (72.17)

Note: Respondents give more than one answer.

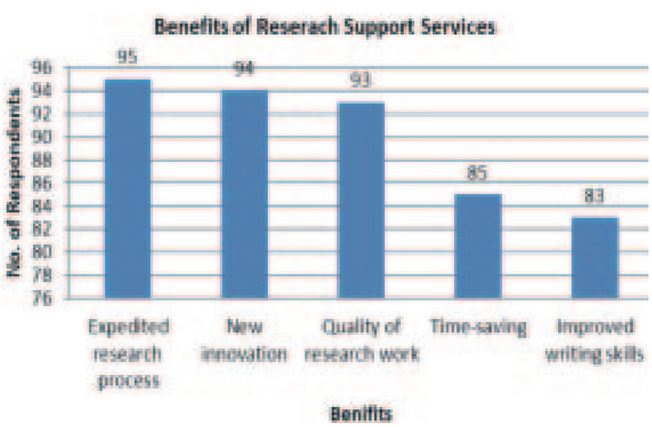

Figure 7: Use and benefits of research support services

The above table shows that 93 (80.86%) research scholars of Kurukshetra University responded that research support services are more informative in comparison to traditional services of Library RSS and enhance the quality of research work among research scholars, followed by 95 (82.60%) research scholars said that RSS bust-up expedited research process, 94 (81.73%)said that they are very helpful in creating innovate idea, 83 (72.17%) respondents said that RSS enhanced writing skills of research work.

Table 9: Satisfaction with Research Support Services

Satisfaction	Respondents n(%age)
Yes	96 (83.47)
.No	19 (16.52)
Total	115 (100)

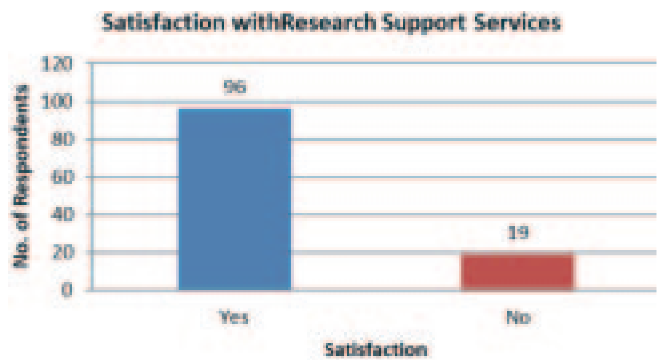

Figure 8: Satisfaction with research support services

The above table shows that 96 (83.47%) respondents are satisfied with research support services provided by JLN Library Kurukshetra, whereas 19(16.52%) research scholars are not satisfied.

Conclusion

This study presented a maximum positive response of respondents towards research support services provided by JLN Library, Kurukshetra University. Most of the respondents are aware of research support services and use the library for research writing, consult thesis and dissertation, and e-resources for writing research papers and their Ph.D. work. Lectures/Seminars/ webinars are very beneficial to make user aware of research support services. The library should continue organise orientation program, lectures, and seminars webinars, which are helpful for the new research scholars and engage those unaware of research support services. During this study, it is also noted that some important research support services such as SDI, indexing and abstracting services, research data management services, research guide, research consultation, scholarly publishing, research impact, and literature access services are not provided by library.

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Role of Parent's Education on Gender Role Attitude of Adolescents

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Abstract

Parent's education has an important role in the life of children's and developing attitude towards many things in any society. Attitude towards many roles as prescribed by societal norms is automatically learned by children mere presence of parents. Parents' education plays a significant role in developing and learning different roles. Its role as a morale builder has been variously acknowledged. This study examines the role of parents' education on adadolescents' gender role attitudes. For fulfillment of this purpose, we administered a Sex-role attitude scale developed and standardized by Dr. Bina Srivastava on adolescents. The sample for the study comprised 200 Adolescents (100 boys and 100 girls). After data collection, the data were evaluated by using the software SPSS. Results revealed that Boys and girls significantly differ in relation to sex-role attitudes, we can say that girls are more specific in relation to sex-role attitudes. mother's education has a significant effect on forming sex-role attitudes of girls, whereas fathers' and mother education both plays an important role in directing boys' gender role attitudes. The finding of the study is significantly useful for reducing gender role attitudes among children. It was also helpful in forming strategies for gender discrimination.

Introduction

Parents' pedagogy has a very significant bit part in the personality enhancement of a child. Children's attitude takes a proper shape or is influenced very much by parental behavior. Parental behavior even subconsciously affects children's attitude development and also changes in attitude. In many countries, parents show discriminatory behavior, between boys and girls. This type of behavior is particularly adopted by children, and even society supports such behavior. Neighborhood, peers, parents' socio-economic status are other variables that directly or indirectly influence children's attitude development. If this gender-based discrimination is supported by society, it also increases the rate of crime in society.

Further, it affects the socio-economic development of any country. So, it is very prominent to study gender roles attitude among adolescents and other family members even in other strata of society. The significance of sex-role attitude in ancestry functioning has been in the attention of many sociologists and psychologists for many decades (Benin & Agostinelli; Ruble, Martin & Berenbaum, 2006; Thomson &Walker, 1969). Sex-role attitude has been studied among family members. Parents, siblings, and it is specifically studied in adults and adolescents. Many factors play a significant role in developing gender role attitudes among adolescents. Socio-economic status of the family. The region from which they belong, neighborhood, siblings, their birth order, all these factors affect "Gender role attitude" in children.

"Gender role attitudes" refer to views held by individuals regarding the roles men and women should play in society". In all societies, tasks are divided partly on the basis of sex. How they are divided between the sexes, however, varies from one society to the next and over time (Padavic & Reskin, 2002).

Some research found that type of schooling, the curriculum they studied and, is their school is single-sex students or is it co-education, it is also Make a crucial impact on developing traditional "Gender role attitudes" among adolescents. When parents have their specific duties of participating gender-wise in their homes, it is keenly observed by their children, and consciously or sub-consciously learned by children.

Generally, Gender roles are determined and constructed by societal norms, and these attitudes are relative and subjective by nature, they can differ in a different culture. Antill, J.K., Cunningham, J., Cotton, S., (2001), studied 191 families in Australia. These families have 2 children between age-group 8 to 12, their attitudes towards gender roles were examined. The role of

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different demographic variables, parenting style, parents' activities in different household tasks were studied, the result reveals, adolescents' "sex-role attitudes" were connected with mother as well as schooling, religious attitude, legislative preferences, mother and fathers' encouragement of adolescent's cross-sex interests, tolerating adolescents cross-sex behavior, and unequal distribution of household chores. Ghorpade, R. (2009), reveals that in secondary school textbooks of Maharashtra there are, more examples of males than females. It represents that, facts in textbooks show male dominancy in the family as well in society. There is an absence of modern images of women in textbooks. All these things are efficient in creating a positive or negative attitude towards gender roles.

Vlasceanu Sebastian, (2013) states that understanding and foregrounding a relation between "gender", motivational as well as cognitive aspects, form view towards activities, convincingly productive in smooth running the executive recruiting and electing in the corporate setting. Their research focuses on "gender differences" in attitudes towards work among young students. The sample of the study chosen 90 participants, male and female aged, 18 to 24 years it was further bifurcated equally into male and female. The result shows that gender does not influence participants' cognitive and motivational aspects. In some research, pampering to children was also studied. It is seen that uneducated parents deal with their children with extra protection, have irregular study habits at their houses for adolescent education, and have high demands from their youngsters, Hanafi (2008). This study also mentions that these things donate uneven and undetermined outcomes to children's "academic achievement". In this study, approximately 100 formally educated parents were taken for sample it is found that these parents have relatively forsaken and impractical academic perspective for their adolescents, as they have high supposition from children and almost have low investments in their education, sometimes they give bodily abuse, and they are following the customary concept of praise and abuse with adolescents. Although, parents with "higher educational status" are practical and structured while assuming the "educational goals" of their offspring. The "highly educated parents" follow a contemporary and natural academic environment for their children at their place. Besides, research studies also recognized the dissimilarity in the parents' restriction regarding the beneficiation of education in adolescent academic achievement. The investigators have revealed that mothers' and fathers' "educational level" was the most valued component in anticipating adolescents' school activities. As seen in research, a mother's "educational status" is more related to children's academic attainment and has significant influences on children's overall achievements. Although, fathers' education equally affects adolescent academic reaching. The academic level of the father straightly affects the economic resources in the family which has a significant relationship to the facilities available for their ward which in succession has an interconnection with children's future success. For example, economically sound, families comfortably make do their children's fundamental, health, food, shelter, and scholastic needs; provide them extra prerequisites and chances to their little one which could contribute, more to the educational success of their youngster (Suleman, Aslam, Shakir, Akhtar, Hussain & Akhtar, 2012).

As stated by Nyama (2010), always the mother is seen as the first "guru" of a child and she is the initial pedagogue in the child's sphere. At first, the mother teaches right and wrong o her child. Then it is the turn of the father and other family members. The educated parents imparted their little one, the prime significance of various things, as all the continue to exist determinants are the basis of these. Teaching that takes place in the household, in the home environment has a foundation of the education of youngster through his/her overall academic advancement. The child learned his mother language at home through the casual coaching of the parents and unbookish interactions with other family relatives. Mother teach their youngster to be kind, disciplined and have appropriate manners. As the child grows, the mother tells different cultural fictions and customs improves their "listening skills" and provides various chances to enhance their glossary. These interchanges evolve curiosity in the youngster, which behind time come up with a lot to the learning capacity of adolescents. We can see those parents along with caring and naturing responsibilities also execute a character of a "Guru" too throughout the sphere of the children.

As mentioned by Francis and Skelton, (2005) and Wessel (2005), "gender stereotypic views" generate a negative influence on children in their choice of career decision-making, and it is observed that females are less likely to study engineering and computer sciences than males. These results reveal that "gender stereotypes" can affect individuals' academic understanding and level of academic motivation.

Tiedemann (2000), states that parents' "gender stereotypes and expectations" for their little one influence children's awareness of self. Investigators are convinced, that "self-concept" evolves behind time, under the "age 7 or 8", as youngsters mature to interpret. "Their feelings, abilities, and feedback they receive from parents, teachers, and peers about themselves". As stated by Benner & Mistry, (2007). In spite of varying views about the beginning of "self-concept development", researchers are in the same mind that, self-concept is a gravity point. Self-concept impacts an individual's behaviors, and "cognitive and emotional outcomes", it also includes "academic achievement, levels of happiness, anxiety, social integration, self-esteem, and life satisfaction". As mentioned by Marsh & Martin, (2011), it is revealed that "females are more extroverted, anxious, and trusting, and have lower self-concept and self-esteem than their male counterparts". Berk (2008, 2010), stated it can contribute to the gender differences that can be seen between boys' and girls' children. The location of the school also influences very much, "gender stereotypes, students' self-concept, and academic achievement". By location we mean is school is in a city, urban or rural area.

The schooling of a breadwinner (father) enlarges the opportunity of a child attaining higher education, but the ascendency of mother training is equally important and more valuable than the role of an "educated father" in children's schooling achievement. The findings of various research articles conclude that "a mother's education is more important than father which has more significant effects on the educational attainments" of students. It was also seen that less formally educated mothers are less pay attention to the education of their offspring it seems unfavorable to children's "educational future". Keeping all these points in mind following objective would be set for research.

Objectives of the study

1. To find out gender role attitudes among male and female adolescents.
2. To assess gender role attitudes of adolescents in terms of father's education.
3. To find out gender role attitudes of adolescents in terms of mothers' education.

Hypotheses

1. Gender would not influence the attitude towards gender roles among adolescents.
2. There would be no effect of father education on the gender role attitude of male students.
3. There would be no effect of mother education on the gender role attitude of male students.

4- There would be no effect of father education on the gender role attitude of female students.

5- There would be no effect of mother education on the gender role attitude of females.

Sample

The sample of the present research is made up of 200 adolescents. The age range of adolescent's children was (14-16) yearsThe data was collected from single-gender government schools in western Uttar Pradesh and Uttarakhand. In which 100 girls and 100 boys, will be selected from single-gender government schools. Purposive sampling techniques were used for data collection. Further, the data will be normalized on a normal probability curve.

Sample structure

Adolescence (200)

Girls (100) Boys (100)

Variables

Independent variable

1 Gender

2 Parents Education

Dependent variable

1 Children's Gender-role attitude

The psychological measure used

Children's Gender-role attitude: Children's sex-role attitude scale was used for measuring gender role attitudes among adolescents. The scale was developed by Dr. Bina Srivastava (1995). This scale has 60 items. It has 5-point rating items. The items of this scale related to Family roles, Activities, Preferences, Beliefs, Occupations, and Interests. It was administered to school-going children. The split-half method was used for (odd-even) calculating reliabilities of scale and it was found .79 and .76 respectively.

The Procedure of Data Collection and Data Analysis: The sample for the present research was collected from single-sex government schools in western Uttar Pradesh and Uttarakhand. There are 100 girls and 100 boys in the sample, the sample was selected from single-sex government schools. At first Children's Sex-roleAttitude Scale was administered to adolescents. The information about their parents was also taken from them (both their mother's and father's). According to the education of parents, the sample was further segregated into 5 groups, parents' education

Group 1: Illiterate parents,

Group 2: 1 to 5 educated parents,

Group 3: 6 to 8 educated parents,

Group 4: 9 to 12 educated parents and

Group 5: Graduates parents. Scores on the children's sex role attitudes scale are taken to compare all these groups of children. SPSS was used for further calculation of statistical measures (t-test and analysis of variance).

Interpretation of Results

Table 1: Mean, S.D, and t-value of children's sex-role attitudes among boys' and girls' students

Gender	Number	Mean	SD	df	t-value
Girls	100	426.36	57.110	198	4.031**
Boys	100	380.59	98.073		

Note: **significant at 0.001

Table 1 results reveal that mean value for girls was found (M-426.36), while the boys' mean was (M-380.59), it yielded a "t-value" of 4.031, which was found noteworthy at 0.001 level of significance. It shows that girls are more specific towards gender role attitudes as compared to their counterparts.

Table 02: The following table is to see the impact of fathers' education on boys' sex-role attitude. Table-02 A shows descriptive statistics. Describing mean, S.D, and standard error for 5 groups of fathers bifurcated according to their education level, and their respective children's sex-role attitude.

Table 02A: Summary of descriptive statistics for one-way classification of the effect of Father's education on gender role attitude of boys

	N	Mean	Std. Deviation	Std. Error
Illiterate	21	416.71	92.948	20.283
1 to 5 pass	12	369.08	114.701	33.111
6 to 8 pass	8	412.88	89.170	31.526
9 to 12 pass	36	393.42	91.679	15.280
Graduate	22	318.59	86.328	18.405
Total	99	380.35	98.543	9.904

Table 02B: One-way ANOVA table forof effect of father's education on gender role attitude of boys

	Sum of Squares	Df	Mean Square	F
Between Groups	127814.481	4	31953.620	3.64**
Within Groups	823842.146	94	8764.278	
Total	951656.626	98		

Note: * significant at 0.01 level of significance.

Table-2B shows, that found Mean squares for between-groups were (31953.620) and within groups, it was (8764.278), which yielded an F-ratio (3.646) which was found significant at both levels of confidence. It indicates, that father education significantly impacts the gender role attitude of boys. The reason behind this was, that maybe most of the fathers are bread earners in the family most of the children keenly observe the role of the father in their family.

Table-02C indicate a "posthoc test" for comparison of various group of fathers in terms of their education. It elaborates boys of Illiterate parents and graduates' parents are remarkably different in respect of sex-role attitude, as well as the boys of 9th to 12th pass and graduate parents are found notably different in respect of sex-role attitude. So we can say that the education of fathers has an important impact on the attitude towards sex-role.

Table 02C: The following table shows Post-hoc test results, to see the impact of father's education on boys' sex-role attitude

Boys GRA and Father Education	Boys G.R.A. and Father Education	Mean Difference (I-J)	Std. Error	Sig.
Illiterate	1 to 5 pass	47.631	33.878	.163
	6 to 8 pass	3.839	38.896	.922
	9 to 12 pass	23.298	25.706	.367
	Graduate	98.123*	28.561	.001
1 to 5 pass	Illiterate	-47.631	33.878	.163
	6 to 8 pass	-43.792	42.730	.308
	9 to 12 pass	-24.333	31.206	.437
	Graduate	50.492	33.597	.136
6 to 8 pass	Illiterate	-3.839	38.896	.922
	1 to 5 pass	43.792	42.730	.308
	9 to 12 pass	19.458	36.592	.596
	Graduate	94.284*	38.651	.017
9 to 12 pass	Illiterate	-23.298	25.706	.367
	1 to 5 pass	24.333	31.206	.437
	6 to 8 pass	-19.458	36.592	.596
	Graduate	74.826*	25.334	.004

Graduate	Illiterate	-98.123*	28.561	.001
	1 to 5 pass	-50.492	33.597	.136
	6 to 8 pass	-94.284*	38.651	.017
	9 to 12 pass	-74.826*	25.334	.004

Table-03: Table-03A, - Describes descriptive statistics for seeing the impact of mothers' education on their children's gender role attitude. The result reveals a clear mean difference between Illiterates mothers' groups' children's and graduates' mother's groups children.

Table 03A : Summary of descriptive statistics for one-way classification of the effect of mother's education on gender role attitude of boys

	N	Mean	Std. Deviation	Std. Error
Illiterate	28	425.36	90.550	17.112
1 to 5 pass	20	364.05	92.063	20.586
6 to 8th pass	9	396.67	93.030	31.010
9 to 12 pass	21	391.24	96.527	21.064
Graduate	22	321.91	90.543	19.304
Total	100	380.59	98.073	9.807

Table 3B: One-way ANOVA table to see the impact of Mother's education on gender role attitude of boys

Sum of Squares	df	Mean Square	F	Sig.
142049.184	4	35512.296	4.164*	.004
810161.006	95	8528.011		
952210.190	99			

Note: * significant at 0.01 level of significance.

The above-shown table indicates that found Mean squares for between-groups were (35512.296) and within groups, it was (8528.011), which capitulate an "F-ratio" of (4.164) which was found noteworthy at 0.05 levels of confidence. It indicates, that mother education impact on gender role attitude of boys. It can be because at this age, may be boys spend more time at home with their mother. After this, we calculate the Post hoc test for comparison of groups to see which groups are exactly differentiated from each other.

Table-3C: Table-3C reveals the result of the post-hoc "Bonferroni test", there was a significant difference between illiterate mothers' boys as compared to graduates' mother boys Gender role attitudes. When we compare 9 to 12 pass and graduates' mother boys' significant difference was found at 0.05 level of confidence. Other groups also differ in regards to gender role attitude, but not at even 0.05 level of confidence. So, we can say as the education of parents can make a significant impact on boys' gender role attitudes. Educated mothers impart a positive attitude towards gender roles among their boys' children.

Table-3C: post-hoc test to see the impact of Mother's education on gender role attitude of boys

Boys Gender role attitude Mothers' Education		Mean Difference (I-J)	Std. Error	Sig.
Illitrate	1 to 5 pass	61.307	27.037	.256
	6 to 8th pass	28.690	35.385	1.000
	9 to 12 pass	34.119	26.658	1.000
	Graduate	103.448*	26.310	.002
1 to 5 pass	illiterate	-61.307	27.037	.256
	6 to 8th pass	-32.617	37.067	1.000
	9 to 12 pass	-27.188	28.853	1.000
	Graduate	42.141	28.531	1.000
6 to 8th pass	Illiterate	-28.690	35.385	1.000
	1 to 5 pass	32.617	37.067	1.000
	9 to 12 pass	5.429	36.792	1.000
	Graduate	74.758	36.540	.435
9 to 12 pass	Illiterate	-34.119	26.658	1.000
	1 to 5 pass	27.188	28.853	1.000
	6 to 8th pass	-5.429	36.792	1.000
	Graduate	69.329	28.173	.157
Graduate	Illiterate	-103.448*	26.310	.002
	1 to 5 pass	-42.141	28.531	1.000
	6 to 8th pass	-74.758	36.540	.435
	9 to 12 pass	-69.329	28.173	.157

Table-4A: Summary of descriptive statistics for one-way classification for the effect of father's education on gender role attitude of girls.

	N	Mean	Std. Deviation	Std. Error
Illiterate	12	444.58	28.852	8.329
1 to 5th	10	430.10	54.417	17.208
6 to 8 passes	11	424.09	31.255	9.424
9 to 12 passes	40	428.43	76.734	12.133
Graduate	27	414.67	39.045	7.514
Total	100	426.34	57.110	5.711

Table-4A reveals that there was not a significant mean difference between all groups regarding gender role attitudes among girls. It can be said that most girls are engaged in household activities, so these things make girls' attitudes towards gender roles more specific than boys.

Table-4B: One-way analysis of variance for the impact of father's education on girls' sex-role attitude

	Sum of Squares	Df	Mean Square	F	Sig.
Between Groups	8043.939	4	2010.985	.607	.659
Within Groups	314852.501	95	3314.237		
Total	322896.440	99			

Table-4B indicates that found F-ratio for the impact of a father's education on girls' sex-role attitude was (F-.607) not found significant at any level of confidence. It can be said that fathers most of the time remain out of the home so maybe it does not make a significant impact on them.

Table-5A: Summary of descriptive statistics for one-way classification for the effect of mother's education on gender role attitude of girls

	N	Mean	Std. Deviation	Std. Error
Illiterate	22	440.55	42.167	8.990
1 to 5th pass	19	422.63	29.549	6.779
6 to 8th pass	13	407.08	46.772	12.972
9 to 12 pass	18	453.72	102.071	24.058
Graduate	28	409.04	36.040	6.811
Total	100	426.34	57.110	5.711

Table-5A shows descriptive statistics for the effect of mothers' education on girls' sex-role attitude. It reveals that yielded Mean difference between groups in terms of their mothers' education shows slightly different with each other regarding gender role attitude.

Table-5B: 'One-way analysis of variance' for the impact of mother's education on girls' sex-role attitude

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	31405.066	4	7851.266	2.559	.044
Within Groups	291491.374	95	3068.330		
Total	322896.440	99			

Note-*significant at .05 level of significance.

Table-5B describes that found mean square for between groups (7851.266) and within groups was (3068.330) was yielded an F-Ratio of (F-2.559) which was found significant at 0.05 levels of confidence. It can be said that mother education also put a significant impact on girls' sex-role attitudes.

Discussion of Result

As far as the objective of this research was to see the role of parents' education on adolescents' sex-role attitudes. The result indicates that the mothers' and fathers' education put a noteworthy impact on encouraging positive or negative attitudes among children. Although the father-mother education also plays an important role in developing gender-specific roles, among boys' adolescents. On part of girls in our result, it is not influenced by the mother as well as fathers. Research shows that parents reinforce "gender-typed behavior" in children by inspiring their kids to participate in "gender-stereotypical activities" Lytton & Rommney, (1991). Except these "gender socialization" content are edgeways pass to children via mother and father's behavior in the pattern of sex-typed role, Collins & Russell, (1991). For instance, adolescent learns that male and female should behave in a diverse way, as they perceive their mother and father's behavior. They often experience mothers, give more time to cooking naturing activities and fathers on outside home activities. With this viewpoint, mother as well father passes the same thinking and gender-specific roles to their youngster, which results from congruency in the behavior of parents and children's gender role attitudes.

A "gender-specific schema" plays an important role in gender role development. It is seen in many research that across childhood to adolescence, children develop conception about "gender-appropriate roles and behavior" Martin & Ruble, (2004). Some studies reveal that schooling and peer-group have an important role in gender socialization (Blum, 2005; Delamont, 2012; Shu, 2004; Stramquist, 2007). In research, it was shown, that boys, in general, express more traditional gender role attitudes than girls, and it is related to negative social and academic achievement, Huyge *et al.* (2015). Due to this reason, male adolescents are at a considerable possibility for scholastic downfall. Exploring and explaining gender role attitude development in boys could help boys' sense of various other responsibilities (Huyge *et al.*, 2015) and can reduce their engagement in destructive and offender activities (Ben-David & Schneider, 2005; Flood & Pease, 2009). Vidyanand, Khandagale, and Bhosale (2019) found in a descriptive survey, the family type does not affect the attitude of adolescents in respect of gender roles, although in their results it was observed that working mothers are quite progressive in their attitude in respect of sex-roles. The limitation of this study was the data was gathered from single-sex government schools of western UP. May be this was the cause of our found result.

Conclusion:

The outcome of this study is that girls have high gender role attitudes as compared to boys. Except this, we can say that mother's education level impact significantly on boys' gender role attitudes. We should further investigate the other factors that impact the developmentof gender role attitudes. This research would be very useful for making policies for girls' education, career planning, and other areas.

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Self-Confidence among General and Special Education B.Ed Teacher Trainees in Papum Pare District of Arunachal Pradesh: A Comparative Study

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Abstract

The present study studied the self-confidence of general and special education two-year B.Ed. teacher trainees in Papum Pare District of Arunachal Pradesh. Descriptive-cum-survey method was adopted to complete the study. The sample of the study comprised of 100 (21.59%) two-year B.Ed. third semester teacher trainees (50 general education and 50 special education), which were selected by adopting the simple random sampling technique. Data was collected using a standardized self-confidence scale developed by Babita Gupta and Avdhesh Jha (2014) and analyzed employing mean and t-test as statistical techniques. The findings of the study revealed that general education two-year B.Ed teacher trainees possess above-average self-confidence and special education two-year B.Ed teacher trainees possess average self-confidence. Additionally, there is no significant differencebetween the self-confidence of general and special two-year B.Ed teacher trainees.

1.0. Introduction

The social environment is dynamic. Numerous factors, including those related to the population, technology, culture, politics, economy, and education frequently interact to change society. Out of all these variables, education is crucial in bringing about social transformation. It transfers skills, information, and cultural practices from one generation to the next. Old concepts and ideals are updated, while new ones are started, and they both become the objectives that the younger generation strives to achieve.In order to establish and uphold peace, tranquilly, unity, and growth in the society, education also fosters political consciousness and informs citizens of national goals. However, the major character who bears the primary burden of delivering education is a teacher.

The teacher is the one who shapes a nation's future generation while overcoming many obstacles. In the classroom, a teacher interacts with a variety of personalities and student types, which calls for varying degrees of behaviour, knowledge, and student-friendly attitudes on the part of a teacher. In addition to teaching in the classroom, a teacher is also responsible for managing co-curricular activities, academic programmes like seminars and workshops, and many other tasks that call for a positive attitude towards one's skills and abilities.

A positive attitude towards one's skills and abilities is called self-confidence. It is one attribute of teacher's personality that greatly determines her/his success in teaching profession. It refers to the feeling of trust in one's skills and abilities. Self-confidence is a positive feeling about oneself (Peterson, 2022). According to Khemchandani (2016), "teachers play a very crucial role in creating, enhancing, and growing pupils' self-confidence". Therefore, it is crucial that teachers develop personality traits and attitudes that will boost their confidence before beginning to work with pupils.

Are teachers created or born? Has historically been answered in two ways; some people are born teachers and some people develop their teaching abilities through high-quality instruction and thorough preparation. Even those who think that teachers are born into their profession believe that teacher education and training further sculpt the natural teaching abilities they already possess. As a result, developing self-confidence in teacher trainees is the primary task of teacher education institutions. A few instances of the studies that were carried out so far on the self-confidence of B.Ed. teacher trainees demonstrate that, a great deal of the studies were carried out in other states and union territories of India, such as Maharashtra, Tamil Nadu, Uttar Pradesh, Chandigarh, and so on, by taking variables like gender, the location of the institution, types of families, medium of instruction, trainees' parents'

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educational backgrounds, family's annual income, opted pedagogy paper, age, and stream of studies (Khemchandani, 2016; Sundaram & Barathi, 2019, Sindhya & Vanitha, 2019; Kumar & Gaur, 2021). However, till now not even a single study is carried out in the Papum Pare district of Arunachal Pradesh on self-confidence of general and special education two-year B.Ed. third semester teacher trainees. Therefore, considering this research gap, the authorshad decided to carry out the present study.

1.1. Objectives

1. To study the level of self-confidence ofgeneral and special education two- year B.Ed teacher trainees.
2. To find out if there is any statistically significant difference in the level of self-confidence between the general and special education two-year B.Ed teacher trainees.

1.2. Hypothesis

$H0_1$: There is no significant difference in the level of self-confidence between the general and special education two-year B.Ed teacher trainees.

1.3. Methodology

Descriptive-cum-survey method was used to complete the present study. The population of the study consisted of all the special (60) and general (403) two-year B.Ed third semester teacher trainees studied in the existing five (5) institutions providing special and general education two-year B.Ed. programmes in Papum Pare district of Arunachal Pradesh. Out of the existing population, a total of 100 (21.59%) teacher trainees (50 general and 50 special) were selected as sample by adopting the simple random sampling technique. A standardized self-confidence scale developed by Babita Gupta and Avdhesh Jha (2014) was used to collect the required data. The scale consisted of 100 items out of which 77 items were positive and 23 items were negative. The items were divided into 10 dimensions; physical confidence, technological confidence, social confidence, psychological confidence, judgment confidence, reading confidence, environment confidence, stage confidence, status confidence, and peer confidence. For each item there were five response options such as strongly agree (SA), Agree (A), undecided (UD), Disagree (DA), and strongly disagree (SD), for which weightages were 5, 4, 3, 2, and 1 respectively for positive items and for negative items the reverse weightages. Given classification for interpretation of the level of teacher's self-confidence were extremely high self-confidence, high self-confidence, above average self-confidence, average/ moderate self-confidence, below average self-confidence, low self-confidence, and extremely low self-confidence. Data was analyzed employing mean and t-test as statistical techniques.

1.4. Delimitation

The present study was delimited to:

- Papum Pare district of Arunachal Pradesh.
- 100 two-year B.Ed. third semester teacher trainees (50 general education and 50 special education).
- Only two variables; self-confidence and specialization of B.ED.

1.5. Result and Interpretation

This section is divided into two segments, as given below:

- Analysis of the level of self-confidence of general and special education two-year B.Ed teacher trainees.
- Analysis of difference in the level of self-confidence between the general and special education two-year B.Ed teacher trainees.

The detail of each segment can be seen as follows:

1.5.1 Analysis of the level of self-confidence of general and special education two-year B.Ed teacher trainees.

Table 1: Showing the Total Number of General and Special Education Two-Year B.Ed. Teacher Trainees and Mean Score for their Level of Self-Confidence

Specialization	N	Mean
B.Ed General	50	363.82
B.Ed special	50	346.64

Note: Data shown in the table was collected through field visit conducted in the month of May 2023. N=Number

Table 1 reflects that mean scores for self-confidence of general and special education two-year B.Ed teacher traineescame out as 363.82 and 346.64, respectively. According to the classification of scores for interpretation of the level of the self-confidence given by Gupta and Jha (2014), the mean score of general education two-year B.Ed teacher trainees falls under the score range of above average self-confidence and that of special education two-year B.Ed teacher trainees falls under average self-confidence. It means the general education two-year B.Ed teacher trainees have above average self-confidence, whereas, the special education two-year B.Ed teacher trainees have average self-confidence.

1.5.2 Analysis of difference in the level of self confidence between the general and special education two-year B.Ed teacher trainees

Table 2: Showing Difference in the Level of Self-Confidence Between the General and Special Education Two-Year B.Ed Teacher Trainees

Specialization	N	Mean	Standard deviation	df	t-value	Level of significance
B.Ed general	50	363.82	49.45	98	1.81	0.05
B.Ed special	50	346.64	45.31			

Note: Data shown in the table was collected through field visit conducted in the month of May 2023. N = Number, df = Degree of Freedom.

Table 2 reveals that the calculated t-value for difference in the level of self-confidence between general and special education two-year B.Ed teacher trainees came out as 1.81, which is less than the critical t-value 1.98 at 0.05 level of significance for 98 df. From this value, it is understood that general and special education two-year B.Ed teacher trainees do not significantly differ in their self-confidence. Hence, the formulated null hypothesis "there is no significant difference in the level of self-confidence between the general and special education two-year B.Ed teacher trainees" gets approved.

1.6. Findings

1. General education two-year B.Ed teacher trainees possess above average self-confidence, whereas, special education two-year B.Ed teacher trainees possess average self-confidence.
2. General and special education two-year B.Ed teacher trainees do not significantly differ in their self-confidence.

1.7. Conclusion

Academic achievement, personality, and interests of students are all greatly influenced by teachers' self-confidence. Further, in today's knowledge-based, technologically advanced, and rapidly changing society, teachers must equip students with a wide set of skills necessary to keep up with this rapidly changing environment. Sadly, the current study found that the self-confidence of general and special two-year B.Ed. teacher trainees in Papum Pare district is above average and average, respectively. As these trainees are the future teachers, it is the need of the hour that teacher educators must find out what hinders the development of self-confidence of B.Ed teacher trainees and work on it.

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Enhancing Critical Thinking in Physics through Blended Learning approach

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Abstract

The emergence of digital technology has significantly altered routines and practices in the majority of human endeavors. The development of information and communication technology has sped up a paradigm shift in the methods of instruction and learning. The field of physics as a whole requires specific modalities of interaction, such as experimentation, demonstration, and discussion. Because of this, blended learning as an effective pedagogical strategy for fostering learning involves fusing face-to-face instruction's socialization chances with online learning techniques. The present study aims to find the effect of blended learning on critical thinking in physics among secondary school students. The study is quasi-experimental in nature and a pretest-post-test non-equivalent group design was employed. The sample consists of a total of 36 students of which the experimental group has 19 students and the control group has 17 students. Critical thinking test wasused for data collection. For statistical data analysis, ANCOVA and t-test. The finding of the study revealed that blended learning strategy is more effective than conventional method of teaching in enhancing critical thinking. The study also shows that there is no significant difference between the critical thinking of boys and girls as a result of blended learning.

Introduction

Today ICT has influenced all areas such as banking, engineering, medical, education, architecture, etc. The impact of ICT on education is not visible in all areas i.e. primary education, secondary education, and senior secondary education but soon we will realize that it is one of the vital tools to compete in the global market (NEP, 2020).

Students can now watch videos on YouTube and animated videos of the 3-D diagram and understand the concepts more deeply. ICT can save students time and spend more time thinking and analyzing concepts (Kulkarni & Manisha, 2014). Students can now receive education both inside and outside of the four walls of the classroom. With the use of mobile, laptops, etc., today's teachers should engage the students in activity-based pedagogy and experiential learning, which helps in the development of critical thinking because students should not bother about notes. The ability to effectively use ICT in a meaningful way is something that many people struggle with (Rickards, 2003). When new technology is introduced into the classroom, the goal is to help pupils improve their learning capacity. These technologies do not, however, operate in a vacuum. Instead, they are connected to the setting's already-used tools and ideas. When instructors try to introduce technological innovation into the classroom, they inevitably face the difficult task of integrating fresh concepts with ingrained pedagogical principles and practices (Russell & Schneiderheinze, 2005). Fostering pupils' capacity for higher-order thinking has become a key educational goal in the age of information and communication technology. The pandemic situation alerts us that we should always be ready with alternate modes of teaching-learning process and not only conventional modes of teaching-learning. Providing education of mass and equality of educational opportunity require the use of digital platforms so that we can educate all. Online learning is one of the very flexible platforms where students can learn according to their pace and time. It is also a free and open website which is less costly. Students can download the file and can learn on their own. They can remain in touch with their teachers via Google Classroom, Email, and WhatsApp. Students can learn and understand basic things at home and discuss higher-order things in the classroom (Ligi, 2019).

Nature of Physics

Physics is the study of matter and how it moves through space and time. It also deals with the energy

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that is present in or around the matter as well as the force acting on it. Today, rapid changes are taking place due to the advancement of physics e.g. different types of vehicles are coming into the market, the design of mobile phones is changing day by day, and so on. So, to understand the concepts of physics, reasoning, and analytical skills are necessary, and these skills should be nurtured from the foundation stages of the students. For learning physics using blended learning means the combination of online and offline learning. In online learning, teachers can use the platform where online discussion can take place, and students can watch some videos and in face-to-face discuss the concept. But only the conventional method is being applied by teachers to teach physics which will not be fruitful for their higher-order development because, in physics, there are more abstract concepts. For example, if the teacher is teaching the direction of the flow of current in an electric circuit by lecture method, then it is very difficult to know the direction of current in the electric circuit but in place of the lecture if we show some videos on how the flow of electron takes place inside the wire then it is very easy to know about it. On the other hand, in problem-posing education, learning always begins from a problem thrown up in the classroom. The effectiveness of online learning depends upon how ICT is being used in the classrooms. To teach physics by blended learning, teachers can conduct web- conferencing, an online whiteboard, and screen share.

Review of related literature

The reviews from various studies related to blended learning show that the blended learning approach is an effective pedagogical approach to meet the need of 21st-century students. The studies depict that the blended learning method will be helpful to improve higher-order thinking among students. Most studies show that blended learning strategies help to improve critical thinking, collaboration, and communication among students (Krishnan, 2011; Josephine, 2016; Neetika, 2021). It further helps in improving critical thinking, creativity, and problem-solving skills (Vahora & Samir, 2020; Nair, 2014). The blended learning approach is not only beneficial for science learning but can be beneficial for other subjects like Arts & Humanities (Neetika, 2021; Deivam, 2018).

In blended learning, teachers use online & offline approaches, in the online approach teacher use ICT-based learning materials to improve the higher-order thinking skills among students (Kulkarni & Manish, 2014). In ICT-based learning, teachers use computer-assisted instruction (CAI), WebQuest, and mobile learning that can be helpful for students to improve their critical thinking, creativity, communication skills, problem-solving, and divergent thinking (Sah, 2015; Uzma, 2013; Astuti *et al.*, 2018; Bansal, 2019). According to Parashurama, *et al.* (2017), technology-based teaching is more effective than constructivist teaching to improve critical thinking among students. There are very limited studies on the effectiveness of the blended learning approach specifically for the teaching of Physics. The hybrid environment effectively fosters critical thinking skills (Sauna *et al.*, 2020). It was also seen that project-based and blended learning helps to improve higher order thinking (Eliyonsic, 2019). In other countries also, many kinds of research were conducted on blended learning and it was found that the more time spent by students on digital media has improved their critical thinking skills (Graham, 2009). Researchers have long advocated for lecturers to use ICT in novel ways that go beyond merely "information giving" (Nicaise & Crane, 1999). According to Khine (2003), instructors can use ICT to support peer conversations, critical thinking, and learning. Pratt (2002) made the case that ICT may aid in both teaching and learning. ICT can be a beneficial addition to lecturers when appropriately included in the curriculum. Winn (1989) recommended that teachers use ICT to create substitutes for the teacher-based education approach.

Need of the study

In the traditional system of learning, chalk & talk methods are used, where students mainly focus on rote learning to pass the examination, the same is been reflected in Paulo Freire's "banking system of education". He called the system "banking education" because academics in the conventional education system operate students' empty accounts by depositing knowledge and information like operating a bank account. According to Freire, traditional education is a form of depositing, with the instructor acting as the depositor and the pupils as the depositories. This educational model involves lecturing by the teacher, which the students then repeat after them. He proposed Problem-posing as a substitute for the current authoritarian and repressive banking education as a means of resolving this issue in the classroom. It is founded on the idea that students learn more effectively when they produce their information rather than when knowledge is created for them. But in problem-posing education, learning always gets started with a problem that is brought up in the classroom. In contrast, in online learning, teachers know how to use technology to deliver the content, but the affective domain is lacking in this mode. So, there is a need for collaboration in online and offline learning, termed blended learning. Much research shows that using ICT improves higher-order skills such as critical thinking, but it will be possible when it provides hands-on experience to the learners. As NEP 2020 also stressed, this kind of study makes it possible to build 21st-century abilities like critical thinking, creativity, computer literacy, etc. Currently, more emphasis on conceptual understanding of the subject will be possible when students actively learn, participate, discuss, analyze, interpret, synthesize, make a hypothesis and generalize the concepts and try to find the deeper meaning of the subject.

NCF-2005 brought by NCERT, focus that students should access ICT and learn many new things through self-paced learning and get a new opportunity to explore their creative imagination. But in the advanced technological era, there is little research into how blended learning is helpful. Current evidence and research suggest that online learning platform is a development phase in all sectors. Many international studies have been conducted in blended learning, but most are in higher education, business environment, and industry level. A review of the study reveals a lack of study in the Indian school scenario specific to teaching physics. Researchers in India have hardly explored this area. Hence, it is crucial to research about how blended learning influences critical thinking in secondary school.

Statement of the problem

In the teaching of physics basically, the methods used in conventional classrooms are delivering lectures without any types of activities such as experimentation and demonstration. Hence, it is required to blend online and face-to-face to teach physics so that higher-order skills can be improved. The present study is meant to find out whether blended learning has any effect on critical thinking in physics as well as to find out whether there is any difference in the critical thinking of boys and girls. Hence, the present study is entitled as "Enhancing Critical Thinking in Physics through Blended Learning approach".

Operational definitions

Blended learning: Blended learning is a pedagogical approach that combines in-person and online instruction. In the present study, blended learning refers to pedagogical strategies to engage students in learning science by blending face-to-face (demonstrations, lecturing, discussion, and experimentation) and online learning.

Critical thinking in Physics: Critical thinking is purposeful, self-regulatory judgment, which results in interpretation, analysis, evaluation, and inference as well as explanation (American Philosophical Association, 1990). The present study defines critical thinking as the capacity of an individual to use cognitive abilities, such as interpretation, analysis, evaluation, inference, explanation, and self-regulation to solve problems in physics.

Objectives

The study under investigation has the following objectives

1. To study the effect of blended learning strategy on student's critical thinking

2. To study the effect of blended learning on the critical thinking of boys and girls

Research Methodology

A pretest-posttest nonequivalent groups design was used in the study, which is a quasi-experimental design. Pretest-Posttest Non-Equivalent Groups Design is frequently employed in classroom investigations where the experimental and control groups are naturally constituted groupings such as intact classes, which may be comparable (Best & Kahn, 2006), the design of which is given in fig 1.

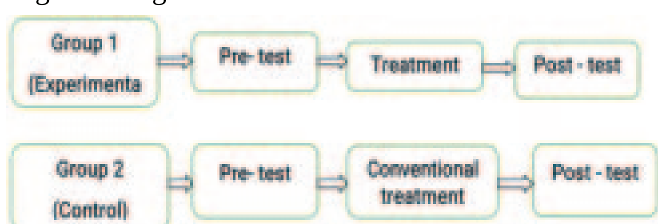


Fig 1: Pretest-posttest nonequivalent groups design

Sample of the Study

The population of the present study covers the students studying in 10th grade following the NCERT syllabus in India. In this study, a purposive sampling technique was used. Two schools were selected at random for the study i.e. Wheat Fields Public School, Ghudda was selected as the treatment group and Mata Jaswant Kaur memorial school, Badal was selected as the control group. The experimental group had 19 students and the control group had 17 students.

Experimental treatment

The investigator used the Blended learning strategy to teach Physics to 10th-class students (experimental group only) for one month. The class is mostly activity based, experiential-based. The investigator provided links to most of the topics for the students to read and watch the contents. For example, how electric current was being taught by the instructor following blended learning is given as

Blended learning strategy

a. Starting the lesson by asking students about day-to-day life experiences with electric current.

b. The teacher divided the class into groups A, B, and C and asked the students to discuss into the group about electric currents and thereafter present them in front of classmates.

c. Investigator explains the electric current

d. Now for a group activity, the investigator will give a battery, wire, and bulb and ask students to make a closed electric circuit

e. The investigator showed a video about the direction of the flow of electric current in an electric circuit.

f. Some quiz questions will be asked by the teacher related to electric current

g. The teacher will provide some links related to electric current and ask students to read them online at home and come next class with a write-up.

Tools of the study

Investigator developed a Critical Thinking test in physics to study the improvement of critical thinking among 10th-grade students after the usage of the Blended learning approach.

Analysis and Interpretation of Data

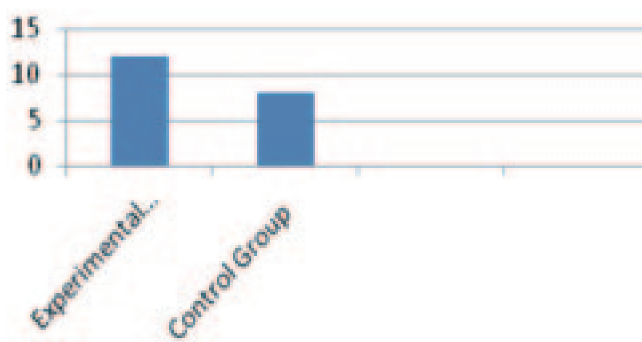
The data obtained in the study was analysed and interpreted using ANCOVA, and t test. Objective wise analysis is as follows;

Objective 1: To study the effect of blended learning strategy on student's critical thinking

In order to test the hypothesis, data obtained on the pre test scores and post test scores of experimental and control group were analysed using ANCOVA, the results of which is presented in table no. 1, 2 and graph 1.

Table 1: Mean score of post-tests of Control and Experimental Group

Group of the students	Mean	Std. deviation	N
Experimental group	12.21	1.75	19
Control group	8.23	1.85	17
Total	10.33	2.68	36



Graph 1: Comparison of adjusted mean post-test scores of critical thinking of the experimental group and control group

Table 2: ANCOVA on the post-test score of the Experimental and Control group

Source	Type III Sum of Square	df	Mean Square	F	Remarks
Corrected Model	168.42	2	84.21	33.25	Significant at 0.05
Intercept	87.24	1	87.24	34.44	level of significance
Pretest	26.64	1	26.64	10.52	
Group	92.28	1	92.28	36.43	
Error	83.57	33	2.53		
Total	4096	36			

According to Table 3.2, the calculated value F is 36.43 while the table value is 4.12 at the degree of freedom 1 and 33 at the significance level of 0.05. Since the calculated F value is greater than the table value, it is significant at 0.05 level of significance. Hence, the alternate hypothesis stating that "there is a significant difference in the critical thinking of control and experimental groups by taking the pretest on critical thinking as a covariant" was accepted. This means there is a significant difference between the experimental group and the control group in their adjusted mean critical thinking scores. The mean post-test score of the experimental group was 12.21 and that of the control group was 8.23. Since the mean of the experimental group is higher than that of the control group so experimental group performed better than the control group as a result of blended learning. This suggests that the blended learning approach is more successful than traditional teaching methods at fostering critical thinking. The outcome of the current study supports the study of Krishnan (2011), King (2002), and Prilluck (2004) that blended learning improves critical thinking.

Objective 2: To study the effect of blended learning on the critical thinking of boys and girls

Table 3: t-test between the mean score of boys and girls in the Experimental group

Variable	Gender	N	Mean	SD	df	t-value	Remarks
Post-test on Critical thinking test	Boys Girls	11 8	11.73 12.88	1.7 1.55	17	1.454	Not significant

From the above table the calculated value of t is 1.454, while the table value is 2.11. Since the calculated value is less than the table value, it is not significant at 0.05 level of significance. Therefore null hypothesis stating that there is no significant difference between boys and girls in critical thinking among secondary school students as a result of blended learningis accepted. Hence boys and girls have the same level of critical thinking as a result of blended learning.

Conclusion

The purpose of the study was to ascertain how the blended learning technique affected critical thinking. The results showed that the blended learning approach improved critical thinking. To summarize, the study discovered that scientific and higher-order thinking skills such as critical thinking, among secondary school students can be enhanced by skillfully integrating online learning with education. The outcome of the current study supports the discovery of Krishnan (2011), King (2002), and Prilluck (2004) that blended learning improves critical thinking. There is no significant difference in critical thinking between boys and girls as a result of blended learning.

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ई-शिक्षा : प्रारम्भिक शिक्षा के सार्वभौमीकरण मे उभरता एक प्रतिमान

**प्रवीण कुमार गौतम, **डॉ. ओ.पी.बी. शुक्ला*

सारांश

शिक्षा के सार्वभौमीकरण में समय, दूरी, भाषा जैसी कुछ बाधाएं आरंभ से ही विद्यमान रही हैं। भारत में अनेक प्रकार की विविधता पायी जाती है, इसमें भाषा की विविधता भी विद्यमान है। भारत की कुल साक्षरता दर 77 प्रतिशत है जिसमें पुरुष की साक्षरता दर 84.40 प्रतिशत और महिलाओं की 71.50 प्रतिशत है। यहाँ शहरी क्षेत्रों में साक्षरता दर 87.70 प्रतिशत है जबकि ग्रामीण साक्षरता दर 73.50 प्रतिशत के लगभग है (एन.एस.ओ. रिपोर्ट)। 1971 से 2017 तक भारत के लिए औसत अनुपात 38.64 छात्र प्रति शिक्षक था। 2017 में प्रति शिक्षक 32.75 छात्र है (यूनेस्को 2017)। भारतमें शैक्षिक विभाजन काफी व्यापक है। यह शैक्षिक विभाजन ही चिंता का प्रमुख कारण है। इस शैक्षिक विभाजन को भौतिक और आर्थिक सहायता प्रदान कर संकुचित करने का प्रयास किया जा रहा है। प्राथमिक शिक्षा की बात की जाए तो ग्रामीण क्षेत्रों में प्राथमिक स्तर पर शिक्षक और छात्र का अनुपात 1:58.81 (स्रोतः यू-डी.आई.एस.ई.) है। इस कारण, यदि शिक्षा के प्राथमिक स्तर पर बदलाव नहीं किया गया तो प्राथमिक स्तर पर शिक्षा की स्थिति और खराब हो जाएगी। शिक्षा के सार्वभौमीकरण से अभिप्राय सभी को अवसरों की समता एवं उपलब्धता सुनिश्चित कराने से है जिससे सभी का सर्वांगीण विकास सुनिश्चित हो सके। परिणामतः कोई भी व्यक्ति शिक्षण तंत्र से बाहर नहीं रहे। आज के प्रासंगिक युग में शिक्षा एवं दक्षता समृद्धि के प्रमुख आधारों में से एक है। वर्तमान समय में ई-शिक्षा की भूमिका भी बहुत ही महत्त्वपूर्ण है। इस कारण यह समाज का बहुत ही महत्त्वपूर्ण हिस्सा बन गया है। शैक्षिक उद्देश्यों की पूर्ति के लिए सूचना और संचार प्रौद्योगिकियों के प्रसार ने ई-शिक्षा के विकास में महत्त्वपूर्ण भूमिका का निर्वहन किया है।

प्रस्तावना

हमारा देश में वैदिक काल से शिक्षा के लिए समृद्ध रहा है। प्रारंभ में शिक्षा कुछ वर्गों तक ही सीमित थी। बौद्ध और मध्यकाल में भी शिक्षा की यही स्थिति थी। सभी वर्गों के लिए शिक्षा की मांग 1919 में गोपाल कृष्ण गोखले द्वारा की गयी थी। प्राथमिक शिक्षा बच्चों के अधिगम में महत्वपूर्ण भूमिका अदा करती है। शिक्षा बच्चों के सर्वांगीण विकास में महत्त्वपूर्ण भूमिका का निर्वहन करती है, इस कारण अधिकांश देशों ने प्राथमिक शिक्षा को अपने नागरिकों के लिए बुनियादी अधिकार घोषित कर दिया है। बच्चों के चरित्र का विकास बचपन से ही शुरू हो जाता है। प्राथमिक शिक्षा बच्चों के सोचने की क्षमता के विकास में भी महत्त्वपूर्ण भूमिका अदा करती है, साथ ही मौलिक मूल्यों एवं अच्छे जीवन को प्राप्त करने में सहायक होती है। प्राथमिक शिक्षा न केवल एक व्यक्ति के विकास में वरन राष्ट्र के विकास में भी सहायक होती है हालांकि भारत में अधिकांश माता-पिता अच्छे स्कूल की जगह, घर से स्कूल कितना दूर है इस पर ज्यादा ध्यान देते हैं यद्यपि स्कूल का चयन करते समय दूरी चयन का प्राथमिक अवयव नहीं होना चाहिए। कुछ माता-पिता स्कूल के इतिहास, गतिविधियों, पाठ्यक्रम पर ध्यान देते हैं बेशक वे अपने बच्चों के लिए सर्वश्रेष्ठ स्कूल चाहते हैं और स्कूल की गुणवत्ता पर विशेष ध्यान देते हैं। प्राथमिक शिक्षा प्राप्त करना प्रत्येक बच्चों का पहला और मौलिक अधिकार है। इस कारण सरकार का ही नहीं वरन माता-पिता का भी कर्तव्य है कि वो अपने बच्चों को प्राथमिक शिक्षा उपलब्ध कराएं। प्राथमिक शिक्षा का मुख्य लक्ष्य बच्चों में चेतना को जगाना, आत्म-सम्मान को बढ़ाना इत्यादि है। इस प्रकार प्राथमिक शिक्षा बच्चों के विकास महत्वपूर्ण भूमिका अदा करती है। भारतीय संविधान का आदेश है कि सभी बच्चों को जो 14 वर्षों तक के हैं, उन्हें मुफ्त शिक्षा उपलब्ध करायी जाएगी। सामान्य तौर पर, यह पता चला है कि घरेलू आर्थिक कारक बच्चों के स्कूल न जाने या स्कूल छोड़ने में सबसे बड़ी भूमिका निभाते हैं। ऐसी स्थिति में निःशुल्क शिक्षा का प्रावधान विशेष महत्व रखता है। यह संघीय और राज्य सरकारों पर निर्भर करेगा कि वे महत्वपूर्ण कार्यान्वयन मुद्दों को दूर करें यदि नई समग्र शिक्षा भविष्य के राष्ट्र के हितधारकों को लाभान्वित करना है।

प्राथमिक शिक्षा की आवश्यकता और महत्व

भारत में प्राथमिक विद्यालय बच्चों को वो बुनियादी कौशल और ज्ञान प्रदान करते हैं जो उन्हें जीवन में सफल बनाने के लिए

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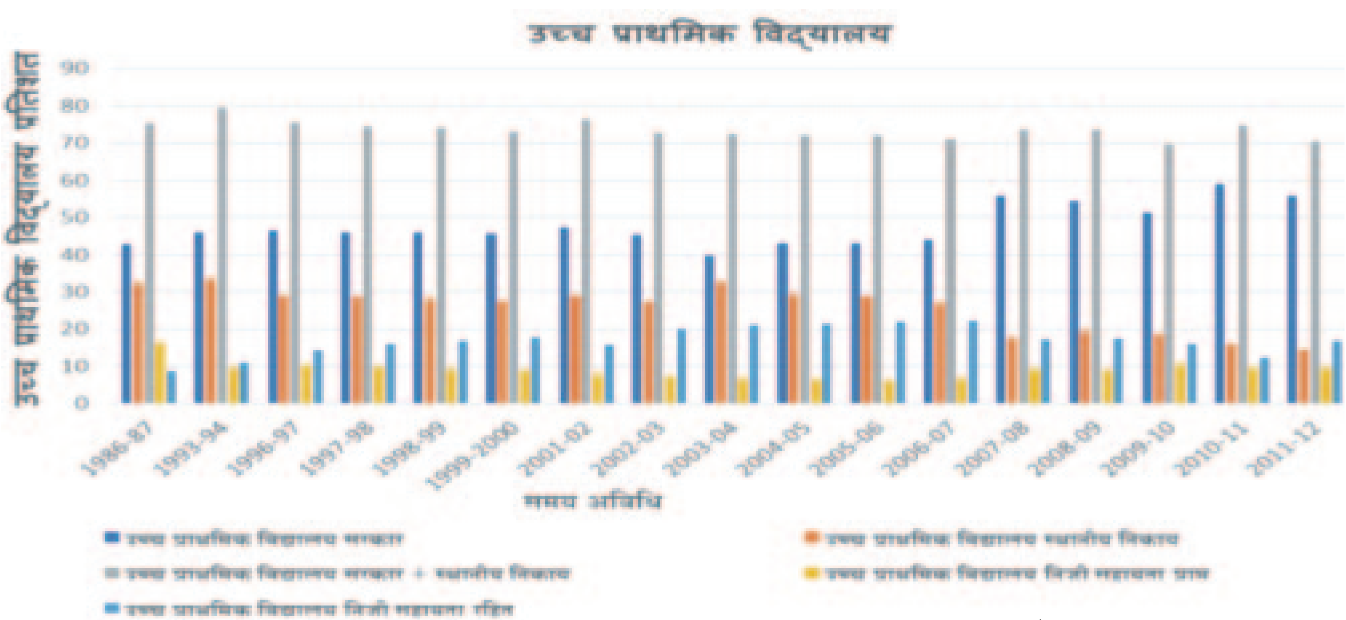
आवश्यक है। यह बच्चों को सहयोग, संचार और सहानुभूति जैसे कौशल भी विकसित करने में मदद के लिए आवश्यक है जो बच्चों के विकास के लिए आवश्यक है। बच्चों के समग्र विकास में प्राथमिक शिक्षा का महत्त्व कई मायने में है।

चित्र 1

स्रोतः www.education.gov.in

सरकारी स्कूलों में प्राथमिक विद्यालयों का प्रतिशत हमेशा बढ़ा है जबकि निजी गैर-सहायता प्राप्त स्कूलों की हिस्सेदारी पिछले कुछ वर्षों में बढ़ी और घटी है, प्रबंधन द्वारा स्कूलों के प्रतिशत वितरण पर समय-श्रृंखला डेटा चित्र 1 में दिखाया गया है।

चित्र 2



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सरकारी स्कूलों में उच्च प्राथमिक विद्यालयों का अनुपात समय के साथ लगातार बढ़ा है, जबकि निजी गैर-सहायता प्राप्त स्कूलों के अनुपात में उतार-चढ़ाव आया है। चित्र 2 प्रतिशत के संदर्भ में प्रबंधन द्वारा स्कूलों के वितरण पर समय-श्रृंखला डेटा प्रदर्शित करता है।

नैतिक मूल्य

बच्चों में नैतिक सिद्धांतों को समझने की नीव प्राथमिक शिक्षा के साथ ही शुरू कर दिया जाता है। मानक शिक्षाओं के अलावा, शिक्षक अन्य तरीकों से भी बच्चों में नैतिक चरित्र का विकास करते हैं जो उनके समग्र-विकास, चरित्र-विकास और उचित मार्ग चुनने में सहायता प्रदान करते हैं।

सामाजिक विकास

स्कूल वो जगह है जहां से बच्चों का अधिगम प्रारंभ होता है। बच्चे यहाँ सहपाठियों और शिक्षक सहित विभिन्न नए लोगों से बातचीत करना सीखते हैं। इससे पहले वो अपना अधिकांश समय अपने माता-पिता, भाई-बहन और रिश्तेदारों के साथ निभाते थे लेकिन स्कूल में आने के बाद वे एक नए वातावरण में प्रवेश करते हैं जहां वो एक-दूसरे के साथ जुड़ना, खेलना और साझा करना सीखते हैं।

पढ़ने और संचार का कौशल

प्राथमिक विद्यालय में बच्चे पढ़ना सीखते हैं और इसी के साथ वो संवाद और संचार भी सीखते हैं। पढ़ने का कौशल जीवनपर्यन्त फायदेमंद है। यह बच्चों के देखने और कल्पना करने की क्षमता को भी विकसित करता है।

आत्मविश्वास का विकास

जब एक बच्चा अच्छे प्राथमिक विद्यालय में जाना शुरू करता है तो वो एक सकारात्मक वातावरण के संपर्क में आता है जिसमें शिक्षकों द्वारा उनका अच्छे से मार्गदर्शन किया जाता है। स्कूल का सकारात्मक और उत्साहजनक वातावरण सीखने और आत्मविश्वासी बनने में सहायता करता है।

ई-शिक्षा

ई-शिक्षा का अभिप्राय शिक्षा को सूचना और संचार प्रौद्योगिकी के द्वारा लोगों को उपलब्ध कराना। ई-शिक्षा, शिक्षा के क्षेत्र में क्रांतिकारी पहल है। यह अधिगम का एक ऐसा प्रकार है जिसमें वेबसाइट के माध्यम से कंप्यूटर पर शिक्षा उपलब्ध कराया जाता है। यह शिक्षा को तुल्यकालिक और अतुल्यकालिक दोनों स्वरूपों में उपलब्ध कराता है। ई-शिक्षा अध्ययन-सामग्रियों को अंतरजाल के माध्यम से अधिगम में महत्वपूर्ण भूमिका का निर्वहन करता है। दूसरे शब्दों में इसे संगणक इलेक्ट्रॉनिक शिक्षण या इंटरनेट शिक्षण भी कहते हैं जो दूरस्थ शिक्षा उपलब्ध कराने में भी बहुत सहायक है।

ई-लर्निंग को शिक्षा के ऐसे माध्यम के रूप में परिभाषित किया जा सकता है जिसकी सहायता से शिक्षा को 'कहीं भी' 'किसी भी समय' उपलब्ध कराया जा सकता है। ई-शिक्षा द्वारा परंपरागत कक्षा-शिक्षण की व्यापकता को बढ़ाने के किए इलेक्ट्रॉनिक तकनीक का उपयोग किया जाता है। अल्बर्ट आइन्सटाइन ने कहा है कि "शिक्षा वह है जो किसी के भूल जाने के बाद बची रहती है जो एक स्कूल में सीखा है"। ई-शिक्षा उन लोगों को अध्ययन और पुनः शिक्षा ग्रहण करने का अवसर उपलब्ध कराता है जो किसी कारणवश स्कूल छोड़ चुके हैं और पुनः स्कूल जाने में शर्मिंदगी महसूस करते हैं। जिन संस्थानों में छात्रों की संख्या बहुत ज्यादा है वहाँ शिक्षकों द्वारा छात्रों का मूल्यांकन संगणक द्वारा आसानी से हो जाता है। ई-शिक्षा के हर-वर्ग, हर-व्यक्ति को घर बैठे अपने अधिगम को सतत बनाए रखने में मदद करता है। जहां एक तरफ ई-शिक्षा, अधिगम को आडिओ-विडिओ के रूप सभी की आसान पहुँच को सुनिश्चित करता है वहीं कई मामलों में यह शिक्षा प्रदान करने में शुल्क का प्रावधान भी करता है। एक अन्य रिपोर्ट के अनुसार, भारत के अनलाइन शिक्षा बाजार का व्यापार आरंभ में 20 अरब डॉलर तक था जो 2017 तक 40 अरब डॉलर तक पहुँच गया था। जहां एक तरफ ई-शिक्षा की अवधारणा का विरोध करने वाले यह तर्क रखते हैं कि शिक्षा की यह पद्धति जो ज्ञान प्रदान करती है उसमें सूचना और ज्ञान का अभाव होता है वहीं दूसरी ओर शिक्षा प्रदान करने की इस नवीन पद्धति का समर्थन करने वाले संगणक और अन्य ई-सामग्रियों को स्व-अध्ययन के लिए महत्वपूर्ण और प्रेरित करने वाला मानते हैं। यह अपने "कहीं भी" "किसी भी" जैसी खूबियों के कारण, वयस्क शिक्षा और प्रशिक्षण के लिए बहुत उपयोगी एवं प्रासंगिक है।

यह उन राष्ट्रों के लिए विशेष रूप प्रासंगिक है जहां शिक्षा ग्रहण बहुत खर्चीली है, तकनीकी काफी महंगी है, अवसर और संसाधन सीमित हैं, साथ ही बहुत ज्यादा आर्थिक असमानताएं विद्यमान हैं। भारत की शिक्षा-प्रणाली सम्पूर्ण विश्व में सबसे वृहद शिक्षा प्रणाली में से एक मानी जाती है जिसमें 10 लाख से अधिक स्कूल और 1800 हजार से ज्यादा उच्च शिक्षण संस्थानों का नेटवर्क शामिल है। नीतियों, प्रक्रियाओं, उत्पाद, सूचना-दस्तावेजों, रिपोर्टों, प्रस्तुतियों और प्रस्ताओं की विशेषज्ञता जैसी जानकारियाँ सामान्यतः प्रपत्रों में दर्ज की जाती हैं।

ई-लर्निंग के प्रकार

स्थिर ई-शिक्षा : स्थिर ई-शिक्षा आनलाईन सीखने के पुराने संस्करणों में से एक है। यह सीखने की प्रक्रिया को संदर्भित करता है जो छात्रों की जानकारी देने की पारंपरिक संरचना का उपयोग करता है। इस पद्धति द्वारा शिक्षार्थियों को वही जानकारी प्राप्त होती है जो प्रशिक्षकों द्वारा पूर्व निर्धारित होती हैं चूँकि शिक्षण सामग्री प्रशिक्षकों पर निर्भर करती है इसलिए कठोर है और छात्रों की प्राथमिकताओं के अनुकूल नहीं है।

अनुकूल ई-शिक्षा : अनुकूल ई-शिक्षा एक अन्य प्रकार की आनलाईन शिक्षा है जिसको इस तरह निर्मित किया गया है जिसमें शिक्षण सामग्रियों को बच्चों के सीखने की प्राथमिकताओं

के अनुकूल हो, इस कारण यह लचीली है।

तुल्यकालिक ई-शिक्षा : यह शिक्षण प्रणाली वास्तविक समय संचार प्रणाली पर आधारित है शिक्षार्थी और शिक्षक एक ही समय पर आनलाईन एक दूसरे से परस्पर जुड़े होते हैं। इसमें संगणक या मोबाईल पर संचार तकनीकी की सहायता से अनुदेशक और सहभागी एक ही समय पर शिक्षण-प्रशिक्षण का कार्य करते हैं।

अतुल्यकालिक ई-शिक्षा : इस शिक्षण प्रणाली में शिक्षार्थी और शिक्षक या प्रशिक्षक और सहभागी भिन्न-भिन्न समय में शिक्षण, प्रशिक्षण या कक्षा का सम्पादन होता है। यह सहभागिता-सूचित चार्ट पटलों, ब्लाग और ई-मेल के माध्यम से हो सकती है। अतुल्यकालिक ई-शिक्षा द्वारा शिक्षार्थी किसी भी वक्त शिक्षण-प्रशिक्षण कर सकते हैं। इसके लिए शिक्षक और शिक्षार्थियों का एक साथ परस्पर विचार-विमर्श आवश्यक नहीं होता।

व्यक्तिगत ई-शिक्षा : व्यक्तिगत ई-शिक्षा द्वारा छात्र बिना किसी की सहायता लिए स्वयं से सीखते हैं।

संवादमूलक ई-शिक्षा : इस शिक्षण प्रणाली में शिक्षक और छात्र दोनों स्वतंत्र रूप से संवाद कर सकते हैं जिसके कारण शिक्षण सामग्री दोनों के मिले-जुले प्रयासों से निर्मित होती है अतः यह भी स्वभाव में लचीली होती है। यह सीमित और घनिष्ट समूह के लिए अधिक उपयोगी है।

सहयोगी ई-शिक्षा : यह ई-शिक्षा सामूहिक कार्य पर केंद्रित होती है जिसमें छात्र एक साथ काम करते हैं। शिक्षण सामग्री को बनने और लक्ष्यों को प्राप्त करने के लिए छात्र सामूहिक रूप से प्रयास करते हैं। इस शिक्षण प्रणाली में खुद की और अपने समूह के लोगों की क्षमतों को ध्यान में रखकर कार्यों का निर्वहन किया जाता है।

ई-शिक्षा का ऐतिहासिक विकास

ई-शिक्षा 1999 अस्तित्व में आयी। ई-शिक्षा शब्द का सर्वप्रथम उपयोग पहली बार सी.बी.टी-संगोष्ठी में किया गया था। ई-शिक्षा का उदय एक दिन में नहीं हो गया, और यह विकास शनैः-शनैः हुआ है और इसी के साथ आनलाइन-शिक्षा और वर्चुअल (आभाषी) शिक्षा जैसी संकल्पनाओं का भी जन्म हुआ। ई-शिक्षा को मूलतः छात्रों या शिक्षकों शिक्षा सामग्रियों को वितरित करने की उद्देश प्रतिपूर्ति के लिए किया गया था लेकिन बाद में यह प्रणाली परस्पर प्रतिक्रियात्मक हो गयी। ई-शिक्षा के उदय के पूर्व दूरस्थ शिक्षा के संचालन में डाक-पद्धति का उपयोग किया जाता था जहां शिक्षण-सामग्रियों को डॉक द्वारा भेजा जाता था। अध्यापकों एवं पथ प्रदर्शकों के साथ परस्पर-प्रक्रिया पत्राचार या डॉक-पत्रों के माध्यम से ही होती थी।

टी-अधिगम

टी-शिक्षा वर्तमान में एक उभरती हुयी संकल्पना है। टी-अधिगम द्वारा उच्च मूल्य एवं गुणवत्ता वाली शिक्षा को "कभी भी" "कहीं भी" प्रदान करने में सहायक है। टी-अधिगम, शिक्षण-सेवाओं और प्रौद्योगिकी का संयोजन है। टी-अधिगम को शिक्षा-व्यवसाय के विकास और डिजिटल-अभिसरण के विकास का अगला चरण के रूप में उदयित हुआ है। टी-अधिगम अपने बेहतर और प्रभावशाली ढंग से वृद्धि करने के लिए शोध और अनुप्रयोगों की आवश्यकता है। यह केंद्रित और प्रासंगिक शिक्षा प्रदान करने में सहायक है। वर्तमान में इसके द्वारा कर्मचारियों को ऑनलाइन शिक्षण-प्रशिक्षण में महत्वपूर्ण भूमिका में सहायक है।

एम-अधिगम

एम-लर्निंग का अभिप्राय है- "मोबाइल द्वारा अधिगम "शिक्षा, सूचनाओं, अध्ययन-सामग्रियों, प्रशिक्षण को ऑनलाइन "कभी भी" "कहीं भी" उपलब्ध कराना ही मोबाइल-अधिगम है। मोबाइल अधिगम उन कार्मिकों तक पहुंचने का अवसर उपलब्ध कराने में भी सहायक हैं जो हमेशा भाग-दौड़ वाला काम करते हैं या दूरस्थ एवं दुर्गम क्षेत्रों में कार्यों का निर्वहन करते हैं।

प्रतिमान विस्थापन

प्रतिमान विस्थापन से क्या अभिप्राय है? शायद, निर्माण क्षेत्र का विश्लेषणातमक अध्ययन प्रतिमान विस्थापन को समझने में सहायक है। जहां यह अभी भी प्रतिस्पर्धी बने रहने के लिए संघर्ष कर रहा है। इससे उत्पन्न चुनौती को गुणवत्ता और सेवाओं का प्रभावी ढंग से विनियमन करना ही सहायक हैं। प्रतिस्पर्धता में बने रहने के लिए गुणवत्ता, संतुष्टि आवश्यक अवयव हैं। यहाँ संतुष्टि का अभिप्राय शिक्षक-शिक्षार्थी संतुष्टि से हैं। यदि प्राथमिक शिक्षा पर किसी प्रकार का प्रभाव पड़ता है तो इसका असर कॉलेज और विश्वविद्यालय पर भी दिखेगा सामान्यतः ऐसा वर्तमान शिक्षा प्रणाली से असंतोष के कारण होता है।

सामान्य शिक्षा और व्यसायिक शिक्षा का तुलनात्मक अध्ययन करें तो सामान्य शिक्षा वर्तमान के प्रासंगिक समाज में तालमेल बनाने में विफल हो रही हैं। सामान्य शिक्षा आज भी परंपरागत पाठ्यक्रमों का अनुसरण करते हैं और परंपरागत मानसिकता का निर्धारण करता है। सामान्यतः ऐसी धारणा है कि सामान्य-शिक्षा की पाठ्यक्रमों की सामग्री, भविष्य की आवश्यकताओं और चुनौतियों के लिए आवश्यक कौशल और क्षमताओं को प्राप्त करने के लिए सहायक नहीं हो सकती हैं। वर्तमान युग सूचना-आधारित ज्ञान-युग है जहां ज्ञान आधारित कार्यों द्वारा धनोपार्जन का कार्य किया जाता है। ज्ञातव्य है कि परंपरागत उद्योगों में निवेश के लिए बड़ी मात्रा में धन की आवश्यकता होती है वहीं ज्ञान-आधारित उद्यमों में ज्ञान-श्रमिकों के रूप में मानव पूंजी की आवश्यकता होती हैं।

संगणक में बड़ी मात्रा में सूचनाओं का आसान और व्यवस्थित रूप में संग्रहण किया जा सकता है। संगणक की खुद की कोई

सोच नही होतीं। यह अपनेउपयोगकर्ता के निर्देशन मे हीकार्यों का सम्पादन करता है। सतत और निरंतर प्रयासों एवं संसाधनों के उचित दोहन से ही कम पूंजी के साथ, कम समय में बहुत ज्यादा सफलता हासिल की जा सकती हैं। इसलिए शिक्षा की प्रणाली कोई भी हो लचीली हो, वर्तमान प्रसंगिकताओं के अनुकूल हो, सोच और कौशल विकसित करने के अनुकूल हो, साथ ही उसमें ऐसी क्षमता होनी चाहिए, जो शिक्षार्थियों में सीखने की क्षमता और ललक के लिए प्रेरित करती रहे अन्यथा इसकी प्रासंगिकता खत्म हो जाएगी।

यह आश्चर्यजनक नहीं है कि वर्तमान समय में छात्र, स्कूलों में पढ़ाए जाने वाले परंपरागत तरीकों एवं अंग्रेजी भाषा के न्यूनतम प्रयोग, प्राथमिक शिक्षा को प्रभावित करती हैं। इसी कारण 21वीं सदी में प्रभावी ढंग से जीने एवं युवाओं की आवश्यकताओं को पूर्ण करने के लिए, स्कूलों में शिक्षण को पुनः उन्मुख करने की तत्काल आवश्यकता है। यह ध्यान देने योग्य है कि शिक्षा प्रणाली में शिक्षा के समक्ष बहुत सी चुनौतियाँ हैं जिनके उत्कृष्ट समाधान के लिए मौजूदा विकल्पों में से सर्वोत्तम विकल्प का चयन आवश्यक है। इतिहास से हमने सीखा है कि विकल्पों के चयन को टाला नहीं जा सकता। यहाँ विकल्पों का सर्वोत्तम चयन महत्वपूर्ण होता है। सूचना और संचार प्रौद्योगिकी के मौजूदा उपकरण, 21वीं सदी के लिए आवश्यक विकल्पों और संसाधनों की प्रसंगिकताओं की कसौटी को पूरी करते हैं। जिसके लक्ष्यों में संगणक और की-बोर्ड के द्वारा पुस्तकों एवं अध्ययन सामग्रियों तक सभी की पहुँच सुनिश्चित हो सके, साथ ही तुल्यकालिक-अतुल्यकालिक शिक्षण "कभी भी" "कहीं-भी" ऑनलाइन उपलब्ध हो सके।

प्राथमिक शिक्षा के सार्वभौमीकरण के समक्ष चुनौतियाँ

विद्यालय से पलायन : विद्यालयों में नामांकन के बाद 'छोड़-देना' एक वृहद समस्या है। सामान्यतः यह समस्या अनुसूचित-जाति और अनुसूचित-जनजाति में ज्यादा पायी जाती है। कक्षा 1 से 8 तक जाते-जाते लगभग आधे बच्चे अपनी शिक्षा को छोड़ देते हैं। (भारत में शिक्षा रिपोर्ट की वार्षिक स्थिति 2012)

सामाजिक-आर्थिक कारक : सामाजिक-आर्थिक कारक शिक्षा को काफी हद तक प्रभावित करता है। जहां एक तरफ सामाजिक कारक प्रमुखतः अनुसूचित-जाति और जनजातियों के संदर्भ में हैं। कुछ का मानना है कि इस समुदाय के लोग कुछ चयनित सामाजिक कार्यों के लिए है यदि वो शिक्षित होंगे तो उन आमुख कार्यों को नही करेंगे इसलिए वो शिक्षा में भेदभाव करते हैं। वहीं आर्थिक कारकों की बात करें तो गरीब परिवार अपनी 'पारिवारिक-आय' पर ध्यान देते हैं। जहां पारिवारिक-आय का मतलब है परिवार के सभी सदस्य आमदनी के श्रोत होते हैं, यदि वो स्कूल जाएंगे तो परिवार की आमदनी घटेगी। इस कारण वो स्कूल नहीं जाते इसके अलावा शिक्षा एक खर्चीला उपक्रम है।

ग्रामीण नगरीय विषमता : ग्रामीण और शहरीय पृष्ठभूमि में काफी अंतर है। शहरीय लोग वर्तमान प्रासंगिकता के प्रति जागरूक होते हैं। ज्यादातर अच्छे शिक्षण संस्थान शहरों में होते हैं। यहाँ लोग अपने बच्चों को गुणवत्तापूर्ण और प्रासंगिक शिक्षा दिलाने पर जोर देते हैं। ग्रामीण लोगों को भी अच्छी और प्रासंगिक शिक्षा दिलाने के लिए शहरों का ही रुख करना पड़ता है जहां दोनों की साक्षरता दर में काफी अंतर है। ग्रामीण क्षेत्रों में साक्षरता-दर लगभग 67.77 प्रतिशत है वहीं शहरी क्षेत्रों में यह दर लगभग 84.11 प्रतिशत है। ग्रामीण और नगरीय क्षेत्रों की लैंगिक साक्षरता दर में भी काफी विषमताएं हैं। ग्रामीण-क्षेत्रों में यह अंतर 19.3 प्रतिशत तथा शहरीय-क्षेत्रों में यह अंतर 9.1 प्रतिशतहै। (भारत में शिक्षा रिपोर्ट की वार्षिक स्थिति 2012)

क्षेत्रीय विषमता : क्षेत्रीय और प्रांतीय स्तर पर भी साक्षरता-दर में काफी अंतर विद्यमान है। केरल (93.91), मिजोरम (91.58), लक्षद्वीप (92.28), गोवा (87.40), राज्यों में शिक्षा दर काफी बेहतर है जबकि बिहार (63.82), झारखंड (67.63), अरुणांचल-प्रदेश (66.95) आदि राज्यों में शिक्षा की स्थिति बहुत बेहतर नहीं है। लैंगिक-असमानता के आधार पर मिजोरम की स्थिति अच्छी है। सामान्यतः जिन राज्यों की साक्षरता दर अच्छी होती है वहाँ का लैंगिक-दर भी अच्छी होती है। शिक्षा का लैंगिक विषमता के समाधान के सर्वोत्तम विकल्पों में से एक है। (भारत में शिक्षा रिपोर्ट की वार्षिक स्थिति 2012)

सरकारी व्यय में कमी : कोठारी आयोग (1964-66) की अनुशंसा के अनुसार शिक्षा पर सकल घरेलू उत्पाद का 6 प्रतिशत खर्च करने की संस्तुति की थी लेकिन अभी भी यह 4 प्रतिशत से अधिक नहीं हो सकी है। इस कारण प्राथमिक स्तर पर सम्पूर्ण सुविधाएं और संसाधन मुहैया नहीं कराया जा पा रहा है।

शिक्षक एवं संरचनात्मक सुविधाओं का अभाव : शिक्षक छात्र अनुपात राष्ट्रीय मानक से कम है, साथ ही गुणवत्तापूर्ण शिक्षकों का भी अभाव है। सरकार कम मानदेय पर अंशकालिक शिक्षकों की नियुक्ति कर, शिक्षण कार्यों का सम्पादन कर रही है। इस कारण शिक्षा पर दुष्प्रभाव पड़ रहा है। विद्यालयों में सूचना प्रसार तकनीकी का भी अभाव है जिसके कारण ई-शिक्षा पर भी प्रभाव पड़ रहा है।

गुणवत्ता का अभाव : वर्तमान शैक्षिक-व्यवस्था में गुणवत्तापूर्ण शिक्षा का अभाव है। यही कारण है कि अभिभावकों के दृष्टिकोण में प्राथमिक स्कूलों में दी जाने वाली शिक्षा का स्तर इतना गुणवत्तापूर्ण नहीं है कि वो आज के युग में प्रासंगिक हो। 6 वर्ष से 14 वर्ष आयु वर्ग के बच्चे, कक्षा 2 की किताबें भी नही पढ़ पाते। सामान्यतः प्राथमिक स्कूलों में वो ही बच्चे नामांकन कराते

हैं जिनके पास शिक्षा ग्रहण करने का अन्य कोई विकल्प नहीं होता। (प्रथम, शिक्षा की स्थिति की वार्षिक रिपोर्ट 2019, प्रथम, नई दिल्ली 2019)

प्रासंगिकता का संघर्ष : वर्तमान के वैश्वीकरण और उदारीकरण के समय में वही देश प्रतिस्पर्धा में बने रह सकता है जिस देश में गुणवत्तापूर्ण और कौशलपूर्ण शिक्षा दी जा रही है। उच्च-शिक्षा और माध्यमिक-शिक्षा का आधार प्राथमिक-शिक्षा है। उच्च-शिक्षा तभी अपने उत्कृष्ट निष्पादन कर सकेगी जब प्राथमिक शिक्षा के लिए आवश्यक सभी सुविधाएं उपलब्ध करायी जाए, जिससे शिक्षा की नीव मजबूत बनी रहे। इसके लिए यह आवश्यक है कि केंद्र और राज्य सरकारें सहयोगात्मकरण नीतियाँ अपनाएं जिससे गुणवत्ता और प्रासंगिकता सुनिश्चित हो सके। इस संदर्भ में किए गए सरकारी प्रयास सराहनीय है।

निष्कर्ष एवं सुझाव

प्राथमिक शिक्षा के सार्वभौमीकरण के लिए सरकार द्वारा सतत अनेकों प्रयास किए जा रहे हैं। वर्तमान समय में प्राथमिक शिक्षा की प्रासंगिकता को बढ़ाते हुए इसे मात्र पढ़ना-लिखना या एवं सामान्य गणित की समझ तक सीमित नया रखते हुए प्रभावी एवं जीवनोपार्जन हेतु उपयोगी बनाने पर भी जोर दिया जा रहा है। भारत का लोकतंत्र विश्व के सबसे बड़े लोकतंत्रों मे से एक है तथा यहाँ गाँव एवं कृषि का विशेष महत्व है। इस कारण गांवों में मिलने वाली शिक्षा की गुणवत्ता तथा प्रासंगिकता पर भी ध्यानाकर्षण की आवश्यकता है। हमें क्षेत्रीय असमानता को दूर करने के लिए विकसित राष्ट्रों द्वारा किए गए प्रयासों का विश्लेषणात्मक अनुकरण करना चाहिए। शिक्षा अपने विकास के लिए अनेकों कारकों जैसे समाज, आर्थिक-स्थिति, शिक्षक की योग्यता तथा अन्य कारकों से भी प्रभावित होती है। भारत सरकार ई-शिक्षा को प्रभावी और सर्वव्यापी बनाने के लिए इलेक्ट्रॉनिक्स और सूचना प्रौद्योगिकी उपकरण और तकनीक विकसित कर रहा है। भारत सरकार ई-शिक्षा के प्रति सकारात्मक प्रयास कर रही है। ई-शिक्षा को बेहतर बनाने किए प्रशिक्षण, अनुसंधान एवं प्रौद्योगिकी विकास जैसे प्रयास प्रमुख हैं। भारत में पिछले कुछ वर्षों मे इंटरनेट के उपभोग मे वृद्धि के कारण ई-शिक्षा का तेजी से विकास हुआ है। वर्तमान में, ई-शिक्षा के द्वारा शिक्षण का ही कार्य हो रहा है लेकिन निकट भविष्य में इसे शोध-कार्यों तक विकसित करना है।

परस्पर विरोधी हितों के सन्दर्भ में घोषणा

लेखक को इस लेख के शोध, लेखन, लेखकत्व एवं प्रकाशन के सम्बन्ध में, हितों से संबंधित टकराव के लिए कोई भी किसी भी प्रकार के टकराव की घोषणा नहीं की है।

अनुदान

लेखक को इस लेख के शोध, लेखन, लेखकत्व एवं प्रकाशन के लिए कोई भी, किसी भी प्रकार की कैसी भी वित्तीय सहायता नहीं मिली है।

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An Effect of Prices of Petrol and Diesel: "If covered under GST Policy"

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Abstract

The prices of Petrol & Diesel are determined by various factors, first cost of crude oil, second the Taxes the central government and state governments impose. There's analso dealer commission and VAT that gets added before it's sold to the customers. One of the most important factors is the Tax levied by the State & Central Govt. As of now fuel has been kept outside purview of GST policy. The Central argument of this paper is to know the price of petrol and Diesel under current Taxation policy as well as if it will be covered under the GST Policy.

Thus the study is done by comparing the price of Petrol & Diesel under GST Policy, study is exploratory as based on secondary data. The stakeholders of petrol and diesel can be benefitted in various ways, if these products come under the GST Policy.

Introduction

Tax is the compulsory contribution toward nation.[1]

Revenue collected from the imposed tax on Petrol, Diesel and Other Petroleum Products such as Natural Gas, Aviation Turbine Fuel (ATF) etc (especially Petrol and Diesel) creates major contribution in collection of the indirect tax for the Central Government as well as to the State Government(s). The revenue share of petroleum taxes for the Central Government has shoot up in last few years, whereas for the state government(s), it has gone down in respect of central government.

We must have to deeply analyze the system that even after India has formulated Goods and Service Tax (GST) and then also, why such indirect taxes collected from the petroleum products would not been formalized and is being covered under the GST? Currently, it is varying in different States and Union Territories of this country.

Let's understand the revenue pattern as collected from the tax imposed on Petroleum Products. Although, the system have been adopted on the said revenue pattern is just for smooth handling and management of public finance governed by the Central as well as the State government(s). Understanding the said revenue system would help us in developing the perspective to analyze why the concerned government would not levy tax on the Petroleum Products (Petrol and Diesel) under the GST.

It is well known fact that the importance of revenue from petroleum sector has increased in these years after introduction of the GST in India i.e. after 2017; as fiscal autonomy of the governments (Central, State and Union Territories) to augment tax collection through unilateral policy changes has been curtailed with harmonization of the tax system.

It is pertinent to note here that the revenue mobilization from the Tax on Petroleum Products is dependent on consumption (sales) of the Petroleum Products and therefore understanding consumption of petroleum products is important to improve our understanding on revenue potential from the Petroleum Sector.

Prior to delving into the topic, we must have to understand, which all tax currently being levied by the Central as well as the State government(s) on the Petroleum Products. The sales tax/Commercial Tax Rate (under VAT System) imposed by state governments differs from state to state. According to the petroleum ministry's planning and analysis cell (PPAC) website, state governments follow different Tax Rate for collecting taxes on petrol & Diesel. Data shows the central government is collecting more tax on petrol and Diesel as compared to state governments.

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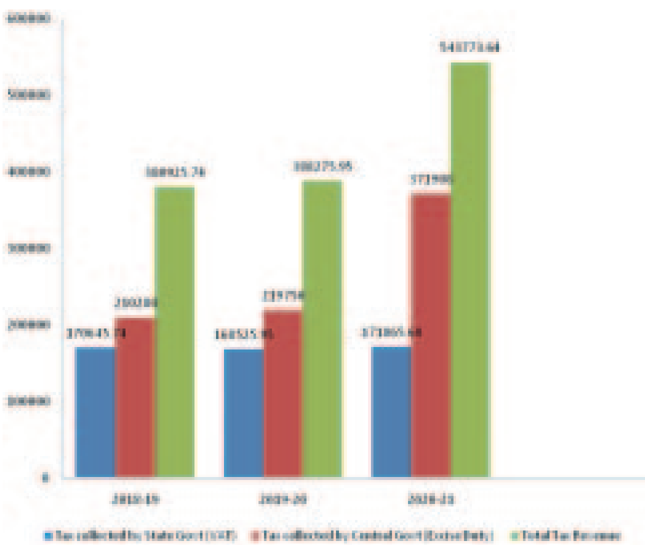
Total Indirect Tax (Excise duty with Custom duty& Cess) collected by central government on petroleum products for the previous years 2018 to 2021 was INR 9,87,271 Cr. (i.e. in the years 2018-19 INR 279847 Cr., 2019-20 INR 2,87,540 Cr. & 2020-21 INR 4,19,884 Cr.) as well as by state governments and UT's collected Indirect Tax (Sales Tax /VAT) was INR 6,26,106 Cr. (i.e. in the years 2018-19 INR 2,09,210 Cr., 2019-20 INR 2,07,838 Cr. & 2020-21 INR 2,09,058 Cr.) within the same aforementioned period. Total revenue collected by the stategovernment and central government on petroleum product INR 16,13,373 Cr.

Total Tax Collections on Petrol & Diesel (In INR Cr.)

Years	Tax collected by State Govt. & UTs (VAT)	Tax collected by Central Govt. (Excise Duty)	Total Tax Revenue
2018-19	170645.74	210280	380925.74
2019-20	168525.95	219750	388275.95
2020-21	171865.64	371908	543773.64
Total	511037.33	801938	1312975.33

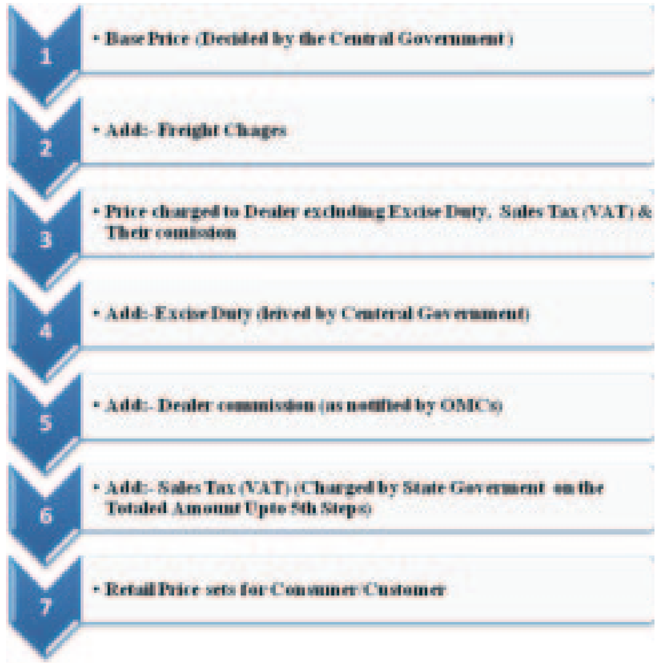


Sources-

Revenue collected by state Govt. & UTs. (VAT) through various Annual Reports of Petroleum Ministry.

Revenue collected by Central Govt. (Excise Duty) through quoted by Hon'ble Cabinet Finance Minister in Rajya Shabha on dated 04th Nov 2021.

7 Steps towards Price determination of Petrol & Diesel



**OMCs-Oil Marketing Companies*

Now after understanding the economics of fuel tax, we must have to discuss on why there is attire need to standardize the tax in every States and Union Territories on the Petroleum Products; and why the Central as well as the State government(s) did not raise their concerns to levy these tax of the Petroleum Products under.

Review of Literature

Girish Garg (2014) Studied "Basic Concepts and Features of Good and Service Tax in India", and concluded that implementation of GST is the very logical steps towards the reform of indirect tax system to bring nation under one roof since independence, it will boost up the India's economic growth by eliminating tax hindrance linking States and integrate India through a same tax charge.

Dr. Neelam Gulati and Deepak Kumar Adhana (2018), "International Journal of Trend in Research and Development, Volume 5(2), ISSN: 2394-9333" entitled "Inducting Petroleum Products into GST: An Only Solution to Rising Prices" they discuss in this paper existing tax collation patter on diesel & petrol & compare the prices of the same from foreign country. They further discussed about the revenue accumulated form Excise Duty & VAT System on perto products on last few years.

Mukherjee, Sacchidananda, (2019), "Estimation and Projection of Petroleum Demand and Tax Collection from

Petroleum Sector in India," Working Papers 19/279, National Institute of Public Finance and Policy, he discussed about the tax collection pattern of state and Central govt. from the Petroleum Products & its collection increasing every year as will comparing to last year.

44th & 45th GST Council meeting (2021), in the GST council meeting 44th & 45th which was headed by finance minister Smt. Nirmala Sitharaman said it is not right time to bring the Petroleum products under the purview of the GST in spite of other representatives of the council were in the favor of bringing the same.

Research Gap

In the process of review of literature researcher found that there are many published article on specifically on tax burden on petroleum products and on GST but no published research which measured impact on prices of petrol and diesel if covered under GST policy. Therefore, the researcher has chosen topic "A comparative study of price of petrol and diesel under Current Tax policy and purposed GST Policy" for the research point of views-

Objectives

To compare the impact on price of petrol & diesel under current tax policy (such as Excise duty & VAT) and purposed GST Policy.

Research Methodology

The present study seeks to compare the price of petrol & diesel under current tax policy and purposed GST system. This study is exploratory and analytical research, based on secondary data which are collected through website of Monastery of Petroleum and Natural Gas & Petroleum Planning and Analysis Cell (PPAC) and other websites, journals, News Papers etc.

Data analysis and interpretation

Comparative Price in current tax policy and if cover under GST Policy (At Delhi on 1st of Jan 2023)

A. On Petrol

Elements	Price Under current Tax System(in INR)	Price Under GST(if covered) (in INR)
Base Price	57.16	57.16
Add:- Freight	0.2	0.2
Price Charged to Dealers (Excluding Taxes)	57.36	57.36
Add:- Excise Duty (Fixed in INR @ per liter)	19.9	-
Add:- Dealers Commission	3.75	3.75
Total	81.01	61.11
Add:-VAT @19.40%	15.71	-
Add:- GST @ 28% (Assuming Higher Tax slab imposing)	-	17.11
Price Charged to Final consumer (Retail Price)	96.72	78.22

Source: PPAC

- **Assuming the higher tax slab (i.e. 28%) if cover under GST policy**

In above table, we can see that in Delhi, the base price for a liter of Petrol was Rs 57.16 as of January 1, 2023 and the Freight Charge is Rs 0.20. Oil marketing companies charge the dealers (excluding Excise Duty and VAT) Rs 57.36 a liter. At this point, the Centre levies Rs 19.90 (Fixed Charge on 1st Jan 2023) as excise duty. Dealers add their commission of Rs 3.75, followed by the state's VAT (including VAT on Dealer Commission) or sales tax of Rs 15.71 @ 19.40% and finally, the Diesel being delivered to the consumer at the rate of Rs 96.72 a liter at the petrol pump for retail distribution.

Further, we also found total Tax in current tax system (such as excise duty & VAT) is Rs. 35.61 on petrol and if GST imposed on the same (Assuming the higher tax slab i.e. 28%) is Rs. 17.11 so that burden reduces to Rs 18.50 and final price charged to the consumer reduces from Rs. 96.72 to Rs.78.22.

B. On Diesel

Elements	Price Under current Tax System(in INR)	Price Under GST(if covered) (in INR)
Base Price	57.94	57.94
Add:- Freight	0.22	0.22
Price Charged to Dealers (Excluding Taxes)	58.16	58.16
Add:- Excise Duty	15.8	-
Add:- Dealers Commission	2.55	2.55
Total	76.51	60.71

Add:-VAT @16.75% + Rs .25 (ambience Charges)	13.11	-
Add:- GST @28% (Assuming Higher Tax slab imposing)	-	16.99
Price Charged to Final consumer (Retail Price)	89.62	77.7

Source: PPAC

- **Assuming the higher tax slab (i.e. 28%) in if cover under GST policy**

In above table, we can see that in Delhi, the base price for a liter of Diesel was Rs 57.94 as of January 1, 2023 and the Freight Charge is Rs 0.22. Oil marketing companies charge the dealers (excluding Excise Duty and VAT) Rs 58.16 a liter. At this point, the Centre levies Rs 15.80 (Fixed Charge on 1st Jan 2023) as excise duty. Dealers add their commission of Rs 2.55, followed by the state's VAT (including VAT on Dealer Commission)or sales tax of Rs 13.11 @16.75 %+ Rs .25 (ambience Charges Fixed) and finally, the Diesel being delivered to the consumer at the rate of Rs 89.62 a liter at the petrol pump for retail distribution.

Further, we also found total Tax in current tax system (such as excise duty & VAT) is Rs. 28.91 on petrol and if GST imposed on the same (Assuming the higher tax slab i.e. 28%) is Rs. 17.00 so that burden reduces to Rs 11.91 and final price charged to the consumer reduces from Rs. 89.62 to Rs.77.70.

Finding & Conclusion

On the basis of above analysis, research concluded & found that Goods and Services Tax (GST) is consumption based tax that is levied on the sale of goods and services. In India, we assume that the GST rate for petroleum products, especially petrol and diesel, is 28%. On the other hand Excise duty imposed on the production or sale of a particular good. The excise duty rate on petrol and diesel in India varies from time to time and is determined by the government.The stakeholders of petrol and diesel can benefit in various ways if the same will be covered under GST Policy-

- **Consumers:** GST is a consumption tax, which means that it is levied on the end-consumer. By including GST in the price of petrol and diesel, consumers can have a clearer understanding of the total tax burden on these products & the reduction in the retail price of petrol and diesel, making these essential commodities more affordable for consumers and savings can be used in other economic activities.
- **Government:** As the GST is a One Nation One Tax Policy, hence if petrol and diesel come under the said policy it will be uniform though out the country and easy to regulate from the Government point of view.
- **Petroleum Companies:** The inclusion of GST in the price of petrol and diesel can simplify the tax compliance process for petroleum companies, making it easier for them to do business and the reduction in overall price can increase the demand for petrol and diesel, leading to an increase in sales for petroleum companies.
- **Transport Industry:** The inclusion of GST in the price of petrol and diesel can reduce the administrative costs as well as operational costs of the transport industry, making it more competitive.
- **Agriculture Sector cum Industry:** Agriculture sector can be beneficiated by the way of reduction in cost cutting of petrol & Diesel by this way they can avail manure, irrigation, transportation facilityat low cost which will boost up said sector drastically.

It's important to note that the benefits of GST on petrol and diesel can be offset by other factors such as international oil prices, currency fluctuations, and government policies.

Including GST in the price of petrol and diesel can have the following economic benefits:

Increased Transparency: The inclusion of GST in the price of petrol and diesel can increase transparency and reduce the confusion surrounding the tax burden on these products.

Improved Compliance: The simplified tax compliance process can lead to improved compliance and reduce tax evasion, resulting in increased government revenue.

Reduced Administrative Costs: The inclusion of GST in the price of petrol and diesel can reduce the administrative costs of petroleum companies and retail outlets, leading to increased efficiency and profitability.

Stimulated Demand: The reduction in the administrative burden of the transport industry can stimulate demand for transportation services, leading to increased economic activity.

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Role of Youth in Creating Sustainable Surroundings through Individual Social Responsibility

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Abstract

A variety of unsustainable lifestyle practises are currently popular as a form of production and consumption. The population is on the rise, and we have limited resources. If this continues, there is a huge possibility that nothing will be left to us in the name of resources in near future. Therefore, now this is the demand of nature to prevent it by adopting sustainable living and in view of this GoI launched an initiative, Mission LiFE (Lifestyle for Environment) in United Nation Climate Change conference (2021). This initiative urges people to practice feasible behaviour to prevent the degradation of mother nature. Sustainability cannot achieve without involving youth in the process as they comprise a large portion of the population. This study was conducted to understand the knowledge and lifestyle practices of Youth. The study involved 237 youths aged between 15-30 years studying in various institutions in Lucknow. They were asked numerous questions related to their daily practices which are directly or indirectly affecting the environment. The findings revealed that majority of youth had knowledge about sustainable development but at practice part very few of them were actually applying it in their daily lives.

Introduction

Earth is a place we all consider home, yet it is being strangled by unprecedented pressure to produce resources of nature to meet the demands of a rapidly growing population. Exceeded demand of capitalism is causing great harm to the regeneration power of earth, and the situation appears to be worsened in near future. Keeping this in mind, Mission LiFE was launched by Hon'ble Prime Minister Shri Narendra Modi at United Nation Climate Change Conference in 2021. Mission LiFE (Lifestyle for Environment) is an initiative of Government of India to promote self-sustainable behaviour and practices among people to protect the environment. In current scenario, severe climatic situation is affecting our lives directly. Changing climate is a threat not only to us but also for the future generations. This can be prevented by adopting sustainable practices in our daily lives. Sustainable practices include behaviours that meant to use resources in a feasible manner by which they can be reserved for our future generations. Since every single action of individuals is affecting the environment, therefore it is everyone's' responsibility towards their society to act accordingly. Sustainability cannot achieve without involving youth in the process. United nation too acknowledged the potential of youth and mentioned their efforts in Agenda 2030 for sustainable development with youth in which they portrayed the role of youth in implementing Agenda 2030 of Sustainable development.Youth of any nation can bring a great change in society by their tiny efforts and practices, as they comprise the maximum population of the world. United Nation defined young people aged between 15-24 years as "Youth". At present Youth of the India has the greatest share in the population. Around 65% of the Indian population are aged between 15-35 years. In a direction of making greener society for their upcoming generations, today's youth are playing a role of change agent in society. They are infatuated to do any sort of activities which are giving them recognition and appreciation. As Gambone *et al.* (2004) stated that young people's growth can only be possible by involving them in the process of change. Noor *et al.* (2015) says that there is a need to educate and aware young people about sustainability. According to him it is the responsibility of universities by education young individuals to maintain sustainable behaviours and

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practices in their campuses. In order to understand the general habits of today's youth this study has been conducted. The major aim of the study is to identify the behavioural practices of youth in their day-to-day life which are directly or indirectly affecting the environment and sustainable practices.

Objectives

1. To identify the knowledge and awareness of youth regarding Mission LiFE.

2. To understand the practices of youth towards sustainable surroundings through Individual Social Responsibility.

Methods

Participants : The study comprises 237 young adults aged between 15-30 years including both boys and girls. All the respondents were college going students studying in various Institution acrossLucknow, Uttar Pradesh.

Procedure : Semi-structured questionnaire was used as a tool to gather the information from the respondents. Respondents were asked to submit the consent first in order to participate in the research.

Result

The collected information was analysed using descriptive and inferential statistics. The study includes young adults both male (36.6%) and female (63.4%). The study findings reveal that majority of respondents were cognizant about sustainable development and sustainable practices. Whereas very few of them were aware about Mission LiFE initiative of Government of India to creating a sustainable tomorrow. Amply respondents believes that environmental issues pose a serious threat to universal well-being; however, they can be addressed by significantly expanding attempts within the prevailing socioeconomic system.

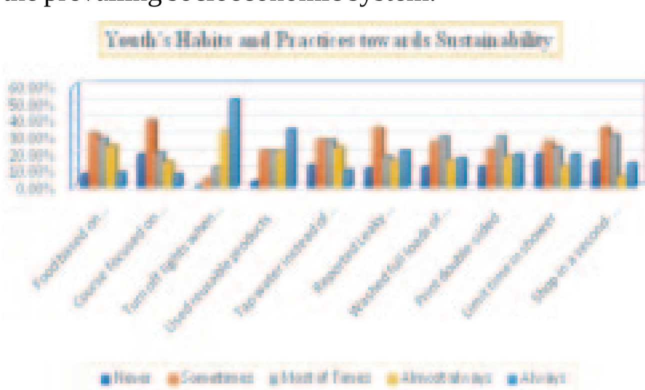

Fig: 1

Figure 1 is about youth's habits and practices regarding sustainability. Respondents were asked questions based on five-point rating scale. All the questions were related to their daily life practices which are affecting sustainability in a direct or indirect manner. The time limit in shower has received lowest weight and tuning off lights when not in used received highest weight in the categorization shown in Fig. 1. However, it is undoubted that other practices towards sustainability like, food based on environmental choices, course on sustainability, use of reusable product, complain of leaky faucets, printing on double side and online or second-hand shopping are some habits which are not very prevalent in all youth, still some of them are thoughtful about their mother nature and for its future. This clearly indicates that there is an enormous change required in day-to-day life of youths', after only they can be work as a change agent for the society towards sustainability.

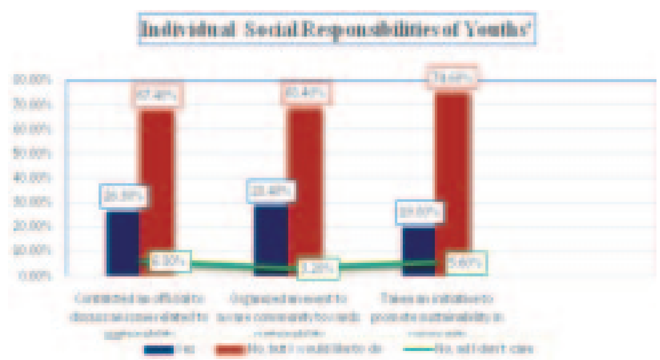

Fig: 2

The graph above depicts youth's individual social obligations to their community in creating a sustainable tomorrow. According to Fig. 2, the majority of respondents were pleased to be a part of sustainable practises because they had never done so before and intended to do so in the future because they as well were concerned about the rapidly changing climate. There were very few responses in favour of the not interested group, as seen in fig 2.

Discussion

Sustainable development requires everyone efforts as it is not possible to achieve a better tomorrow by the practice of a single person. Sustainable practices are not meant to be hamper anyone's life instead this is a practice which requires minor lifestyle changes in order to achieve a feasible tomorrow. Todays' lifestyle is not only expensive but at the same time hampering the environment in a great manner. This can be prevented only by accepting sustainable lifestyle changes. In view of that, Mission

LiFE was launched by GoI. The only motivation towards this initiative was to prevent the degradation of environment by applying sustainable practices in our life style which includes, turn off lights when not in used, report wastage of water, increase use of reusable products and etc. These are some changes, which anyone can adopt and implement in their day-to-day lives. The current study was divided in three sections in which respondents were examined including: Knowledge and attitude towards sustainability, daily habits of youth and initiatives taken by youth for sustainable surroundings. This study focused youth as they are sharing a great percent of population and their activities will majorly affect the environment the most. The study findings reveal that majority of youth were aware about sustainable practices still very few of them heard about Mission LiFE initiative. Almost all the respondents were practising some of sustainable behaviours but this will not be sufficient in making sustainable surroundings. In order to maintain a sustainable surrounding it is important for all to follow sustainable behaviours strictly. Youth can play an active role of change agent by simply adopting these practices and spreading awareness towards sustainability in their respective communities. Youth are the most potential agent of society who can bring changes by their warm attitude, enthusiasm and sharp mind. They can act as an enabler to make a feasible society for their future generations. By the investigation researcher came to a conclusion that some of youth are understanding the individual social responsibility and practicing a self-sustainable behaviour. Interestingly those who are not practising these habits are ready to do that from now as they are realizing their responsibility towards the mother nature.

Implication

The study will be a great help to the researchers, academicians and students searching sustainable practices and related terms. This study will draw a better understanding towards the Mission LiFE initiative and youth's role in implementing and practising behaviours promoting sustainability. The study will further assist individuals to understand their individual social responsibility towards nurturing the society in a greener way.

Conclusion & Suggestion

The study findings reveals that almost all youth were practising some of habits which are good for environment in order to preserve electricity and prevent wastage of water. However, this will not be sufficient for making a greener society for our future generations. Therefore, researcher come to a conclusion that there is a huge number of behavioural changes are required for making a sustainable society. These changes should be strictly adopted by every youth. Furthermore, another concerned area is awareness of mass towards sustainability and sustainable practices. Since this study solely focused youth's behaviour and practices, future studies can focus on another subsets of society.

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Effect of Concept Mapping Strategy on Achievement in Botany Among XI Standard Students: A Gender Analysis

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Abstract

Concept map is a way to represent the structure of knowledge. The study was carried out to investigate the effect of learning through concept mapping on the achievement in botany among XI standard students. Quasi-experimental design has been followed in this study. Purposive sampling method has been used for selecting the sample. One Government higher secondary school was purposively selected. Sample of the study consisted of 60 students and divided into 30 students (15 boys and 15 girls) experimental groups and 30 students (15 boys and 15 girls) controlled group were selected for conducting the experiment. Furthurly, the result was inferred that the boys and girls XI standard students gained achievement score (pre-test score) equal when the concept mapping strategy was used for learning botany. Finally, the study was concluded that the post-test experimental group have gender difference in concept mapping strategy on achievement in botany.

Introduction

Concept mapping are thinking through and visually representing between thoughts from mental connections that allow for better retention of knowledge. The focus of concept mapping strategy is therefore specific that they're supposed to be enforced to reinforce the recall of the elements of any lesson that memory is required. It is now used as a medium to represent and assess changes in student's understanding of science (Novak & Canas, 2008). These concept mapping strategy are enforced to assist students recall new and unknown information. Concept maps have their basis in the constructivism educational philosophy, which asserts that students actively construct knowledge. David Ausubel's cognitive theories (assimilation theory), which emphasised the value of existing knowledge in the process of learning new concepts, served as the foundation for Novak's research (Villalon & Calvo, 2011). Concepts usually represented as boxes or circles are connected with labeled arrows in a downward branching hierarchical structure. The relationship concepts can be expressed in linking phrases such as "gives rise to," "results in, or "contributes to" (Moon *et al.*, 2011). Therefore, the technique for visualizing these relationships among different concepts is called mapping. Concept mapping can provide as a helpful tool in the education field and helping the students to understand concepts more easily, link prior new knowledge and represent their thoughtful of those concepts. It is initiate to be an effective teaching strategy that enhances achievement among students (Gandhi and Hema, 2019).

Review of Related Studies

Concept maps are described as two or three dimensional graphic representations of interactions between conceptual pairings utilising labelled nodes (Bamidele *et al.*, 2013). Concept maps are viewed by as a two-dimensional hierarchical diagram that shows the links between and among various concepts (Aderogba, 2006). Concept maps offer a visual road map illustrating some of the pathways in propositions, where concepts are regularities in occurrences or things denoted by some labels. Propositions are two or more ideas labels linked by words in a semantic unit. Concept maps could be used in any subject at any level (Frisendal, 2012). Concept mapping had a substantial impact on writing ability (Ahangari and Behzady, 2011). The concept mapping approach of writing demonstrates that the experimental group outperformed the control group and had higher composition scores in the Korean language (Fahim & Rahimi, 2011; Lee, 2013). Concept mapping technique for teaching and learning, whether used with individual students or in cooperative learning groups (Bilesanmi, 2002 and Rekha, 2010). Concept mapping for meaningful learning, and empirical evidence suggests that concept mapping can be used to improve student learning outcomes in general and scientific outcomes in particular (Gerstner and Banger, 2012).

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Concept mapping teaching strategies had a significant impact on performance, with students exposed to concept maps performing significantly better than their peers taught with conventional teaching strategies (Okoronka, 2018). Significant difference in the performance of students who taught physics using the concept map learning strategy and those who taught using the explanatory method, in favor of the concept map group Meheux (2017). The students exposed to the teaching strategy of concept mapping performed significantly better than their peers exposed to the conventional teaching strategy Ogonnaya *et al.* (2016). Concept mapping as a learning tool improves student academic performance by enabling active participation in learning, discussion, sharing of concepts, and resolution of misunderstandings (Cheema and Mirza, 2013). Students exposed to concept maps also performed better than their peers exposed to conventional teaching methods (Nnamdi & Okechukwu, 2006; Sor, Jamabo, & Igwe, 2018).

Concept mapping approach recorded considerably better retentive mean ratings than those who had been taught using the traditional method. Studies on the influence of gender on the instructional fulfillment and improve of college students has been inconclusive over the years (Awodun, 2017). Effectiveness of thought maps on college student's fulfillment and retention in electricity whilst in comparison with the traditional teaching method (Bawaneh, 2019). Concept maps achieved considerably better and had a better mean retentions core than their counterparts taught using traditional method (Adeniran, Ochu and Aatoo, 2018). Concept mapping strategy was an effective teaching strategy that enhances for the students achievement (Sivakumar, 2022). The difference between pretest and posttest of academic achievement of girl students and boy students in physics in control and experimental group (Sukanya & Shailaja, 2017). Both male and female students performed better in biology when concepts maps instructional strategy was used, David & Michael (2021). Ahmed, Shittu & Yahaya (2021) revealed that male and female students benefitted almost equally when the concept mapping instructional strategy was used for teaching biology.

Significance for The Study

Achieving gender equality in education means an equal opportunity for both males and females to have equal learning process, equal learning outcome. Men and women are equal in the world for all, but they are differ from physical and mental. Although the teaching methods are the same for both sexes, the learning abilities of the students are not the same. The influence of gender and differences in instructional performance is a complex task. The way both are taught in the classroom is the same and the way they demonstrate their understanding of the concepts through exams is different. Therefore, the gender variable was chosen for the research to find out the difference between both male and femalestudents in learning and expressing their mastery.

Objectives of The Study

1. To find out the significant difference between pre-test and post-test score of boys achievement in botany of the control group.
2. To find out the significant difference between pre-test and post-test score of girls achievement in botany of the control group.
3. To find out the significant difference between pre-test and post-test score of boys achievement in botanyof the experimental group.
4. To find out the significant difference between pre-test and post-test score of girls achievement in botany of the experimental group.
5. To find out the significant difference between boys and girls student in post-test achievement scores in experimental group and control group.

Hypotheses

1. There is no significant difference between pre-test and post-test score of boys achievement of botanyof the control group.
2. There is no significant difference between pre-test and post-test score of girls achievement in botany of the control group.
3. There is no significant difference between pre-test and post-test score of boys achievement in botanyof the experimental group.
4. There is no significant difference between pre-test and post-test score of girls achievement in botany of the experimental group.
5. There is no significant difference between boys and girls student in post-test achievement scores in experimental group and control group.

Methodology

The study was carried out to investigate the effect of learning through concept mapping on achievement in botany among higher secondary school XI[th] standard boys and girls students from Salem district in Tamil Nadu. Quasi-experimental design has been followed in this study. Random sampling method has been used for selecting the sample. Two intact sections from class XI[th] standard were selected for conducting the experiment. One section of thirty students was treated as experimental group and the other section of same thirty students was treated as control group. The Biology Achievement Test (BAT) and A package of concept mapping strategyfor botany was developed by the researcher and conducted the intervention programme to XI standard students used after 30 days of instruction. The pre-test tool was used for data collection and the statements of the tool re-arranged for post-test. The pre and post test tools were given face and contents validity by experts in botany. The treatment lasted for 6 weeks for the experimental group that was taught by the researcher using concept map strategy while the botany teacher taught the control group for the period of 6 weeks as well using conventional teaching method. Both groups were exposed to BAT in the seventh week. The invigilation was done by the researcher.

Testing of Hypotheses

Hypothesis 1: There is no Significance difference between pre-test and post-test scores of boys achievement in botany of the control group

Table 1: Significance difference between pre-test and post-test scores of boys achievement in botany of the control group

Mode of Test	N	Mean	SD	't' Value
Pre test	30	7.93	1.43	21.11
Post test	30	29.73	3.73	

From the table (1) showed that the calculated 't' value 21.11 was greater than the tabulated value 1.96 at .05 level significance in both Pre-test and post-test in concept mapping strategy on achievement in botany among XI standard boys in control group. Consequently the null hypothesis is not accepted. Therefore the post-test score of boys (29.73) is higher than the pre-test score of boys in botany (7.93) of control group.

Hypothesis 2: There is no significance difference between pre-test and post-test score of girls achievement in botany of the control group

Table 2: Significance difference't' test values between pre-test and post-test scores of girls achievement in botany of the control group

Mode of Test	N	Mean	SD	't' Value
Pre test	30	7.53	1.80	25.29
Post test	30	30.73	3.05	

From the table (2) indicated that the calculated 't' value 25.29 was greater than the tabulated value 1.96 at .05 level significance between Pre-test and post-test in concept mapping strategy on achievement in botany among XIstandard girls in control group. Consequently the null hypothesis is not accepted. Therefore the post-test scoreof girls (30.73) is higher than the pre-test score of girls in botany (7.53)of the control group.

Hypothesis 3: Significance difference between pre-test and post-test score of boysachievement in botany of the experimental group

Table 3: Significance difference between pre-test and post-test score of boys achievement in botany of theexperimental group

Mode of Test	N	Mean	SD	't' Value
Pre test	30	8.35	1.18	32.81
Post test	30	38.13	3.18	

From the table (3) inferred that the calculated 't' value 32.81 was greater than the tabulated value 1.96 at .05 level significance between pre-test and post-test in concept mapping strategy on achievement in botany among XI standard boys in experimental group. Consequently the null hypothesis is not accepted. Therefore the post-test scoreof boys (38.13) is higher than the pre-test score of boys in botany (8.35) of the Experimental group.

Hypothesis 4: There is no significance difference between pre-test and post-test scores of girls achievement in botany of the experimental group

Table 4: Significance differencebetween pre-test and post-test scores of girls achievement in botany of theexperimental group

Mode of Test	N	Mean	SD	't' Value
Pre test	30	8	1.85	38.78
Post test	30	38.8	2.45	

From the table (4) noted that the calculated 't' value 38.78 was greater than the tabulated value 1.96 at .05 level significance between pre-test and post-test in concept mapping strategy on achievement in botany among XI standard girls in experimental group. Consequently the null hypothesis is not accepted. Therefore the post-test scoreof girls (38.78) is higher than the pre-test score of girls in botany (8) of the Experimental group.

Hypothesis 5: There is no significance difference between boys and girls student in post-test achievement scores in experimental group and control group.

Table 5: Significance difference betweenboys and girls post-test achievement scoresin botany in experimental group and control group

Group	Gender	N	Mean	SD	't' Value
Experimental group	Boys Girls	15 15	38.13 38.8	3.18 2.45	0.64
Control group	Boys Girls	15 15	29.73 30.73	3.73 3.05	0.80

The results from the boys and girls samples t-test as shown in Table 5 indicate that gender did not have significant influences on students taught with the concept mapping strategy, (t=0.64) in experimental group. Although the mean scores of boys (m=38.13, SD = 3.18) and that of girls (M=38.8, SD = 2.45) appear different on the face value, the difference was not significant. It can therefore be concluded that this did not influence students' posttest scores.

The results from the boys and girls samples t-test as shown in Table 5 indicate that gender did not have significant influences on students taught with the concept mapping strategy,. (t=0.80) in control group Although the mean scores of boys (m=29.73, SD = 3.73) and that of girls (M=30.73, SD = 3.05) appear different on the face value, the diffence was not significant. It can therefore be concluded that this did not influence students' posttest scores.

Sum Up of The Findings

In this study, the investigator focused to study the gender difference between pre-test and post-test through concept mapping strategy of boys and girls XI standard students in botany in control group and experimental group. The gender difference between pre-test and post-test score in experimental group (Pre-test boys-8.35 and girls-8.0) is similar as like as the experimental group (post-test boys-38.13 and girls 38.8) is similar. Likewise from the analysis revealed that the gender difference between pre-test score and post-test score in control group pre-test boys (7.93) and girls 7.53) is similar but the control group post test girls (30.73) are better than the boys (29.73) in concept mapping strategy in botany.

Result and Discussion

The study investigated the effect of concept mapping strategy on achievement in botany among XI standard students. Based on the findings from the research noticed that the overall experimental group is better than the overall control group in pre-test score and post-test score on concept mapping strategy on achievement in botany among XI standard students. The similar study Muni.s & Misra, B.C (2021) revealed that the students the similar of class IX taught through concept mapping strategy and traditional method of teaching science differed significantly in terms of attitude towards science. Additionally Mulkhaadebisi Ahmed, *et al.* (2021) showed that the male and female students benefited almost equally when the concept mapping instructional strategy was used for teaching biology. According to Udeni and Okafor (2012) and Sor *et al.* (2018), the student of boys have better improvement in science then the student of girls had been subjected to concept mapping strategy.

Conclusion

The study result was inferred that the boys and girls XI standard students gained achievement score (pre-test score) equal when the concept mapping strategy was used for learning botany. Finally, the study was concluded that the post-test experimental group boys and girls have gender difference in concept mapping strategy an achievement in botany.

Educational Implications

1. Concept mapping used to improve higher order skills functionality.
2. The goal of the teaching and learning process can be effectively achieved with concept mapping.
3. Concept mapping strategy as a teaching method can help to increase students academic achievement.
4. Concept mapping combined with other activities is a better alternative teaching method to traditional teaching methods.
5. Concept mapping helps students develop their critical, creative thinking abilities on their own.

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A Temporary Complete Lockdown-As a Solution to Environmental Protection Measures

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Abstract

The worst worldwide economic crisis in more than a century was triggered by the COVID-19 pandemic, which sent shockwaves across the global economy. Around 2020, as the pandemic became a worldwide health crisis, various nationwide reactions, such as lockdowns and travel bans, significantly disrupted society, travel, energy use, and economic activity. Due to human passiveness, the environment began to experience some beneficial consequences with the start of the epidemic. Therefore, this study tries to explore the need for lockdown measures to revive our climate system as it benedicts the whole ecological system of the globe. We are continuously finding options to revive and nurture our climactic system and natural resources but still, we are laggard in finding solutions to these calamities. The covid 19 pandemic has given us a new solution to rejuvenate our environment i.e., lockdown measures. In this study, we have given some arguments to safeguard our environment although thorough research and strategic policies are needed to establish lockdown as an option to rebirth our environmental system.

Introduction

One of the greatest issues of the twenty-first century is environmental change. Despite numerous attempts to restore nature over the past several decades, humans have only made a few, not very noteworthy, progress. The COVID-19 pandemic was unexpected, and its effects are still being felt by societies throughout the world. From a human health and environmental perspective, the COVID-19 pandemic has become a significant issue. To stop the virus from spreading further, lockdown has been imposed everywhere. Significant social and economic effects of this lockdown were experienced. According to various studies, it also had some favorable effects on the environment, especially on air quality, as a result of lower levels of particulate matter (PM), nitrogen dioxide (NO2), and carbon monoxide (CO) in all of the world's major cities. The natural ecosystem benefits in some way from this lockdown. Recent statistics from NASA (National Aeronautics and Space Administration) & ESA (European Space Agency) show that pollution levels have decreased by up to 30% in several of the COVID-19 epicenters, including Wuhan, Italy, Spain, and the USA (Muhammad, S., Long, X., & Salman, M., 2020). As we know fasting is a prevalent practice in many religions and cultures, especially during religious festivals when it is offered as a sacrifice to the Gods. Ayurveda also recommended fasting to purge the body of toxins and get rid of illness. In the same way, we can purify our environment from toxins and manmade hazards with the help of temporary lockdowns (Maslov PZ, *et al.*, 2022).

A temporary complete lockdown is a time frame in which all unnecessary operations are stopped or limited to reduce the damage that humans have on the environment. A temporary complete lockdown includes extensive steps that endeavor to reduce overall ecological harm caused by human activities, in contrast to other solutions that concentrate on certain issues like preventing pollution or conservation efforts.

Multiple investigations of the COVID-19 epidemic have been performed. The advantages of lockdown on the environment, however, are still lacking in the present field of information. Therefore, this research focused on finding a solution to environmental contamination via a temporary lockdown.

Literature Review

A brief overview of pertinent research and their methodology for analyzing the effects of temporary lockdown-

There isn't a lot of information available on temporary lockdowns as a way to address environmental preservation initiatives. A small number of academics are

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actively researching and publishing on this issue, as evidenced by the few published papers that particularly address this topic. The urgent need for environmental preservation has arisen due to the deterioration of ecosystems and the detrimental effects of human activity on the planet. There has been an increase in interest recently in investigating innovative methods to deal with these environmental problems. The use of temporary complete lockdowns as a method of environmental protection is one such strategy that has attracted attention. A rigorous shutdown is recommended as an efficient way to stop the Coronavirus from spreading over the entire world (Krishan, K., & Kanchan, T., 2020). It has been observed that most of the researchers perform theoretical review and observation methods to get conclusive evidence in their investigations.

A study by Pacaol *et al.* (2021) shows there have been significant improvements in air quality due to lockdown measures, according to research done at times when COVID-19 related restrictions were in effect. The study also examines the potential benefits of a temporary lockdown for reducing climate change. It concludes that by lowering greenhouse gas emissions, lockdowns can be a key component of the fight against the effects of climate change. The enactment of favorable laws and infrastructure, as well as public education and changes in behavior, are necessary for long-term success.

Arora, S. *et al.* (2020) found that the enactment of quarantine ceased all commercial activities that significantly influenced several significant environmental factors that were directly related to human health. Nature benefited from the sudden halt of all social, economic, industrial, and urbanized activities as it evidenced improved air quality, cleaner rivers and lakes, reduced noise pollution, and calm and peaceful wildlife.

Kumar, P., *et al.* (2020) suggest a reduction of metropolitan anthropogenic emission activities during lockdowns to prevent the spread of COVID-19 is to be expected, and it is consequently anticipating a decrease in the primary pollutant concentrations during shutdown in comparison to times when businesses as usual is conducted.

Menut, L., *et al.* (2020) find that the effects of lockdown procedures used in several European nations to limit the Covid-19 outbreak on air quality have recently been demonstrated in research. This investigation also demonstrates that the lockdown effect on atmospheric composition, particularly through significant traffic reductions, has been significant for several brief atmospheric trace species, with a significant decrease in NO2 levels, a smaller reduction in particle matter (PM) concentrations, and a mitigated effect on ozone levels due to irregular chemical effects.

After reviewing the various studies, it has been experienced that a complete lockdown can help our ecological system to rejuvenate, but it can also have serious disadvantages. These harmful effects are the outcome of careless human behavior. Therefore, we must be cautious lest we discern only benefits from the lockdown.

Research Methodology

This is an exploratory study as it finds solution measures for protecting our environment and much research is needed to know the possible solutions and the strategic actions required to perform. In this study, the authors review the various research articles published on this topic on various databases like Scopus and Pubmed, etc.

Objective of the study

1. To identify the measures through which we can rejuvenate the environment.
2. To assess the impact of lockdown on the environment and business.

Impact of Lockdown on Environment & Business

The impact of lockdown on the environment and business can be classified into two categories i.e., positive impacts and negative impacts. Throughout the globe, the lockdown was implemented due to the rapid spread of coronavirus disease (COVID-19) rapid spread to reduce the rate of continuous outbreaks. Undoubtedly, the enactment of the lockdown was beneficial for the renewal of the environment since all business, social, industrial, and economic activities, were suddenly suspended. As a result, nature recovers and exhibits significant changes in the parameters measuring the quality of the air and water, noise pollution, as well as quiet, peaceful wildlife (Ashvardhini, N., *et al.*, 2021).

Despite the terrible consequences of the coronavirus, the ecosystem has somehow benefited from the lockdown measures. Lockdown has the effect of reducing pollutants and causing Mother Earth to appear to be healing. This research presents evidence of a considerable decrease in noise, air, and water pollution as well as the benefits of lockdown on wildlife, providing a clearer understanding of the consequences of lockdown across many countries. This urges decision-makers to change national policies in the long run for a better environment. Government and individuals should develop steps and guarantee that limits are frequently enforced to control environmental degradation to reduce the environmental problem in the future.

Positive impact of lockdown

1. The world's air quality has been improving due to a considerable slowdown in industrialization, urbanization, and economic and social activity.
2. A significant pollution reduction was achieved by lockdown and stopping factories, airplanes, and vehicles, and stopping factory waste in rivers which improved the quality of the water.
3. Pandemic lockdown measures provided animals an opportunity to recuperate and get out of their habituated places.
4. Due to the brief suspension of human activity, noise pollution levels dropped in the majority of cities across the world.
5. Lower Carbon Emissions: As a result of fewer automobiles on the road and less industrial output, emissions of carbon dioxide ($CO2$) tend to decrease, assisting in the fight against climate change.
6. E-commerce expansion: As more people turn to online purchasing for their necessities, demand for online merchants and companies that provide delivery services has risen dramatically during lockdowns.
7. Lockdowns have pushed several companies to innovate and adapt to the new environment, which has resulted in the creation of novel products, services, and organizational structures.

Negative impact of lockdown

1. Increased municipal and medical wastage due to sudden lockdown measures.
2. The earning potential of people has significantly decreased as all enterprises have closed, except utility entities.
3. The lockdown has reduced the number of workers in several industries. As a result, there is less demand for labor. which results in job losses.
4. Lockdowns can cause local and international supply chains to break down, which slows manufacturing and increases prices for companies that depend on imported items or raw materials.
5. During lengthy lockdowns, businesses may find it difficult to meet their financial commitments, such as settling rent and salaries, which might result in financial struggle and possible loss of employment.

Results and Societal Implications

Conclusions drawn from the literature that address the issue of lockdowns as a method to safeguard the environment:

The literature suggests that lockdown as a response to environmental preservation initiatives has the potential to have considerable positive effects on the environment, public health, and the economy. Yet it is essential to plan carefully, consider the social and economic repercussions, and do a continuous study on the long-term consequences and efficient tactics. Future research should concentrate on these topics and expand on the possibilities of lockdowns as a tactic for long-term environmental management.

The author also investigates the impact of lockdowns on the global environment and find some interesting fact that leads to the adoption of such measures as a quality tool for safeguarding our environment. Thankfully restrictions have given us a chance to explain how humans have also improved the environment in various parts of the world. Because nearly all businesses, transportation systems, and industries have shut down, there has been a sharp decline in carbon emissions. Air quality levels in New York, USA, have fallen by over 50% as compared to the statistics on pollutant gas emissions from the previous year. According to Lau *et al.* (2020), during the lockdown, carbon emissions in China decreased by 25% and NO2 emissions by roughly 30%. When compared to statistics from the prior year, the Ecology and Environment Ministry reports that China's air quality has improved by about 11.4%. Over northern Italy, Spain, and the UK, NO2 emission levels decreased in Europe (Ficetola and Rubolini, 2020). In India, the mean reduction in tropospheric NO2 during shutdown was 12.10%. However, over the same period in 2019, tropospheric NO2 concentrations above India increased by 0.8%. According to the findings, NO2 levels decreased as a result of limitations on significant anthropogenic activities. In Delhi, the tropospheric NO2 concentrations decreased by 65.90% during the lockdown.

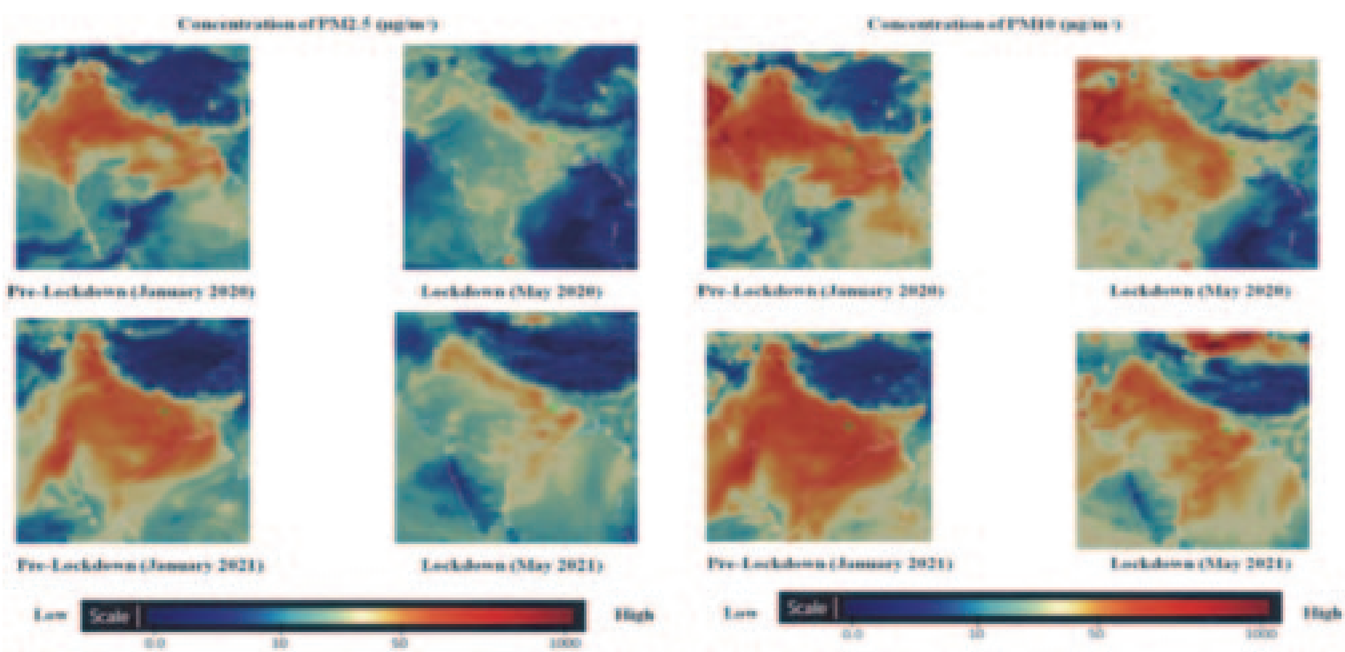
Figure 1: Comparative analysis of air quality in some of the world's biggest cities

Source: Saadat *et al.,* 2020

Figure 1 reflects the pre and post-lockdown effect on the climatic condition of the different cities, including (a) New Delhi, India; (b) Beijing, China; (c) Paris, France; and (d) New York, USA, before the COVID-19 epidemic as well as following the lockdown. It clearly shows that lockdown has filtered the whole environment and made it more cleared and cleaner which is a good sign for our planet.

In coastal areas, beaches have evolved into one of the most important natural resources (Zambrano-Monserrate *et al.,* 2018). The coronavirus epidemic has reduced the number of visitors visiting these beaches, which has caused an unexpected shift in the physical appearance of numerous beaches throughout the world. Beaches in places like Acapulco, Mexico; Salinas, Ecuador; and Barcelona, Spain still appear to have clean, sparkling seas.

Figure 2: Concentration of PM 2.5 & 10



Source: CNN

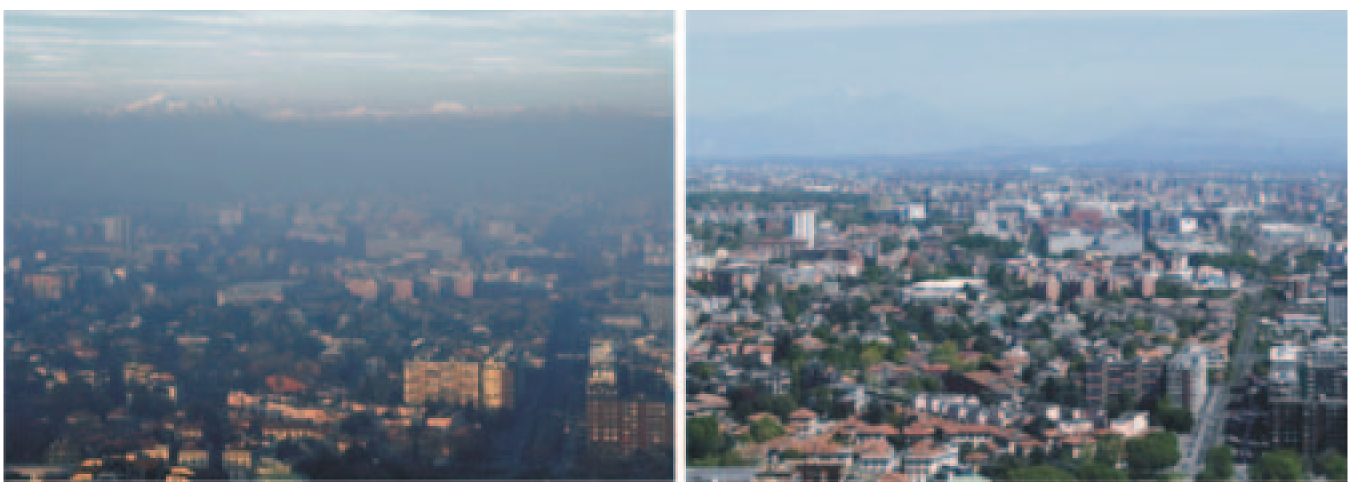
Figure 2 shows the concentration levels of particulate matter (PM) 2.5 and 10 which differ in the period of pre- and post-lockdown effect on Indian climate. The concentration was very high during the lockdown period and it has been dramatically reduced after the implementation of lockdown. CNN observed much lower concentrations of nitrogen dioxide and harmful tiny particulate matter (PM 2.5) in April. In one week of lockdown, the PM 2.5 in New Delhi decreased by 71%.

Figure 3: Grand Canal, Venice, Italy, waterways before and after lockdown

Source: CNN

Prior to the lockdown the extremely busy rivers of Venice, Italy, were frequently murky. The scenario Images dated April 2020 showed the canals to be so clean one could see almost to the bottom. However, according to the mayor of the city, this is because there is "less travel on the waterways, permitting the sediment to remain at the bottom."

Figure 4: A view of Milan City, Italy before and after the lockdown



Source: BBC& The Guardian

Milan was ranked the most polluted city in Europe in 2008, according to The BBC, although pollution is still a challenge today. This information was published before the lockdown. During lockdown, when traffic decreased, it also reduced air pollution. In consequence, Milan is considering implementing a plan to cut back on driving after the outbreak in order to reduce their environmental pollution.

Figure 5: New Delhi, India, as seen from the Yamuna River before and after the lockdown

Source: The New York Times

The New York Times reports that 14 of the 20 cities with the most polluted air in 2019 were located in India. But after the lockdown, everything has changed. The air in Delhi hasn't been this clear in years. New Delhi reportedly had "the greatest stretch of clean air ever" in April, according to Reuters. The Washington Post reports that within the first few days of the lockdown starting, the air quality in New Delhi decreased by roughly 60%. Similarly, the condition of the river Yamuna is so satisfying after the lockdown as can be seen in the above images.

Figure 6: A view ofLos Angeles, California before and after the lockdown

Source: David McNew/Getty Images & Business Insider, Getty

Smog and traffic in Los Angeles are two well-known phenomena. CNN, however, reports that afterward the lockdown LA witnessed the fresh and good air sessions in March as perhaps 1995. Consequently, Los Angeles can see the San Gabriel Mountains after so many years shown in Figure 6.

After reading the aforementioned article, which was published in a reputable journal, it can be concluded that the lockdown has had a substantial impact on the entire globe's air, water, and climate system as a whole. The effect of lockdown can also be experienced on noise pollution and wildlife creatures.

Environmental noise is defined as an unwanted sound that may be produced by human activity at high volumes. According to Zambrano-Monserrate and Ruano (2019), it is one of the key contributing variables for humans and the ecosystem, affecting the natural surroundings and posing hazards to health. Flights were canceled everywhere. The business operations have almost entirely ceased. All outdoor sports, including football, volleyball, hockey, and cricket, have been suspended. Markets and shopping centers are closed. Both private and public meetings have been suspended, and all educational institutions have been closed. The majority of cities' streets were desolate, and all of the shops, businesses, factories, pubs, and theaters were shut. The overall level of noise in the planet's main cities has significantly decreased due to all these changes.

Environmental specialists are attempting to determine whether a significant decrease in pollutants and an increase in air quality are a rapid, transitory response to the lockdown measures. Let's look to the environmental effects of lockdown as a ray of optimism for the moment being in these terrible conditions. Let's utilize this as a chance to promote sound, sustainable economies with clean energy investments and green jobs.

In conclusion, establishing temporary complete lockdowns as a strategy for environmental conservation reflects the significant potential in resolving critical issues like air pollution and resource depletion spurred by human actions. Despite issues with economic repercussions and societal acceptance, the advantages of lower pollution levels, resource conservation, and enhanced public health benefits make this method worthy of investigation. Through these proactive actions, society can contribute toward attaining a future that is more environmentally friendly by enacting suitable policies and effectively involving important stakeholders.

Limitation of the study

The study has limitations since it focuses more on the advantages of the lockdown than its disadvantages. The entire investigation is based on a single lockdown impact experienced in a particularly recent period of COVID-19, which is a limitation we faced. Further study is required in order to provide greater results since the existing research in this field is quite limited.

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Community-based tourism an optimal technique for integrated tourism development: A theoretical approach

*Tahmeed Ahmad Badam

Abstract

The behavioural-ethics of tourist development necessitated to be the niche where the development course-of-action should meet the expectations of the host communitarian fellow chiefly in both short-run as well as in long-run. Until the recent past, tourism development was carried out inun-decentralized fashion and, in most cases, with little consideration to the impact that had on the natural ecosystem and local-community. This tacticwhich, in some cases, is still applied today-has had a significant impact on a local, regional and national level, by creating huge discrepancies among the national-regions, with direct repercussions on local communities and the country's labour market. Notwithstanding, recent years have shown a distinct linkage between tourism and local inhabitants, largely owed to the multiplying effect that tourism activities have inculcated, but also to the intricate networkof correspondences between themselves. The purpose of this task is; (1) tostudy the existing relationship between tourismdevelopment and the local-community where itoccurs, between the need for development and theneed to preserve the local tradition, conventions, values, folk-customs as well.

1. Introduction

The wide spread technological, socio-cultural, and economic stages of development experiential in Union-territory of J&K and, implicitly, that of the national tourism, demands novel approach purview to "tourism-development" phenomena. Until the 2002, tourism development was carried out in centralized fashion and, in most cases, with minute regard to the impact that strategy had on the environment as-well-as host-residents. The result was a concentrated development of certain tourist areas, as far as hotel accommodation is concerned. The Srinagar-Boulevard area Dal-lake side encompasses spectacular number of rooms available and other entertainment facilities including Shikara-ride, boatel-ride, fish-angling, golf-course, theme-parking etc and Pahalgam destination exclusively offers accountable sum of available-rooms to the guest market. Nevertheless, recently Ahad-Hotels and Resorts started novel passenger Radio-transportation services in order to heighten the experience of visitor segment. It is obvious that this situation still observed today has led to the appearance, on a national level, of important differences of economic development between the distinct regions, with direct impact on the respective local communities and the labour market.

Contemporary years have highlighted the existence of a close relationship between tourism and local communities, owed mainly to the multiplying effect of tourism activities, but also to the intricate network of correspondences between themselves. A careful analysis of the two aforementioned terms reveals: Tourism acts as a stimulus to the reverberation of entire economic environment vastly due to the fact that it is an intensive consumer of workforce and has an invigorating effect on the production in adjacent industries; thus, a diversification of the local/regional economic structure takes place, which, together with a superior use for the local resources, leads to a smoothening of inter-regional lack of equilibrium (Travtalk India, fortnightly, 2012). We can therefore infer that tourism represents a "solution for the incipient prosperity of disfavoured are as and a remedy for under industrialized towns" (World travel Mart London, 2013).

It has been observed with ease that tourism activity has a significant repercussion on the targeted areas and, implicitly, on the respective local population and environment. Therefore, any project aimed attourism development and/or eco-tourism should firstly be concerned with the mitigating of the dysfunctional impact presented by this type of activity andthe elevation of the functional traits. There are quantumnotions of tourism development: eco-tourism, durable development, integrated or systematic-development; each of these

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terms consists of a balance between tourism development and economic benefits on the one hand, and environment protection and safe keeping of the local communities, on the other.

2. Literature Review

Sharma, (2009), one type of tourism destination is living local resident areas. For an indigenous-culture that has stayed largely separated from the surrounding majority tourism can present both advantages and demerits. On the functional side are the unique cultural practices and arts that attract the curiosity of tourists and provide opportunities for tourism and economic development. On the dysfunctional side is the issue of hoe to control tourism so that those same to cultural amenities are not distorted and the people don't feel violated. Other destinations include historical-sites, modern urban districts, theme parks and country clubs, coastal or island ecosystems and inland natural areas. Basu and Das (2007), for a tourism industry, traditional attributes are nothing but a consumer product. In such tourist oriented living community-environment, the decision-making process often highlights the dichotomy of 'insider' and 'outsider'. The outsider is concerned predominantly with developing a product to respond to the market (potential-visitors) while the insider is more concerned with place, locality and community. But, if properly channelized; the energy of tourism can feed the overall development process and ensure a continuity of past with the present. This can be achieved through proper planning- a balance between creative intervention and effective-management strategy.

Balancing the needs of residents and visitors is important to ensure that tourism benefits everyone. It is important to understand the kind and amount of tourism that your community can handle. Local priorities vary. So do local capabilities. In other words, local circumstances determine what your area needs to do and can do in cultural tourism (National trust for Historic-Preservation, 2011). Programs that succeed have widespread local acceptance and meet recognized local needs. They are also realistic, based on the talents of specific people as well as on specific attractions, accommodations, and sources of support and enthusiasm.

Ekwelem and Ekwoma,(2011), efforts to preserve resources on cultural authenticity have gained new momentum throughout the world nowadays. Protecting local community usages is economical, as well as historical and also a cultural process. While cultural-heritage preservation has not yet become firmly rooted in the J&K consciousness, a great number of people and organizations see cultural-resources as critical to the nation's economic development through tourism. Cultural-heritage is based on the aspects of our past that we cherish, want to keep and pass on to future generations and outside world. However, the economic benefits of preservation are secondary to the intrinsic value of that community heritage which is been preserved.

3. Objectives

To figure-out the existing relationship between tourism development and the local-community of a region between the need for development and the need to preserve the local/host-traditions.

4. Methodology

Study is based upon rational-approach composed from the previous research-literature and pilot-observations render throughlocal-communities of a tourism-region.

5. The Synergy between Local Residents and Tourism

The appraisal of local communities hailing with tourism activities, their reaction towards tourists, their implication with the project, the changes that occur within the community in a certain time-frame, are all aspects which cannot be analyzed exclusively through economic models and indicators. The social-approach of tourism development becomes a necessity, especially in atime when globalization is the general concern, because the loss of cultural identity, norms/values, customs/traditions, ticking environment pollution, stampede global-warming are all very serious aspects that need a careful evaluation.

People, and to a broader extent, local and regional-communities are the basis for tourism development of a certain region. Their consideration as an equal rights partner considerably increases the success rate of any tourism development project. Alongside the inevitable fluctuations and frictions that might arise as a consequence of an increase in tourist-traffic, these changes may induce a state of social fermentation and disorganization. This aspect becomes clearer in situations where a traditional community is faced with rapid change that require, in turn, a rapid adaptation to new ideas, customs, behavioural-patterns and technologies that might emerge from this process.

The aim of this academic endeavour is the analysis of the relationship between tourism development and local-community, between the need to develop and the need to preserve traditions, by means of balancing these two by-and large opposed options. The ethics of tourist development should be the niche where the development policy should meet the expectations of the host local-community.

Thus, a few issues must be underpinned clearly from the start. The first one addresses the effect that tourism activity has on local communities, especially from an economic point of view. Alongside "regular" benefits, such as a drop in unemployment rate, an increase in income level, development of infrastructure, also come negative aspects and the possible emergence of undesirable activities, like: child-sex, immoral-trafficking of girls/ women, drug-dullard, prostitution, illegal-gambling, and larceny. The socio-cultural implications are represented by the alteration in consumption patterns of local denizens, which takes place due to anincrease of living conditions and an imitation of tourist-behaviour as well as by cultural-trinkitization and commodification. These alterations are most visible especially in those areas where the number of tourists largely out numbers the number of local residents. In those areas, other aspects can be observed: traffic jams, congestion around the main natural and entropic resources, alteration of customsand traditions to make them more appealing for tourists and even certain abysmal feelings regarding tourism/tourists, in general.

5.1 Integrated tourism and regional Development

Faced with a large array of implications and effects stemming from tourism business activity, following concerns need to be addressed:

- What means of including the local community in the decision-making process are available?
- How can local communities get involved in the development project/ventures?

The answer to these questions is vital in obtaining an integrated tourism at a regional level. As opposed to other forms of tourism development like eco-tourism ("responsible-travelling in natural areas, that is environment-friendly and upholds local welfare"- International Ecotourism-Society) or durable tourism, integrated tourism can be loosely defined as a type of tourism that is closely tied to the economic, social, cultural, natural and human structures of the region where it occurs and seeks to utilize them at an optimal level. In practical terms, it is the type of tourism that is in direct relation to the economy, activities and resources that are available in a certain region and to the participating local-community. Integrated tourism has the potential to offer consumers a distinctive mix of products, services and local-experiences. Thus, durable tourism should:

- Make optimal use of the available natural resources, because they are the key-element in tourism development, by maintaining the essential ecologic-processes, while conserving the natural resources and biodiversity.
- Respect the socio-cultural authenticity of host communities, conserve the social-heritage, traditional-values and contribute to inter-cultural understanding and tolerance.
- Ensure viable economic operations in the long run, by offering evenly distributed social and economic benefits among all stake-holders; stable workplaces, social services and win-win rather win-loss opportunities to host communities; decreasing the poverty rate by generally improving the quality of life.

Durable tourism development requires a relevant degree of involvement from all stakeholders, as well as strong leadership on a political level, in order to ensure a large participation and consensus. Achieving a durable development is anon-going process, because the impact needs to be constantly circumspect, in order to be able to take timely preventive/corrective measures, when needed. Durable tourism should maintain a high degree of tourist satisfaction and provide for a memorable-experience, appealing to his/her consciencevis-a-vis durability issues and promoting perennial/lifelong tourism.

5.2 Systematic Tourism Ethics and Development

An analysis of the connection between ethics and systematic tourism development can only be conducted by having the Global-Ethics for Tourism Guide, put together by the World Organization for Tourism in 2001, as a starting point. The main pathways it introduces, which regard the link between tourism and local-communities, are:

- Tourism-business activities shall be conducted insynergy with the attributes and traditions of host-regions by showing respect for their laws, traditions and customs.
- Tourism activities should respect the equality between men and women, should promote human rights, especially, the individual rights of under privileged groups, such as the elderly and young, down-trodden class, persons with any kind of disabilities, ethnic-minorities and indigenous populations.
- All participants involved in tourism activities should protect the environment to ensure a sustainable, durable and continuous-economic growth, meant to satisfy in an equitable module the needs and expectations of present and future generations of host-tourist community.
- Tourism-activity should be planned in such a way

that it allows for the survival and flourishing of traditional-cultural products, social usages, crafts and folklores, instead of degenerating and standardizing them.

- Local populations should be associated to tourist activities as an equitable partner, equally involved in all economic, socio-cultural processes generated by these and whose direct result is the creation of direct and indirect workplaces.

Tourism policies must be designed in order to allow for a general improvement of raising the general quality of life of the population in the target-areas and to satisfy its needs; the planning and the architectural approach as well as the management of tourism resorts should seek their integrationin the local economic and social structure, ata maximum possible level, and where there are equal levels of workforce qualification, priority shall have the local one (WTO, Santiago, Chile,1 999). The rational attitude of tourism activity can only be correctly assessed if it is crutched against the local community. Intensive tourist development of anarea, if undertaken without the mutual consent of host population, it can only result in dissatisfactions, monotony and adverse reactions. Given all this, to assess the necessity of an action, its opportunity, one must constantly keep in mind the local community. How can that be done? Can local population be consulted each and every time? Is it necessary to obtain its "goahead" for opening a new hotel or a new ski stretch?

5.3 Involvement and Participationof the Local Communitarian

Consulting with the local inhabitants, involving it in the initiation and realization of the tourist development assignment, considerably increases it ssuccess rate and may result in positive effects in allareas: economic, social, traditional, cultural and environmental (Tab.1). The efficiency and morality of a tourism development project is more visible when the entire community benefits from its implementation and its dysfunctional aspects are limited to the environment or population of the host area. The magnitude of benefits and their even and equitable distribution is the first step in implementing a successful tourism venture. Knowing what the local priorities are can only be achieved by a thorough consultation of the local communities, which, in turn, can only be achieved by implementing a set of social terms-participative democracy which is regarded as 'a conception of democratic policies in which decision-making and policy-planning are set by a process of debate among free and equal citizens or their representatives" (Gutmann and Thompson, 2000).

Tab. 1

Socio-cultural Aspects	Economic Activity	Adventurous Activity	Environmental
1 Language, literature	Agri-Horticulture	Mountaineering, Pony-riding	Eco- tourism
2 Ethnic-groups	Industry, Handicrafts	Rock-climbing	Forest, wildlife, Marine-life
3 Festivals, fairs	Information tech. telecommunication	Water-Rafting, Shikara-riding	Winter/snow tourism
4 Tradition, Values	Hotel, travel agency	Paragliding	Landscape, meadows, Valley
5 Pilgrimage,Religion	Transport, tour-Operation	Skiing, Ice-Skating	Weather & climate
6 Social-usages, Themes	Civil aviation	Kayaking, Canoeing Floral	Herbal-tourism

The importance of consulting the local communities in the decision-making process has been stressed by other authors as well: like Plog, Winston, Smith, Ewin *et al*, in the consultation phase of decision-making, participants express their stands and form certain groups according to expressed opinions. In backing the stands, the respective groups must present arguments which other groups find relevant. The most important aspect is the fact that the participants must find those arguments which are parsimonious and appeal to collective actions, those not being necessarily the most advantageous ones" (Fung and Wright, 2003). There are multiple levels where the concept of deliberative democracy can be implemented, such as: local groups, medium-level institutions, national and global levels. In this article we shall reflect only on the first level and analyze its particularities in the context of local communities. At a local level, groups may be constituted of: NGOs, public administration and social groups that require outside assistance. Even if these groups manifest the potential to exert participative democracy, it is possible that, in certain communities where that process is in incipient stage, the decision-making process is seized by the local elites. In order to protect themselves and to avoid being overwhelmed by anti-democratic forces, or simply to increase the size of the target-group affected by a certain decision, local groups must expand "horizontally" by joining forces with other similar groups and "vertically", by cooperating with groups found at higher levels. All decisions, even inthe case of participative democracies, have an impact on local communities. Economic impact aside-which is easily assessed in tangible terms- there is another one, with social and cultural consequences, which are harder to define and therefore, evaluate. The social and cultural impact may manifest through:

- An increase in the economic independence of the groups which previously were dependent (i.e., new job-opportunities for women and young-adults);
- Decay of the traditional economic model, access to fishing and hunting areas or forests;
- Shift in the traditional occupational structure (cattle raising, agriculture, crafts) towards new employment opportunities in restaurants and hotels;
- Shift in land destination to make room for new activities. To observe and analyze the cultural impact of tourism, two new sets of characteristics must be introduced: visitors and target-area. Typical for visitors are:
- **Volume:** a small number of visitors in a heavily populated area will have an insignificant impact on the latter. On the other hand, a large number of tourists visiting a relatively small area, in a small window of time, will have an enormous impact.
- **Length of stay:** the longer it is, the more significant the impact on that region it will have.
- **Racial-issues:** the more radical the racial, language and the cultural differences, the larger the impact.
- **Economic:** differences of economic-development generate feelings of discomfort among the local population along with a desire for equality. Typical for the target area are:
- **The level of economic-development:** the more developed the region is, the smaller the dependence on touristic-activities, thus lessening the impact on local-communities.
- **Special characteristics:** including the physical dimension of the region, population size number of tourism facilities, and number of access roads. In a later stage, one can evaluate the rapport between the number of arrivals/number of guests and host population/surface. The higher the ratio, the more plausible the emergence of chaos between sides.
- **Level of local-involvement:** if tourism-activities are conducted on the property of, or are being led by locals, the possibility of crisis dramatically decreases.
- **Strength of local-culture:** the stronger it is; the weaker will be the impact. Each of these factors plays a role in the day-to-day life of the local population of target areas. By combining these two factors, one can achieve various levels of physical and mental saturation, levels that need different approaches. In initiating a programme of tourism development, aiming to preserve local authenticity, one must observe the features displayed by the tourist destination.

Conclusion

Choosing the optimal form of tourism and implementing it within a target-area does not solve the problem of 'cultural contamination' of the two sides. These cultural exchanges are perfectly normal and existed since times long gone. The purpose of this study was to present the ways of action which are available in order to avoid the cultural decay of local communities and to identify the optimal method for tourism development at aregional level.

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Post-2014 Paradigm Shift in India's Governance: From State-Centric to Citizen-Centric

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Abstract

Minimum Government, Maximum Governance marks India's post-2014 paradigm shift in governance. The new governance is complimented by its pro-poor and citizen-centric approach, with a focus on bringing back India's civilizational values and ethics to the governance and administrative culture of the country. *Justice to All and Appeasement of None* is the new mantra of the refurbished governance, which was conspicuously missing in the pre-2014 period. So as to make it people-friendly, governance in 'New India' is complimented by technological innovations and interventions, and regulated by an administrative system that is efficient, responsive and sensitive to people's aspirations and expectations. The political leadership of New India is resolutely committed to social justice, empowerment and wholesome transformation of society, which is bereft of corruption, discrimination, appeasement and allurement. People's prosperity, human wellness and inclusion of vulnerable sections are sought to be inter-woven in governance policies, and this is to be achieved through the 4-Ts- Talent, Transparency, Technology and Trusteeship. Scores of government decisions and enactments are based on these 4Ts. In the refurbished governance, social and economic transformation is to be driven through technological interventions. Modern means of Information and Technology (ICT) is increasingly being adopted to give expedite the pace of development and prosperity. However, amidst the changing dynamics, there are certain development-gaps which need urgent attention from the administrators and policy makers.

The present paper critically discusses the new aspects of governance under the present dispensation. Aided by wide-ranging and credible references, the paper emphasizes how the rejuvenated governance has been striving to reach the last mile since the last decade, and realising the government's call of Sarvodaya through Antyodaya. It also highlights the defining characteristics of the post-2014 governance scenario in India and discusses at length the progress made during the last nine years and that's now headed into India's Amritkal period.

Introduction

The last ten years have been phenomenal in India's history of governance, growth and development. The very meaning and characteristics of these buzz words of democracy have undergone a radical transformation, if not a wholesome substitution! For the first time it appears that India's governance is being guided by the philosophy and principles of part 1V of the Constitution that deals with the Directive Principles of State Policy, something that was envisaged by our constitutional framers. The framers of the Constitution had envisioned that the DPSP would form the basis of future governance of the country. Expressing the intent of the Constituent Assembly, Dr. Ambedkar said on November 19, 1948-

"It is the intention of this Assembly that in future both the legislature and the executive should not merely pay lip service to these principles enacted in this part, but that they should be made the basis of all executive and legislative action that may be taken hereafter in the matter of the governance of the country."

Governance is a continuous process and post-independence India too saw this journey take off on the Nehru-Mahanalobis model of development. Pt. Nehru is complimented for introducing democracy in a free India and laying a strong foundation of democratic institutions and practices. However, in terms of growth, the economy remained measly around 2.5% annually, attracting the phrase "Hindu rate of growth" and States termed as "BIMARU"! Growth and prosperity became hostage to Socialism and private initiative came under the servitude of the public sector! License-Permit-Quota Raj (LPQ) became the mantra of the so-called development and

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bureaucracy became all-powerful vigorously implementing the tenets of Socialism more than other cardinal principles of democracy, viz open society, market liberalization, private initiative and free enterprise! Top-down approach" was justified by successive governments for almost 40-long years with the State looked upon as the "Engine of Growth" and "Commanding the heights of development"! With the State becoming all-powerful and dominant allowing limited space for the private sector, red-tapism, circumlocution, favoritism and corruption became the by-products of the Nehruvian Socialism! Thus, the late Rajiv Gandhi remarked that "out of every one rupee sanctioned by the Centre, only 15 paise reaches the end beneficiary". With India's economy crumbling under the burden of the Nehruvian socialistic policies and worsened by an adverse Balance of Payment crisis brewing up in the beginning of the '90s, India had to pledge 67 tones of its gold with the Bank of England to get a 2.2 billion USD loan from the IMF!!

The post-1990 governments at the Centre took lessons from the fallout of its Socialist policies and introduced the LPG in place of LPQ!! Thus, began the notion of a new system of governance that ranged from State-Centric to Business-Centric (1990-2014) and from Business/Economic-Centric to Citizen-Centric (2014 to the present)! Though the first NDA Government under Prime Minister Vajpai (1998-2004) was no less emphatic on people's welfare, the second edition of the NDA Government under the stewardship of the Prime Minister Modi has relentlessly focused on the "Citizen-First" and "Pro-people" approach. The post-2014 governance marks a paradigm shift in humane governance by channeling the economic strength of the State in rebuilding the people's and the nation's health. The present day governance puts the individual in the centre of all economic and industrial activities, and harnesses the State's strength in strengthening the social and economic health of the masses. Economic growth, driven by the "Ease of Doing Business" (EoDB) is leveraged for social and institutional development, with a prime focus on people's "Ease of Living" (EoL). Thus, the EoDB is to complement the EoL, and any diversion between will defeat the very purpose of the development paradigm.

A number of unique practices of the present government can be highlighted that marks a pronounced shift in India's governance paradigm, which are as follows:

Humane governance with a strong focus on vulnerable sections of society

Women and girl-child are among the most vulnerable sections of India and they need a special and dedicated protection from the State. This realization has been the driving force of the current NDA government since 2014 and its policies have thus been crafted in the direction of not only ensuring the physical and personal safety and integrity of women and girl-child, but also to ensure a holistic development and empowerment of women and girl-child in India. Women-related governance has undergone a wholesome change prompting it to be termed as "Women-led development".[1] The renewed focus encompasses five inter-related women-related security components, viz-

- health security of the mother and child, social security
- financial security
- security of the future through educational and financial programmes
- the physical safety of women.

In pursuance of the above goals, a number of policies and programmes have been enacted and successfully implemented upon. Some of its policies, such as, the *Pradhan Mantri Matru Vandana Yojana* (PMMVY), *Pradhan Mantri Surakshit Matritva Abhiyan* (PMSMA), *Mission Indradhanush, and National Nutrition Mission* (NNM) have relentlessly focused on securing the health of mother and child. Similarly, programmes launched under India's National Health Mission (NHM), such as the "Ayushman Bharat Yojana", "Pradhan Mantri Jan Arogya Yojana (AB-PMJAY), Pradhan Mantri Ayushman Bharat Health Infrastructure Mission (PM-ABHIM) etc have positively impacted the health status of women and children. As a result of, the Union public expenditure on healthcare rose from a measly 1.2% since 2014 to more than 2% around 2020-21.[2]

The budgetary allocation to the Union Ministry of Health and Family Welfare has been increasing with each passing year with, thus the latest figures marking an increase of around 16.5%, from INR 73,932 cr in FY 2020-21.to 86,200 cr in 2022-23, thus demonstrating the government's resolve for building a sustainable health ecosystem which is capable of handling the growing healthcare needs and aspirations for the people of the country with a dedicated focus on the women and child welfare.[3]

No governance concept could be complete without a genuine concern for the tribal development. The focus on Particularly Vulnerable Tribal Groups (PVTVs) is an essential part of the modern welfare state. A data-centric human development indexing approach for the PVTGs has been adopted for the first time under the current government with the objective of a dedicated focus on the socio-economic development of the tribal communities for the next three years with an allocation of Rs. 15,000 cr for 2023-24.[4]

In the post-2014 period, a marked shift in the area of tribal human resources and infrastructure development has been witnessed accompanied by a matching budgetary allocation. Statistics reveal that while the UPA government allocated Rs. 24,000 crore for tribal community in the budget, the same was enhanced to around Rs. 90,000 crore by the NDA government in the post-2014 period. Further, while 167 Eklavya Model Residential Schools (EMRS) for children of tribal community came up under the UPA regime, the same went upto 690 under the current dispensation. Started in 1997-98, the EMRS today (2023-24) has an enrolled students' strength of 1,13,275, marking a sharp increase from 1,19,000 in 2013-14. Around 38,000 techers and support staff are slated to be appointed for EMRS in the next three years. Scholarships granted to tribal students too shows an impressive jump from Rs. 978 crore to Rs. 2,533 crore under the respective governments.[5]

Distinctly citizen and human-centric approach with a particular focus on people's healthcare and wellness services

The greatest characteristic of the Modi government is perhaps its intensely pro-people and people-friendly approach. The notion of India First and Indians First is the guiding principle of the present dispensation. Over the last nine years, numerous social welfare policies have been launched with the prime objective of easing people's lives and their living conditions, in a way translating Article 21 of the Constitution into reality. All spheres and dimensions of human development have been addressed, be it social, economic, educational, religious or cultural in the last almost one decade. Though previous dispensations were not lagging behind in policy enactments, it is the implementation and the fruition of the public policies that is so striking and conspicuous of the present governance. In the post-Pandemic period, revamping health infrastructure, conserving people's health and affording low-cost medical services to the economically weaker sections has been a major area of governance. One of such policies is the Ayushman Bharat Yojana (PMJAY).[6] Launched in September 2018, it, is the world's largest government-funded health care programme that offers cashless benefits up to Rs.5 lakhs per person of the EWS category. By October 2023, the policy has successfully catered to 5.7 crore plus hospital admissions worth more than Rs. 70,000 crore, thereby, saving more than rupees 1 lakh crore of poor and deprived families. Of the total beneficiaries, 49% Ayushman Cards are held by female beneficiaries. In order to make it user-friendly and more accessible to people, the National Health Authority (NHA), the implementing body, introduced the 'Ayushman App' for Ayushman Card creation. The success of the App can be gauzed by the fact that it has been downloaded for more than 26 lakhs times, since the launch of the app on 13th September, 2023. Several States have produced impressive results in implementing this centrally-sponsored scheme, with Uttar Pradesh, Madhya Pradesh and Chattisgarh emerging as top three States with maximum Ayushman Card holders.[7]

Another highly significant policy dedicated to people's health and life is the *'Jan Aushadhi Scheme'* 2015. Though initiated by the previous UPA Government in November 2008 but hardly ever known to people, it was renamed, as *'Pradhan Mantri Jan Aushadhi Yojana'* (PMJAY) in September 2016 and further streamlined and renamed as *'Pradhan Mantri Bharatiya Janaushadhi Pariyojana'*(PMBJP) in November 2016.[8] The scheme operated by the Department of Pharmaceuticals, Ministry of Chemicals & Fertilizers, Government of India, and run with the participation of by both government agencies and private entrepreneurs, has the mission of providing generic allopathic medicines at affordable prices to all sections of society, especially to the poor and weak. The government has tried to break the impression that health care is a matter of affluence and cannot be afforded by the deprived sections. As a result of the relentless efforts of the government, the PMBJP has achieved impressive results.

Official figures show that as on 28.02.2023, 9182 PMBJKs are functional across the country in 36 State/ UTs covering all districts of the country. Price of Jan Aushadhi Medicines is cheaper at least by 50% and in some cases, by 80% to 90% of the market price of branded medicines. The product basket of PMBJP comprises 1759 medicines and 280 surgical & consumables for sale through PMBJKs. In the current financial year, i.e., 2022-23 till 28.02.2023, 565 new PMBJKs have been opened, and PMBI has made sales of Rs. 1095 Crore which led to savings of approximately Rs. 6600 Cr. to the citizens.[9]

The introduction of the eSanjeevani OPD scheme is yet another landmark health project of the Government of India. Launched in April 2020,[10] it is the national telemedicine service of India, which enables the availability of telemedicine services to the needy people nationwide. This technological health intervention scheme is the world's largest telemedicine implementation scheme in the primary healthcare. More than anyone, it has proved to be a blessing for people in rural areas, where reaching health services was a difficult task. Run through the ICT, it has emerged as a game changer in transforming the primary health care services in India. Government records demonstrate that eSanjeevani has crossed a landmark milestone by providing telemedicine services to over 10 crore beneficiaries, The telemedicine services have been availed by more than 57% female beneficiaries around 12% beneficiaries are senior citizens. More than that 100.11 million patients were served at 115,234 Health & Wellness Centres (as spokes) through 15,731 hubs and 1,152 online OPDs populated with 229,057 medical specialists and super-specialists trained in telemedicine. eSanjeevani has been augmented further to support over 1 million consultations in a day, so far, the platform has peaked to serve 5,10,702 patients in a day.[11]

A bottom-up approach

Following the Gandhian notion of *"Antyoday"*, India's contemporary governance is marked by the *"Policy of Saturation and Reaching the Last Mile"*. As explained by Prime Minister Modi in his fourth post-Budget Webinar on "Reaching the last mile", the fourth of the series of 12 webinars organized by the government, it consists in maximum coverage of government schemes, i.e., saturation of government policies, to the most vulnerable sections and reaching the doorsteps of the poor for the delivery of basic facilities to them. *"This is the spirit behind the policy of saturation. When our aim is to reach everyone, then there will be no scope for discrimination and corruption. And only then, we will be able to complete the goal of reaching the last mile…. Thus, the goal of reaching the last mile and policy of saturation complement each other."*[12]

Contrasted to earlier times, when people at the grassroots were deprived from basic services due to corruption and red-tapis making them run after the government for their delivery, the 'new approach', it emphasizes the importance of good governance in accomplishing the goal of reaching the last mile. This approach has been applied by the government to provide good governance to people in all sectors of national life. The use of technology is sought to be used in the implementation of the saturation policy, which will also ensure transparency and accountability in the delivery of the basic services and welfare schemes to the last person of the society.

Free and universal coverage of immunization and vaccination provided to one and all under *Mission Indradhanush* without any discrimination during Covid Pandemic is an example of this approach. Reaching out to the most deprived sections--the Pasmanda Muslims and the tribals-for which the government has created special welfare policies are further examples of this new governance.

This new approach though not totally unprecedented as earlier governments too claimed to be people-oriented, their approach was ridden with numerous flaws and gaps, with the weak and the bottom-most nowhere in the picture! Middle-men and office bearers/service providers extracted the cost of the services delivered by them, even to the most vulnerable sections, like the widows, the destitute and the orphans, leave aside the other vulnerable sections. However, a whiff of fresh air marks the latest edition of governance, which has been reaching the doorsteps of the beneficiaries at the grassroots and citizens in the urban areas. This is enabled by constant monitoring by government authorities and consumers' feedback of the services availed by them. To a large extent, a consciously-driven non-discriminatory and even-handed approach has been responsible for giving effect to social welfare policies crafted for the bottom most segments of the society. Government policies like *Ujjvala* under PMUY are focused on the most vulnerable and the disadvantaged sections of people. Till now, around 9.59 crore people have benefited under this scheme. The migrants have been a special focus of PMUY in the FY-21-22 Union budget. Likewise, houses have been sanctioned to the most destitute under the PM Awas Yojna (PMAY). A massive 2.28 crore houses under the PMAY -R and 122.69 lakh houses under PMAY-U have been sanctioned, out of which lakhs of houses are distributed in both categories.

Linking governance with Technological innovations, E-governance and Digitisation

Good governance today has become synonymous to e-governance and technology-driven development. Though E-governance marked its advent in India at the turn of the century, the new found focus in the post-2014 period makes it distinctly special. Linking all areas of governance with technology, converting official records into digitisation and giving effect to computerization and equipping it with internet/wireless connections are increasingly gaining pace.

So as to give wings to development, the Government of India launched the ambitious *Digital India* initiative in 2015. The central objective was to enable the delivery of government services to the citizens electronically through online infrastructure and internet connectivity, and to connect the rural areas with high-speed internet networks.[13]

Thus, linking governance with development through technology is the principal objective of the Digital India Initiative. The all-round use of technology in implementing government schemes and projects has yielded impressive results of people, be it administering the Covid vaccines, running the healthcare services, the DBT schemes for the vulnerable sections or remitting money to the farmers' accounts or checking the money laundering by unscrupulous elements. Thus, it was said by Prime Minister Modi that Digital India campaign has witnessed a more human-centric approach to development. and that his governance model is 'technology first' and through technology, human dignity has been enhanced."[14]

The delivery of essential public services through E-governance has given wings to e-commerce, e-payments, e-transactions and more importantly has ensured a seamless delivery of online public services. One of the most successful stories has been the Unified Payment Interface (UPI). Billions of transactions worth trillions of rupees have been taking place over the last ten years. So much so, that UPI payment touched a record high of Rs. 14.3 trillion in terms of value and 9.41 billion in volume in May 2023. Reports suggest that UPI will take over 90 percent of retail digital payments in the next five years.[15] Today, India has emerged as the world's top nation in digital payments, beating China. India's payments are more than the digital payments made in the next four leading countries combined.[16]

Over the last nine years, India has witnessed rapid digital transformation with the number of internet users soaring to a record high of more than 759 million users in 2022.[17] For the first time, the active internet base crossed half the population of the country. The continuous rise in internet users is facilitated by the rapid digital transformation of India under the Digital India initiative launched in 2015. Aided by relatively low-cost cheap data tariffs, the internet accessibility stands fairly distributed between urban and rural areas at 360 and 399 million users, rendering the debate on urban-rural divide infructuous. The internet base is expected to reach around 900 million by 2025 and touch the figure of 1.5 billion by 2028.[18]

Financial inclusion - the* *JAM Trinity*

A paradigm shift in the modern-day governance is marked by the realisation that governance cannot be complete without the financial inclusion of the vulnerable sections. A root cause of the vulnerability of masses stems from their financial exclusion. Hence, the financial integration of the weak was launched on war footing at the very inception of the Modi government in 2014. Financial inclusion is described as "the process of ensuring access to financial services, timely and adequate credit for vulnerable groups such as weaker sections and low-income groups at an affordable cost".[19]

The *"Jandhan-Adhar-Mobile"* forms the Trinity of the financial integration of the underprivileged sections. The first part of the JAM Trinity pertains to the opening of bank accounts of the poor sections, who had remained bankless and away from banking services. Thus, the *Pradhan Mantri Jan Dhan Yojana* (PMJDY) was launched in 2014 with the avowed objective of "promoting equitable and inclusive growth as well as delivery of financial services at an affordable cost to vulnerable groups such as low-income groups and weaker sections that lack access to basic banking services".

On the 9th anniversary of the PMJDY, it was informed by the government that PMJDY-led interventions and digital transormation have revolutionised the financial inclusion in India. More than 50 crore people have been brought into the formal banking system through the opening of Jan Dhan Accounts. Among these accounts, approximately 55.5% belong to women, and 67% have been opened in Rural / Semi-Urban areas. The cumulative deposits in these accounts surpass Rs. 2 lakh crore. Furthermore, about 34 crore RuPay cards have been issued to these accounts without charge, which also provides for a Rs. 2 lakh accident insurance cover."[20] These accounts account for Rs. 2.03 lakh crore in deposits till August 18, 2023, which stands deposited as of today.[21]

The 2014 Jandhan accounts scheme was followed by another concomitant initiative in the form of the Aadhar Card Scheme. The scheme heralded under the Aadhaar Act, 2016 established The Unique Identification Authority of India (UIDAI) on July 12, 2016. under the Ministry of Electronics and Information Technology (MeitY) with the objective of national mapping of the adult population by issuing the Aadhar cards. A total of 138.08 crore Adhar cards had been issued by the UIDAI till September 29, 2023, thus bringing 99 percent of the adult population under unique identity numbers.[22] The linking of the

Jandhan and the Adhar with the mobile number of the individual marks the completion of the national registration process. Nearly 510 million out of the total 630 million Permanent Account Numbers (PAN) have been linked by March 2023, which forms around 80 percent linking of PAN-Aadhar. This marks an effective step in the direction of national, financial and individual security.

Strong emphasis on economic and structural reforms for self-reliant Aatma Nirbhar Bharat

Good governance cannot materialize in a static economic environment with sick public sector units and low performing industrial sector. Market reforms were thus introduced with the adoption of globalization in 1990. However, during the last nine years, widespread reforms have been introduced in several sectors, the prime being the Goods and Services Tax (GST). Coming into effect on 1st July 2017, it brought some1.3 million taxpayers into the country's unified indirect taxation system. The chronic NPA issue afflicting the banking sector led to the enactment of the Insolvency and Bankruptcy Code (IBC) which enabled banks to recover their debts. From time to time, government has funded the state-run banks that has brought down the NPA.[23] Real Estate Regulation Authority (RERA) is another notable reform introduced in the real estate sector in 2016, a sector which contributes around 13 percent to the country's GDP. The reforms have worked to tide over corrupt practices rampant in the real estate business in pre-2014 period and to fix accountability of the developers, while boosting an all-round confidence of all stakeholders- the investors, buyers, developers and the consumers. Other reforms effected such as are, reduction in the corporate tax from 30 percent to 25 percent, ending of retrospective taxation of cross-border investments, allowing more than 50 percent foreign investment in insurance, allowing more than 50 percent in foreign investment in defence.[24]

The *Gati Shakti National Master Plan for Multi-modal Connectivity* (GSNMP), a 100-crore mega infrastructure connectivity project introduced by the Modi government in October 2021, is aimed at enhancing logistical efficiency in business operations across and movement of people, goods and services from one mode of transport to another. The ambitious plan is expected to generate large-scale employment, improve supply chains, make local goods qualitatively competitive globally and cut down on logistics costs.[25] The new Foreign Trade Policy announced by the Modi government envisages to boost Indian exports, as well as, to take Indian goods and services export to USD 42 trillion by 2030.[26] Consequent to far reaching economic and structural reforms, a record FDI inflow of USD 83.57 billion in the FY 2021-22 was recorded. The forex reserves of India today stand at around 600 billion USD.[27]

Government's rejuvenating* *policies

The post-2014 governance is conspicuous by its resuscitating and rejuvenating policies aimed at harnessing local talent, skills and entrepreneurial activity to give boost to development and capital generation. At a time, when India witnessed a dip in its annual growth rate recording 5.24% (2011), 5.26% (2012) and 6.39% (2013) from a high of 7.86% (2009) and 8.50% (2010), the advent of the NDA dispensation under the Modi leadership, marks a marked shift in governance that revolves around its philosophy of development. Government has reiterated from all big forums that modern-day governance needs private investment, entrepreneurial initiative and an enabling environment to give fillip to economic growth and development. Giving sizeable space to private sector and liberalizing government policies for facilitating socio-economic growth and social welfare is a part of this governance philosophy.

All government development projects are a logical outcome of its belief that without private investments and entrepreneurship, no governance can be complete and no government can meet massive expenditure needed for development, which often is capital-intensive. The rising needs, aspirations and expectations of people in a democracy can be meet only with increased capital investment and involvement of people in developmental activities. In line with this reasoning, post-2014 Modi governance has seen several rejuvenating policies aimed at giving space to entrepreneurs, such as *Start-up India, Make-in-India, MSME, Atma Nirbhay Bharat, Vocal for Local, ODOP, Hunar Haat* and the like. These policies have given unprecedented push to employment generation, wealth creation, economic stabilization and technological innovations. An impressive success story pertains to the Start-ups, which have seen a 260-fold increase from 350 before 2014 to the present. More than 100 Unicorns have blossomed out of these Start-ups and several of them are moving to Deca-corns. It is expected that India will have around 200 unicorns by 2025, accounting for 37,000 tech startups, with 180-200 unicorns with a cumulative valuation of US$ 600-700 billion."[28]

The recent *Global Investors Summit-2023* in U.P. attracted an unprecedented 35 lakh crore investments from foreign and domestic investors, clearly indicating the investors' growing confidence in governance reforms and capacity of the State. During the three-day summit from 10 to 12 February, 2023, a total of 18,643 Memorandum of Understanding (MoUs) for investment intents, worth Rs 35 lakh crore, were signed by the UP government, paving way for the State to becoming the One Trillion-dollar economy by 2025. It is expected that the investment proposals will lead to the creation of 93 lakh employment opportunities in the state.[29]

The impressive investments in the U.P. GIS thus prompted Prime Minister Modi to say, "if India is considered a 'bright spot' on the globe, Uttar Pradesh is playing a leadership role in driving India's growth, adding, "there has been improvement in every field in the state in 5-6 years from electricity to connectivity."[30] By getting investments in all fields of development, it is expected that the state will generate thousands of employment and contribute to both the State and the national GDP. Today, most of the States in India are organising such investors meet and inviting private capital and initiative. A healthy competition among States is on the rise opening fresh doors to the governance paradigm in the 21st century.

Scams, Scandals and Corruption-free governance

A striking feature of the present-day governance is characterized by a leakage-free governance! Contrasted to the UPA's 2004-2014 era where big time corruption became the order of the day, the present government has relentlessly focused on clean and efficient governance. Development and cleanliness were the two planks on which the present NDA dispensation came to power in 2014 and have since been working on these themes. To make this a reality, the *Swatch Barat Abhiyan'* (Clean India Mission) was launched on 2nd October 2014 focusing on sanitation and providing it on the universal basis to all people in India as a matter of basic human right.[31]

Over the years, this cleanliness drive has been extended and expanded to include the drive against corruption, both at the political and administrative levels. The government's policies and actions have been designed to create a 'Clean India' by ensuring efficiency and transparency in government departments and administrative dealings. State anti-corruption and investigative agencies, such as the CBI, CVC and ED have been employed to unearth illegal transactions and wealth accumulation by scrupulous elements. The government has emphasized on creating a mechanism to rank government departments on the basis of pending corruption cases against officials akin to the Swatch Bharat rankings and publishing its report on periodic basis. Expressing his views on combating corruption at the Vigilance Awareness Week organized by the Central Vigilance Commission, Prime Minister Modi asserted:

"We should have a system where corruption-related disciplinary proceedings are completed in time-bound mission mode. We should devise a way of ranking departments on the basis of pending corruption cases and publishing the related reports on a monthly or quarterly basis, on the lines of the Swachhta (cleanliness) rankings. There is also need to streamline the vigilance clearance process with the help of technology and a need for auditing the data of public grievances so that we can go to the root causes of corruption in the department concerned."

Paying rich tributes to Sardar Patel, he said:

"The entire life of Sardar Vallabhbhai Patel was dedicated to honesty, transparency and the building of a public service system based on these values. The campaign revolving around awareness and alertness is based on these principles. The campaign of Vigilance Awareness Week is taking place to realise the dreams and aspirations of a corruption-free India. All government agencies should work to change the system and tradition of corruption as India is celebrating 75 years of Independence."[32]

To create a corruption-free ecosystem and to minimize the leakages in government resources reaching the vulnerable sections at the grassroots level, the post-2014 governance has resorted to the use of technology and banking reforms on a wide scale. The opening of *Jandhan Accounts,* specially of people working in unorganized sectors and having no access to banking system, and the *Direct-benefit Transfer* (DBT) of government money in their *Jandhan accounts* have been done on a vast scale. In addition, several steps have been taken by the government to realise a clean, efficient and transparent governance. Dwelling on the need to strike at the very roots of corruption, Modi observed:

"For a very long time, the lack of amenities and opportunities was deliberately kept alive and a gap was allowed to widen leading to an unhealthy competition in a zero-sum race. This race fed the ecosystem of corruption. Corruption created by this scarcity affects the poor and middle classes the most. If the poor and middle class spend their energy to arrange for basic amenities, then how will the country progress? That is why we are trying to change this system of scarcity for the last eight years. We are trying to fill the gap between supply and demand.

The three ways adopted to achieve this are advancement in technology, taking basic services to the saturation level, and finally heading towards atmanirbharta (self-reliance)."[33]

Restoring trust between the governed and the government

Due to frequent scams and scandals rocking the UPA government, particularly during its second tenure, pessimism, skepticism and cynicism towards government came to harbor the people's psyche. That corruption was no more a point of discussion, that it was a non-issue and the accepted Indian way of life became the dominant thinking of the people! This erosion of trust and democratic deficit, that marked the pre-2014 governance between the citizens and the State, has been sought to be dispensed away by the current dispensation. So as to galvanise the governance process, the principle of *"maximum governance, minimum government"* was introduced by the post-2014 government. A number of innovative steps have been taken to ensure a citizen-centric, accountable and responsive governance, and one of them being the scrapping of several out-of-use and redundant legislative enactments from the government's statute books. More than 2000 laws have been repealed in the cleansing exercise and many more of them are being shortlisted for the guillotine. It has been reported that while 1159 outdated laws were repealed by successive governments, 1301 redundant laws have been weeded out since 2014. The deletion was also caused as several provisions of the old Acts were incorporated in the new legislations from time to time. The removal of outdated and infructuous have contributed to the ease of living and ease of governance.[34]

One of the biggest reforms processes initiated recently in the statute books have been the move to replace the colonial-era IPC, CrPC and the Indian Evidence Act. Three bills were introduced by the government in the Parliament in August 2023, namely the *Bhartiya Nyaya Sanhita* Bill 2023, *Bhartiya Nagrik Sukraksha Sanhita* Bill 2023 and the *Bhartiya Sakshya* Bill 2023 respectively that seek to repeal and replace the British-era IPC 1860, Criminal Procedure Code 1872 and the Indian Evidence Act, 1872. The thrust of these new codes of law will be to dispense *"justice instead of punishment"*.[35]

The passage of these bills, will for the first time, herald a definition of "Terrorism", death for the rape of minors and a new penal code on 'mob lynching' and the repeal of 'sedition'. The use of digital technologies has been incorporated in the new bills.

Overall, the bills, when passed will mark the end of the symbols of the colonial rule, smoothen the effective functioning of the legal proceedings and revamp the Indian criminal justice system. It is expected that crores of cases pending in various courts of India will be smoothened out and will pave way for the *"legal renaissance"*.[36]

Another notable step taken was the doing-away with the age-old practice of attestation of certificates of students and aspirants for the competitive services, who were required to submit their documents duly signed by the gazette officers. In one stroke, the government abolished this pernicious practice and replaced it with self-attestation, giving a strong message to the students that the government reposes faith in them and their integrity. It is to be noted that the practice of attestation of documents by government officers was a gate way to corruption and harassment for the students. The government realized this evil, struck hard on it and provided a timely remedy to the students.[37]

Another notable measure has been the discontinuation of interviews in all the central ministries and departments for selection to the junior/subordinate level posts. The basic objective behind this move is to provide a level-playing field to the aspirants, without allowing the socio-economic background of aspirants to become a handicap for them.[38]

In a major step aimed at ushering in ease of living to the elderly citizens, the 'face recognition technology' was substituted for the earlier cumbersome process of producing life-certificate by senior citizens to avail the continuation of pension. The introduction of technology has enabled the pensioning process being converted to online process thereby bringing accountability and transparency and reducing human interface in the system. This has brought a great relied to the old and aged pensioners, thus marking a revolutionary step in the governance process.[39]

So as to ensure a responsive democracy and give vent to people's voice, far-reaching reforms were introduced in the grievance redress system. The Centralised Public Grievance Redress and Monitoring System (CPGRAMS) has been introduced in many more government ministries and departments, made more effective, cutting down on time and providing reliable information and solutions to people's complaints/ grievances. As a result, around 20 lakh grievances are received every year to the 2 lakh grievances a year in the pre-2014 period.[40]

The grey areas of governance

However, India's governance scenario is interspersed with certain drawbacks. The recent shifts in governance paradigms present a mixed picture--rosy at the macro level and worrisome at the micro level. Instances of mal-governance/bad governance exists at the social and local levels, while better governance prevails in the economic and industrial domains.

Urban governance at the grassroots is crumbling under the ever-increasing pressure of population and migration from rural areas. In the absence of adequate development in rural and semi-rural areas, people are flocking to cities in search of employment and livelihood. This has choked urban life and wrought untold pressure on urban infrastructure and facilities.

According to the July 2020 final report of the technical group on population projections constituted by the National Commission on Population (NCP) under the Ministry of Health and Family Welfare, India's population is projected to grow by 25%, reaching 1.52 billion by 2036. This marks an increase of 311 million from 1.21 billion (2011 census) to 1.52 billion by 2036. The report that says that 70% of this increase will be in urban areas. India's urban population will increase from 377 million in 2011 to 594 million in 2036–a growth of 57%. Thus, while 31% of Indians were living in urban India in 2011, that will grow to 39% by 2036. As a result, the proportion of the rural population will decline from 69% to 61% as the urban population is projected to increase more than twice the projected increase in the rural population. The state of Delhi, which was 98% urban in 2011, will be 100% urban by 2036. In addition, Tamil Nadu, Kerala, Maharashtra, Telangana and Gujarat will all be more than 50% urban, the report predicts.[41]

The choking of the cities in India has inevitably led to multifarious problems with pollution being one of the major ones. Pollution of all sorts and delivery failure of essential civic services have been the many fallout of the civic governance at the micro level. A study conducted by the International Institute for Applied Systems Analysis (IIASA) in Austria and the Council on Energy, Environment, and Water (CEEW) in New Delhi, reveals that Indian citizens are likely to breathe air with high concentrations of PM2.5 in 2030 with current policies and measures.[42]

This worsening of air quality levels is directly attributed to the ever growing traffic in India's urban areas. The expansion of the urban areas and the increasing volume of vehicles on the roads without a consequent widening of the roads has led to another problem of congestion and traffic jam. According to a report of the Boston Consulting Group, the total cost of congestion in India in 2019 was a whopping 22 billion dollars. If urgent action is not taken, this cost is expected to escalate to 37 billion dollars by 2030 posing untold civic and health problems to the urban dwellers.[43]

The rapid increase in India's urbanization and the ever increasing migration of people from rural to urban areas in search of employment or livelihood, has given rise to the problem of urban slums. The illegal settlements and shanties coming up in almost every cities and the presence of large-scale slums in almost every major city and beggars loitering the urban streets and localities is a gruesome picture that meets one's eyes while going around the city. It is estimated that around 6.5 crore of India's urban population resides in slums, which constitutes around 35.2 percent of India's urban population.[44]

It's painful to see that despite the increasing financial strength of municipal corporations and the improving economic might of state governments, the problems of slums, beggary and garbage piling at street corners still remains unresolved!! Administrative apathy and corruption have added to the prevailing pathetic situation. Cities after cities going down in water at the very start of the rainy season are a case in point that amply demonstrates the administrative failure, rampant corruption and weak government. Mumbai is India's wealthiest municipal corporation and yet Mumbai submerges in rains is a telling story of systemic political, administrative and civic failures.

This brings one to the conclusion that while market reforms are easier to affect, civic and municipal reforms remain the real challenge before today's governance. The same goes with rural governance too. Most States present a disturbing picture of rural neglect and apathy. The lack of health and educational infrastructure, and livelihood opportunities contribute to the worsening of rural governance. Hardly there is any governance worth its name exists there. One of the several reasons for the difficulties encountered in effecting civic and municipal reforms is the financial constraint faced by most of the States and the consequent lack of will power of the state governments. Capital-intensive urban infrastructure projects crumble due to the lack of matching resources. The problem is further complicated by the lack of sufficient government staff, untrained or semi-trained staff which is not adept in handling technical work, the lack of coordination between and among municipal departments, the absence of work culture and the prevailing corruption in local institutions all have contributed to the urban woes. Civic and municipal reforms have not kept pace with the pace of urban population and urban migration. Resultantly, things have worsened and reached alarming levels today. As such, there is a dire need of a massive transformation to de-choke and cleanse the cities from plethora of unmitigated problems.

Conclusion

Justice to All, Appeasement of None and *Minimum Government, Maximum Governance* marks the paradigm shift in India's post-2014 governance .As a result, governance has taken new strides in all directions and aspects of national life. Economic growth, prosperity and development reaching across diverse sections of society and touching the lives of the disadvantaged and vulnerable sections in large measures is a cumulative result of reformed governance and administration, Aided by a strong, determined, decisive and upright political leadership, the country has been fast moving on a path of governance that is inclusive, sensitive, responsive and action-oriented. One of the hall marks of the governance in New India is its being largely taint free and bereft of scams and scandals which marred governance in pre-2014 period The cleanliness in governance, administration and people's lives have largely been possible due to technological innovations, interventions and digitisaton. Greater use of modern means of information and communication have indeed given wings to development and economic prosperity However, despite impressive achievements, governance needs to be further streamlined and reoriented towards addressing people's problems encountered in their day-to-day lives, in urban and rural areas both. The need, is to infuse greater dynamism, and responsiveness to governance efforts to achieve the last mile to achieve the goal of *Antyodaya* and *Sarvodaya*. The wheel will come a full cycle when all are incorporated in the new paradigmatic shift of governance that marks the making of the New India.

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Exploring the Dynamics of Maternal and Child Health in Rural Uttar Pradesh: An Investigation of Institutional Delivery Choices, Factors, and Trends

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Abstract

Introduction: India has registered a significant decline in Maternal Mortality Ratio (MMR) recording a 22% reduction in such deaths since 2013. Sample Registration System (SRS)

Objectives: (1) To find out the factors influencing the choice of place of delivery in women of rural Uttar Pradesh. (2) To identify the factors associated with maternal and child health. (3) Magnitude and trend of Utilization of institutional delivery services.

Materials and Method: The complete investigation is grounded upon secondary data sourced from the National Family Health Survey (NFHS)-5 undertaken during the period of 2019-21. In order to accurately portray the outcomes, a binary (0, 1) logistic regression analysis has been executed.

Result: The findings indicate that several influential factors influenced the choice of delivery location in India. Moreover, the outcome of the binary logistic regression analysis revealed a significant disparity in the probability of delivering in a healthcare institution among ever-married women i.e. The adjusted odds ratio among the women aged 25-34 years who received antenatal care was high [AOR:0.362, 95% CI:0.317-0.414 & $p<0.01$] which indicates that they were more likely to deliver at institution either public or private than the women who didn't received antenatal care and the women who are richest [AOR:0.689,95% CI:0.533-0.891 & $p<0.01$] were more preferred institution in case of delivery than the women who are poor in India. The women with higher education [AOR:0.639, 95% CI:0.534-0.764 & $p<0.01$] are preferring their delivery in institution than those who are less educated. Those women who doesn't belongs to SC/ST or OBC category preferred to deliver in institutions with [AOR:0.852, 95% CI:0.748-0.971 & $p<0.05$]. The women whose BMI is high i.e. who are overweight/obese preferred to deliver at health center with [AOR:0.816, 95% CI:0.723-0.920 & $p<0.01$]. The women with parity two are more likely to deliver in health care centers with [AOR:2.683, 95% CI:2.274-3.166 & $p<0.01$].

Conclusion: The study emphasizes the importance of addressing the economic situation of women in rural Uttar Pradesh to enhance health outcomes for mothers and children. Measures should be taken to enhance healthcare access for women from lower wealth groups. Furthermore, the increase in institutional deliveries suggests the effectiveness of government initiatives in promoting such deliveries in rural Uttar Pradesh.

Introduction

The maternal mortality rate (MMR) in India has been historically high, but recent data indicates a decline. However, accurately calculating MMR is challenging without comprehensive death records. To estimate MMR, surveys and census data, as well as Reproductive Age Mortality Studies (RAMOS), are used. In India, the Sample Registration Survey (SRS) is relied upon to obtain estimates of MMR, with the Office of the Registrar General releasing a bulletin on Maternal Mortality in March 2022[1].

Methodology

Study design: Cross sectional record-based study

Study Area: Rural Uttar Pradesh.

Data source: This cross-sectional study is procured from the fifth round of the National Family Health Survey (NFHS-5), 2019-2021. It is a wide reaching nationally representative sample survey done in 2019-2021 conducted by International Institute for Population Sciences (IIPS) and supervised by Ministry of Health and Family Welfare (MoHFW), Government of India. It covers all 28 states and 8 union territories and also provides

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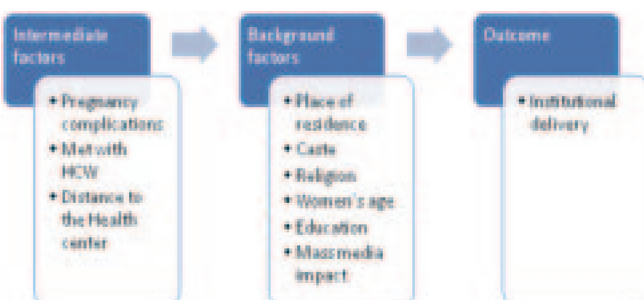
information on all 707 districts in India. NFHS-5 was mapped out to provide information on husband's background and women's work; sexual behavior; HIV/ AIDS knowledge, attitudes, and behavior; and domestic violence only at the level of state (in the state module), while indicators in the district module are reported at the district level[2].

The sampling technique used for NFHS-5 is two-stage stratified sampling. For the election of PSUs (Primary sampling Units), Census of 2011 served as the sampling frame. A detailed sampling design, technique and procedure of survey has been apportioned in the national report of the NFHS-5[3].

Study participants

Participants in the state of Uttar Pradesh rural were confined to women having age between 15-49 years who had given birth to at least 1 child in the last 5 years (n =36104) after removing missing observation. In rural Uttar Pradesh Institutional delivery (n=29920) and Non-Institutional delivery (n=6184). The final sample comprised of 29807 women within reproductive age who had institutional deliveries in Uttar Pradesh were considered for analysis. After the data were properly filtered and cleaned for relevant indicators were used for data analysis[2].

Flow chart



Variable description:

Outcome Variable	
Place of delivery	Yes i.e. Institutional delivery-coded as 1 No i.e. Non-Institutional delivery-coded as 0
Explanatory Variable	
BMI of mother	< 18.49 kg/m2 - Underweight, 18.50-24.9 kg/m2 - Normal, ≥25 kg/m2 - Overweight or obese
Parity	1,2,3, ≥4
ANC visits	No visit, 4-5 visit, > 5 visit
Wealth Index	Poorest, Poorer, Middle, Richer, Richest
Highest educational level of mother	No education, Primary, Secondary, Higher
Type of place of residence	Urban, Rural
Caste	Scheduled Caste/Scheduled tribe, OBC, Others
Religion	Hindu, Non-Hindu
Mother's age at marriage	15-24 years, 25-34 years, 35-49 years
Mother's age at first birth	Less than or equal to 19 years, 20-29 years, greater or equal 30 years

Statistical analysis

Bivariate analysis was done to assess the relationship between the dependent and independent variables. The analyses were done after eliminating list wise cases of missing, flagged and no information from the NFHS 5 data. The Binary logistic regressions model was made to appreciate the associated predictors with the choice of institutional deliveries. Appropriate assumption was checked before fitting logistic regression modeling.

The statistical formula for the multiple logistic regression model is given below:

$$\phi_i = f(x) = \begin{cases} \mathbf{1}, & if\ \ Institutional\ delivery \\ \mathbf{0}, & Otherwise \end{cases}$$

Logistic regression model:

$$\log\left(\frac{\phi_i}{1-\phi_i}\right) = \beta_0 + \beta_1 x_1 + \beta_2 x_2 + \beta_3 x_3 + \ldots\ldots\ldots\ldots + \beta_n x_n$$

Where and βi (i = 0, 1, 2….12) are the regression coefficients associated with the reference group and the x_i predictor variables of institutional deliveries. The regression results are conferred by adjusted odds ratio (AOR) and a 95% confidence interval (CI).

Results

Table 1: Individual and socio-cultural characteristics of ever-married women aged 15-49 years who had at least one live birth in the last 5 years preceding the survey, India, 2019-2021

Type of delivery	Frequency	Percent
Non-institutional delivery	6184	17.1
Institutional delivery	29920	82.9
Total	36104	100.0

Received antenatal care for pregnancy	Frequency	Percent
No	1594	4.4
Yes	26072	72.2
Total	27666	76.6
Missing	8438	23.4
Total	36104	100.0

Religion	Frequency	Percent
Hindu	30504	84.5
Muslim	5522	15.3
Others	78	.2
Total	36104	100.0

Belong to a scheduled caste, a scheduled tribe, other backward class	Frequency	Percent
Schedule caste	10320	28.6
Schedule tribe	633	1.8
OBC	19530	54.1
None of them	5435	15.1
Don't know	73	.2
Total	35991	99.7
Missing	112	.3
Total	36104	100.0

Age in 5-year groups	Frequency	Percent
15-19	426	1.2
20-24	9620	26.6
25-29	15349	42.5
30-34	6999	19.4
35-39	2787	7.7
40-44	733	2.0
45-49	188	.5
Total	36104	100.0

Current marital status	Frequency	Percent
Never in union [includes: married gauna not performed]	25	.1
Married	35776	99.1
Widowed	203	.6
Divorced	14	.0
No longer living together/ separated	86	.2
Total	36104	100.0

Living children + current pregnancy (grouped)	Frequency	Percent
0	248	.7
1	6721	18.6
2	12630	35.0
3	8804	24.4
4	4347	12.0
5	1966	5.4
6+	1388	3.8
Total	36104	100.0

Highest educational level Education level	Frequency	Percent
No education	11366	31.5
Primary	5196	14.4
Secondary	14562	40.3
Higher	4980	13.8
Total	36104	100.0

Respondent's occupation (grouped)	Frequency	Percent
Not working	4495	12.5
Professional / technical / managerial	57	.2
Clerical	12	.0
Sales	63	.2
Services/household and domestic	103	.3
Agricultural	467	1.3
Skilled and unskilled manual	149	.4
Other	35	.1
Total	5381	14.9
Missing	30723	85.1
Total	36104	100.0

Husband/Partner's Age		
Age group	Frequency	Percent
25 and less	985	2.7
26-35	3443	9.5
36-45	795	2.2
46-55	99	.3
56 and above	15	.0
Total	5337	14.8
Missing	30766	85.2
Total	36104	100.0

Husband/partner's education level	Frequency	Percent
No education	1005	2.8
Primary	689	1.9
Secondary	2814	7.8
Higher	860	2.4
Don't know	12	.0
Total	5379	14.9
Missing	30724	85.1
Total	36104	100.0
Wealth index combined	**Frequency**	**Percent**
Poorest	11720	32.5
Poorer	10652	29.5
Middle	6684	18.5
Richer	4503	12.5
Richest	2545	7.0
Total	36104	100.0

Table 1 represents that the women of reproductive age group who gave birth in last 5 years of which 82.1% of delivery was institutional, and a total of 72.2% women received the antenatal care, 85.5% of the women surveyed were Hindu, while 15.3% were Muslims. Maximum i.e. 54.1% women belongs to OBC category while 28.6% were SC's. Maximum i.e. 42.5% women are of age group 25-49 years. 35% of women having two children or currently pregnant. Education level of 40.3% women is secondary education. Only 12% of women are working. 32.5% of women reported as poorest category.

Table 2. Reasons for not delivering in health centers

Reasons for not delivering in institution in India, 2019-21	Frequency	Percent
Reason didn't deliver at health facility: cost too much	652	10.5
Reason didn't deliver at health facility: facility not open	358	5.8
Reason didn't deliver at health facility: too far/no transport	358	5.8
Reason didn't deliver at health facility: don't trust facility/ poor service	174	2.8
Reason didn't deliver at health facility: no female provider	141	2.3
Reason didn't deliver at health facility: husband/family didn't allow	869	14.1
Reason didn't deliver at health facility: not necessary	1220	19.7
Reason didn't deliver at health facility: not customary	154	2.5

Table 2 represents the reasons stated by females of age 15-49 years why they did not choose to deliver at delivery center. The women who didn't deliver at health center out of them around 20% think it's not necessary while only 2.3% said that they could not find the female service provider [4-5].

Table 3. Coverage of health insurance

	Frequency	Percent
Covered by health insurance	2159	6.0
Health insurance type: Employees State Insurance Scheme (ESIS)	31	.1
Health insurance type: Central Government Health Scheme (CGHS)	98	.3
Health insurance type: State Health Insurance Scheme	14	.0
Health insurance type: Rashtriya Swasthya Bima Yojana	145	.4
Health insurance type: Community Health Insurance Programme	4	.0
Health insurance type: Other health insurance through employer	16	.0
Health insurance type: Medical reimbursement from employer	2	.0
Health insurance type: Other privately purchased commercial health insurance	18	.1
Health insurance type: other	1841	5.1

Table 3 shows the data regarding the beneficiaries of health insurance schemes only 12% of females are covered by health insurance.

Table 4. Logistic regression analysis on the determinants of institutional delivery (1 = Institutional Delivery; 0 = Home Delivery) in India, 2019-21

Variable	Categories	B	S.E.	Wald	df	Sig.	Exp(B)	95% C.I.for EXP(B)	
								Lower	Upper
ANC Visits	No visit®								
	1-4	-1.016	0.068	223.535	1	0.000	0.362	0.317	0.414
Wealth index combined	Poorest®			42.830	4	0.000			
	Poorer	-0.669	0.123	29.653	1	0.000	0.512	0.402	0.652
	Middle	-0.479	0.122	15.469	1	0.000	0.619	0.488	0.786
	Richer	-0.426	0.125	11.657	1	0.001	0.653	0.511	0.834
	Richest	-0.372	0.131	8.041	1	0.005	0.689	0.533	0.891
Educational level	No education®			181.396	3	0.000			
	Primary	-1.033	0.095	117.163	1	0.000	0.356	0.295	0.429
	Secondary	-0.817	0.101	65.719	1	0.000	0.442	0.362	0.538
	Higher	-0.448	0.091	24.004	1	0.000	0.639	0.534	0.764
Caste	Sc/ST®			12.795	2	0.002			
	OBC	-0.257	0.073	12.450	1	0.000	0.773	0.670	0.892
	Others	-0.160	0.066	5.801	1	0.016	0.852	0.748	0.971
Religion	Hindu®			3.041	2	0.219			
	Muslim	-0.249	0.494	0.255	1	0.613	0.779	0.296	2.051
	Others (Sikh/jain/budhist)	-0.348	0.496	0.493	1	0.483	0.706	0.267	1.866
Age-group of women	15-24®			2.267	2	0.322			
	25-34	-0.082	0.090	0.825	1	0.364	0.922	0.773	1.099
	35-49	-0.097	0.065	2.201	1	0.138	0.908	0.799	1.031
Women's Age at birth	Less than or equal 19			21.687	2	0.000			
	20-29	-0.055	0.178	0.095	1	0.758	0.947	0.667	1.343
	Greater or equal 30	0.156	0.173	0.823	1	0.364	1.169	0.834	1.640
BMI	Underweight®			24.521	2	0.000			
	Normal	-0.359	0.073	24.400	1	0.000	0.698	0.605	0.805
	Overweight/Obese	-0.204	0.062	10.970	1	0.001	0.816	0.723	0.920
Parity	One®			139.939	3	0.000			
	Two	0.987	0.084	136.499	1	0.000	2.683	2.274	3.166
	Three	0.348	0.063	30.477	1	0.000	1.417	1.252	1.603
	Four or more	0.224	0.058	14.793	1	0.000	1.252	1.116	1.403

The results in Table 4 shows the outcomes of logistic regression with respect to the factors that influence institutional delivery in India among women aged 15-49 years who have given birth to at least one live child in the preceding five years, as indicated by the survey. The results indicate a statistically significant variation in the probability of delivering at a healthcare facility.

The adjusted odds ratio among the women aged 25-34 years who received antenatal care was high [AOR:0.362, 95% CI:0.317-0.414& $p < 0.01$] which indicates that they were more likely to deliver at institution either public or private than the women who didn't received antenatal care and the women who are richest [AOR:0.689, 95% CI:0.533-0.891& p < 0.01] were more preferred institution in case of delivery than the women who are poor in India. The women with higher education [AOR:0.639, 95% CI:0.534-0.764 & p<0.01] are preferring their delivery in institution than those who are less educated. Those women who doesn't belongs to SC/ ST or OBC category preferred to deliver in institutions with [AOR:0.852, 95% CI:0.748-0.971 & p<0.05]. The women whose BMI is high i.e. who are overweight/obese preferred to deliver at health center with [AOR: 0.816, 95% CI:0.723-0.920 & p < 0.01]. The women with parity two are more likely to deliver in health care centers with [AOR:2.683, 95% CI:2.274-3.166 & p<0.01].

The location of delivery is crucial for the use of maternal health care services. Institutional delivery reduces maternal mortality and protects newborns from diseases, thus decreasing neonatal mortality[6-8].

Limitations

The study relies on secondary information obtained from the National Family Health Survey (NFHS)-5 undertaken during the period of 2019-21, which may possess restrictions in relation to the preciseness and dependability of the data. The research concentrates on females between the ages of 15 to 49 who have experienced a minimum of one successful childbirth within the five years preceding the survey, which may not comprehensively portray the entire female population in India[9].

Conclusion

The study highlights the need to focus on the economic status of women in rural Uttar Pradesh to improve maternal and child health outcomes. Targeted interventions should be implemented to improve access to healthcare services for women belonging to lower wealth quintiles. Additionally, the positive trend in institutional deliveries indicates the effectiveness of government programs and policies to promote institutional deliveries in rural Uttar Pradesh.

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छात्र आत्महत्याओं के रूप में बढ़ता शैक्षणिक संकट : भारतीय समाज का एक समाजशास्त्रीय विश्लेषण

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सारांश

प्रस्तुत शोध पत्र भारतीय समाज में छात्र आत्महत्याओं के रूप में बढ़ते शैक्षणिक संकट पर आधारित है कि साल दर साल बढ़ती छात्र आत्महत्याओं की संख्या भारतीय शैक्षणिक व्यवस्था पर सवालिया निशान खड़ा करती है जोकि किसी भी देश की सामाजिक व्यवस्था और शैक्षणिक व्यवस्था दोनों के लिए बेहद चिंताजनक है। सोचने की बात यह भी है कि इसे गंभीर संकट के रूप में नहीं पहचाना जा रहा है। भारत में छात्रों की बढ़ती आत्महत्याओं की घटना को लगातार वैयक्तिगत क्रिया माना जाता रहा है, जिससे समाज और शिक्षण संस्थान दोनों अपनी जवाबदेही से बच जाते हैं। आत्महत्या के इन कारणों की पड़ताल व्यक्ति और समाज के सम्बन्धों में तलाशने का कार्य सर्वप्रथम सुविख्यात फ्रांसीसी समाजशास्त्री एमिल दुर्खीम ने किया और बताया कि आत्महत्या बहुत कुछ व्यक्ति का समाज के साथ सम्बन्ध, समाज की स्थिरता, अस्थिरता और समाज में विद्यमान मूल्यों पर निर्भर करती है, जिससे कि व्यक्ति घिरा होता है क्योंकि जहाँ आत्महत्या को एक लम्बे अरसे तक एक निजी और व्यक्तिगत कार्य माना गया है। यही वजह है कि आत्महत्या को एक आपराधिक अपराध माना गया। हालाँकि, भारत सरकार द्वारा धारा 309 में संशोधन इस प्रकार की आत्महत्या को अपराध की श्रेणी से बाहर किया गया है। हमारे देश में आत्महत्या को एक बहुआयामी मुद्दे के रूप में देखा जाना चाहिए, जिसमें व्यक्तिगत और सामूहिक अस्तित्व के आर्थिक, सामाजिक, सांस्कृतिक, मनोवैज्ञानिक और जैविक क्षेत्रों के साथ जटिल अंतक्रिया होती है। बढ़ती आत्महत्याओं का माहौल भारतीय समाज के लिए अच्छा संकेत नहीं है। किसी एक बच्चे की आत्महत्या के पीछे समाज और व्यवस्था की बहुत बड़ी नाकामी दिखती है। माता-पिता के साथ शिक्षक और समाज की जिम्मेदारी बनती है कि बच्चों के साथ सकारात्मक संवाद कायम हो और अच्छा वातावरण प्रदान किया जाए। सफलता के बनाए गए चंद पैमानों से अब हमें बाहर निकलना होगा।

परिचय

देश-दुनिया में हर वर्ष बड़ी संख्या में लोग आत्महत्या कर लेते हैं। आत्महत्या के मामले में जिसमें मृतक एक छात्र होता है, किसी भी देश की सामाजिक व्यवस्था और शैक्षिक व्यवस्था दोनों के लिए बेहद चिंताजनक है। राष्ट्रीय अपराध रिकॉर्ड ब्यूरो (एनसीआरबी) की रिपोर्ट के अनुसार, जहाँ 2020 में देश भर में कुल 12,526 छात्रों ने आत्महत्या की, वहीं 2021 में यह आंकड़ा बढ़कर 13,089 हो गया। 2020 में किसान आत्महत्या की तुलना ने छात्र आत्महत्या के मामले ज्यादा नजर आए, जहाँ किसानों की आत्महत्या को भारत में एक संकट के रूप में राष्ट्रीय बहस का मुद्दा माना दिया जाता है। वहीं छात्रों की आत्महत्या के विषय को न केवल दबाया जाता है बल्कि नजरअंदाज भी किया जाता है। 2020 में ही हर 42 मिनट में एक छात्र अपनी जान ले लेता है; यानी हर दिन 34 से ज्यादा छात्र आत्महत्या कर लेते हैं। चिंता और सोचने की बात यह है कि इसे गंभीर संकट के रूप में नहीं पहचाना जा रहा है। भारत में छात्रों की बढ़ती आत्महत्याओं की घटना को लगातार वैयक्तिगत क्रिया माना जाता है, जिससे समाज और शिक्षण संस्थान दोनों अपनी जवाबदेही से बच जाते हैं। एनसीआरबी की आकस्मिक मृत्यु और आत्महत्या रिपोर्ट (एडीएसआई) 2020 के अनुसार, देश भर में कुल मरने वालों में लगभग 8.2% छात्र आत्महत्या से मरते हैं। दुनियाभर में सभी आत्महत्याओं में भारत का हिस्सा करीब 25% है। आत्महत्या की बढ़ती घटनाओं पर रोक लगाने और लोगों में मानसिक स्वास्थ्य के प्रति जागरूकता फैलाने के उद्देश्य विश्व स्वास्थ्य संगठन (डब्ल्यूएचओ) की अगुवाई में हर साल 10 सितंबर को 'विश्व आत्महत्या रोकथाम दिवस' मनाया जाता है।

राष्ट्रीय अपराध रिकॉर्ड ब्यूरो : आत्महत्या से मौतें

राष्ट्रीय अपराध रिकॉर्ड ब्यूरो (एनसीआरबी) के अनुसार, भारत में आत्महत्या के कारणों के लिए पेशेवर या करियर संबंधी समस्याओं, अलगाव की भावना, मानसिक विकार, दुर्व्यवहार,

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पारिवारिक समस्याओं, हिंसा, वित्तीय नुकसान, शराब की लत आदि को प्रमुख कारण माना था। बदलती जीवनशैली, शिक्षा तथा करियर के क्षेत्र में गलाकाट प्रतिस्पर्धा, पारिवारिक संबंधों में दूरियां, प्रेम में विफलता, अकेलापन, बीमारियां, घर का नकारात्मक माहौल आदि ऐसे कारण हैं, जिनसे लोगों में अवसाद (डिप्रेशन) जैसी स्थिति पनप रही है। समस्याओं में उलझा व्यक्ति जब स्वयं को अकेला समझने लगता है, तभी वह अवसादग्रस्त की स्थिति में चला जाता है और अवसादग्रस्त व्यक्ति प्रायः अपने करीबी लोगों से भी कटा-कटा सा रहने लगता है और इस प्रकार के व्यक्ति को अकेले में कई तरह के नकारात्मक विचार मन में आते हैं। इनमें से एक विचार आत्महत्या का भी होता है। 2021 में भारत में कुल 1,64,033 आत्महत्याएं दर्ज की गईं, जो 2020 की तुलना में 7.2% अधिक थी। आत्महत्याओं की स्थिति क्रमवार पांच राज्यों में महाराष्ट्र (22,207), तमिलनाडु (18,925), मध्य प्रदेश (14,965), पश्चिम बंगाल (13,500) और कर्नाटक (13,056) हैं। देश में हुई कुल आत्महत्याओं में से 50% इन पाँच राज्यों में हुई हैं। आत्महत्या के कारणों में पारिवारिक समस्याएं और बीमारी प्रमुख कारण थे, जो 2021 की कुल आत्महत्याओं का क्रमशः 33.2% और 18.6% थे। नशीली दवाओं का दुरुपयोग या ड्रग्स/शराब की लत (6.4%), विवाह संबंधी झगड़े (4.8%), प्रेम-प्रसंग (4.6%), दिवालियापन या ऋणग्रस्तता (3.9%), बेरोजगारी (2.2%), परीक्षा में असफलता (1.0%), पेशेवर/करियर समस्या (1.6%) और गरीबी (1.1%) आत्महत्या के अन्य कारण थे। छात्रों द्वारा की गई कुल आत्महत्याओं की स्थिति क्रमवार महाराष्ट्र में 1,834, मध्य प्रदेश 1,308, तमिलनाडु 1,246 और कर्नाटक में 855 आत्महत्याएं दर्ज की गईं।

समाजशास्त्रीय पहलू

'आत्महत्या' शब्द का प्रयोग सर्वप्रथम अंग्रेजी लेखक सर थॉमस ब्राउन ने 1642 में अपने ग्रंथ 'रिलिजियो मेडिसी' में किया था। इस शब्द की उत्पत्ति दो शब्दों सुई (स्वयं की) और कैदेस (हत्या) से मिलकर हुई है जिसका शाब्दिक अर्थ स्वयं की हत्या अर्थात् खुदकुशी होता है। समाजशास्त्री दुर्खीम ने 26,000 आत्महत्याओं से जुड़े आंकड़ों का वर्गीकरण और व्यवस्थित अध्ययन करके उक्त तथ्यों पर प्रकाश डाला है और इसे अपनी पुस्तक 'द सुसाइड '(1897) में स्पष्ट किया है। दुर्खीम का मानना था कि समाजशास्त्र की विषय वस्तु सामाजिक तथ्य होते हैं जो सामूहिक जीवन का प्रतिनिधित्व करते हैं अर्थात् सामाजिक तथ्य का जनक समाज ही होता है। इसी बात का समर्थन करते हुए उन्होंने कहा कि आत्महत्या भी एक सामाजिक तथ्य है क्योंकि यह घटना वैयक्तिक होते हुए भी सामूहिक जीवन में घटित होती है। व्यक्ति भले ही प्रत्यक्ष व अप्रत्यक्ष रूप से अपने जीवन के अंत को आत्महत्या के रूप में वैयक्तिगत क्रिया मानता हो। लेकिन व्यक्ति की इस वैयक्तिगत क्रिया का बीज कहीं न कहीं उसके सामाजिक परिस्थिति में ही निहित होता है। दुर्खीम ने अपनी पुस्तक 'द रूल्स ऑफ सोशियोलॉजिकल मेथड' (1895) में कहा कि किसी सामाजिक घटना के पीछे के कारण गैर-सामाजिक नहीं हो सकते हैं। इसलिए आत्महत्या एक सामाजिक घटना है। दुर्खीम की बात का समर्थन करते हुए ब्रजराज चौहान लिखते हैं सामान्य बोलचाल में आत्महत्या कहीं न कहीं एक व्यक्तिगत कार्य लगती है लेकिन जब किसी समाज में अलग-अलग समय पर एक से अधिक आत्महत्या हर साल होती है अर्थात एक से अधिक व्यक्ति का एक से अधिक समय पर होने वाला व्यवहार कभी व्यक्तिगत नहीं हो सकता, उसमें समूह के लक्षण आ जाते हैं। इस अर्थ में आत्महत्या की उपज एक समूह में होती है, फलस्वरूप आत्महत्या एक सामाजिक तथ्य ही है। इसी संदर्भ से मिलता-जुलता एंथोनी गिड्डेंस का कहना है कि एक समाजशास्त्री को आत्महत्या की घटनाओं को व्यक्तिगत व्यवहार के रूप में न देखकर एक प्रारूपधारी घटना (पैटर्न फिनोमेना) के रूप में देखना चाहिए।

शैक्षणिक संकट

समाज अपनी अगली पीढ़ी के बच्चों को नागरिक बनने के लिए शिक्षा को एक साधन के रूप में उपयोग में करता है। वर्तमान भारतीय शिक्षा व्यवस्था ज्ञान के बजाय रोजगार और आजीविका के विषय को ज्यादा महत्व दे रही है। ज्यादातर छात्र और उनके परिवार अपनी सामाजिक स्थिति को सुधारने, जाति और वर्ग संबंधी प्रस्थिति को बदलने के लिए प्रतिष्ठित नौकरी का सपना देखते हैं और इन सपनों को साकार करने में कोचिंग संस्थानों की भूमिका महत्वपूर्ण रही है। आज देश में बढ़ रहे कोचिंग संस्थान शिक्षा के व्यवसायीकरण की ओर इशारा करते हैं। बेहतर भविष्य की आशा को भुनाते हुए, कोचिंग संस्थान शिक्षा क्षेत्र में प्रमुख उद्योगों में से एक के रूप में उभरे हैं। हालाँकि, इन केंद्रों को अब उनमें शामिल होने वाले कई युवाओं के लिए जेलों के रूप में देखा जा रहा है; जहाँ उनके शरीर, आत्मा और सपनों को वश में किया जाता है। जहाँ शिक्षा के प्रति सकारात्मक सोच विकसित करते हुए सरकारों द्वारा उस पर सर्वाधिक ध्यान दिया जा रहा है। वहीं इन सब प्रयत्नों के बावजूद भी चिंता की बात यह है कि पूरे देश में खुदकुशी करने वाले छात्रों की संख्या बढ़ रही है। सुसाइड हब बन रहे बड़े-बड़े कोचिंग संस्थानों को इस आपदा का हल तो ढूंढ़ना ही होगा। ऐसा नहीं है कि महामारी बनती इस समस्या के कारण हमें नहीं पता। जबकि हम सभी जानते हैं कि शिक्षा ही एक ऐसा हथियार है जिससे इंसान न केवल खुद को, बल्कि अपने समाज, राष्ट्र एवं दुनिया को भी बदल सकता है। फिर भी ना जाने कहां से आज की शिक्षा की दिशा में ऐसी कौन-सी विसंगतियां एवं विडम्बना

आ गयी हैं कि छात्रों में आत्महत्या की प्रवृत्ति लगातार बढ़ती ही जा रही है। वर्तमान समय में शिक्षा के बढ़ते व्यवसायीकरण के कारण उसमें अनेक कुचेष्टाएं प्रवेश कर रही हैं, जिसके चलते छात्रों से बस अच्छे परीक्षा परिणाम देने का दबाव बनाया जा रहा है। गला-काट प्रतिस्पर्धा ने छात्रों पर पहले से ही एक दबाब बना रखा है, इसके साथ ही माता-पिता भी अपने सपने बच्चों पर थोपते हैं। उन्हें आईआईटी, एनआईटी, नीट जैसी परीक्षा के जरिए डॉक्टर और इंजीनियर बनने में ही बच्चों का सुनहरा भविष्य दिखाई देता है। माता-पिता के सपनों से घिरा हुआ बच्चा जब कोचिंग संस्थानों में पहुंचता है तो उस पर तैयारी के साथ-साथ परीक्षा को पास करने का दबाव अपने आप ही एक वक्त के बाद डर में बदल जाता है और यही डर एक बच्चे को आत्महत्या की खाई में धकेल देता है।

सामाजिक जवाबदेही की आवश्यकता

आत्महत्या के इन कारणों की पड़ताल व्यक्ति और समाज के सम्बन्धों में तलाशने का कार्य सुविख्यात फ्रांसीसी समाजशास्त्री एमिल दुर्खीम ने किया और बताया कि आत्महत्या बहुत कुछ व्यक्ति का समाज के साथ सम्बन्ध, समाज की स्थिरता, अस्थिरता और समाज में विद्यमान मूल्यों पर निर्भर करती है, जिससे कि व्यक्ति घिरा होता है। इसलिए मैकाइवर ने ठीक ही कहा है कि समाज सामाजिक संबंधों का जाल होता है। इस आधार पर दुर्खीम अपनी पुस्तक 'द स्यूसाइड' में आत्महत्या के तीन रूपों की चर्चा करते हैं, (1) अहमवादी आत्महत्या (2) अस्वाभाविक आत्महत्या और (3) परार्थवादी आत्महत्या। दुर्खीम ने कहा था कि शिक्षा, परिवार और समाज के मध्य एक पुल का कार्य करती है। कूले के अनुसार परिवार, समाज की प्रथम पाठशाला होने के नाते बच्चों की आकांक्षाओं और सपनों को आकार देता है। छात्र आत्महत्याओं के साल दर साल बढ़ते आंकड़े यह सवाल पैदा करते हैं कि हमारी पारिवारिक संरचना वास्तव में क्या छात्रों की बढ़ती आत्महत्याओं की योगदानकर्ताओं में से एक है या नहीं।

आगे की राह और उपाय

मनोचिकित्सकों का कहना है कि अवसाद (डिप्रेशन) से जूझ रहे लोगों को मानसिक चिकित्सा के जरिये स्वस्थ बनाया जा सकता है। इसके अलावा परिवार और समाज का भावनात्मक वातावरण भी अवसाद से उभरने में मददगार हो सकता है।

1. स्वास्थ्य एवं परिवार कल्याण मंत्रालय ने 21 नवंबर, 2022 को राष्ट्रीय आत्महत्या रोकथाम रणनीति की शुरुआत की। यह सार्वजनिक स्वास्थ्य प्राथमिकता के रूप में आत्महत्या की बढ़ती संख्या को रोकने की दिशा में केन्द्र सरकार द्वारा तैयार की गई अपनी तरह की पहली नीति है। इस योजना का उद्देश्य वर्ष 2030 तक भारत में आत्महत्या से होने वाली मृत्यु की दर को 10 प्रतिशत तक कम करना और सभी प्रकार के शैक्षणिक संस्थानों में एक मानसिक कल्याण पाठ्यचर्या को एकीकृत करके लागू करना है और एक ऐसे समाज का निर्माण करना है, जिसमें लोग अपने जीवन के मूल्य को महत्व दें तथा जरूरत पड़ने पर उन्हें समर्थन मिले ताकि आत्मघाती व्यवहार के प्रति समाज में व्याप्त कलंक को कम किया जा सके।
2. राष्ट्रीय मानसिक स्वास्थ्य नीति (2014) मानसिक विकारों की रोकथाम, आत्महत्या तथा आत्महत्या के प्रयास में कमी को मुख्य प्राथमिकता वाले क्षेत्रों के रूप में देखती है। 10 अक्टूबर, 2014 को राष्ट्रीय मानसिक स्वास्थ्य नीति की घोषणा की गई थी। इसका उद्देश्य प्राथमिक स्वास्थ्य देखभाल में मानसिक स्वास्थ्य देखभाल को एकीकृत करते हुए सामुदायिक स्वास्थ्य देखभाल की ओर अग्रसर होना था। मानसिक स्वास्थ्य देखभाल अधिनियम 7 अप्रैल, 2017 को पारित और मई 2018 से लागू हुआ था। इस अधिनियम ने प्रभावी रूप से आत्महत्या के प्रयास को अपराध की श्रेणी से बाहर कर दिया, जो भारतीय दंड संहिता की धारा 309 के तहत अभी तक दंडनीय था। इसने यह सुनिश्चित किया कि जिन व्यक्तियों ने आत्महत्या का प्रयास किया है, उन पर मुकदमा चलाने या उन्हें दंडित करने के बजाय सरकार द्वारा पुनर्वास के अवसर प्रदान किए जाएं।
3. कल्याण संगठन मनस्थली ने छात्रों की दिनों-दिन बढ़ती आत्महत्याओं को रोकने के लिए स्कूलों में मानसिक स्वास्थ्य योजनाओं को लागू करने का आह्वान किया है। मनस्थली ने कहा कि छात्रों की आत्महत्याओं में साल दर साल होने वाली वृद्धि एक चिंता का विषय है। मनस्थली का मानना है कि स्कूल इन घटनाओं को रोकने में भूमिका निभा सकते हैं। निजी और सरकारी शिक्षण संस्थानों में व्यापक मानसिक स्वास्थ्य योजनाएं बनाने और उसे लागू करने की सलाह दी गई है। सुझाव दिया गया है कि योजनाओं में संवाद की संस्कृति को बढ़ावा देना चाहिए। स्कूलों को छात्रों में मानसिक परेशानी के शुरुआती लक्षणों की पहचान करने के लिए एक अलग तंत्र स्थापित करना चाहिए। काउंसलिंग के जरिये आत्महत्याओं की आशंकाओं को काफी हद तक रोका जा सकता है।
4. पुणे स्थित कंसल्टेंसी फर्म इनफिनियम ग्लोबल रिसर्च का अनुमान है कि इस साल के आखिर तक कोचिंग इंडस्ट्री का कारोबार 58,000 करोड़ रुपये से भी ज्यादा होगा। यानी कोचिंग संस्थान समृद्ध एवं शक्तिशाली संरचना बनते जा रहे हैं, अगर वे चाहें तो बच्चों की मानसिक स्वास्थ्य सुधारने के

लिए पहल कर सकते हैं। एक ऐसा संरचनात्मक ढांचा विकसित कर सकते हैं जिससे वे छात्रों की मॉनिटरिंग कर सकें, जिनका टेस्ट स्कोर कम हो और जो अक्सर क्लास से गायब रहते हों। या किसी अन्य तनाव से गुजर रहे हो।

आलोचनात्मक मूल्यांकन

विजयकुमार (2007) का अनुमान है कि हमारे देश में आत्महत्या को एक बहुआयामी सार्वजनिक और मानसिक स्वास्थ्य मुद्दे के रूप में देखा जाना चाहिए, जिसमें व्यक्तिगत और सामूहिक अस्तित्व के आर्थिक, सामाजिक, सांस्कृतिक, मनोवैज्ञानिक और जैविक क्षेत्रों के साथ जटिल अंतर्क्रिया होती है। विद्वान लंबे समय से किसानों की आत्महत्या को भारत के कृषि संकट से जोड़ते रहे हैं; अब समय आ गया है कि नागरिक समाज छात्रों की आत्महत्याओं को देश की शैक्षिक संरचना जिसमें संस्थागत संरचना, पाठ्यक्रम और इसी तरह की अन्य चीजें शामिल हैं, के गंभीर संकट के संकेतक के रूप में देखना शुरू कर दे। साफ है कि बढ़ती आत्महत्याओं का माहौल समाज के लिए अच्छा संकेत नहीं है। ऐसी स्थिति में सरकार और प्रशासन को कोचिंग संस्थानों द्वारा होर्डिंग और विज्ञापनों पर छपी भ्रामक जानकारियों पर रोक लगानी होगी, जिससे सच्चाई सामने रहे। किसी एक बच्चे की आत्महत्या के पीछे समाज और व्यवस्था की बहुत बड़ी नाकामी दिखती है। माता-पिता के साथ शिक्षक और समाज की जिम्मेदारी बनती है कि बच्चों के साथ सकारात्मक संवाद कायम हो न और अच्छा वातावरण प्रदान किया जाए। सफलता के बनाए गए चंद पैमानों से बाहर निकलना होगा।

भले ही हम अपने बच्चों के लिए शिक्षण संस्थानों को स्वर्ग जैसा नहीं बना सकते, लेकिन कम से कम हम कोशिश तो कर ही सकते हैं कि उन्हें मौत का केंद्र न बनाएं। यह स्वीकार करना कि छात्रों की आत्महत्या एक संकट है और इस मुद्दे के समाधान के लिए उपाय करना हमारी सामूहिक जिम्मेदारी होनी चाहिए। ऐसा करने में असफल होने पर हम इस राष्ट्र का निर्माण छात्रों के शवों पर कर रहे हैं, उनकी यादों को रसातल में धकेल दिया गया है क्योंकि भारतीय समाज और इसकी शिक्षा प्रणाली ने उन्हें विफल कर दिया है, जिस कारण छात्र ऐसा करने के लिए मजबूर है और ऐसा करना जारी रखा है। डाक्टर और इंजीनियर राष्ट्र निर्माण में सहायक होते हैं अतः इनकी माँग समाज में हमेशा बनी रहती है और भविष्य में भी रहेगी, लेकिन यह कहना भी गलत नहीं होगा कि सार्वजनिक जीवन में इन पेशों के अलावा और भी व्यवसाय है जहां लोग अपनी छाप छोड़ सकते हैं। प्रत्येक व्यक्ति अपनी क्षमताओं को पहचान के उन्हें और बेहतर बनाने की दिशा में अग्रसर हो सकता है। तभी वह अपने क्षेत्र में उत्कृष्टता प्राप्त कर समाज एवं राष्ट्र के प्रति योगदान देने में सक्षम होगा। इसमें शिक्षकों और अभिभावकों की भूमिका सबसे महत्वपूर्ण होगी कि वे बच्चों पर अनावश्यक रूप से दबाव न डालें कि उन्हें डाक्टर या इंजीनियर ही बनना है। इन प्रत्येक स्तर पर सक्रिय होकर उच्च शिक्षा के लिए ऐसा सुगम परिवेश बनाना होगा ताकि जिन छात्रों को समाज और देश का भविष्य माना जाता है, इस अपनी जीवनलीला समाप्त करने पर विवश न हों।

निष्कर्ष

शिक्षा का कार्य व्यक्तित्व निर्माण और जीवन को सही दिशा देना होता है, लेकिन आज के युग में शिक्षा के नाम पर तनाव और दबाव से खत्म होती जिंदगी समाज के लिए चिंता का विषय है। छोटी उम्र में किशोर समय से पहले ही बड़ी-बड़ी परीक्षाओं की तैयारी करने लग जाते हैं। इस प्रतियोगी दौड़ में बच्चे के दिमाग पर पड़ने वाला दबाव से कई बार आत्महत्या जैसे खतरनाक विचार बच्चों के मन में आ निकलते हैं। एक प्रतियोगी कक्षा में पढ़ने वाले दो बच्चे आपस में सहयोगी कम एक दूसरे को प्रतियोगी ज्यादा समझते हैं। इस प्रकार के वातावरण से बच्चे के अंदर घुटन पैदा होने लगती हैं। इसी बीच परीक्षा का तनाव बच्चों में अलगाव की स्थिति पैदा कर देता है जिससे बच्चे मनोरंजन और कलात्मक शौक को तक नजरअंदाज कर देता है और यह अलगाव बच्चे में आत्महत्या का बीज बो देता है। इस प्रकार की आत्महत्या को दुर्खीम ने अहमवादी आत्महत्या (ईगोस्टिक सुसाइड) की श्रेणी में रखा है। इस प्रकार की आत्महत्या में बच्चों पर बढ़ता परीक्षा का दबाब और उससे पैदा होने वाला तनाव बच्चों के सामाजिक संबंध को अत्यधिक ढीला, अव्यवस्थित और कमजोर कर देता है। तब बच्चा अपने आपको अपने समूह से स्वयं को कटा हुआ पाता है तो वह धीरे-धीरे एकाकी हो जाता है। प्रत्येक बच्चे में अपनी अगणित क्षमता छिपी होती है। हजारों नाकाम इंजीनियर, डाक्टर भी अच्छे कवि, लेखक, विचारक, अभिनेता, अभिनेत्रियां, कारोबारी तक भी बने हैं। इसके अलावा, बच्चों को स्वस्थ और शांतिपूर्ण वातावरण प्रदान करना माता-पिता, शिक्षकों, पड़ोसियों और अन्य सभी का कर्तव्य है। हमें उनका देखभाल और स्नेह से पालन-पोषण करना है, आवश्यकता पड़ने पर उन्हें दंडित करना है लेकिन सबसे ऊपर हमें उनकी बात सुननी है, उनके रोजमर्रा के अनुभवों, समस्याओं आदि को सुनना है और उन्हें समझना भी हमारा कर्तव्य है। हमारे समाज के वयस्कों को यह समझना और महसूस करना होगा कि बच्चे केवल हमारी इच्छाओं और कार्यों के निष्क्रिय प्राप्तकर्ता नहीं हैं, हमको उनकी आवाज भी सुनी जानी चाहिए। पारिवारिक सहयोग के अलावा शैक्षणिक संस्थानों को बच्चों की काउंसलिंग करने के साथ-साथ उन्हें कुछ अच्छे उद्देश्यों के लिए अपने प्रयासों को आगे बढ़ाने में मदद करने में भी सक्रिय भूमिका निभानी चाहिए। सरकारी, गैर सरकारी कल्याण संगठनों और माता-पिता को भी अपने बच्चों को उनके जीवन के हर कदम पर मार्गदर्शन करने में मदद करने

के लिए आगे आना चाहिए। माता-पिता को यह भी सिखाया जाना चाहिए कि अपने बच्चों के साथ कैसे व्यवहार करें, उन्हें उचित मार्गदर्शन कैसे दें और सबसे महत्वपूर्ण बात यह है कि उन्हें समझने के लिए धैर्य रखें। बच्चों को यह विश्वास दिलाना होगा कि असफलता का मतलब जीवन का अंत नहीं है, बल्कि असफलता भविष्य की प्रगति और सफलता का मार्ग प्रशस्त करती है।

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Folkpreneurship: A New Dimension of Entrepreneurship in India

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Abstract

Folklore is term used for describing the people's knowledge which have been transferred from previous generations to newer generations in multiple forms of cultural practices such as folk songs, riddles, proverbs, rituals, festivals, oral stories, mythology etc. Entrepreneurship is the dynamic process of identifying innovative opportunities, taking calculated risks, and creating value by launching and managing a business venture, with the ultimate goal of achieving growth, profitability, and positive societal impact. Folkpreneurship is the amalgamation of folklore and entrepreneurship. "Folkpreneurship" refers to a form of entrepreneurship that is deeply rooted in the cultural traditions, practices, ancestral wisdom and traditional knowledge of a particular community or group of people. This type of entrepreneurship may involve the creation and development of businesses that draws heavily on traditional craftsmanship, heritage, or local expertise, and often involves serving and empowering the community from which it originates.

Introduction

Folklore is cultural practice of our ancestors which has been transferred to us in form of an art and craft, storytelling, knowledge, song, joke, riddles, proverbs, and other related practices. The folklore of a culture is often associated with the memories and histories of the people, but it is also an expression of today's dynamic living traditions, innovation, and creativity. Folklore is one of the most common ways of expressing ourselves in form of cultural transmission. Folklore, which is quite often but not always tied to the past practices, is one of the most acceptable behaviors we share with one another considering the essentiality of it towards the social and cultural values. Folklore is an integral part of people's daily lives, shaping their understanding of the world and carrying the essence of their ancestral culture. As the heart of all cultures, folklore plays a crucial role in defining our shared humanity and fostering improved living standards.

To sustain and perpetuate this valuable aspect of human life, it is imperative to disseminate these cultural treasures to every corner of our society. In this endeavor, entrepreneurship emerges as the most effective means to achieve this goal. Through entrepreneurial ventures, we can effectively promote, preserve, and share the richness of folklore, ensuring its continuity for future generations. An entrepreneur is an individual who identifies innovative opportunities, takes calculated risks, and initiates and manages a business venture with the aim of creating value, achieving growth, and realizing success in the marketplace. An entrepreneur is an agent of change. Entrepreneurship is the process of figuring out new ways to combine resources. Folklore refers to the local community knowledge system so promoting folklore directly links to the developing community-based knowledge. Local knowledge is not limited to tribal groups or the area's original inhabitants. It is not even limited to persons living in rural areas. Rather, all communities–rural and urban, settled, and nomadic, original inhabitants and migrants–have local knowledge. Traditional knowledge and traditional cultural expressions-based entrepreneurship celebrates the rich and diverse cultures and traditions of Indigenous peoples and local communities around the world, boosting their feeling of identity and belonging while also providing jobs and earning revenue. The majority of folklore comes from rural places. India is a land of villages. The majority of India's population lives in villages. Individuals in rural areas face unemployment, poverty, and inadequate infrastructure, all of which can be alleviated through the emergence of

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rural entrepreneurs. Rural entrepreneurs are persons who conduct business in rural areas by utilizing local resources. Folk entrepreneurship is also related to rural entrepreneurship. Folklore entrepreneurship is now a significant possibility for those migrating from semi-urban or remote regions to urban areas.

Objective

This study explores the potential of leveraging folklore to develop a sustainable business model through entrepreneurship. It delves into salient methods of transforming folklore into a scalable and profitable business venture. Based on the research findings, the article will propose practical recommendations for policymakers, stakeholders, and aspiring Folkpreneurs to foster sustainable community development and leverage potential of Folkpreneurship that nurtures India's knowledge economy. By adopting a comprehensive research methodology that blends qualitative and quantitative approaches, this study seeks to shed light on the emerging domain of Folklore and Entrepreneurship termed as 'Folkpreneurship' and its significance in empowering communities and driving knowledge-based economic growth in India.

Literature Review

The article titled "Entrepreneurial Folklore" written by R.H. Brockhaus describes in detail what an entrepreneur is and what are the major problems face by the entrepreneurs associated with folklore. He claimed that entrepreneurship depends heavily on innovation (Brokhaus, 1987).

Peter B. Robinson (1992) in his article titled "Entrepreneurship and birth order: Fact or Folklore" he, in addition to examining and describing the logical sequence of entrepreneurship, also provided some fundamental arguments in support of the birth-order theory. First off, birth order is not a reliable indicator of entrepreneurial propensities. Second, birth-order studies in the field of entrepreneurship have been hampered by inadequate methodological oversight of confounding factors including family size, socioeconomic situation, level of education, and many others (Hunt, 1992).

The journal article titled, "International Entrepreneurship: Beyond Myth and Folklore"talks about themisconceptions regarding entrepreneurship's effectiveness. Additionally, it offers ideas for how to convey the principles of entrepreneurship into specific plans of action that guarantee productivity and growth at the national level (Schulte, 1994).

Research Methodology

Authors have used in depth study that is completely exploratory cum descriptive research in order to fulfillment of the objective of the paper and also to extract the best cultural business practices that can be combined with Folklore.To fully examine the idea of Folkpreneurship in India, this study will use a mixed-method research methodology, incorporating both qualitative and quantitative methodologies. An in-depth study of the phenomena and its effects on neighborhood development and the information economy will be provided through the integration of various methodologies.

Folkpreneurship: Folklore as Business Potential

Folkpreneurship is the amalgamation of folklore and entrepreneurship. Folklore as per Harper and Row (1959) is comprised of traditional creations of peoples, primitives and civilized (Row, 1996). The term "entrepreneurship" was derived from the French loanword "entreprendre" that means "to undertake", with "entre" deriving from the Latin word meaning "between" and "prendre" denoting "to take". Entrepreneur also resembles the Sanskrit term "Anthaprerna" which means "self-motivation" (Lerner, 2009). According to Shane and Venkataraman (2000), one of the most well-known and frequently used definitions of entrepreneurship is "how, by whom, and with what effects opportunities to create future goods and services are discovered, evaluated, and exploited" (Ratten, 2023). Just like the terms "Agripreneurship" (Mukhopadyay, 2020) and "Enviropreneurship"(Abdelmohsen A. Nassani, 2023), the term Folkpreneurship is being used by the authors here. "Folkpreneurship" refers to a form of entrepreneurship that is deeply rooted in the cultural traditions, practices, ancestral wisdom and traditional knowledge of a particular community or group of people. Folkpreneurshipcan be viewed as one of the answers to poverty, migration, and unemployment, as well as the development of historic cultures. Folkpreneurs can raise the level of living and buying power of rural people and the bottom of the pyramid by providing employment opportunities in villages. Folklore industries promote the efficient use of local resources such as raw materials and labor for productive purposes, hence increasing production. They can also mobilize rural savings to aid in the preservation of historic culture. Rural India's rich legacy is preserved by preserving and promoting handicrafts and art through Folkpreneurship. Folkpreneurship can encourage rural youngsters to pursue entrepreneurship as a career by exposing them to many opportunities. Folklore industries contribute significantly to the country's foreign exchange revenues through the export of their products. Folklore entrepreneurship will also increase literacy rates in the communities engaged. Their education and self-employment will benefit the community and so raise their standard of living. Folklore entrepreneurs play an important role in the economic progress of a developing country like India.

Folkpreneurship holds immense business potential in India due to its rich and diverse cultural heritage. India's folklore is a treasure trove of ancient wisdom, traditional art forms, storytelling, music, dance, and craftwork, presenting a unique opportunity for entrepreneurs to create sustainable ventures. Some factors that support and positively contribute to the business ecosystem and business potential underFolkpreneurship in India are:

1. ***India's Cultural Diversity:*** India's cultural diversity offers a vast array of folklore from different regions, languages, and communities. Entrepreneurs can tap into this richness to create a wide range of folklore-based products and experiences catering to various tastes and preferences.
2. ***Cultural Heritage Preservation and Promotion:*** In recent years, there has been a growing interest among both domestic and international audiences in experiencing and learning about India's cultural heritage in process of preserving and promoting them and making them more valuable. Folklore-based businesses can cater to this demand and provide authentic and immersive experiences.
3. ***Rise of Cultural Tourism:*** India's cultural tourism industry is on the rise, with travelers seeking unique and meaningful experiences. Folkpreneurship can contribute significantly to cultural tourism by offering guided tours, workshops, performances, and other engaging activities.
4. ***Ethical and Sustainable Branding:*** Folklore-based businesses that embrace ethical practices, sustainability, and responsible sourcing of materials can attract conscious consumers looking to support ventures that have a positive impact on local communities and traditions.
5. ***Export Potential:*** Folklore-inspired products and experiences have the potential to find a market beyond India's borders. The global interest in traditional arts, crafts, and cultural experiences presents opportunities for Folkpreneurs to expand internationally.
6. ***Empowerment of Local Artisans and Communities:*** By collaborating with local artisans and communities, Folkpreneurship can empower them economically and help preserve traditional crafts and skills that might otherwise fade away.
7. ***Integration of Modern Technology:*** Integrating technology, such as e-commerce platforms and digital marketing, can help Folkpreneurship ventures reach a broader audience and extend their impact.
8. ***Social and Environmental Impact:*** Folkpreneurship can contribute to social and environmental initiatives, such as empowering marginalized communities, promoting sustainable practices, and supporting local education and development.
9. ***Government Support:*** The Indian government has shown increasing support for initiatives that promote cultural heritage and traditional crafts. This support includes financial incentives, skill development programs, and policies that encourage entrepreneurship in this field.
10. ***Educational and Research Opportunities:*** Folkpreneurship can foster educational and research opportunities, inspiring future generations to learn about their cultural roots and contribute to the preservation of folklore.

Overall, Folkpreneurship in India has the potential to create a thriving and sustainable ecosystem that celebrates the country's cultural legacy while providing economic opportunities and social benefits to communities. Entrepreneurs with a passion for folklore and a commitment to cultural preservation can make a significant impact while building successful and meaningful businesses.

Folklore: Business and Entrepreneurship

Folklore holds a significant place in people's lives, reflecting their culture and traditions. By recognizing folklore as a valuable asset, entrepreneurs can tap into a wealth of untapped opportunities. Business models based on folklore can be creative and unique, capitalizing on the rich cultural heritage and traditional knowledge.

Suggested business ideas for establishing businesses using folklore:

1. ***Folklore-inspired Merchandise:*** Create a brand that designs and sells merchandise inspired by folklore, such as clothing, accessories, home decor items, and souvenirs. Collaborate with local artisans and craftsmen to produce authentic and culturally significant products.

2. ***Folklore Tourism Experiences:*** Develop folklore-themed tourism experiences, such as guided tours, cultural workshops, and immersive storytelling events. Offer visitors an opportunity to experience and learn about the local folklore while promoting sustainable tourism.
3. ***Folklore Publishing House:*** Start a publishing house that focuses on producing books, graphic novels, or digital content based on traditional folklore stories. Collaborate with local writers, illustrators, and storytellers to preserve and popularize these narratives.
4. ***Folklore-inspired Cuisine and Beverages:*** Open a restaurant or cafe that offers cuisine and beverages inspired by traditional recipes and folklore themes. Create a unique dining experience by incorporating folklore storytelling and ambiance into the establishment.
5. ***Folklore-based Educational Programs:*** Establish educational programs that teach folklore, traditional crafts, music, and dance to children and adults. Offer workshops and courses to promote cultural learning and skills development.
6. ***Folklore Music and Entertainment:*** Build a music or entertainment business that specializes in producing and promoting folklore-inspired music, performances, and cultural events. Collaborate with local artists and performers to showcase the region's rich cultural heritage.
7. ***Folklore Wellness and Beauty Products:*** Develop a line of wellness and beauty products that incorporate traditional herbal remedies and ingredients from folklore. Market the products as natural and culturally meaningful alternatives.
8. ***Folklore Digital Content Platform:*** Create an online platform that curates and disseminates folklore-related content, including stories, music, videos, and artwork. Generate revenue through subscriptions or advertising.
9. ***Folklore-inspired Gaming:*** Design and develop video games or board games that draw inspiration from folklore stories and characters. Offer an engaging and educational gaming experience for players of all ages.
10. ***Folklore Research and Consulting:*** Establish a consultancy firm specializing in folklore research and advisory services. Collaborate with businesses, governments, and organizations to leverage folklore for marketing, branding, and community engagement.

When developing a business model based on folklore, it's essential to respect and work closely with the individuals, groups, and communities from which the folklore originates. Emphasize authenticity, sustainability, and ethical practices to ensure that the business contributes positively to the preservation and promotion of cultural heritage.

The Entrepreneurial Approach

To convert folklore into a thriving business, entrepreneurs must adopt innovative and strategic approaches. This involves identifying unique market niches and creating products or services that resonate with consumers.While embracing entrepreneurship, it is vital to ensure that the essence of folklore is preserved authentically. Balancing commercial interests with cultural sensitivity is crucial for sustainable growth. Entrepreneurs must envision scalability from the outset. By integrating technology and modern practices, folklore-based businesses can expand beyond their local boundaries. A successful folklore-based business not only generates profits but also fosters positive social impact. Such ventures contribute to the economic empowerment of communities and help preserve cultural heritage. Developing a successful entrepreneurship strategy in the field of folklore requires a careful blend of innovation, cultural sensitivity, and community engagement.

A folklore-inspired startup entrepreneur must conduct extensive and intensive market research before undertaking entrepreneurship. In order to conduct market research, the Folkpreneurs should consider the following aspects:

- ***In-depth Cultural Research:*** Conduct thorough research on the folklore, traditions, and cultural nuances of the target community. Understand the historical significance, storytelling practices, and traditional art forms to ensure authenticity and respect.
- ***Identify Unique Opportunities:*** Look for unexplored niches within folklore that can be leveraged for entrepreneurship. Identify aspects of folklore that can be transformed into innovative products, services, or experiences to attract a diverse audience.
- ***Collaboration with Local Artisans and Experts:*** Collaborate with local artisans, craftsmen, storytellers, musicians, and other experts in

the folklore domain. Their expertise will not only enhance the authenticity of the offerings but also create a sense of ownership within the community.

- ***Storytelling and Immersive Experiences:*** Incorporate storytelling and immersive experiences into the entrepreneurship model. Create a narrative around the folklore that engages customers and brings them closer to the culture and traditions.
- ***Sustainable and Ethical Practices:*** Promote sustainability by using eco-friendly materials and ethical sourcing of resources. Ensure that the entrepreneurship model contributes positively to the preservation of cultural heritage and benefits local communities.
- ***Cultural Sensitivity and Respect:*** Demonstrate cultural sensitivity and respect throughout the business operations. Avoid appropriating or misrepresenting folklore, and always seek permission when using culturally significant symbols or stories.
- ***Community Involvement and Empowerment:*** Involve the local community in the entrepreneurship venture. Engage with them to understand their needs, aspirations, and challenges, and design initiatives that empower and uplift them economically and socially.
- ***Technological Integration:*** Leverage technology to amplify the reach of folklore-based products or experiences. Utilize online platforms, digital marketing, and e-commerce to connect with a broader audience.
- ***Education and Awareness:*** Educate customers about the significance of folklore and its impact on the community. Raise awareness about the value of preserving cultural heritage through marketing campaigns and educational initiatives.
- ***Adaptability and Innovation:*** Stay adaptable and open to evolving the entrepreneurship strategy based on feedback and changing market dynamics. Continuously innovate to keep the folklore-based offerings relevant and appealing to modern audiences.
- ***Networking and Partnerships:*** Establish connections with like-minded organizations, cultural institutions, and tourism agencies to expand the reach of folklore-based products and experiences.

Considering the above strategies, the Folkpreneurs can develop the below mentioned lesser-known cultural sites and practices (in table 1.1) by integrating innovations and creativity for the business's purposes. By integrating these considerations into the entrepreneurship strategy, businesses in the field of folklore can strike a balance between commercial success and the preservation and celebration of cultural heritage. The right strategy will not only create a sustainable business but also contribute to the greater good of the communities and traditions from which the folklore originates.

Table 1.1: Some lesser-known Cultural sites and practices that can have better Entrepreneurial Opportunities

1.	Suraj Kund, Barkatha	9.	Mask Making by Paper
2.	Luguburu Ghantabari, Bokaro, Jharkhand	10.	Junjhunwa Pahad, Pawai: An Instrumental Rock in Bihar
3.	Gajanan Mata Dham, Bihar	11.	Tanginath, Gumla in Jharkhand
4.	Chakra Puja of Kumhar Community	12.	HargaddiChokhahatu in Jharkhand
5.	Rani Chuwan, Nagari, Jharkhand	13.	Kadsa dance
6.	Betel Farming in Bihar	14.	Biroh dance
7.	Harihar Dham, Jharkhand	15.	Rikhia Ashram, Jharkhand
8.	Madhuban, Jharkhand		

Implications and Recommendations

Folkpreneurship can play a crucial role in preserving and reviving traditional cultural practices, art forms, and knowledge that might otherwise be at risk of fading away. This can lead to a renewed sense of pride and identity among communities. It somewhere associates the following implications and recommendations (see table 1.2) as observed by the authors of the papers.

Table 1.2: Implications and Recommendations in Practicing Folkpreneurship

Implications	Recommendations
• **Economic Empowerment:** By engaging local artisans and communities, Folkpreneurship can empower them economically. It opens up avenues for sustainable livelihoods and income generation, contributing to poverty alleviation and reducing rural-to-urban migration. • **Tourism Promotion:** Folkpreneurial ventures can attract tourists seeking authentic and immersive cultural experiences. This can boost cultural tourism, generating revenue for both entrepreneurs and local communities. • **Knowledge Economy:** Folkpreneurship fosters knowledge-sharing and skills development, nurturing a knowledge economy that values and harnesses traditional wisdom and practices. • **Social Cohesion:** Folkpreneurship can strengthen social cohesion by bringing communities together, fostering mutual understanding, and promoting cultural exchange. • **Environmental Sustainability:** Embracing sustainable practices in Folkpreneurship can contribute to environmental conservation and promote eco-friendly tourism. • **Global Visibility:** Successful Folkpreneurial ventures have the potential to showcase India's rich cultural heritage on the global stage, promoting cross-cultural appreciation and understanding.	• **Policy Support:** The government should create supportive policies and provide incentives for Folkpreneurship initiatives. This can include financial support, skill development programs, and streamlined licensing procedures. • **Collaboration and Partnerships:** Encourage collaborations between Folkpreneurs, cultural institutions, and tourism agencies to enhance the reach and impact of Folkpreneurship ventures. • **Community Involvement:** Involve local communities at every stage of Folkpreneurial projects. Respect their values, traditions, and aspirations while developing business models. • **Education and Awareness:** Promote educational programs and awareness campaigns to highlight the importance of preserving folklore and its contribution to community development and the knowledge economy. • **Market Access:** Facilitate market access for Folkpreneurial products and experiences through e-commerce platforms, cultural fairs, and international trade events. • **Research and Documentation:** Invest in research and documentation of folklore to ensure accurate representation and dissemination of cultural knowledge. • **Capacity Building:** Provide training and capacity-building initiatives for Folkpreneurs to enhance their entrepreneurial skills, management, and marketing capabilities. • **Sustainable Practices:** Encourage Folkpreneurs to adopt sustainable practices, supporting environmental conservation and responsible tourism. • **Fund Allocation:** Allocate funds for Folkpreneurship projects as part of corporate social responsibility initiatives, cultural development programs, and tourism promotion schemes. • **Evaluation and Impact Assessment:** Regularly assess the impact of Folkpreneurship initiatives on community development, cultural preservation, and the knowledge economy. Use feedback to refine strategies and ensure long-term sustainability.

By implementing these recommendations and recognizing the potential implications, Folkpreneurship can emerge as a powerful catalyst for community empowerment, cultural preservation, and economic growth in India. It can foster a harmonious blend of tradition and innovation, strengthening the nation's identity while contributing to global cultural dialogue.

Conclusion

Folklore and entrepreneurship together present a powerful amalgamation for creating sustainable and profitable businesses called Folkpreneurship. By striking the right balance between commercial viability and cultural preservation, entrepreneurs can unlock a world of opportunities that celebrate tradition while embracing modernity. Folkpreneurship, the innovative integration of folklore into entrepreneurial ventures, holds tremendous promise for community development and the knowledge economy in India. As discussed, this emerging dimension of entrepreneurship embraces and celebrates the nation's diverse cultural heritage, presenting a host of opportunities for sustainable business models that enrich both communities and the broader economy. By leveraging the wealth of traditional knowledge, art forms, and storytelling, Folkpreneurship contributes significantly to the preservation and revival of India's cultural legacy. Through collaborations with local artisans and community members, these ventures empower marginalized groups, offering economic opportunities and creating a sense of pride in cultural identity. Moreover, Folkpreneurial initiatives play a pivotal role in promoting cultural tourism, as travelers seek authentic experiences that connect them with India's rich history and traditions. Such initiatives generate revenue for both entrepreneurs and local communities, fostering economic growth at the grassroots level. Folkpreneurship also strengthens the knowledge economy, as traditional wisdom and practices find relevance in modern contexts. By embracing ethical and sustainable practices, Folkpreneurs contribute to environmental conservation and social well-being, positioning themselves as responsible custodians of cultural heritage. The implications of Folkpreneurship reach far beyond business profitability, offering a means to bridge cultural divides, promote social cohesion, and foster global appreciation for India's rich tapestry of folklore. As these ventures gain visibility on the international stage, they create opportunities for cross-cultural exchange, promoting understanding and appreciation of diverse cultural expressions.To realize the full potential of Folkpreneurship, it is imperative to develop supportive policies and provide adequate funding, while prioritizing community involvement and capacity building. Educational initiatives and research efforts will further enhance the value of folklore in driving sustainable economic development. Folkpreneurship emerges as a powerful force for positive change, offering a new dimension to community development and the knowledge economy in India. By cherishing and embracing the timeless treasures of folklore, entrepreneurs can create a lasting impact on society, empowering communities, fostering cultural pride, and enriching the fabric of India's cultural heritage for generations to come.

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Empowering Citizens: A Comparative Analysis of State Laws on the Right to Public Service in India

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Abstract

In the dynamic landscape of governance and citizenry, the Right to Public Service Guarantee Act (RTPSG) has emerged as a pivotal instrument to enhance citizen empowerment and ensure effective public service delivery. Across various states in India, the implementation of RTPS acts reflects a commitment to fostering transparency, accountability, and responsiveness in public administration. This comparative analysis delves into the diverse legal frameworks governing the Right to Public Service across different Indian states, examining key provisions, variations, and their impact on citizen empowerment. The Gandhian philosophy of Sarvodaya and its principles provide moral and ethical support for the right to public service act. Mahatma Gandhi has stated the significance of public service in public life. Providing public services to its citizens is the basic mandate of every government. It promotes an inclusive, equitable, and sustainable society. It aims to ensure national growth and promote welfare and justice in society.

The concept of governance during the 1990s was focused on service delivery as the most crucial element in the global governance system. The formulation and implementation of the citizen charter, the emergence of the concept of social audit, e-governance, and the Public Service Guarantee Act have transformed the governance structure in India. This paper focuses on a comparative study of the 'Right to Public Service' in various states. It highlights the significance of the Public Service Guarantee Act in service delivery and its challenges and suggests reform measures.

1. Introduction

Even before the advent of the welfare state, governmental efforts toward the citizens' well-being have been continuous. Since the 1950s, there has been a notable expansion in the responsibilities of the welfare state. This heightened role has prompted a growing demand for increased accountability within the state. Consequently, initiatives such as the Citizen's Charter, the Human Rights Declaration, and the Public Service Guarantee Act were embraced to address public grievances and deliver various services. In a democratic setup, the government undertakes multifaceted functions encompassing law enforcement, defence, regulation, welfare, and public service delivery. Development and public service delivery functions are particularly pivotal for developing nations like India. Every citizen is entitled to access public services and seek redress for grievances. The provision of public services is fundamental to governments worldwide, and the effective and efficient delivery of these services is a hallmark of good governance. The quality and quantity of public services play a crucial role in satisfying citizens and fostering trust.

In contemporary society, public service delivery is at the heart of all levels of government, from local to central authorities. However, as citizens' demands and expectations have grown, existing public service delivery models have proven inadequate and unresponsive. The advent of new technology, innovative managerial tools, and concepts like new public management and new public governance have improved the efficiency and effectiveness of public service delivery, ultimately fostering citizen-centric governance. Recognising the need for administrative reforms, the government of India has implemented various measures to enhance the efficiency of service delivery. Initiatives such as formulating and implementing citizen charters, social audits, and the sevottam model have been introduced. Furthermore, the evolution of a right-based approach has compelled the government to enact the Right to Public Services Act. These developments promote welfare, development, justice, and equality, making public service delivery a critical component of the governance system.

The introduction of the Right to Public Services Guarantee Act in India has granted citizens a potent tool

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to ensure timely service delivery and grievance resolution. It signifies the state government's commitment to providing high-quality services promptly and of high quality. The Act aims to curb corruption, enhance transparency, and establish accountability and responsibility in administration. Legal provisions safeguard the right to public services, ensuring timely delivery of recognised services and providing avenues for addressing citizen grievances, reducing corruption and ensuring swift service delivery.

The demand for a Citizens' Charter in India originated from the Citizens' Charter movement in the United Kingdom, gaining momentum with the New Economic Reforms of 1991. In India, the evolution of the Citizen's Charter movement during the late 1990s and early 2000s is closely tied to the development of the right to public service. The concept of a public service guarantee emerged in response to perceived short-comings of the Citizens' Charter. Concurrently, theoretical advancements such as New Public Management and Public Choice Theory underscored the importance of public service guarantee. This marked a shift towards ensuring tangible and assured public service delivery, departing from the earlier reliance on the Citizens' Charter approach.

In 2010, Madhya Pradesh pioneered the Right to Public Service Guarantee Act, becoming the first state to do so. Subsequently, other states, including Bihar, Chhattisgarh, Delhi, Himachal Pradesh, Jammu and Kashmir, Jharkhand, Karnataka, Punjab, Rajasthan, Uttar Pradesh, Uttarakhand, Orissa, Kerala, and Haryana, followed suit by implementing similar acts. On December 20, 2011, the Central government introduced the Right to Redressal of Grievances Bill in the Lok Sabha, although it did not pass. Presently, twenty states in India have enacted the Right to Public Service Act.

2. Provision of Right to Public Service Guarantee Act across Indian States

The selected states for study have some common provisions with slight variations in their content. These provisions are mentioned below.

- This legislation explicitly outlines its name, the number of services covered, and the date of enactment.
- The legislation defines key terms such as designated officer, the hierarchy of appellate authorities, notified services, and eligible individuals.
- The act enumerates notified services and must be provided to eligible citizens. The state government reserves the right to update these services periodically through executive orders.
- Every eligible citizen is entitled to receive public services within a specified timeframe. If officials fail to deliver the required services, they will be held accountable for their actions.
- Individuals who have not received services within the stipulated timeframe or whose service applications have been rejected by the designated officer can file an appeal with the first and second levels of appellate authorities.
- The legislation includes a provision for imposing penalties on officers who fail to fulfil their duties, drawing inspiration from the Right to Information Act.
- The act incorporates a provision safeguarding officials who act in good faith. This protects public officials from suits, prosecutions, or legal actions.
- The state government is empowered to issue official notifications to formulate rules to implement the provisions outlined in the acts. It explicitly states that all regulations crafted by the state government under this act must be presented before the state legislature.
- The state government holds the authority to issue orders that align with the act's provisions to address challenges in its implementation.
- The legislation defines designated officials' powers, functions, duties, and responsibilities to ensure smooth and effective operation.
- In the majority of states, the second appeal is handled by the relevant department. However, states like Punjab and Uttarakhand have introduced provisions for a "Right to Service Commission" to ensure the Act's proper application.

These provisions collectively establish a robust legal framework for public service guarantee, emphasising transparency, accountability, and citizen empowerment. Incorporating penalties, protection for officials, and adaptive rule-making mechanisms reflects a thoughtful approach to addressing challenges in service delivery. The varied appellate mechanisms illustrate a nuanced response to ensure effective citizen redressal.

3. The objective of the Study

This paper aims to achieve the following primary goals:

- To delineate the essential clauses in the Right to public service guarantee acts implemented across different states.
- To assess and compare the number of services officially notified under the Act and their adherence to stipulated timelines.
- To analyse the challenges impeding the effective implementation of public service guarantee acts.

4. Research Methodology of the Study

Information regarding state public service guarantee laws, the number of notified services, penalties, and relevant secondary data was collected from the official websites of various state governments. Secondary sources such as books, research articles, and government reports were also utilised. The study employs qualitative and quantitative approaches, employing a comparative research method to draw distinctions between provisions in different state public service guarantee acts. The content analysis method is also used in the study.

The research method adopted is desk-based, and the study focuses on ten selected states: Madhya Pradesh, Uttar Pradesh, Karnataka, Rajasthan, Uttarakhand, Delhi, Himachal Pradesh, Maharashtra, Bihar, and Haryana. Specifically, services outlined in the Uttar Pradesh Janhit Guarantee Adhiniyam are identified and compared with those in other state acts.

5. Comparison of key provisions of the Right to Public Service Guarantee legislation across Indian States

In Madhya Pradesh, a dedicated Public Services Management department is responsible for overseeing and monitoring the implementation of the Act. This department effectively manages and coordinates the state's public service delivery system. In contrast, other states such as Uttar Pradesh, Bihar, Rajasthan, and Delhi rely on central implementing departments, including Revenue, General Administration, Administration Reforms, and Information Technology, to carry out the mandates of the Act.

5.1 Short title and commencement of the Act and nodal implementing departments:

Different states designate the Public Service Guarantee Act by different names, each with its specific commencement date, as shown below. Additionally, the table below shows the name of the department responsible for enforcing the Act varies across states.

Table No 1: Title of the Act and Nodal Department for the enactment of the Act

State	Title of the Act	Commencement of the Act	Nodal department for enforcement of the Act
Maharashtra	The Public Service Guarantee Act, 2015	April, 2015	General Administration
Haryana	Right to Service Act, 2014	March, 2014	Administrative Reform
Karnataka	The Karnataka Guarantee of Service to Citizens Act, 2011 (SAKALA)	April, 2012	Personnel & Administrative Reform
Himachal Pradesh	Himachal Pradesh Public Service Guarantee Act, 2011	November, 2011	Home Affairs
Uttarakhand	The Uttarakhand Right to Service Act, 2011	October, 2011	General Administration
Rajasthan	Rajasthan Public Service Guarantee Act, 2011	September, 2011	Administrative Reform
Bihar	Bihar Right to Public Services Act, 2011	July, 2011	General Administration
Delhi	Right of Citizen to Time Bound Delivery of Services Act, 2011	April, 2011	Information Technology
Uttar Pradesh	Uttar Pradesh Janhit Guarantee Adhiniyam, 2011	January, 2011	Revenue
Madhya Pradesh	Madhya Pradesh Lok SewaonkePradan Ki Guarantee Adhiniyam, 2010	September, 2010	Public Service Management

Sources: Retrieved from the official website of the respective state government

5.2 Notification of Public Services and Provisions of Penalty under various Acts:

There is considerable variation in the number of services officially notified under the Act in different states. Karnataka Act provides the highest number of public services, followed by Maharashtra and Delhi. Uttar Pradesh is in fourth position among 20 states. The table below gives details of the quantum of notified services and related departments regulated by various State Acts.

Table No 2: Notification of Public Service and Penalty Provisions Across States

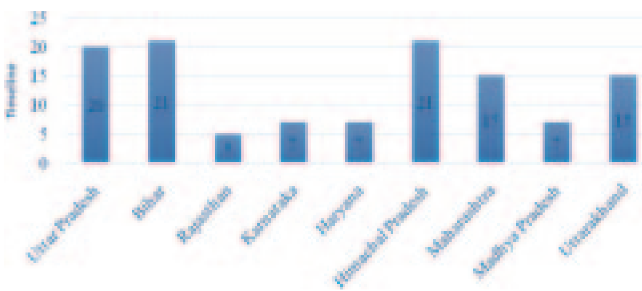
State	Department covered	Notified Services	Penalty for non-compliance
Karnataka	62	952	An amount of Rs. 20 per day, with a maximum limit of Rs. 500.
Uttar Pradesh	45	384	An amount of Rs. 500 per day, with a maximum limit of Rs. 5000.
Haryana	22	199	An amount of Rs. 250 per day, with a maximum limit of Rs. 5000.
Rajasthan	18	153	An amount of Rs. 250 per day, with a maximum limit of Rs. 5000.
Uttarakhand	23	243	An amount of Rs. 250 per day, with a maximum limit of Rs. 5000.
Himachal Pradesh	32	228	A minimum of Rs. 1000, up to a maximum of Rs. 5000
Delhi	22	361	An amount of Rs. 10 per day, with a maximum limit of Rs. 200 per application.
Maharashtra	39	372	An amount of Rs. 500 per day, with a maximum limit of Rs. 5000.
Bihar	17	196	An amount of Rs. 250 per day, with a maximum limit of Rs. 5000.
Madhya Pradesh	23	264	An amount of Rs. 250 per day, with a maximum limit of Rs. 5000.

Sources: Retrieved from the official website of the respective state government

6. Comparative study and analysis of the timeline of services notified under the Act

The essence of the act lies in empowering individuals with the right to access public services within a stipulated timeframe, thereby reducing bureaucratic delays and enhancing the overall governance system. The timeline of services under the Right to Public Service Act plays a pivotal role in shaping the quality of service delivery, citizen satisfaction, and the overall effectiveness of public service delivery. This comparative study and analysis examine the timeline of services notified under the Right to Public Service Act across different jurisdictions. This comparative study aspires to contribute to the ongoing discourse on administrative reforms, good governance, and citizen empowerment by comprehensively analysing the timeline of services notified under the Right to Public Service Act in different contexts.

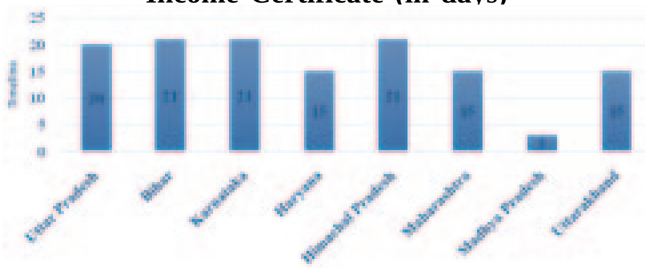
Bar diagram no. 1: Timeline for issuing of Domicile Certificate (in days)



Sources: Retrieved from the official website of the respective state government

The timeline of "Domicile Certificate" issuance in several states is compared in the above bar diagram. The maximum time frame for the same service in Bihar is 21 days, while the minimum time frame in Rajasthan is five days. The timeframe in Uttar Pradesh is 20 days. The timeline differs between states, spanning from 5 to 21 days.

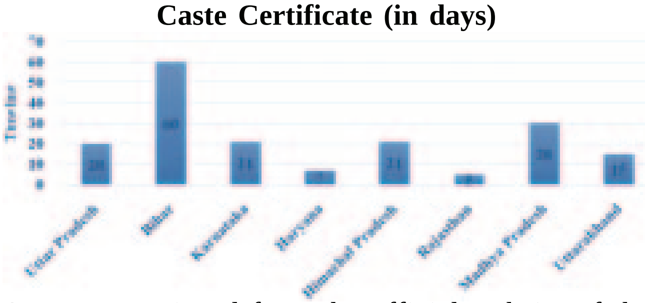
Bar diagram no. 2: Timeline for issuing of Income Certificate (in days)



Sources: Retrieved from the official website of the respective state government

The timeline for "Income Certificate" issuance in different states is compared in the above bar diagram. The timeframe in Uttar Pradesh is 20 days, whilst the maximum timeline for the same service in Bihar is 21 days, and the minimum timeline is three days in Madhya Pradesh. The time frame differs between three days and 21 days across the states.

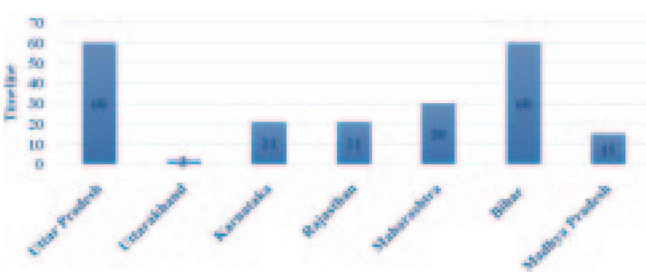
Bar diagram no. 3: Timeline for issuing of Caste Certificate (in days)



Sources: Retrieved from the official website of the respective state government

The above bar diagram compares the "Caste Certificate" issuance timeline in different states. The shortest timeframe for the issues of caste certificates in Rajasthan is five days, while the maximum timeline for the same service in Bihar is thirty days. The stipulated time frame in Uttar Pradesh is twenty days. The time frame varies from state to state, ranging from 5 to 60days.

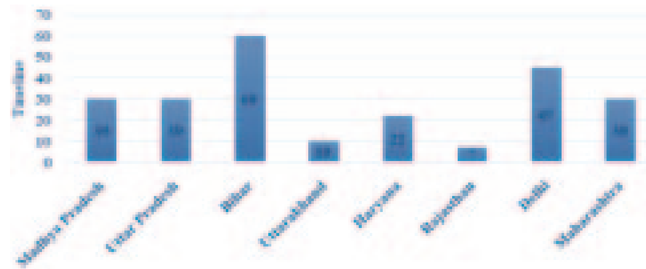
Bar diagram no. 4: Timeline for issuing of Disability Certificate (in days)



Sources: Retrieved from the official website of the respective state government

The timeframe for "Disability Certificate" issuance in several states is compared in the above bar diagram. The maximum time frame for the notified service in Uttar Pradesh is 60 days, and the minimum is two days in Uttarakhand. The time frame differs from state to state and ranges from 2 days to 60 days.

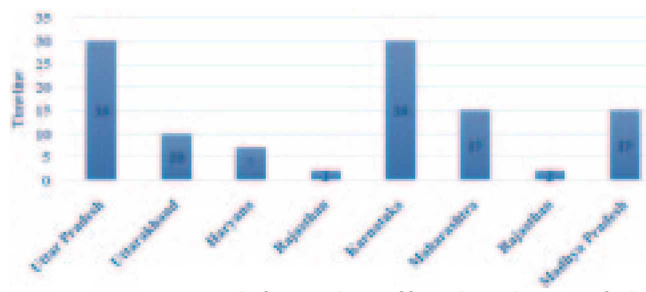
Bar diagram no. 5: Timeline for issuing of New BPL Ration Card (in days)



Sources: Retrieved from the official website of the respective state government

The deadline for issuing a "New BPL Card" in several states is compared in the above bar diagram. The maximum time frame for the notified service in Bihar is sixty days, and the minimumis seven days in Rajasthan. The time frame varies from 7 days to 60 days between states.

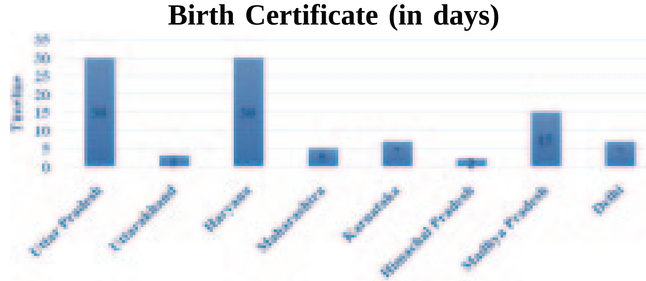
Bar diagram no. 6: Timeline for issuing of Driving Licence (in days)



Sources: Retrieved from the official website of the respective state government

The timeline for issuing "Driving Licenses" in several states is compared in the above bar diagram. The maximum time frame for a similar service in UP is 30 days, and the minimum is 2 days in Rajasthan. The time frame varies from 2 days to 30 days across states.

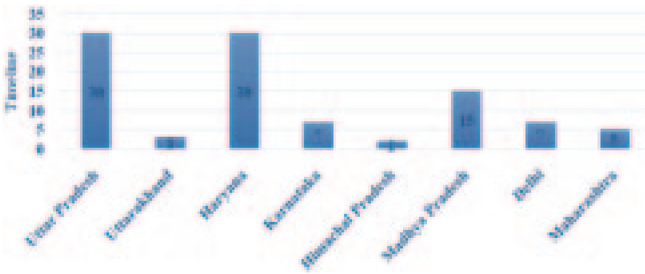
Bar diagram no. 7: Timeline for issuing of Birth Certificate (in days)



Sources: Retrieved from the official website of the respective state government

The timeframe for "Birth Certificate" issuance in several states is compared in the above bar diagram. The maximum time frame for the notified service in Uttar Pradeshis thirty days, whereas the minimum is two days in Himachal Pradesh. The time frame varies from two days to thirty days between states.

Bar diagram no. 8: Timeline for issuing of Death Certificate (in days)



Sources: Retrieved from the official website of the respective state government

The timeline of "Death Certificate" issuance in different states is compared in the above bar diagram. The minimum timeframe for the same service in Himachal Pradesh is 2 days, while the maximum timeline for the same service in Uttar Pradesh is 30 days. The time frame varies from state to state, ranging from 2 days to 30 days.

7. Loopholes in the Implementation of the Act

The Right to Public Service Guarantee Act faces notable challenges that hinder its effective implementation. One significant limitation lies in its narrow scope, as it exclusively caters to citizens. Additionally, ambiguity surrounds the definitions of critical terms like grievance, notified services, and "designated officer," with inconsistencies across state acts. The act lacks provisions ensuring the quality of service delivery, focusing primarily on the provision of services rather than emphasising service quality. Enforcement mechanisms are weak, failing to compel compliance from designated officials. Furthermore, limited citizen involvement in the formulation, implementation, and monitoring processes results in a mismatch between expectations and outcomes. Inadequate data management exacerbates the problem, with a shortage of information on received grievances, services provided, and grievances resolved. These shortcomings demand urgent resolution to ensure the act's proper implementation. Moreover, administrative and institutional challenges, including infrastructure shortages, financial constraints, citizen accessibility issues, a shortage of functionaries, and a lack of awareness about act provisions, pose additional obstacles to the efficient delivery of public services. Addressing these issues is crucial for enhancing the overall efficacy of the Act.

8. Roadmap to Citizen Empowerment

The Right to Public Service Guarantee Act has played a pivotal role in enhancing the efficiency of the public service delivery system, drawing inspiration from the Right to Information Act and emphasising citizen-centric administration. The merits of the Public Service Guarantee Act include: Firstly, it contributes to citizen empowerment by offering various services and service providers.Secondly, it ensures the guaranteed provision of services to citizens.Thirdly, it fosters accountability, responsibility, transparency, and openness in operational procedures in service delivery.Fourth, it establishes a grievance redressal mechanism to enhance citizen satisfaction and trust in the administrative processes. Finally, it incorporates provisions to ensure the quality and timeliness of public service delivery to citizens. However, the act must be reassessed and modified to remain effective and responsive to evolving citizen demands and aspirations.

9. Conclusion and Recommendation

The table and bar diagram above elucidates variations and commonalities among public service guarantee acts enacted by different states. Many states have adopted similar acts for public service guarantees, mainly mirroring the model initiated by Madhya Pradesh in 2011. The shared elements include stipulations regarding notified services, the appellate framework, service delivery timelines, penalties, and technology integration in public service delivery. Notwithstanding these resemblances, certain states have developed more robust acts, fostering a competitive environment for service delivery improvement. Disparities arise in the definitions of designated officers and eligible citizens, the grounds for grievance consideration, timelines for notified services, timelines for grievance redressal, and the nodal agency for implementation, among other factors. Despite the incorporation of technology, there is a notable absence of data on the annual volume of applications received and the timely provision of services to beneficiaries. Moreover, comprehensive data on the number of services rendered, complaints received, and grievances resolved is currently unavailable.

There are several ways in which the act can be rejuvenated to make it more effective and more citizen-centric. This would help in better functioning and achieving the objective of the act. Based on overall evaluation and observation, some suggestions may be helpful, like;

- Improve accessibility to notified services and make citizens more aware of the provisions under the act.

- Ensure quality in public services and provide services to citizens within a stipulated time.
- The State governments should provide regular and appropriate training and skills to the designated officials involved in the delivery of services. They should formulate a capacity-building programme for officials and citizens.
- There should be provisions like social audit and community participation. It would be beneficial in the effective monitoring of the act.
- Strong enforcement mechanisms can ensure the compliance of officials.
- Infrastructure development and the use of information and communication technology in delivering public service.
- The state government should review the stipulated time frame of notified public services occasionally.

The Right to Public Service Acts represent innovative and impressive approaches to delivering services to the citizens of the nation. These acts have significantly enhanced democratic citizenship by actively involving citizens in the service delivery process. This research paper offers a comparative analysis of public service guarantee acts enacted by various states, portraying a nuanced picture of both marginal differences and shared provisions. Despite certain drawbacks, the acts have demonstrated efficiency and effectiveness. However, modifications are essential to align them with the evolving needs and demands of the citizens, especially in the face of new challenges in the service delivery system.

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An Analysis of Wordsworth's Life & His Literary Creation: "Juxtaposition Representation to the Society"

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Abstract

"Shakespeare penned the phrase 'All that glisters is not gold' (Merchant of Venice) in his play The Merchant of Venice (Act II, Scene VII, line 60). The more familiar version of this saying uses 'glitters' instead of the original 'glisters', a term from the 16th century that means the same. This line is drawn from a subplot within the play and can be found in the scroll inside Portia's golden casket, a significant element of the tale. Written between 1596 and 1598, The Merchant of Venice encapsulates this adage, which poignantly underscores the often-deceptive nature of appearances in human existence."

Introduction

Human life is very unpretentious as well as complicated. It is full of happiness but sorrow is another aspect of the same. Moreover, it happens often, the visible jolliness revels later on its ugly painful sight. Sometimes things which are seen, not true, they undercover so many hidden hollowness in it. This feature of this mortal life is considered as Irony. Irony put two contradictory things together for further predictions. One cannot be prejudice for the same. If one wants to encounter the reality, one has to be analytical approach henceforth, the hidden truth can be seen. In this regard, William Wordsworth (1770-1850) was a renowned English poet and a key figure in the Romantic literary movement. His works often celebrated nature, human emotions, and the individual's relationship with the natural world. While Wordsworth is admired for his poetic genius, there are also some significant and ironical points about the author:

William Wordsworth, the noble nature poet, who seeks all the worldly comforts in the lap of nature. For him nature is the only source for the human being to live a happy life. Wordsworth not only considers nature as a mother but as a primary nurse too. It looks after the child with utmost love and affection as well as takes care of each and every wound of the patient with perfection and skilled manner. Nature is the supreme power for William Words worth in the whole universe. That's why he is considered as a nature poet. Wordsworth was not same, as reflected in the 18th century. He was completely having a different approach in his mind towards this world in the initial days of his career. Even in his personal life too he echoes for something but follows something else. This is one of the greatest ironical factors about Wordsworth's life. If his life is being segregated it can easily and closely be examined this approach in various aspects itself.

Simplicity and Nature

Wordsworth's verse is celebrated for its straight-forwardness and vivid nature depictions. He held a deep conviction in the unadulterated essence of emotions and the splendour of the outdoors. However, despite advocating a return to nature and simplicity, he himself lived a rather complex life, which included various personal and financial struggles:

"Fairest of all rivers, loved to blend his murmurs with my nurse's song and from his alder shades and rocky falls, and from his fords and shallows sent a voice That flowed along my dreams." (The Prelude)

It is very hard to believe that the poet who gives voice to all the mute objects of nature was very reluctant towards his own contrastive nature. His poetry portrays such a peaceful and solace ambiance while he himself was very moody and violent temper in his real life. It is almost a shock to know that a person who is established his work as a symbol of calmness and nobility was himself having atempestuous and plebeian nature. In the very early age, he lost his parents and his charge been given to relatives who sent him to the Hawkshead school. But the buildings of the school were not able enough to impress

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Wordsworth as the open beauty of the Hawkshead. This reflects in his work where he says close those barren leaves i.e., books and come to the open shelter of nature that is real teaching as well as learning. He emphasised that the wisdom of nature is better than those of books:

"Books! 'tis a dull and endless strife: Come, hear the woodland linnet, how sweet his music! on my life, There's more of wisdom in it.And hark! how blithe the throstle sings! He, too, is no mean preacher: Come forth into the light of things, Let Nature be your teacher." (Coleridge).

But this loneliness which is complete itself with the bounties of nature was not fulfilled by human surroundings. He preferred to live alone. Here, its very ironical that through his works he always echoes for the human relationship and humanity. But in his own real life he himself wanted to be aloof so that he can fulfil his solitude with pleasures of nature.Wordsworth's father served as the legal representative for James Lowther, the 1st Earl of Lonsdale. Because of this association, he resided in a grand mansion in a quaint town. Despite the town's size, Wordsworth was provided with all the conveniences akin to those afforded to a child in a large city. Throughout his life, Wordsworth enjoyed a captivating mix of both urban and rural experiences.

Childhood and Innocence

As Wordsworth was born in Cockermouth, Cumberland (now part of Cumbria), and spent his early years in towns and cities like Penrith and Hawkshead. He attended schools in these places and experienced the hustle and bustle of urban life during his formative years. He attended Cambridge University, where he was exposed to a more intellectually stimulating environment in a city setting. This time in Cambridge played a crucial role in shaping his poetic and philosophical thoughts. After his university education, Wordsworth lived in London for some time. During this period, he witnessed the rapid industrialization and urbanization of the city, which significantly impacted his perceptions of nature, humanity, and society. One of Wordsworth's recurring themes is the idea of childhood innocence and purity. He saw children as closer to nature and believed that they were born with a sense of wonder and appreciation for the world around them. Ironically, Wordsworth's own relationship with his children was often distant and strained. A notable line from William Wordsworth's "Ode: Intimations of Immortality from Recollections of Early Childhood" highlights the purity of childhood: "Trailing clouds of glory do we come From God, who is our home." (Intimations)

In this poem, Wordsworth reflects on the loss of the vivid sense of spiritual connection and awe that children often possess as they grow older. The line suggests that children are born with a divine connection and a sense of wonder ("clouds of glory") from their origin in a higher realm ("God, who is our home"). This quotation beautifully captures the idea of the innate innocence and divine essence of children. But somehow, he himself was failed to maintain his own relationship well. Henceforth can be said that the picture he depicts in his works about childhood and innocence through Lucy Poems and many other major works, could not find place in his real life.

Irony of Urbanization

Wordsworth criticized the negative impacts of industrialization and urbanization on the human spirit and the natural environment. He mourned the loss of a simpler rural life and the connection with nature. However, he also lived in urban settings for most of his life, including London, contradicting his idealization of rural life which paved the way for his deep appreciation of nature and his focus on rural life in his poetry. However, it's essential to note that Wordsworth did spend some time in urban canters like London during his life. He was critical of the rapid urbanization and industrialization that he witnessed during his time, which influenced his poetry. Wordsworth's views on urban life and the negative impacts of industrialization are evident in many of the poems like:

"The world is too much with us; late and soon, Getting and spending, we lay waste our powers: Little we see in Nature that is ours; We have given our hearts away, a sordid boon!" (The world is too much with us)

The lines are extracted from Wordsworth's sonnet "The World Is Too Much with Us," composed in the early 19^{th} century. In this poem, the speaker expresses his disappointment with the materialistic and consumer-driven nature of urban society. In William Wordsworth's sonnet "London, 1802," he expresses his concern about the state of England during the Industrial Revolution and criticizes the urbanization and moral decay of society. Here's the quotation from the poem along with an example to illustrate urbanization:

"Milton! thou shouldst be living at this hour: England hath need of thee: she is a fen of stagnant waters: altar, sword, and pen, Fireside, the heroic wealth of hall and bower, have forfeited their ancient English dower of inward happiness. We are selfish men; Oh! raise us up, return to us again; And give us manners, virtue, freedom, power. (London, 1802)

Despite these critical perspectives, Wordsworth's focus and affinity remained with the natural world and rural landscapes, which became central themes in his poetry. His connection to nature and the countryside served as a source of solace and inspiration throughout his life.

Romanticism vs. Neoclassicism

Wordsworth played a pivotal role in the Romantic literary movement, which championed feelings, individuality, and creativity. However, in his earlier years, he followed the neoclassical style and later shifted to Romanticism, reflecting an ironic change in his poetic approach. Romanticism and Neoclassicism are two major literary and artistic movements that emerged during different periods in history and held contrasting views on various aspects of art and human experience. William Wordsworth, as a prominent Romantic poet, was a key figure in the Romantic movement and his works often embody the ideals and characteristics of Romanticism. On the other hand, Neoclassicism, which preceded Romanticism, emphasized order, reason, and adherence to classical models.

To highlight the distinction between Romanticism and Neoclassicism in Wordsworth's oeuvre, we can juxtapose his Lines Composed a Few Miles Above Tintern Abbey with "Elegiac Stanzas Suggested by a Picture of Peele Castle in a Storm". Lines Composed a Few Miles Above Tintern Abbeyauthored in 1798 embodies numerous traits of Romanticism. In it, Wordsworth reflects on his return to a picturesque scene of nature, specifically Tintern Abbey, after a five-year absence. He describes the emotional impact of the natural landscape and explores themes such as memory, the sublime, and the unity between man and nature. The poem is infused with a sense of awe and reverence for nature, emphasizing the individual's emotional response and connection with the natural world:

"But oft, in lonely rooms, and 'mid the din of towns and cities, I have owed to them, In hours of weariness, sensations sweet, Felt in the blood, and felt along the heart; And passing even into my purer mind, With tranquil restoration-feelings too Of unremembered pleasure; such, perhaps, As have no slight or trivial influence On that best portion of a good man's life, His little, nameless, unremembered acts Of kindness and of love."(Tintern Abbey)

In this excerpt, Wordsworth describes how the memory of the natural scenery of Tintern Abbey has sustained and inspired him during moments of weariness and in the busy city life. He emphasizes the transformative power of nature on the human spirit, highlighting the importance of emotional experiences and inner connections with the natural world. "Elegiac Stanzas" demonstrates Neoclassical traits through its commitment to formal patterns and classical motifs. While it has a romantic theme of contemplating the power and grandeur of nature, the Neoclassical influences are evident in the poem's ordered and structured presentation:

"When, from behind that craggy steep, till then the bound of the horizon, a huge cliff, as if with voluntary power instinct, Upreared its head."(1805,330-412)

In this excerpt, Wordsworth uses a structured and formal style, which is a characteristic of Neoclassicism. The poem adheres to a regular rhyme scheme and meter, which was typical of Neoclassical poetry. Additionally, the description of the landscape, particularly the "craggy steep" and "huge cliff," reflects a focus on nature's physical attributes and grandeur, similar to the Neoclassical emphasis on the portrayal of the natural world in its true and objective form. Despite these Neoclassical elements, it's important to note that the poem still contains Romantic themes of awe and contemplation of nature's power. Wordsworth's Romantic sensibilities shine through in the emotional response to the scene and his portrayal of the sublime aspects of the world of Nature.

Literary Rejection

In his early years, Wordsworth faced rejection and criticism from established literary figures. However, as time went on, he became one of the most celebrated poets of his era, and his works are now considered classics of English literature. As a renowned poet, William Wordsworth produced a considerable body of work throughout his lifetime. In his early years, he composed numerous poems, some of which were eventually excluded from his published collections due to various reasons. One of the most significant early poetic works that was rejected and never included in his major works is titled "Descriptive Sketches." "Descriptive Sketches" was penned during Wordsworth's European expedition, notably his 1791 trip to France. This extended piece captures his insights on the terrains and individuals he met along the way. The poem shows the influence of other poets of the time, particularly William Cowper and James Thomson, as well as classical authors:

"But doubly pitying Nature loves to show'r, Soft on his wounded heart her healing pow'r, Who plods o'er hills and vales his road forlorn,Wooing her varying charms from eve to morn. No sad vacuities his heart annoy," (The Descriptive Sketches)

Originally, the poem was slated for inclusion in his seminal work, "Lyrical Ballads," a collaborative effort with Samuel Taylor Coleridge, released in 1798. However, Wordsworth eventually decided to exclude "Descriptive Sketches" from the collection. There were several reasons for this decision. Wordsworth was undergoing a significant transformation in his poetic style during this period. He was moving away from the conventional and ornate language used by his predecessors and towards a more simple, natural, and lyrical style. "Descriptive Sketches" didn't align with the kind of poetry he wanted to be known for. While "Descriptive Sketches" portrayed vivid descriptions of nature and landscapes, it lacked the thematic unity that Wordsworth sought in his later works. He was beginning to explore deeper themes related to human emotions, imagination, and the connection between nature and the human mind. Wordsworth aimed to create a cohesive and consistent collection of poems in "Lyrical Ballads", and "Descriptive Sketches" might have disrupted the overall flow and thematic coherence of the anthology. Wordsworth himself was not entirely satisfied with "Descriptive Sketches" and might have felt that it did not represent his true poetic vision adequately.

It's worth noting that despite its rejection from his major works, "Descriptive Sketches" was later published separately in 1827, after undergoing revisions by Wordsworth himself. However, it is not considered one of his significant contributions to English literature.While "Descriptive Sketches" was excluded from "Lyrical Ballads," Wordsworth's decision to remove it allowed him to focus on refining his poetic philosophy and defining the themes that would become central to his later, more celebrated works. His subsequent works, including "Lines Composed a Few Miles Above Tintern Abbey," "Ode: Intimations of Immortality," and "The Prelude" solidified Wordsworth's standing as a central figure in the Romantic movement, revolutionizing the understanding and crafting of poetry:

"O there is blessing in this gentle breeze,A visitant that while it fans my cheek

Doth seem half-conscious of the joy it brings,
From the green fields, and from yon azure sky.

Whate'er its mission, the soft breeze can come,

To none more grateful than to me; escaped

From the vast city, where I long had pined, A discontented sojourner: now free,

Free as a bird to settle where I will."
(The prelude).

Political Irony: Initially, Wordsworth fervently backed the French Revolution, drawn to its promises of liberty and brotherhood. But as events took a violent and tumultuous turn, his enthusiasm waned, leading him to adopt more conservative political stances. This transformation stood in stark contrast to his earlier fervor for radical changes. His poem, "Lines Written a Few Miles Above Tintern Abbey" - often referred to simply as "Tintern Abbey" or "Lines Composed a Few Miles Above Tintern Abbey" - penned in 1798, is a celebrated work that elegantly captures themes of fraternity and kinship: "The anchor of my purest thoughts, the nurse, the guide, the guardian of my heart, and soul of all my mortal being. Nor perchance, If I were not thus taught, should I the more." (The World is too much with us).

In,Tintern Abbey, Wordsworth revisits the banks of the River Wye in Wales, near the ruins of Tintern Abbey, after a five-year absence. He reflects on the changes he has undergone during this time and contemplates the profound connection between nature, memory, and human experience. Throughout the poem, there are several instances that showcase fraternity and brotherhood. Wordsworth describes the natural scenery around Tintern Abbey with a sense of familiarity and friendship. He speaks of the "beauteous forms" of nature and the "coherent" imagery of the landscape. This portrayal of nature as a companion and friend illustrates a sense of brotherhood with the natural world.

Wordsworth expresses a deep sense of connection with his sister, Dorothy, who accompanies him on this visit. He describes her as "my dearest Friend" and appreciates the way she perceives and experiences nature. Their shared bond and appreciation of the natural world strengthen the theme of fraternity between siblings and humanity as a whole.The poem explores the continuity of human existence and the idea that people are united across time through shared experiences and emotions. Wordsworth recognizes 'stillsad music of humanity' acknowledging the shared trials and elations that connect everyone.

In essence, "Tintern Abbey" exemplifies the spirit of fraternity and brotherhood through its portrayal of the poet's connection with nature, his sister, and humanity as a whole. The poem's themes of shared experiences, continuity, and the power of memory underscore the idea that we are all interconnected and part of a larger, harmonious whole. This sense of unity and shared existence resonates deeply with readers and has contributed to the enduring popularity and significance of this poem in the world of English literature. While in "The Prelude," Wordsworth vividly describes the impact of the French Revolution on his own beliefs and ideals. While visiting France in 1791, he was swept up in the intense zeal of the revolutionary movement. The poem captures his early excitement for the Revolution and his aspirations for profound societal transformation. Wordsworth saw the French Revolution as a struggle for liberty, equality, and fraternity- ideals that aligned with his own aspirations for humanity.

However, as the Revolution unfolded and descended into violence and chaos, Wordsworth's enthusiasm waned, and he became disillusioned with the direction it took. He began to question the violent means employed and the loss of noble ideals in the process. This conflict within Wordsworth's mind between his revolutionary ideals and the harsh realities of the Revolution is evident in "The Prelude."Rivalry Feelings: In "The Prelude," Wordsworth also portrays feelings of rivalry and competition with his contemporary poets. One notable example is his complex relationship with Samuel Taylor Coleridge, a fellow poet and his close friend. While they collaborated on "Lyrical Ballads," there was also an underlying sense of rivalry between them, as they each sought to establish their individual poetic voices.One of the notable aspects of their personal lives that caused some tension was Coleridge's struggle with opium addiction, which had an impact on his health, family life, and writing. This period of Coleridge's life was a challenging one, and it did affect his relationship with Wordsworth and others in their literary circle.

Wordsworth grapples with feelings of insecurity and self-doubt as he compares his own poetic talents with those of Coleridge. This rivalry is evident in the poem as Wordsworth tries to find his unique poetic identity and seeks recognition for his literary achievements. "The Prelude" offers a profound exploration of Wordsworth's intellectual and emotional journey, capturing his changing beliefs and sentiments as he grapples with revolutionary ideas and navigates the complexities of personal relationships, including rivalry with fellow poets. It remains one of Wordsworth's most influential works, reflecting the shifting ideals and emotions of an era marked by revolutionary fervour and literary experimentation:

According to Thomas Carlyle, "Coleridge, with his gigantic intellect, his boundless stores of knowledge, his deep insight into the human soul, his marvellous gift of eloquence, might have left Wordsworth far behind him in the race of literary genius, if he had been given more chance." (Carlyle)

The statement that if Samuel Taylor Coleridge had been given an equal opportunity as William Wordsworth, he could have surpassed him in literary genius. Samuel Taylor Coleridge, a prominent poet and intellectual of the Romantic period, is celebrated for iconic works like "The Rime of the Ancient Mariner" and "Kubla Khan," which stand as pillars of English literature. Coleridge was also a prominent literary critic and philosopher, coining the term "willing suspension of disbelief" and making significant contributions to literary theory. Conversely, William Wordsworth, a cornerstone of the Romantic movement, transformed literary depictions of nature and the human experience, particularly through works like "Lyrical Ballads" and "The Prelude." His emphasis on the commonplace and the role of the human psyche in moulding perception and feeling significantly influenced the evolution of English poetry.

Both Coleridge and Wordsworth contributed significantly to the Romantic literary tradition, each with their unique style and philosophy. It is not a matter of one poet being superior to the other but rather a celebration of their respective talents and their lasting influence on English literature. At the last it is not hyperbolic to conclude that Wordsworth's poetry is known for its emotional intensity and deep connection to human experiences. Ironically, despite his focus on individual emotions, he often portrayed his emotions in a more universal context, seeking to evoke emotions in readers beyond his own personal experiences.

Wordsworth often explored how nature could elevate human emotions and provide a sense of spiritual solace. However, he also acknowledged that nature could sometimes evoke darker feelings and emotions, reflecting the complexity of the human psyche. In conclusion, William Wordsworth's work and life present a complex and sometimes ironic juxtaposition of ideas. Despite some contradictions, his influence on English poetry and the Romantic literary movement remains profound. He further says: "We live by admiration, hope, and love; And, failing these, we are as dust." (The Poetical).

This quotation is from Wordsworth's poem "Ode:

Intimations of Immortality from Recollections of Early Childhood." In the poem, Wordsworth explores the theme of loss and the inevitability of death. He argues that we are born with a sense of wonder and joy, but that this sense is gradually lost as we grow older. We become jaded and cynical, and we lose our ability to see the beauty in the world.

The aforementioned quote underscores life's irony. While our world brims with beauty and marvels, we frequently overlook them. We are so focused on our own problems and concerns that we forget to appreciate the simple things in life. We are like dust, blowing in the wind, without any purpose or direction.Wordsworth's quotation is a reminder to us to never take life for granted. We should cherish every moment, and we should never stop looking for the beauty in the world. We should live by admiration, hope, and love, and we should never lose our sense of wonder.

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Understanding Teaching Learning through Constructivism

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सारांश

रचनावादी शिक्षण अधिगम की प्रक्रिया मूल रूप से शिक्षार्थी केंद्रित है। रचनावादी दृष्टिकोण कक्षा शिक्षण में क्या, कब एवं कैसे पढ़ाया जाए, के स्थान पर कक्षा में शिक्षार्थियों के स्व-अधिगम, अनुभव आधारित अधिगम एवं स्वतंत्र वातावरण को अधिक महत्व प्रदान करता है। तथ्यात्मक एवं रट कर अर्जित किए गए ज्ञान की अपेक्षा स्व-अनुभव द्वारा अर्जित ज्ञान शिक्षार्थियों में जीवन कौशल के विकास हेतु महत्वपूर्ण है। जीन पियाजे द्वारा प्रदत्त संज्ञानात्मक विकास को प्रभावित करने वाले चार कारकों में से अनुभव एक प्रमुख कारक है। एक ही स्थिति या वातावरण में प्रत्येक शिक्षार्थी के अनुभव भिन्न-भिन्न हो सकते हैं। वैयक्तिक अनुभव किसी भी शिक्षार्थी के लिए महत्वपूर्ण है क्योंकि भावी ज्ञानार्जन इसी पर निर्भर करता है। सामान्यतः प्रशिक्षण एवं अनुभव के द्वारा व्यवहार के संशोधन के रूप में अधिगम की अवधारणा को समझा जाता है जिसमें प्रशिक्षण को अनुभव की तुलना में अधिक महत्व दिया जाता है। इस कारण शिक्षार्थी में अनुभव की अपेक्षा तथ्यों को रट कर याद करने की प्रवृत्ति उत्पन्न हो जाती है। अनुभव आधारित शिक्षा जीवनपर्यंत शिक्षा का आवश्यक अवयव है। राष्ट्रीय शिक्षा नीति 2020 में भी अनुभव आधारित शिक्षा या अनुभव आत्मिक शिक्षा को प्रोत्साहित करने की सिफारिश की गई है। प्रस्तुत शोध पत्र में सेवापूर्व शिक्षकों में अनुभव आधारित 'शिक्षण' एवं 'अधिगम' प्रक्रिया को रचनावादी दृष्टिकोण से समझने पर प्रकाश डाला गया है।

Introduction

Constructivism is a philosophy of learning which focuses on learner-centered education. In India earlier (before 2015) the Teacher Education Program educated the teachers in teachers cantered approach where teacher has the decisive power about the learner regarding what has to be taught (curriculum), where has to taught (school climate), when has to taught (time table) and who will taught (teacher). Due to the teacher-centered approach life skills among students cannot be developed. At the same time the fact is that in all subjects there is very few factual knowledges only which can be provided by the teacher to the student, rest of the syllabus cannot be taught by the teacher. Jean Piaget (1936; 1957) a prominent psychologist said that there are four factors that effects the cognitive development of the learner. First one is Maturation. Maturation is a biological process and it is concerned with the development of the central nervous system of a learner. If it does not work in an appropriate manner it will adversely affect the process of acquiring knowledge. Second factor is Experience. Piaget categorised experience is into 3: simple exercise, simple abstraction and reflective abstraction. Simple exercise means repetition of learned behaviour which makes the consolidation of behaviour and knowledge. Simple abstraction means the fact-based knowledge which the teacher can taught to students. For example, the colour of Apple is red, it is of white from inside, it has small seeds etc. But what is the taste of Apple? This knowledge cannot be given by the teacher and does not come into the category of simple abstraction. The taste of Apple can be known to only those learners who have eaten Apple. In other words, to know the taste of Apple one has to eat it. The knowledge which is generated through the action of the learner on the environment is reflective abstraction. To provide the knowledge about the taste of Apple, teacher can provide the environment or situation by cutting the apple into pieces and putting it before the learner for eating. This indicates that to learn the students must be active. Teachers can provide opportunities of learning to the learner by creating the situations. Activity on the part of the students is must. There are two types of activity: physical activity and mental activity. One of the most important aspect is that taste of Apple is different for everyone. This personal experience is very important for an individual as later assimilation and accommodation depends on it. In other word subjective experience of the learner is of critical importance in learning process. For example, one man's meat is other man's poison. Generally, teachers understand the concept of learning as the MODIFICATION OF BEHAVIOUR THROUGH TRAINING AND EXPERIENCE in which there is more

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emphasis on Training in comparison to Experience. Due to these students memorize the concept without understanding. It has been observed that a student of physics cannot explain the concept of Volume. Astudent of biology cannot explain the concept of Biosphere rather they define these concepts as written in the book or as told to them by the teacher. A student of history cannot tell the time period of ancient Indian history. Due to experience a rural child can move from one place to another by North, South, East and West while urban child uses right turn and left turn for the same. Education prepares us for life. In other word it teaches us to live a life. This can be learned through the education of experience. Therefore, experiences play a significant role in one's education. National Education Policy 2020 also recommends to encourage and emphasize experiential learning within each subject (p.11). The third factor is Education and Cultural background of the learner and how he has been educated formally and informally counts to his or her experiences on which further knowledge is built. A learner educated in a government school situated in rural area may have different concept of teaching from the learner taught in a private school of urban area. Both are now pre-service teachers of same institution and ENGAGE in one-week observation in the same school. They may have their own expectations, confusions and conflicts. The moment both the pre-service teachers interact with each other and gain view points of one another, clarify their some confusions and conflicts. Vygotsky (1962; 1978) emphasized that students construct knowledge through social interaction with others. The content of this knowledge is influenced by the culture in which the student lives, which includes language, beliefs and skills. Need not to mention here that social constructivism gives great emphasis on peer interaction in learning. According to Shamier and Tzuriel (2004) fellow students also can be effective tutors. In peer tutoring one student teaches another This can be of two types: cross age peer tutoring and same age peer tutoring. Cross age peer tutoring works better than same age peer tutoring. An older peer is more likely to be skilled than the same age peer. The unconditional and informal relationship between the students of the same class influence each other more rather than the teacher student relationship.

The fourth factor is Equilibration. A learner can't remain in a conflict and confusion for long time. Equilibration is an auto regulatory mechanism helps the learner to adapt with new information, organise conflicting cognitive structures, thus reaching to qualitatively better understanding of the concept under study.

In teacher-centered approach learners are trained to think that teacher is right and they are wrong but the reality is that teachers' experiences do not match with the experience of the learner. All this wide gap of experience creates problems in the learning of students. Now researches in the field of Educational Psychology advocate constructivistic approach for facilitating the learning of students.

But the main issue is that still teachers-centered approach linger on in schools because the teachers are educated in that way earlier. Though the Gazette of India 2010 and NCTE curriculum framework 2009 has clearly advocated about the exposure of constructivistic approach to the pre-service teachers. On the recommendation of Government of India, the Teacher Education Program of one year have been converted in two-year program with effect from 2015-2017 with special input of constructivistic approach systematically throughout the course. As the two years teacher education program has been divided into four semesters, in each semester there is emphasis on understanding teaching and learning constructively. National Education Policy 2020 mention that all B.Ed. programmes will include training in time-tested as well as the most recent techniques in pedagogy including learner-centered and collaborative learning (p.23).

Teaching and learning is two sides of the same coin whatever activity is done by teacher to facilitate the learning of students is considered teaching. When more mature person affects the behaviour of less mature person teaching occurs. Though in earlier approaches maturity symbolises physical age of a person so teacher is more aged person than learner but in constructivistic approach maturity does not mean physical age. Age might be one of the factors. Here maturity means the person having more experience and knowledge in the particular field which is to be taught to the learner. There are two aspects of teaching: one is within the classroom and another is outside the classroom.

In semester 1, one-week observation of school is done by pre-service teachers to understand the concept of teaching and learning. In other words, pre-service teachers are ENGAGED in the school to observe the teaching of regular teachers. Pre-service teachers have some previous knowledge about teaching and learning as they are graduate or post graduate pass out and have been taught by teachers from class 1 to the graduation. On the other hand, they may have some expectations or opinions about the teaching and learning in their mind during school observation. They observe regular teachers taking classes, putting questions to students, writing on blackboard, asking students to read, or to think. Pre-service teachers observe many teachers teaching different subjects like English, Biology, Maths, Social sciences, Hindi etc. Some of them are teaching with out participation of students while others are involving students more during the teaching. By doing so they EXPLORE about the teaching and learning behaviour of teachers and students respectively.

Similarly, they observe students and teachers outside the classroom such as during morning assembly, interval, cultural programs, sports, competitions and examinations. On the basis of this classroom observation and outside classroom observation pre-service teachers assimilate about what is teaching and learning. In other words which activities and situations modify the student's knowledge, skills and attitude. Pre-service teachers may judge or expect some activities and behaviour as correct and others as wrong though they are not the member of inspection team. All of them may have some doubts, confusions as well as conflicts regarding what is teaching and what is learning. Social constructivistic approach emphasizes social context of learning and that knowledge is mutually built and constructed (Bearison and Dorval, 2003). Involvement with others creates opportunity for students to evaluate and refine their understanding as they are exposed to the thinking of others and as they participate in creating shared understanding (Gauvain, 2001). In this way experience in social contexts provide an important mechanism for the development of students thinking (Johnson and Johnson, 2003). Vygotsky (1978; 1962) emphasized that students construct knowledge through social interaction with others. The content of this knowledge is influenced by the culture in which the students lives, which includes language, beliefs and skills. After the observation phase these pre-service teachers prepare observation report containing three aspects: first one is, what they thought or expect about teaching and learning; second, what facts they observe during observation; third one is, what is the gaps, confusions and conflicts between the expectations and the facts.

During the second semester pre-service teachers remains in teacher education institutions and their practice teaching skills under the supervision of teacher educators. Though there are certain skills already identified by some educationist are based on Teachers-entered approach to teaching learning. while learner-centered approach to teaching learning demands different types of skills to be master or practice by the teachers. Therefore, e.g. in a 15-day schedule of practice teaching skills, 5 days can be devoted in the identification of a skills, selecting and creating strategies based on learner-centered approach and identifying teaching skills involved in selected strategies. Rest of the 10 days can be devoted to practice the skills and strategies. Some of the skills maybe creating tasks, deciding strategies, forming groups, distributing tasks, monitoring group activities, observing, providing help, evaluating students and providing feedback.

This time pre-service teachers not only observing but also participating in teaching learning process in a simulated manner so their doubts, confusions become clear and conflicts are resolved by themselves to a little bit and some of them may be clear while they interact with teacher educator. In other words, teacher educator EXPLAIN them, teach the concept of teaching and learning. They will be in a better understanding about what activities and behaviours of the teacher facilitate the knowledge, skill and attitude of the learner. Right and wrong behaviour of the teacher is not permanent. It depends on the situation such as a school, students, infrastructure etc

After practicing the teaching skills under the supervision of teacher educators and before taking up the final practice in teaching in real situations pre-service teachers were taught and demonstrated various teaching strategies based on constructivist approach. They were also taught the steps of preparing lesson plans based on these strategies. Teacher educator EXPLAIN and ELABORATE pre-service teachers about all these.

It is very important to mention here that scaffolding is a technique of changing the level of support. Over the course of training session, a more skilled or knowledgeable person (teacher educator) adjust the amount of guidance to fit the pre-service teachers' current performance level. When pre-service teachers learn new skills, the teacher educators might use direct instructions or explanation. As pre-service teachers' competence and understanding regarding the concept of teaching and learning increase, less guidance is given.

Dialogue is an important tool of scaffolding in the Zone of Proximal Development (John Steiner and Mohn, 1996; Tappan,1998). Vygotsky viewed children as having rich but unsystematic, disorganised and spontaneous concepts meet with the skilled helpers having more systematic, logical and rational concepts. As a result of the meeting and dialogue between pre-service teacher and teacher- educator, the pre-service teachers' concepts become more systematic, logical and rational.

Now pre-service teachers select topic, select strategy to suit the topic and prepare lesson plans. Teacher educators go through the lesson plan and EXPLAIN the modifications where needed: in the content; in steps; in example or in strategy. The process of practice in teaching in real situation goes on till one month continuously or 40 working days. So, this is the time when pre-service teachers learn teaching as a Science as well as Art. He or she intensively ENGAGE in teaching learning, EXPLORE the various aspects of classroom situations, LEARN to handle them on the spot effectively sometimes or not, get FEEDBACK of students during teaching learning along with the CRITICISM of teacher educator or mentor which he or she go through after the class. 'Feedback' and 'criticism' works as EVALUATION. Pre-service teachers must accept it positively and regulate their teaching behaviour accordingly.

Either daily or on alternate days pre-service teachers and mentors have a detailed discussion; means EXPLAIN and ELABORATE about the strong and weak points of Pre-service teachers teaching learning behaviour. In this phase pre-service teachers were EXPOSED or taught by teacher educators who have less exposure of real school situation, here reflective abstraction takes place as pre-service teachers themselves assimilate the good and bad aspects of their teaching and accommodate themselves in the next class accordingly making their teaching qualitatively better day by day. This involves the process of SELF-EVALUATION and SELF-REGULATION.

In the final semester pre-service teacher do their internship of three months. They are placed in a school under the supervision of school principal and regular teachers. They work as a junior regular teacher and provided a full time table. They face the practical difficulties in real situations and have to act upon and the knowledge about what is teaching and learning is generated from their actions and at the same time the able to understand how to apply theory into practice and what extent it can be applied. They discuss the problems with the subject teachers, class teacher or principal as per the need on regular basis and adapt themselves in teaching learning process. Every weekend they share experiences difficulties, enjoyments in doing teaching with the teacher educators or mentors.

This whole process of internship in the is the is the peak time to understand the concept of teaching and learning because pre-service teachers interact with regular and experienced field workers (regular teachers) on one hand and their teacher educators (expert of theory and new research) on the other hand. This two-direction interaction help all level of teachers. First, teacher educators get the knowledge regarding practical difficulties of within the classroom and outside the classroom of school. Secondly, regular teachers of school came to know the new theories and researches and practices in teaching learning through pre-service teachers and thirdly, pre-service teachers get the benefit of both field exposure and new theory and practice understand, assimilate and act accordingly to the situation he or she might be successful in doing so or may not be. He/she has to resolve the conflict and confusions daily, understanding teaching in better and maturing as teachers and finally following the path of becoming a reflective teacher.

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Financial Literacy and Investment Decisions in A Select Demography of India

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Abstract

While trying to evaluate financial education in India, utilizing the OECD survey of 600 government employees from eight chosen areas, it has been discovered that the normal financial proficiency of the state is superior to the all-India normal. Male financial education just as comprehensiveness is likewise higher than females. In any case, metropolitan financial incorporation isn't essentially higher than the country regions any longer; anyway, metropolitan financial proficiency is discovered to be altogether more than rustic. Advanced education and pay level could fundamentally influence financial proficiency. Notwithstanding, work circumstances could influence financial incorporation as it were. Financial proficiency alongside training level, work circumstance, and pay band could have a huge effect on financial comprehensiveness and picking moderately more dangerous speculations.

Introduction

In the present financial world, the significance of financial schooling is universally recognized just like a critical part of the financial prosperity of a person just as the financial steadiness of a country. These days, buyers are entering a dangerous commercial center where they are faced with a wide cluster of financial items and administrations. The astounding decisions in these items and the cunning publicizing regularly perplex customers and forestall them from understanding the fine print of the intricate data and the disadvantageous hazards related to that. The circumstance turns out to be more confounded because of mechanical developments that have brought about a blast of new items. This builds the obligation and danger of family units in settling on financial choices. The need emerges to furnish financial buyers with fundamental financial information and abilities to empower them to explore the perplexing scope of items and benefits and select those that best suit their necessities and assets. The expansion in market intricacy, openness to cutting-edge financial innovation like portable and online installments, the increment in the financial obligation of people because of the move from characterized benefits plans to contributory plans, and the worry for retirement arranging and medical services needs make it fundamental to comprehend the financial ideas and settle on reasonable choices with respect to financial exchanges. Financial education upgrades the information and constructs certainty among families to deal with their financial undertakings toward a protected financial future. Exploration shows that financial education has a positive overflow impact on the economy. Individuals who can precisely attempt basic computation and are educated about swelling and danger expansion will in general arrange more for their retirement.

"Absence of proficiency as a rule and financial education specifically, are the principle jumps in growing the inclusion of financial administrations to the more unfortunate sections of the general public" (K.C. Chakrabarty, Former Deputy Governor, RBI, 2009). Financial proficiency is a supplement to financial incorporation, especially in rising economies where a sizeable extent of individuals is outside the ambit of the financial framework. To eliminate financial unapproachability, there is a more extensive development of bank offices to give fundamental financial administrations to individuals in India. Be that as it may, the records opened under different government plans are described by fewer exchanges of little worth. This shows that individuals have the availability, yet they do not have the information and comprehension about the 'utilization' and 'advantages' of the items and administrations offered by the financial organizations. In India, the vast majority are hazard loath, and, for quite a long time, thought about putting resources into gold and land as the most secure saving items. These assets address a huge pool of financial

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assets and an enormous capital implantation in the economy whenever resources into profitable financial items and administrations. In this way, there is an incredible requirement for financial proficiency in India.

The route towards a financially proficient India is likewise exceptionally testing because of the enormous unbanked populace, low education levels, neediness, local dialects, changed societies, and the wide difference in financial turn of events. The wide variety of ways of life, convictions, religions, and customs in various states direct the conduct of individuals and furthermore outline their mentality. Subsequently, in such conditions, this sort of study is the need of great importance in quantifying the financial education of individuals. This examination is a push to deliver observational proof with respect to the degree of financial education of the individuals of Haryana. An endeavor has been made to look at the effect of the socio-segment factors on the financial proficiency of individuals. The discoveries could be useful in detailing customized financial instruction programs, and fitting investigation material can be planned with due thought of the instructive foundation, home, and financial status of these populace sub-gatherings. The greater part of the broadly utilized meanings of financial education highlights the capacity of people to procure, comprehend, and assess data to settle on exact choices to make sure about a superior financial future for them. The writing relating to the issue has distinguished five areas of the individual budget-making a decent living, following along, picking items, preparing, remaining educated, and finding support. Every one of these areas comprises of financial information, financial perspectives, and financial practices that together cosmetics the idea of financial education. These spaces are productively reflected by the OECD meaning of financial proficiency, which characterizes it as "A mix of mindfulness, information, and ability, demeanor and behavior important to settle on sound financial choices and eventually accomplish individual financial prosperity" (Atkinson and Messy, 2012). The definition was embraced by the G20 pioneers in 2012. The examination receives the survey created by the OECD that will in general inspect the by and large financial proficiency of the individuals by estimating the three most significant elements of financial education-financial information, financial mentality, and financial conduct. These individual measurements possibly convey indispensable experiences past those given by financial education alone. Financial education has become a matter of profound concern everywhere in the world.

Another OECD International Network on Financial Education study was directed by Atkinson and Messy (2012) in 14 nations across 4 mainlands. Financial education was estimated based on three parts of financial proficiency; in particular, financial information, financial conduct, and financial disposition. The outcomes featured an absence of financial information among an enormous extent of the populace in all the nations reviewed. Less mindfulness was found concerning the parts of enhancement and accumulating funds. Ladies had a lower level of financial information than men in a large portion of the nations. A positive relationship existed between pay and financial proficiency, and a significant degree of financial information, positive conduct, and mentality were portrayed by higher-instructed individuals. The examination likewise uncovered that individuals with higher information were bound to display positive financial conduct.

Over the new years, financial education has become a significant territory of worry in practically all the nations on the planet. Far and wide insufficiency in financial proficiency has been seen among the individuals of any nation as a rule and those of the non-industrial nations specifically. Further, research concentrated everywhere in the world has uncovered a generally lower financial proficiency among ladies in the created nations just as in the agricultural nations. The OECD International Network on Financial Education has built up a poll on estimating financial proficiency taking contributions from 35-part nations and a couple of other spectator nations. It has characterized financial education as 'a mix of mindfulness, information, ability, demeanor and conduct important to settle on sound financial choices and eventually accomplish individual financial prosperity' (OECD, 2015). In a nation like India, with assorted social and monetary profiles, financial education is discovered low among the individuals when all is said in done and extremely low among the asset helpless class specifically. The G20/ OECD INFE Report (2017) on grown-up financial education has granted a score of 11.9 to a humble positioned India against the greatest conceivable score of 21 out of a review among the G20 nations, the normal score having been discovered to be 12.7. Lower financial education for the less fortunate segment of individuals combined with their insubstantial quality and vulnerability in pay, brings about an endless loop driving these individuals to a helpless family unit dynamic to living under determined financial tension. Financial education improvement might have helped this asset-helpless populace to getimportant data for turning into a piece of the formal financial framework and for improving their financial circumstance at the appointed time. It is subsequently seen that the absence of financial education has additionally driven these individuals to be consistently reliant upon the casual financial framework as constrained by cash moneylenders. Financial proficiency is required for the less fortunate class as well as for the center-pay and lower-center-pay populace, for whom it tends to be compelling in understanding the wide scope of accessible financial items and administrations with their advantages or limits upgrading their comprehension of the market. Financial education hence helps in advancing financial consideration and can be supposed to be working in the interest side of financial incorporation. The OECD/INFE has likewise characterized financial incorporation in its tool stash as 'the way toward advancing moderate, ideal and sufficient admittance to a wide scope of directed financial items and administrations and expanding their utilization by all sections of society through the execution of custom-fitted, existing and imaginative methodologies including financial mindfulness and instruction so as to advance financial prosperity just as monetary and social consideration' (OECD, 2015). One chief explanation behind picking the examination on financial proficiency for a state like West Bengal is the intermittent financial cheats that have hit the state consistently. The state is arranged geologically in the eastern piece of India covering an all-out zone of 88,752 square kilometers with an aggregate of 23 regions. The state's economy is prevalently reliant upon horticulture and furthermore upon medium-sized industry, albeit the part of the administration industry and substantial businesses in producing state income has essentially expanded throughout the long term. As per the 2011 public statistics, West Bengal is the fourth-most-crowded state in India with a populace of 91,347,736 (which is 7.55% of the nation's populace). Populace thickness of 1,029 occupants for each square kilometer makes it the second-most thickly populated Indian state. The proficiency pace of India is 77.08%, higher than the public normal of 74.04%. The infamous Sanchayita extortion which became known in 1980 is viewed as the state's first chit reserve catastrophe. Over Rs. 1 billion was gathered from financial specialists who were eventually cheated of their well-deserved cash. Following this, Sanchayani and Verona, two residuary non-bank financial organizations, destroyed a large number of small investors. In 2013, the breakdown of the Saradha Group (joined in 2008), uncovered a financial trick with an expected loss of Rs. 200-300 billion including almost 1.7 million contributors. This gathering had deceitful Ponzi plans in the mask of chit finances which unavoidably imploded. With the unfurling of the Saradha bunch trick, the other financial tricks additionally came into light in which different organizations or gatherings like Rose Valley, MPS, I-Core, Prayag, and numerous others.

Literature Review

A few examinations have been led now and again on financial education in various nations of the world and furthermore in India. Writing gives a lot of proof that in many nations across the world, an enormous extent of grown-ups is not even acquainted with the most fundamental financial ideas like swelling, danger, and home loans.

Campbell (2006) contends that although numerous US families contribute adequately, scarcely any families commit genuine venture errors, for example, under broadening of hazardous portfolios, nonparticipation in dangerous resource markets, and inability to practice choices to renegotiate contracts.

Atkinson *et al.* (2007) imagine financial capacity to envelop four diverse domains managing cash, preparing, picking items, and remaining educated and found that people in the UK might especially fit in at least one territory, yet may need abilities or involvement with others.

Kotzé and Smit (2008) contemplated the impression of business the executive's understudies in South Africa and found an absence of certainty of government employees in their cash-the-board abilities and furthermore their craving for more financial information.

Sekita (2011) finds the general financial proficiency level in Japan to be low particularly among government employees with lower pay and lower training levels just as female and youthful representatives.

Nash (2012) notices imbalances in financial proficiency across various areas of the populace in India.

Nidar and Bestari (2012) studied the degrees of individual financial proficiency of university understudies in Indonesia and found that the components that fundamentally affected individual financial education included degree of training, workforce, individual pay, information from guardians, guardians' pay, and responsibility for.

Arrondel *et al.* (2013) locate a huge positive connection between financial proficiency and the capacity of long-haul financial arranging, incorporating retirement arranging in France.

Agarwalla *et al.* (2015) find among the working youth in metropolitan India a couple of elements, for example, joint-family and consultative dynamic cycle impacting financial proficiency. There are numerous papers on the status of financial incorporation (or, prohibition) in India and furthermore investigating the determinants of financial consideration in the country which are generally experimental in nature. Notwithstanding, observational examinations uncovering the connection between financial proficiency and financial consideration are not many. There are a couple of significant approach papers of the high-ranking representatives of the public authority that have consistently contended for such a relationship.

Chakraborty (2012) examines the obstructions as (a) low proficiency levels, absence of mindfulness and comprehension of financial items, (b) sporadic pay, (c) incessant miniature exchanges, (d) absence of trust in conventional financial establishments, and (e) social impediments (e.g., sex and social qualities) as the interest side components for financial rejection.

Ghatak (2013) recognizes the variables, availability, culture, resources, pay, and proficiency as the key factors that impact the interest for financial incorporation and has noticed openness with the most noteworthy relationship (0.650) trailed by education (0.447), pay (0.442), culture (0.303) and resources (0.054).

Biswas (Sinha) and Gupta (2016) notice occupation, instructive foundation, and family pay among the segment factors and financial incorporation list (as estimated by CRISIL) as having a genuinely huge relationship with financial education, anyway dependent on a minuscule representative size of 90 from the Kolkata city and its two bordering regions in the territory of West Bengal. In a new report among the Delhi ghetto inhabitants in India, Tulasi *et al.* (2017) find econometric proof that there are limitations as far as pay and work circumstances keeping them away from utilizing banking administrations, and to empower compelling financial incorporation they should be empowered altering financial items for recognized work circumstances, improving financial education and being rationalist about sex. A couple of studies in an Indian setting uncovering the connection between financial proficiency and speculation dynamics could likewise be found.

Thilakam (2012) has seen that rustic masses in India are OK with customary speculation decisions and are more dangerous averters than daring people.

Bhushan (2014) has discovered that representatives with more significant levels of financial proficiency showa higher inclination for speculations like common assets, debentures, securities exchange ventures, securities and item market instruments, disaster protection, public opportune assets, and benefits stores when contrasted with those with lower levels of financial education.

Writing audits of various unfamiliar examinations and a couple of Indian investigations uncovered a lesser number of observational examinations setting up the hypothetical legitimacy of the effect of financial education on financial incorporation. This recommendation exists most in sensible contentions and hypothetical talks. Furthermore, while observationally investigating the impact upon either financial education or financial consideration, the segment and financial components were generally blended. Thirdly, if there should arise an occurrence of a set number of studies uncovering the connection between financial education and speculation dynamic in India, the philosophy doesn't appear to be fitting to handle a subjective variable like the danger penchant of venture choice.

Objectives of The Study

1. To evaluate the status of financial proficiency in the province of India and investigate the effect of chosen segment and financial components like age, work circumstance, schooling and family pay alongside financial education upon the danger-taking capacity of speculation choice.
2. To inspect the effect of segment and financial components like sex, age, habitation, work circumstance, training, and family unit pay alongside financial proficiency upon financial incorporation.

Research Methodology

Sample

As numerous as 600 example representatives were considered for the last examination which was chosen randomly from as numerous as eight areas of West Bengal including two from the northern piece of the state prominently called North Bengal. These chosen areas address over half the populace of the state. These incorporate the state capital Kolkata (Calcutta) viewed as a cosmopolitan city and its two-encompassing locale, Chandigarh and South Delhi, which were most exceedingly awful hit by the Saradha Scam (2013) according to different paper reports. Different regions were likewise picked purposively to address different geological and monetary highlights of the state, hence to incorporate Uttar Pradesh locale along the waterfront belt with a relatively preferable financial improvement over its adjoining Uttar Pradesh region having timberland territories and known conventional underdevelopment.

The investigation included Jammu and Kashmir (before its division) being the geologically biggest locale of the state and having a portrayal of both rural just as modern populace. The example number of representatives from each area was picked in the proportion of the local populace of the complete example size. A locale-savvy number of test government employees and their determined mean financial education scores are given in Table 1.

Table 1: District-wise mean Financial Literacy score and Test results of mean difference

Domicile	No.of govern-ment employees	Mean Financial Literacy (On a scale of 1 to 21)	t statistic (Mean difference sig-nificance test with the highest score holding Kolkata district)
Kolkata	59	18.25	-
Chandigarh	22	14.94	5.620*
Delhi	130	14.84	8.267*
Jammu and Kashmir	101	14.82	10.801*
Paschim	77	14.41	11.043*
South Delhi	106	13.59	10.623*
Uttar Pradesh	66	12.95	13.161*
Haryana	39	12.09	15.000*
Total	600	14.51	

Essential information from the government employees was gathered by utilizing an organized poll. The OECD/INFE Toolkits (2011 and 2015) for estimating financial proficiency and financial incorporation have been utilized in this examination with authorization from the OECD Secretariat. The OECD/INFE Toolkit (2015) is a refreshed rendition of the Toolkit (2011) as invited by G20 pioneers in September 2013. The Toolkit is made accessible to public specialists and different associations in anticipation of the 2015 OECD/INFE financial proficiency and financial incorporation estimation workout. As needs be, a standard survey like this was chosen to be utilized with the end goal of the current investigation.

Research hypothesis

Financial education appraisal could not be made neither against any self-assertive score nor against any example normal albeit the example size is sensibly huge surpassing the suggested size of the multitude of dependable guidelines. Subsequently, an evaluation of financial proficiency could be made keeping it restricted to a correlation among the example representatives regarding the two most noticeably discovered segment factors sex and home. Further, locale astute distinction among the chosen different areas is likewise seen undoubtedly with the region having the most noteworthy mean financial proficiency score. Although the examination has conjectured three segment factors like age, sexual orientation, and home, and three financial factors like instruction level, work circumstance, and pay band, for investigating their relationship with financial proficiency and financial consideration independently, two factors of them like sex and home were rejected to test their relationship with likelihood of less secure speculation choice because of nonattendance of hypothetical relationship. The accompanying theories were at last tried to finish up with measurable importance the discoveries of the examination:

The accompanying theories were at long last tried to close with factual importance the discoveries of the investigation:

1. (a) There doesn't exist any huge regional contrast in the financial proficiency of people. (b) The financial education of people in the metropolitan (counting city) territories is higher than that in the country regions. (c) The financial education of male representatives is more than that of female government employees.
2. There is a huge effect of the segment and financial variables like sexual orientation, habitation, age band, schooling level, work circumstance, and pay band on financial proficiency.
3. There is the critical effect of financial proficiency and segment and financial components like sex, habitation, age band, instruction level, work circumstance, and pay band upon financial consideration.
4. There is the critical effect of financial proficiency and segment and financial variables like age band, schooling level, work circumstance, and pay endless supply of more hazardous speculation dynamic.

Data Analysis

Table 1 uncovers a high mean financial education score in the Indian locale which essentially comprises the enormous city, of Kolkata, which is additionally the state capital. However, curiously, Delhi, a North area tops among the others in regard to a similar score.

Different regions like Chandigarh, Jammu and Kashmir, and Uttar Pradesh come close as far as the mean financial education score. The mean education score of the multitude of government employees taken together is 14.51 or 69.095% of the greatest conceivable score, which is higher than the OECD-determined all-India normal of 11.9 (2017). As the time of information assortment is practically the same, it could be deduced from here, that the normal financial proficiency of the state is superior to the all-India normal and even than the G-20 nation normal of 12.70. The mean distinction tests introduced additionally in Table 1 uncover huge mean contrast in the education score of the other chosen regions with India holding the most elevated mean proficiency score.

Mean financial literacy score according to gender

Table 2 gives the consequences of the t-test for correspondence of means, whereby the negative t esteem demonstrates the mean financial education score of the main gathering (female government employees) is essentially lower than the mean for the subsequent gathering (male government employees). This is in congruity with past examination discoveries.

Table 2: Group Statistics and t-test for Equality of Means (Gender)

	Domicile	N	Mean	Std.	Std. Error Mean
Financial Literacy Score	Female	181	13.5287	4.09636	0.30448
	Male	419	14.9383	3.17783	0.15525

t-test

t	df	Sig. (1-tailed)	Mean Diff.	Std. ErrorDiff.	95% Confidence Interval of the Diff.	
					Upper	Lower
-4.124	277.675	0.000	-1.40955	0.34177	-2.08235	-0.73675

Source: Calculated by the author

Mean financial literacy score according to domicile

Table 3 gives the aftereffects of the t-test for equity of means, whereby the negative t esteem shows the mean financial education score of the principal gathering (rural government employees) altogether lower than the mean for the subsequent gathering (urban government employees).

Table 3: Group Statistics and T-test for Equality of Means (Domicile)

	Domicile	N	Mean	Std. Deviation	Std. Error Mean
Financial Literacy Score	Rural	209	13.0528	3.06350	0.21191
	Urban	391	15.2936	3.52893	0.17847

t-test

t	df	Sig. (1-tailed)	Mean Diff.	Std. Error Diff.	95% Confidence Interval of the Diff.	
					Upper	Lower
-8.088	479.144	0.000	-2.24078	0.27705	-2.78516	-1.69641

Source: Calculated by the author

Multiple regression analysis

Table 4 shows the different relapse models with financial proficiency as the reliant variable. From the estimations of R^2 and Adj. R^2 it very well may be said that the model is a solid match. As numerous as four segment and financial factors viz., sexual orientation, house, instructive level, and pay band are measurably critical at 1% level of significance with the reliant variable financial proficiency their normal way. Table 5 shows the numerous relapse models with financial incorporation as the reliant variable and financial education as the key autonomous variable with the segment and financial components as utilized before as the control factors to discover the genuine effect of financial proficiency upon financial consideration. The estimations of R^2 and Adj. R^2 shows the model as a solid match. Financial proficiency is discovered to be exceptionally huge in the numerous relapse models alongside the segment and financial components like sexual orientation, instructive level, pay band, and work circumstance in their theorized course.

Table-4: Multiple regression output (Dependent Variable: Financial Literacy)

R^2=0.41 Adj. R^2 = 0.406				Number ofobservations = 600 F statistic = 69.329*		
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	6.805	0.607		11.205	0.000*
	Gender	1.815	0.259	0.236	7.011	0.000*
	Domicile	0.584	0.142	0.157	4.100	0.000*
	Age Band	0.160	0.125	0.042	1.281	0.201
	Education Level	0.596	0.091	0.280	6.529	0.000*
	Work Situation	-0.199	0.340	-0.019	-0.585	0.559
	Income Band	0.772	0.120	0.288	6.448	0.000*

a. Dependent Variable: Financial Literacy

* Indicates significance at 1% level

Table-5: Multiple regression output (Dependent Variable: Financial Inclusion)

R^2=0.424 Adj. R^2 = 0.418				Number ofobservations = 600 F statistic = 62.371*		
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	0.911	0.258		3.537	0.000*
	Gender	0.203	0.104	0.068	1.955	0.051**
	Domicile	0.070	0.056	0.049	1.263	0.207
	Age Band	-0.055	0.048	-0.037	- 1.131	0.259
	Education Level	0.175	0.036	0.211	4.790	0.000*
	Income Band	0.607	0.131	0.151	4.641	0.000*
	Work Situation	0.316	0.048	0.302	6.608	0.000*
	Financial Literacy	0.074	0.016	0.189	4.659	0.000*

a. Dependent Variable: Financial Inclusion

* Indicates significance at 1% level, ** indicates significance at 5% level

Ordered logit analysis

Venture dynamic is a subjective variable that distinguishes whether the representative as of now holds any of the speculation items among the decisions given. As indicated by the danger affinity of a venture choice, the variable has been esteemed arranged by the plausible peril of interest in potential spots like 'bank account' (0), 'protection item' (1), 'retirement item, security, common asset' (2) and 'stocks and offers' (3). Requested logit is a fitting method to investigate the level of reliance of a particularly requested ward variable upon a couple of fakers and genuine free factors in a multivariate examination. Table 6 uncovered a measurably critical effect of financial proficiency, training level, and work circumstance.

Table 6: Ordered logistic regression (Dependent Variable: Investment decision making)

Ordered logistic regression						Number ofobservations = 585
LR chi2(5) = 253.87 Prob > chi² = 0.0000						
Log likelihood = - 615.51518						Pseudo R^2 = 0.1710
Investment decision making	Coefficient	Std. Error	z	P>z	[95% confidence interval]	
Financial literacy	0.155586	0.029061	5.35	0*	0.098629	0.212544
Age band	0.094993	0.091300	1.04	0.298	-0.08395	0.273937
Education level	0.216547	0.068141	3.18	0.001*	0.082994	0.3501
Work situation	0.981766	0.248665	3.95	0*	0.494391	1.46914
Income band	0.589564	0.086251	6.84	0*	0.420515	0.758612
/cut1	4.245386	0.535211	3.196391	5.29438		
/cut2	7.124617	0.592526	5.963288	8.285946		
/cut3	8.517766	0.622306	7.298068	9.737464		

Source: Calculated by author

What's more, pay bands their normal way upon the likelihood of danger taking capacity of the speculation choice.

Discussions and Conclusions

It shows principally from the determined mean financial education score that the normal financial proficiency of the state is superior to the all-India normal (2017). Nonetheless, the examination ofthe essential mean financial education score of the regions uncovers that there is a huge contrast in such scores among the other chosen locale of the state with Kolkata, the state capital, holding the most elevated mean financial proficiency score. An investigation of the various relapse results uncovers that male representatives are more financially included than female government employees, in any case, the normal male financial proficiency is essentially higher than female financial education. Be that as it may, metropolitan regions uncover a by and large discovered more financial consideration in contrast with the rustic zones, not being a genuinely critical one. This calls attention to a potential choice of the chosen places in the examination among the country (and semi-urban) zones which should be obviously superior to a normal town in India in addressing ledger proprietorship. After the Pradhan Mantri Jan Dhan Yojana, a milestone financial incorporation activity of the public authority dispatched in August 2014, the metropolitan provincial separation in ledger possession has altogether diminished in the entire country. The impact of segment factors like sexual orientation and house over financial proficiency as seen in various relapse results is likewise gone before with a corroborative finding of huge mean contrast test results between the mean financial education score between the rural and urban representatives, and furthermore between the male and femalegovernment employees. The Financial factors like instructive level and pay band both anyway are discovered to be altogether related to more financial proficiency just as more financial incorporation, which demonstrates in less complex words that richer and taught individuals have more prominent financial education just as consideration.

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India Towards $5 Trillion Economy - An Analytical Study on Contribution of Commodity Trading in GDP

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Abstract

The government of India envisioned for making the worth of Indian Economy up to US $5 trillion. Various domestic and global developments have encouraged the government for this target. With the increasing numbers of startups and businesses the GDP is increasing. The Indian economy, in contrast to other economies is showing a growth despite of COVID-19 and other Global unrest situations. Indian economyconsists of 3 sectors i.e., Primary (Agriculture), Secondary (Manufacturing or Industrial) and Tertiary (Service) sector. Role of every sector is crucial in achievement of this target. The contribution of Commodity sector is also very important because they are related with agriculture, extraction, and mining industries.Various types of Commodities are traded, and they are playing a significant role in increasing the GDP. This paper has made an attempt to find out the contribution of commodity trading sector in achieving the goal of $5 trillion Trajectory. It tries to explore the trends of Export-Import, the impact of commodity trading on GDP and the growth of Commodity sector in the past years. Authors also investigated what should be the required growth rate to achieve US $5 trillion club.

Introduction

Indian economy has been developing with a very fast pace. Recently it has become fifth largest economy in the world surpassing United Kingdom. The Economic sector reforms of 1991 have played a key role in upliftment of economy because it has opened the territories for world, although for encouraging the economy, steps for liberalization have been taken in early 1966 and 1980s. Since then Governments are trying their best to develop the Indian economy. Now India is the fastest growing economy with world's second largest population despite of lower GDP initially. The Indian economy is basically agro-based, because majority of population are engaged in primary sector directly or indirectly. The Indian economy is Mixed economy in nature. Under mixed economy the markets are free to trade and produce and with some government intervention. In 2019, Prime Minister Narendra Modi in his charge of second term announced a mission of $5 trillion economy for India, at that time it was $ 2.7 trillion. He envisioned the nation to achieve it in 2024. It took more than 50 years to make India a$ 1 trillion economy. In 2014, it was $ 1.85 trillion but the target of $ 2.7 trillion economy was achieved in just five years. This embodiment have been possible due to various strong government policies like Make in India, Start-up India, Stand-up India, Atmanirbhar Bharat Yojana and many more. These programs, policies and various other initiatives have made India a $3 trillion economy. India is now a country with 100 plus Unicorn companies.

The vision to achieve goal of $ 5 trillion economy till 2024 is not a very easy task. The outbreak of COVID-19 has derailed the pace of the economy. During this pandemic the foreign trade has been reduced to lowest level because of the closed territories of most of the economies in the world. Slowly the Indian Economy was growing but war between Russia and Ukraine has made this mission more difficult. The rising inflation, lower production, NPAs of Banks, collapsed economy of Sri Lanka and other neighbors are big problems in front of India. The growth of any economy is dependent on the overall development of all sectors whether the manufacturing or service sector. Every sector needs to contribute to the GDP growth. The Commodity markets are playing a very significant role in GDP growth. It is different from Capital markets because in these types of markets physical goods are traded.

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Literature Review

Year	Title of the Paper	Authors	Objectives of the Paper	Findings of the Paper
2022	Understanding India's Economic Slow Down - Challenges for reaching $ 5 Trillion Economy by 2024 - 2025	Kesari Polishetty	The main objective of the paper was to analyze the reasons behind the economic slowdown and analyzing the prospects of US $5 trillion economy.	Govt. should frame comprehensive multi-pronged policy for the circulation of more money in the economy and try to recover from the COVID- 19 losses. Firstly it should reach to the growth rate of pre-pandemic level. Author mentioned that it will require more time to reach the $5 trillion goal.
2020	India's Sectoral Growth Patterns and US$ 5 Trillion Trajectory: An Empirical Investigation on Macroeconomic Impact of COVID-19	Soni Swapnil & Subrahmanya Bala M.H	The main objective of the paper was to analyze the sectoral growth pattern and	Authors find out that Services sector will play a significant role in achieving this goal. They have used weighted average method and for analysis of the projection time series analysis has been used.
2020	Role of Agriculture in making India $5 trillion Economy under Corona Pandemic Circumstance.	Singh Anil and *et.al.*	The focus of the paper was to analyze the contribution of agriculture and allied activities in GDP.	Authors have suggested that India should reduce the tariff barriers, improve the export to $1 trillion annually. They have observed in the paper that agriculture is a key factor that can contribute significantly.
2020	India $5 Trillion Economy: Vision & Mission.	Bhakri Suman and *et.al.*	The main focus of the paper was on the analysis of GDP trends in the past and India's position globally.	Authors suggested that India need balanced development which includes synergy in long term finance, improved banking facilities and long term financing, along with revised GST rates it should also ensure optimum utilization of funds. They have also marked the role of Tourism industry along with other sectors.
2020	"India's Pathway to $5 Trillion Economy"- A Study on Youth Employability.	Shaikh Neelam	The main objective of the paper was to analyze the role of Youth employability in the context of US $5 trillion economy.	Author has suggested that if India wants to reach the goal of $5 trillion, then it should focus more on its youth and there employment generation and public private partnership. With the help of skill and development programme employment can be generated.

Scope of The Study

The paper will be focused on GDP and the $5 trillion vision of Indian Economy. It is also outstretched to commodities and their contribution in GVA. The Export-Import trends in past years and the growth of Commodities has been included in this study.

Objective of The Study

- To know about growth pattern of Commodities in India.
- To study about Import and Export trends of various Commodities.
- To study the role of commodity sector in contribution of GDP.

- To study Indian prospect of $5 trillion economy together with the Sub-goals of the Economy.

Hypothesis

H_{01}: The relationship between commodities and GDP is not significant.

H_{a1}: The relationship between commodities and GDP are partially significant.

H_{02}: The impact of commodities on GDP is not significant.

H_{a2}: There is partially significant impact of commodities on GDP.

H_{03}: The goal of $5 trillion economy is unachievable in the next 10 years.

H_{a3}: The goal of $5 trillion economy is achievable in the next 10 years.

Research Methodology

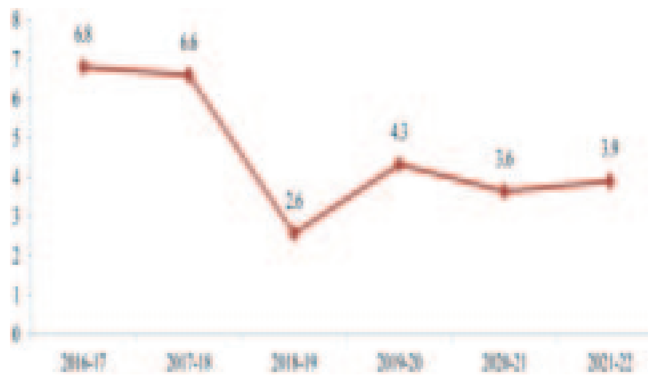
- **Sources of Data:** The data for this paper is taken from various report published by Govt., Journals, economic surveys, websites, RBI's reports, etc. The data is based on Secondary sources.
- **Nature of the Study:** The study is Analytical in Nature.
- **Sampling Design:** The population of the study includes the trading of commodities in India. It also includes the export and Import of these commodities. The samples/Data have been identified through reviewing various Journals, Articles, Other Published sources.
- **Statistical Tools:** Statistical tools have been carefully selected by authors for fulfilling the Objective of Research paper and Testing of Hypotheses. For this purposeCorrelation & Regression, CAGR modeling has been used.

Analysis and Interpretation

The paper is analyzed and interpreted in following phases which depicts the four objectives of the paper:

I. To Know Growth trends of Commodities in India: This objective is focused on analyzing the trends forgrowth of commodities. It is analyzed with help of two figures 1&2. As we observed earlier there are two types of commodities i.e. Agriculture and Non-agricultural commodities. The agricultural commodities are output of different agricultural activities. Figure 1 shows the growth data of Agriculture and Allied sectors for six years. As shown in the figure the Agriculture and Allied sectors has grown at rate of 3.6% in 2020-21. Earlier from the year 2016-17 and 2017-18 the growth of this sector was very high in comparison to current growth rate, it has been declining since 2018-19. The reason behind declining of growth rate was Demonetization and global factors. This growth has been achieved because of policies of Government and good weather & monsoon condition. Various govt. measures like National Agricultural Market (e-NAM), National Mission for Sustainable Agriculture, Pradhan Mantri Krishi Sinchaee Yojana (PMKSY), Pradhan Mantri Fasal Bima Yojana (PMFBY) etc. have played a very important role in achievement of this growth rate. Due to these measures agricultural sector has reached the growth rate of 3.9% in the year 2021-22.

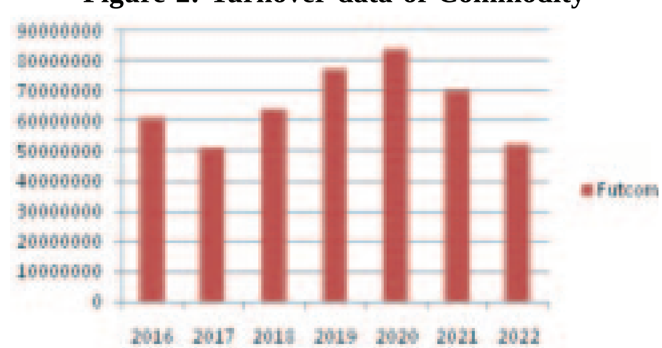
Figure 1: Growth of Agriculture and Allied Sectors (per cent)



Source: First Advance Estimates of National Income, 2021-22

In below figure FUTCOM has been included for the brevity of the study. TheFigure 2 shows trends for tradingof Commodity since 2016.

Figure 2: Turnover data of Commodity



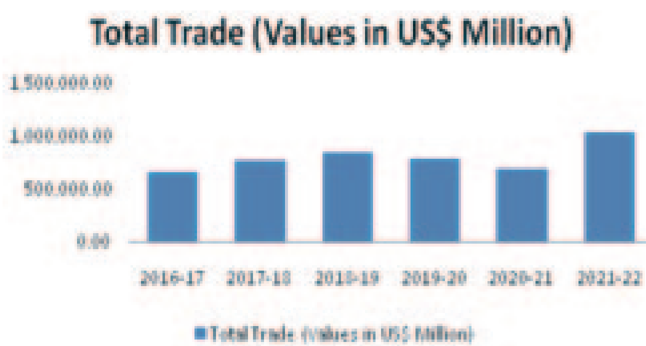
Source: https://www.mcxindia.com/market-data/historical-data#

Here, FUTCOM have shown a rapid growth due to increased trading. The data has been taken from website of MCX and it shows 3 types of commodities i.e. Agricultural commodities, Metallic & Energy

Commodities. From the year 2016 till 2022 the total turnover including Traded Contract (Lots) and Quantity (000's) was 611154045.46, 512604887.45, 636555347.69, 770728571.85, 840971120.16, 701102309.72, 521097217.62 (value in lacs depicted in INR) respectively. The commodity trading haveshown highest turnover in 2020 which turned out to be 84097.112016 billion despite the advent of COVID-19.

II. To study about Import and Export trends of various Commodities: International trade plays a very vital role in any country's economy because it has strong contribution in the GDP. There is very positive relationship in increasing growth and development. Nowadays, Government of India is focusing on policies which lead to increase in trade prospects. They are making various policies like Make in India, Startup India, Ease of Doing Business, Digital India, Skill India, etc. to increase the domestic production and facilitation of business. In series of these, Govt. has launched Foreign Trade Policy (FTP) on 1 April, 2015 which has been extended up to March 2023 due to COVID. The role of FTP is to provide a structure to Export and Import, Market and Product strategy, expanding of trade, etc. The trade of India has increased and now it involves almost export of 7500 Commodities and Import of approximately 6000 Commodities. It is not limited to Commodities only but also involves services now. In the following figure we can understand the trends of trade.

Figure 3: Total Trade from 2016-17 to 2021-22

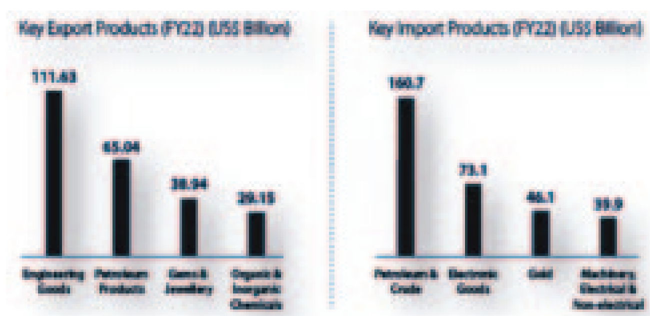


Source: Ministry of Commerce and Industry, https://commerce.gov.in

In figure 3 the total trade since FY 2016 till FY 2022 has been shown. It shows that the total trade in 2016-17 was 658,828.66, in 2017-18 it was 769,057.68, in 2018-19 it was 844,148.55, in 2019-20 it was 788,056.15, in 2020-21 it was 686,242.51 and in 2021-22 it was 1,035,037.49. The total trade value of India has reached its maximum level in Commodities Export. The Govt. is confident about reaching the target of Export to US$ 500 Billion in FY 2023-24. And for this they are more focusing on Rupee denominated trade and various bilateral trade agreements. For the increment of Export Govt. has recently launched National Logistic Policy and PM Gati Shakti National Master Plan which will help in technological advancement of logistics nationally and internationally. The following is the list of top 10 export commodities of India which contributes the most to Trade:

- Engineering goods
- Petroleum products
- Gems and jewelry
- Organic and inorganic chemicals
- Drugs and pharmaceuticals
- Electronic goods
- Cotton yarn/fabrics/made-ups, handloom products, etc.
- Ready-made garments of all textiles
- Marine products
- Plastic and linoleum

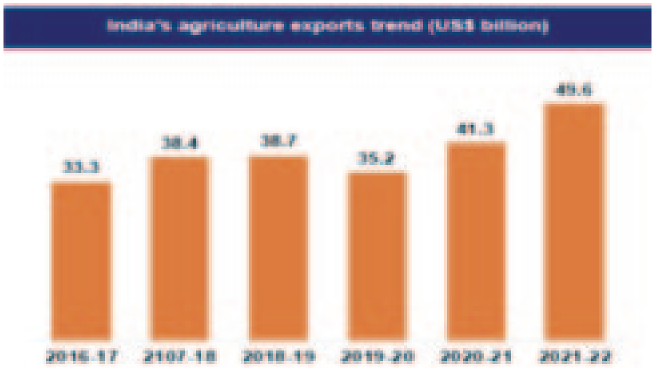
Figure 4: Key Export and Import Products



Source: https://www.india-briefing.com

The above Figure 4 shows the top 5 export-import commodities in the FY 2022. It is observed that the momentum of India's trade has been shifted to Engineering goods which includes Iron & Steel products, Automobile, Industrial machinery, etc. The highest Import was of Petroleum products (Crude). The Agricultural commodities have also shown the rapid growth in past years and they are contribution a lot in the GDP of the country. Figure 5 shows the trends of Agriculture Export since FY 2016-17 till FY 2021-22:

Figure 5: India's agriculture exports trend



Source : The Ministry of Commerce & Industry

In the year, 2016-17 the export was US$ 33.3 billion and it is increasing every year.The Export of Agricultural Commodities was highest in the FY 2021-22 which was US$ 49.6 Billion. It has declined very slightly in the year 2019-20 due to COVID-19 and was US$ 35.2 billion. In the FY 2021-22, Rice is the mostexported Agricultural commodity which has given the contribution of 19%. Sugar has a contribution of 9% and Spices contributed 8%of the total Agricultural export. Wheat has also shown growth and its export value was US$ 2.1 billion in the year 2021-22. For the first time the export of Coffee has crossed US$ 1 billion in the same year. USA was India's largest agricultural product importer in 2021-2022 with a share of US$ 5.7 billion and 11.5% of the total exports.

USA is the leading importer from India in Last few years which shows India's caliber in global trade. Bangladesh was at 9th position previously but during COVID-19 due to several trade restrictions globally they have shifted their imports to India and jumps to the 5th position in the list of importers of India.

III. To study the role of commodity sector in contribution of GDP: For the analysis of this objective Correlation and Regression has been used. For the calculation purpose the use of SPSS is made. Table 1 show the correlation between GDP and Agricultural and Non-agricultural commodity and Table 2 shows the impact of these commodities for this Regression has been used. For the purpose of finding the variance, ANOVA has been used it is represented in Table 3. Table 4 &5 shows the Coefficients and Collinearity Statistics.Two Hypotheses has been taken for proving the significance:

H_{01}: the relationship between commodities and GDP is not significant.

H_{a1}: the relationship between commodities and GDP are partial significant.

Table 01: Correlations

Test	Variables	GDP	Agricultural Commodity	Non-Agricultural Commodity
Pearson Correlation	GDP	1.000	0.839	0.159
	Agriculture Commodity	0.839	1.000	-0.360
	Non-Agriculture Commodity	0.159	-0.360	1.000
Sig. (1-Tailed)	GDP		0.009	0.367
	Agriculture Commodity	0.009		0.214
	Non-Agriculture Commodity	0.367	0.214	
N	GDP	7	7	7
	Agriculture Commodity	7	7	7
	Non-Agriculture Commodity	7	7	7

The above table 01 represents the relationship between dependent variable, GDP and independent variable, agricultural commodity and non-agricultural commodity. The table reveals that there is positive relationship between dependent variable and independent variable or predictors. There is high degree of positive correlation between GDP and agricultural commodity with the value of 0.839 at 0.05 level of significance, whereas 0.159 was the value of coefficient of correlation between GDP and non-agricultural commodity and that was not significant because the value of significance (1-tailed) 0.367 for the non-agricultural commodity which was greater than the level of significance (?) 0.05. Hence, on the basis of above statistics null hypothesis stating there is no significant relationship between GDP and commodity is partially rejected and alternate hypothesis stating there is partially significant relationship has been accepted.

H_{02}: the impact of commodities on GDP is not significant.

H_{a2}: there is partially significant impact of commodities and GDP.

Table 02: Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.974[a]	0.949	0.924	400543.7989	0.949	37.433	2	4	0.003

a. Predictors: (Constant), Non-Agriculture Commodity, Agriculture Commodity
b. Dependent Variable: GDP

The above table 02 reveals the specification of dependent variable (agricultural commodity and non-agricultural commodity). The model 1 revealed the ability of commodity to affect or predict the GDP. The R^2 value 0.949 indicates that 94.9% of observed variability in GDP can be explained by the differenced in the independent variables. Remaining 5.1% variance in the GDP is attributed to other variables.

Table 03: ANOVA[a]

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	12011080973856.700	2	6005540486928.350	37.433	.003[b]
	Residual	641741339314.727	4	160435334828.682		
	Total	12652822313171.400	6			

a. Dependent Variable: GDP
b. Predictors: (Constant), Non-Agriculture Commodity, Agriculture Commodity

The value of R^2 is significant, indicated by the p-value (0.000) of F-statistics as given in the ANOVA Table 03. F-test is used to test the overall validity of the model and to test if any of the explanatory variables has linear relationship with the dependent variable. Here significance F change value is less than 0.05. Therefore, it can be said that at least one explanatory variable has significant linear relationship with GDP and the fitted linear model is valid. And thus, the null hypothesis stating there is no significant impact of commodity on GDP is rejected and the alternate hypothesis has been accepted. There is conclusive evidence to say that commodity has a significant impact on GDP.

Table 04: Coefficients[a]

Model	Unstandardized Coefficients		Standardized Coefficients	T	Sig.
	B	Std. Error	Beta		
1 (Constant)	-33618483.1	7047577.91		-4.77	0.009
Agricultural Commodity	289648.433	33931.201	1.03	8.536	0.001
Non-Agricultural Commodity	3802.203	865.607	0.53	4.393	0.012

a. Dependent Variable: GDP

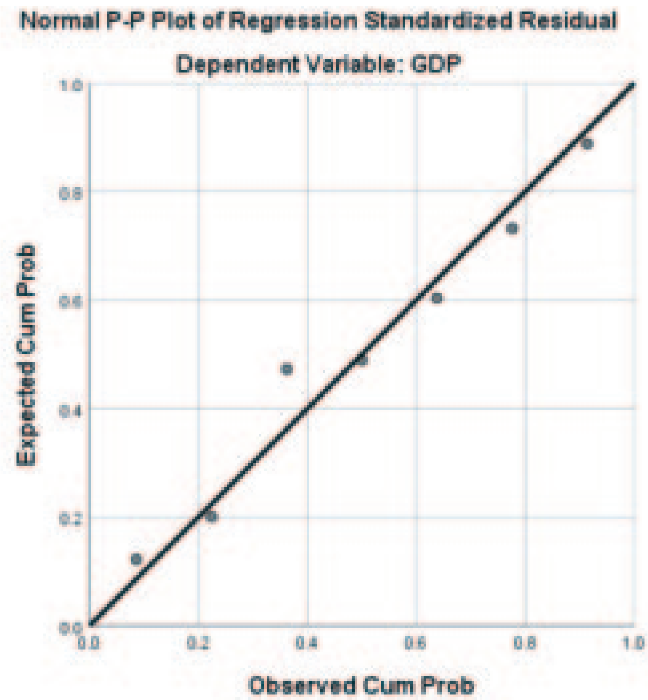
In table 04 column 'B' shows the unstandardized regression coefficients for the equation. The column 'beta' shows the relative contribution of both independent variables. Agricultural commodity with beta value of 1.03 explains the maximum variation. In the above table column 'standard error' shows the sampling variability of regression coefficient, while column't' measures statistical significance of the regression coefficients The coefficients are both individually and collectively significant with their t-values at 0.05 level of significance with 0.000 p-values.

Table 05: Collinearity Statistics

Variables	Tolerance	VIF
Agricultural commodity	0.870287845	1.14905
Non-Agricultural Commodity	0.870287845	1.14905

Table 05 indicates the results of collinearity statistics using Tolerance Test and Variable Influence Factor (VIF). It shows that both the independent variables are within the suggested value of tolerance test (should not be equal to or greater than 1) and VIF (should not be equal to or greater than 10). Hence, all the independent variables selected for the study falls within the said criteria of collinearity test.

Figure 6: Regression Standardized Residual



IV. To study Indian prospect of $5 Trillion economy together with the Sub-goals of the economy: for the analysis of this objectives CAGR has been used. CAGR has been calculated on the basis of GVA. Two Hypotheses has been made for the analysis:

H_{03}: the goal of $5 trillion economy is unachievable in the next 10 years.

H_{a3}: the goal of $5 trillion economy is achievable in the next 10 years.

The government of India has segregated the target of $5 trillion into three divisions i.e.US$ 1trillion in agriculture, US$ 1trillion in manufacturing sector and US$ 3trillion in service sector. The initial goal was to achieve the target by 2024-25, but due to the unforeseen circumstances of COVID-19 the target was pushed to 2027-28. In this section, the study has projected the target both with Pre as well as Post COVID of all the three sectors and of overall economy.

Prospects of US$ 1 Trillion Agriculture Economy: the following figure 7 show the prospect for sub goals of $1 trillion from the agricultural sector:

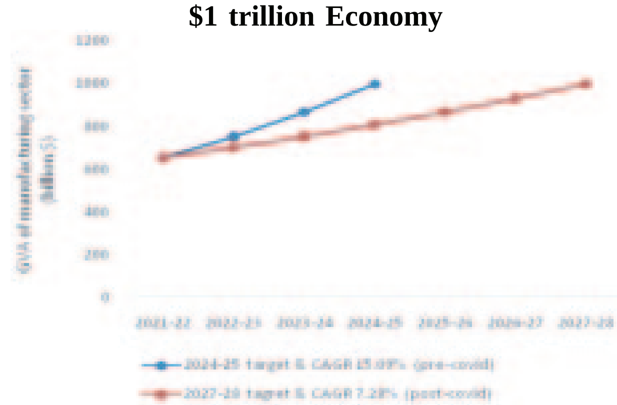
Figure 7: Projection of Agriculture and Allied sector's $1 trillion Economy

Source: Authors own calculation

Agricultural sector has always been a major contributor to the growth of Indian economy; the government has projected the target of US$ 1trillion agriculture economy by 2025 Pre-COVID and later pushed the target to 2027-28. With the help of the targeted GVA and the initial GVA of agriculture sector in 2021-22, CAGR (Compound Annual Growth Rate) has been calculated and presented in the figure. For the Pre-COVID target of 2024-25 the CAGR of 23.46% has been calculated, which now seems to be an imaginary target, further, as the target has been extended to 2027-28 the CAGR of 11.11% has been calculated. This indicates that if the government wants to achieve US$ 1trillion agriculture economy, the sector needs to maintain a growth rate of 11.11 percent.

Prospects of US $1 Trillion Manufacturing Economy: the sub goal of $5 trillion includes the contribution of $1 trillion economy from the manufacturing sector. The figure 8 shows its prospects for future.It has been divided into Pre- Pandemic and Post-Pandemic phase. For the projection FY 2021-22 has been taken as a base year on which CAGR has been calculated:

Figure 8: Projection of Manufacturing sector's $1 trillion Economy

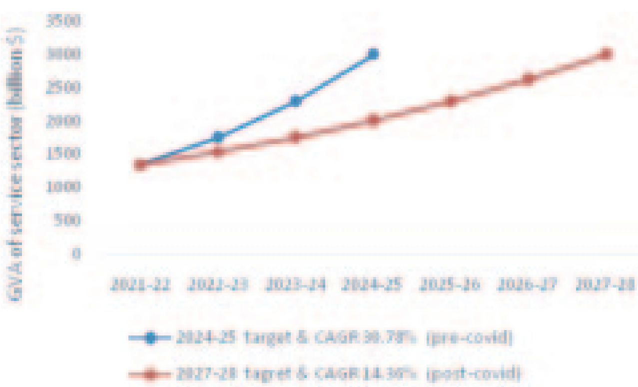


Source: Authors own calculation

Manufacturing sector has witnessed a steady growth in last decade and has been a significant part of Indian Economy; the government has projected the target of US$ 1trillion manufacturing economy by 2025 Pre-COVID and later pushed the target to 2027-28. With the help of the targeted GVA and the initial GVA of agriculture sector in 2021-22, CAGR (Compound Annual Growth Rate) has been calculated and presented in the figure. For the pre-COVID target of 2024-25 the CAGR of 15.09% has been calculated, but, as the target has been extended to 2027-28 the CAGR of 7.28% has been calculated. This indicates that if the government wants to achieve US$ 1trillion manufacturing economy, the sector needs to maintain a growth rate of 7.28 percent.

Prospectsof US $3 Trillion Service Economy: the service sector has the most significant role in achieving the goal of $5 trillion. It is expected that it will contribute $3 trillion. Figure 9 represent this sub goal:

Figure 9: Projection of Service sector's $3 trillion Economy

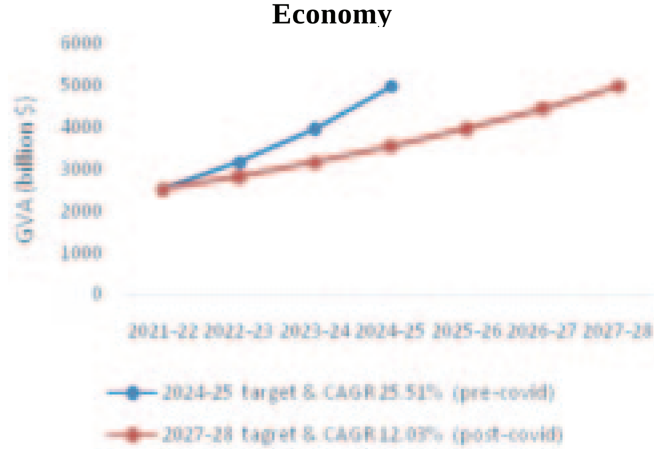


Source: Authors own calculation

In past decade service sector has proved to be the most promising sector to Indian economy by witnessing positive growth. The government has projected the target of US$ 3 trillion service sector economy by 2024-25 before the pandemic and due to its effects later pushed the target to 2027-28. With the help of the targeted GVA and the initial GVA of service sector in 2021-22, CAGR (Compound Annual Growth Rate) has been calculated and presented in the figure. For the Pre-COVID target of 2024-25 the CAGR of 30.78% has been calculated, this target of is now seems to be unachievable. Further, as the target has been extended to 2027-28 the CAGR of 14.36% has been calculated. This indicates that if the government wants to achieve US$ 3trillion service economy, the sector needs to maintain a steady growth rate of 14.36 percent.

Prospects of US $5 Trillion Economy: In figure 10, the $5 trillion trajectory is represented. Original target of 2024-25 and revised target of 2027-28 has been shown in the figure. For the calculation of projected target CAGR has been used. There projection for both the phases i.e. Pre- COVID and Post-COVID has been presented in the figure.As per the announcement of Govt. of India the goal of $5 trillion trajectory should be achieved till 2024-25. But due to several unrests in global economies it seems to be hard task. Indian economy has not recovered from the impact of COVID and then the Russia-Ukraine war has made the situation more critical.

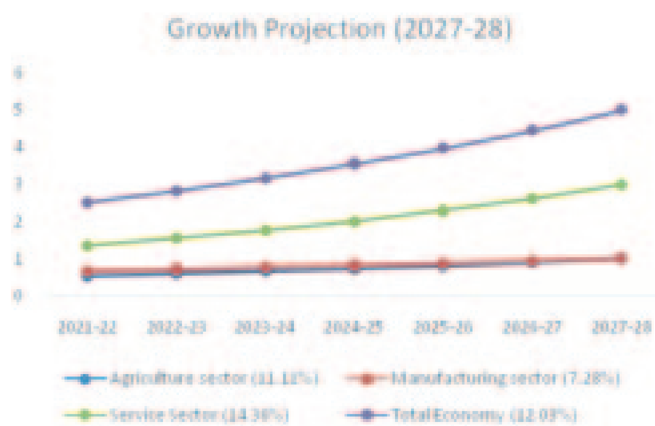
Figure 10: Projection of target US $5 trillion Economy



Source: Authors own calculation

If we have to achieve this target in 2024-25 a CAGR of25.51% should be maintained. The new target for achieving this goal is near about 2027-28 for this economy should maintain CAGR of 12.03%. it is calculated with the help of GVA and initial GVA.Thus, to achieve the target of US$ 5trillion economy growth rate of 12.03 percent needs to be maintained.

Figure 11: Projection of $5 trillion Economy jointly with key sectors



Source: Authors own calculation

The above figure represents the projection of all the three sectors, that is, agriculture, manufacturing and service sector as well as of the overall economy by 2027-28. It indicates that to achieve the stated target the government needs to maintain a steady CAGR of 11.11 percent in agriculture sector, 7.28 percent in manufacturing sector, 14.36 percent in service sector and in overall aggregate it should be 12.03 percent. Hence the null hypothesis has been rejected because the $5 trillion goal is achievable within the next 10 years if we maintain the CAGR of 12.03 percent and alternate hypothesis is accepted.

Conclusion

With the above analysis it can be concluded that the role of commodities is very significant and positive. The $5 trillion trajectory can be achieved till 2027-28. The Government needs to take some strong action for the facilitation of trade. The role of sub goals in $5 trillion is very crucial and it is observed from the analysis that wecanachieve it. Earlier the target of $5 trillion was to be achieved in 2024-25 but it seems to be impossible at present.

Suggestions for reaching the goal of $5 Trillion:

- The agriculture sector should contribute $ 1trillion throughout.
- Proper framework for Commodity markets and trading should be made.
- The Government should reduce the Trade Deficits.
- More focus should be on the domestic manufacturing & production and Import should be reduced.
- The implementation of National Logistic policy should be done efficiently so that the commodities can be transported without any hurdles. This will save time and cost.
- In India the rates of tariffs are very higher in comparison to rest of the world. Tariffs should be reduced, and alluring schemes should be given to the countries which import from India.
- Government should more focus on agricultural and manufacturing sector for the growth.
- Contemporaneously the Govt. should stop the devaluation of INR in comparison to dollar.

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Comparative study on Attitudes towards Physical Education program between higher secondary Non-Tribal and Tribal girls with special reference to West Tripura

***Suparna Debbarma, **Dr. Surjya Kanta Paul**

Abstract

The study was conducted to compare on attitudes towards physical education program between higher secondary non-tribal and tribal girls' students with special reference to west Tripura. For this study 200 higher secondary girls (100 non-tribal and 100 tribal) ages between 16-19 of west Tripura were selected. Quota sampling procedure was employed for the selection of the subjects. To the collect the data Opinionnaire by Pralhad V. Raut attitude scale towards physical education were used and the responses were employing by Likert Method. To interpret and analyse the collected data percentile, Mean,Standard Deviation and t-test technique were used. From the responses of each respondent's statement, it was found that the non-tribal and tribal higher secondary girls of west district of Tripura have positive attitude towards physical education where the calculated 't' value is -0.846 and tabulated value is 1.962 at 95% level of significant for 198 df. Where calculated value is less than tabulated value. there is no significant difference on their attitudes.

Introduction

Tripura with geographical area of 10,491 sq. kms, which is naturally dominated by hilly areas. Most of the people mostly the tribal are living in the hills of Tripura.The economy of Tripura based on Agriculture, Fisheries, Rubber etc. where the Non tribal and tribal peoples are living together. The basic outlook towards any particular thing depends on the economical background and literacy of the family.

Here we are talking about the attitude of higher secondary non-tribal and tribal girls of west Tripura, which is mostly dominated by non-tribals, so the attitude of tribal and non-tribal may different.

In Tripura Non-tribals are (Bangalee and Manipuri) and Tribal community are (Tripuri, Reang, Jamatia, Chakma, Halam, Mog, Munda, Noatia, Garo, Orang, Kuki, Lushai, Bhil, Santal, Uchai, Chaimal, Khasia, Lepcha, and Bhutia).

Attitudes is a particular belief towards a particular subject, topic or may be a person which is determined by the person's beliefs or disbeliefs about the subject whether it may be positive or may be negative.

A person's belief on any statement or may be the facial expression can display verbally or non-verbally, may attitudes and beliefs are prominent but by the time it can change. Positive attitude getting more when it's come from positive experience,and negative experience leads to negative attitude.

In the school curriculum all students develop some positive or negative attitudes towards every subject which develops their mental any physical health.

National Policy on Education (1986) discuss about the importance of physical education in school, to encourage the students the government are planning to buildsports infrastructure which help the sports person to practice, also they are planning to include sports related studies and to give specialised attention they recruit coach and sports teacher for giving the better opportunity for the futuristics purpose in school.4

From that Education policy 1986 till National Education Policy (NEP) 2020 it has observed that government have taken many steps to encourage the sports persons, to motivate them and to give them proper practice they build infrastructure, they have given equipments and for the guidance they recruit coaches, and sports teachers. In fact, according to NEP the importance of physical education, games and sports increasing day by day which is beneficial for the proper growing the mental and physical development of the students. So, the government decided physical education,

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games and sports in the curriculum as compulsory in all educational institution so that students can participate and getting the overall development.

Curriculum is all planned learning for which the school is responsible -Marsh & Willis, 2003.

Physical education program includes physical activity, physical fitness,exercise, games and sports etc., not only this having knowledge of physical education one can understand about their health, nutrition, body organs, bone and muscles, wellness, life style, sports psychology, biomechanics etc. so we can say that it's an overall development of the person. Physical education is the scientific process to move the body systematically and physical activities, games and sports helps to do that.1

Physical activity has been defined by the US Department of Health and Human services as'Any bodily movement that is produced by the contraction of skeletal muscles and that substantially increases the amount of energy you expend.

Commenting on the importance of Physical Activities, Robinson and Shaver (1969) had shown that sports participation in general is positively correlated with the development of psychological, physical and physiological well-being and the people who are active in a variety of ways in such activities tend to report a higher degree of emotional well-being,life satisfaction, perceived happiness and physical fitness.

Physical activities which we described as variety of exercises done by using bone and muscles.

"Physical fitness refers to the organic capacity of the individual to perform the normal tasks of daily living without undue tiredness or fatigue having reserves of strength and energy available to meet satisfactorily any emergency demands suddenly placed upon him." - Nixon

Games and sports are someway different, means game is any activity which is physical or mental followed by some rules for fun or recreation like board games, chess, card games etc. and sports are specific physical activity for competittion like football, basketball, cricket, weight lifting, car race etc. Not only that physical education concept is very vast, games and sports are just a part of this, it includes adventure activities like, rock climbing, paragliding, river rafting and so on.

The study is on higher secondary girls' students, ages between 16-19 years studying in higher secondary school as class XI and XII student. As per NEP every school having sports classes as compulsory and depends on the environment of the school, family and economical status the students having some kind of reflections which may good or bad.

Statement of the problem

The problem of the present study is comparing the Attitudes towards Physical Education program between higher secondary Non-Tribal and Tribal girls with special reference to West Tripura.

Objectives of the study

To compare the attitudes between non-tribal and tribal higher secondary girls students of West Tripura on physical education program.

Purpose of the study

The main purpose of the study was to compare the attitudes towards physical education program between higher secondary non-tribal and tribal girls of West Tripura

Hypothesis

H0 It was hypothesised that there will be no significant difference of attitudes between non-tribal and tribal higher secondary girls' students towards physical education program.

Implications of the study

1. The results of the study will show the comparison of attitude of higher secondary Non-tribal and Tribal girls' student of west Tripura towards physical education.
2. The result of the study will provide suggestions to promote the participation of Non-tribal and Tribal girl's students in physical education and sports.
3. The study is significant in assessing what are all the likes and dislikes in physical education and sports programs at school level
4. The findings of this study would be helpful to the school authorities to take suitable steps for motivating the students towards physical education and sports programs

Delimitation of the study

1. The study is delimited to higher secondary schools of West District of Tripura.
2. The study is delimited to tribal and non-tribals of Tripura

Limitation of the study

1. The study is limited to only higher secondarygirls' schools of west Tripura.
2. The study is limited to ages between 16-19.

Variable

Independent- i) Gender- Girls

ii) Caste-Tribal, Non-tribal

Dependent- Attitude towards physical education program

Sources of data

For the present study 200 (100 from tribal, 100 from non-tribal) of higher secondary girls' students of West Tripura were selected as subjects.

Sampling procedure

To collect the data Quota sampling was used for the selection of subjects.

Selection of the test and scoring procedure

To the collect the dataOpinionnaire by Pralhad V. Raut attitude scale towards physical education program were used and the responses were employing by Likert Method.

Positive and Negative items were recorded separately for each dimension. Items measuring particular dimension positively and as "Very strongly agree" "strongly agree", "Agree", "Disagree", "Strongly disagree", and "very strongly disagree" were given the scores for positive statement 6,5,4,3,2,1 and for negative statement 1,2,3,4,5,6 respectively.

Statistical Tools

To analyse and draw the conclusion the percentile, Mean, Standard Deviation and t-test technique were used.

Result of the study

Table-1

Score	65-97	98-130	131-162	163-195	196-227	228-260	261-292	293-325	326-357	358-390
Non-tribal	0	0	0	0	0	26	51	19	4	0
Tribal	0	0	0	1	7	9	47	34	2	0

As per the questionnaire the highest possible score is 390 and the lowest possible score is 65 where the high score is showing positive attitude & the low score is showing negative attitude towards physical education program.

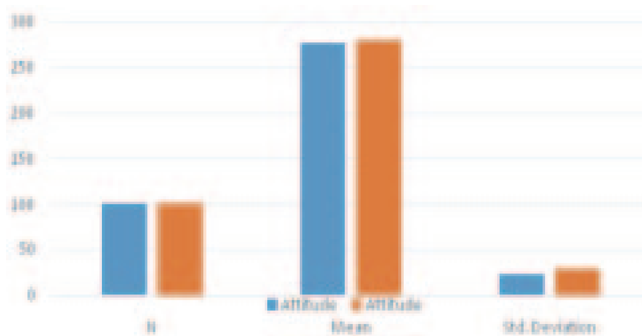
After analysing the data of Table 1, it shows that out of 100 non-tribal students, 26 scored between 228-260, 51 scored between 261-292, 19 scored between 293-325, 4 scored between 326-357 respectively and out 100 tribal students, 1 scored between 163-195, 7 scored between 196-227, 9 scored 228-260, 47 scored 261-292, 34 scored between 293-325 and 2 scored between 326-357 respective.

Table-2

Group	N	Mean	SD	t	df
Non-Tribal	100	276.94	± 23.518	-0.846	198
Tribal	100	280.10	± 29.016		

Tabulated 't' value at 95% level of significance for 198 dfis 1.962

To compare between the two groups i.e. non-tribal and tribal girls students of West Tripura District, independent t- test was employed. After analysis the data it is found that mean value of non-tribal group is 276.94 and tribal group is 280.10. It is also observed that calculated 't' value is -0.846 and tabulated value is 1.962 at 95% level of significant for 198 df. Where calculated value is less than tabulated value. Therefore, it shows that there is no significant difference between the said groups.



It is found that the there are no such comparison between non-tribal and tribal higher secondary girls of west Tripura, both have positive attitude towards physical education program. The responses may be characterised to the fact that:

1. The importance physical education program and games and sports is growing in all school across the country.
2. The higher secondary school have sports infrastructure and facilities and encouragement from the teacher as they are participating in various intramural and extramural competitions.
3. Now a day's most of the students are conscious about their health and fitness which might be the

one factor of having positive attitude towards physical education program.

Recommendations

i) Similar type of study may be conducted on different subjects or different caste.

ii) Similar type of study may be conducted on Elementary, Middle, secondary, Graduate and Post Graduate students also.

iii) This type of study can be conducted on all the district or may be within all district of Tripura.

iv) The study may also be conducted on different age group people and other professions.

v) It is recommended that a similar study may be repeated on large sample to make the study more valid and authentic.

Conclusion

On the basis of discussion of finding it is concluded that the there are no comparison on the attitudes of non-tribal and tribal higher secondary girls of west Tripura, both are having positive attitude towards physical education program.

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A Critical Study of National Education Policy 2020: Issues and Challenges

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सारांश

शिक्षा राष्ट्र की नींव है, क्योंकि यह देश और नागरिक के विकास में महत्वपूर्ण भूमिका निभाती है। कोई भी इस तथ्य से इन्कार नहीं कर सकता है कि शिक्षा एक शक्तिशाली उपकरण है, एनईपी 2020 वर्तमान शैक्षिक परिदृश्य को परिवर्तित कर युवाओं को वर्तमान और भावी चुनौतियों का सामना करने हेतु तैयार करेगी। जो कि डॉ.के. कस्तूरीरंगन की अध्यक्षता वाले पैनल पर लगे हुए हैं। जो हमारे देश में शिक्षा की समानता, गुणवत्ता, सामर्थ्य और हिस्सेदारी पर केन्द्रित है।

इस पत्र में, शोधकर्ता राष्ट्रीय शिक्षा नीति में 2020 में विभिन्न ग्लोब के आने वाले मुद्दे और हक का पता लगा रहे हैं। इसमें नई शिक्षा नीति में बदलाव के कारण खान-पान से संबंधित सभी अपेक्षाओं का विश्लेषण किया गया है।

Introduction

The National Policy Education is the policy formulated by the Government of India to promote education among India's people. The policy covers elementary education to college education, in both rural and urban India. The first NPE was declared by the Government of India by Prime Minister Indira Gandhi in 1968, the second policy by Prime Minister Rajeev Gandhi in 1986, and the third by Prime Minister Narendra Modi in 2020. The National Education Policy 2020 which was approved by the union cabinet of India on 29th July 2020 highlights the vision of India's New Education System. The policy is a comprehensive framework from elementary education to higher education and vocational training in rural and urban India. The policy aims to transfer India's education system by 2021. The NEP 2020 enacts various changes in Indian education policy, it aims to increase state expenditure on education from around 4% to 6% of the GDP as soon as possible in the coming years.

Based on the committee report, in June 2017, the draft NEP 2020 was submitted in 2019 bythe panel led by former Indian Space Research Organisation (ISRO) Chief Krishnaswamy Kasturirangan. The Draft New Education Policy (DNEP) 2019, was later released by the Ministry of Human Resource Development The vision of "National Education Policy 2020 envisions an India-centric education system that contributes directly to transforming our nation sustainably into an equitable and vibrant knowledge society by providing high-quality education to all (NEP 2020 Draft).

India is a developing country, liberal for educational reforms, currently, there are 1113 Universities and approximately 43,796 colleges, and 11,296 stand-alone Institutes registered according to AISHE 2020-21 report. (https://aishe.gov.in) Total enrolment in Higher education has increased to nearly 4.13 crore in 2020-21 from 3.85 crores in 2019-20 which ended.

Based onthe Ministry of Education, it is predicted that India will be the 3rd largest economy in the world in 2030-2032 with estimated GDP of 10 trillion dollars. It is evident that 10 trillion economies will be driven by knowledge resources and not by the country's natural resources. To boost the growth of the Indian education sector, the present government decided to revamp it by introducing a comprehensive National Education Policy 2020.

Objectives

To Study the overall issues and challenges of national education policy 2020.

Highlights of National Education Policy 2020

A. *School Education:*

1. The New Policy targets to achieve a 100% gross enrolment ratio in school education by 2030 along with universalization of education from Pre-Primary School to Grade 12. The 5+3+3+4 curricular structure concerning ages 3-8, 8-11, 11-14, and 14-18 years respectively will replace the 10+2 structure of the school curriculum. (NEP 2020,4.1)

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2. For children up to the age of 8, the National Curricular and Pedagogical Framework for Early Childhood Care and Education (NCPFECCE) on 20th October 2022 by the Union Ministry of Education. NCERT to attain universal foundational literacy and numeracy in all primary schools by 2025, National Mission on Foundational Literacy and Numeracy will be set up by Education Ministry. (NEP 2020, 1.3)
3. Schools' extra-curricular, vocational, and academic streams will be given equal importance without any rigid separation. Local language/Mother tongue will be used as a medium of instruction for classes 5 preferably till 8. (NEP 2020, 4.11)
4. PARAKH (Performance Assessment, Review, and Analysis of Knowledge for Holistic Development), a new assessment center that will be set up for improving the system of evaluation in schools. (NEP 2020, 4.41)
5. In consultation with NCERT, a new National Curriculum Framework for Teacher Education (NCFTE) 2021 will be established by 2030, a 4-year integrated B.Ed. will be the minimum degree qualification for teaching Higher Education. (NEP 2020,5.2)

B. Higher Education:

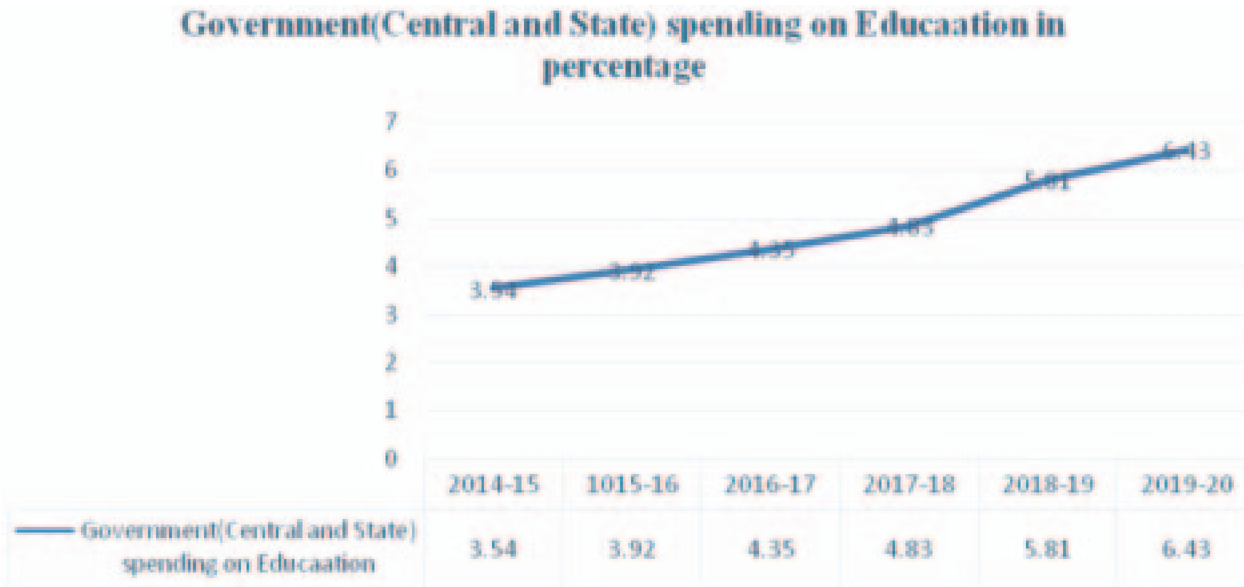
1. Gross enrolment ratio in higher education including vocational education to be raised from 26.3% in 2018 to 50% by 2035 and it aims to add a new search of 23.5 crores in higher education institutions. (NEP 2020, 22.10)
2. Facilitate digital stores and transfer of credit earned from different higher education institutions academic banks of credit will be established. (NEP 2020, 24.2)
3. The new policy provides multiple entry and exit point certificates at every stage and promotes multidisciplinary education witha flexible curriculum andcreative combination of subjects.(NEP 2020, 11.5)
4. Multidisciplinary education and research universities MERUs to be established to provide the best multidisciplinary education of global standard in the country at par with IITs and IIMs.(NEP 2020,11.11)
5. The National Research Foundation is an umbrella body that will be established to foster quality research across the country and strengthen the overall research ecosystem. (NEP 2020, 17.9)
6. The entire higher education excluding legal and medical education will come under the purview of the Higher Education Commission of India (HECI) which will be set up as a single Apex body. (NEP 2020, 18.2)
7. The same set of norms for regulation accreditation academic standards will be applicable to both public and private higher education institutions.
8. In the upcoming 15 years the affiliation call is to be phased out and the graded autonomy concept will be introduced to encourage healthy competition between the universities.
9. The National Education Technology Forum NETF will be set up to foster a free exchange of ideas on the use of technology. (NEP 2020, 23.3)
10. The increase in government expenditure on education from around 4% to 6% of GDP with the collective efforts of the canter and state governments.

Issues and Challenges of National Education Policy 2020

- ***Infrastructure and Funding:***

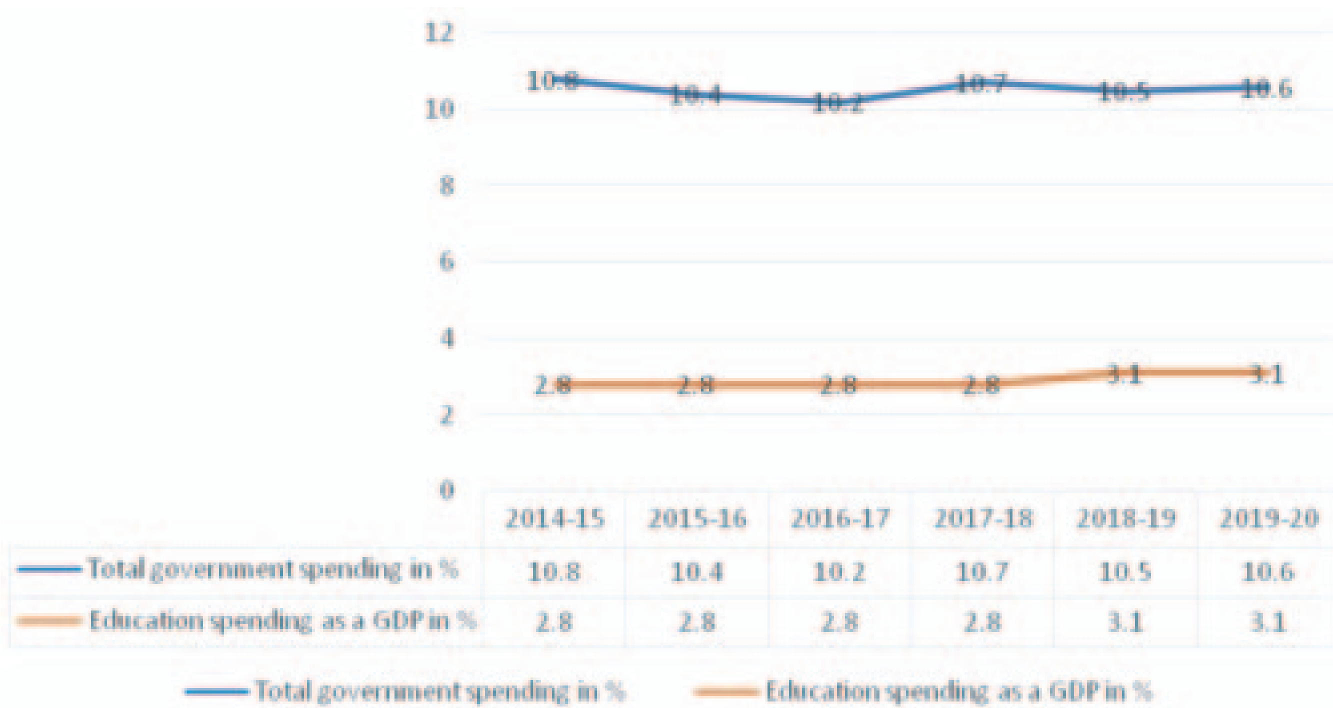
The national education policy 2020 aims to take the country to a global perspective on education by providing high-quality, different variety, and by dynamic education hubs to all the people in the country as well as abroad. The Policy focuses on raising expenditure in the education sector to reach 6% of GDP at the earliest. It cannot say that this education policy is newly structured because as earlier it had been recommended by the Kothari Commission allocation way back in 1964. As the economic surveys give us a clear picture of spending in India on education. As per data for 2019-20, India spends only 3.1% of its GDP on the education sector. If we deeply study, the recommendation which is given 52 years ago, we will able to uncover that since 2014-15, Expenditure on education has expanded in total termfrom 2.8% to 3.1% in 2019-2020 yet it has been stagnant of 10.5 of total government budgets.

The central government has deducted expenditure on education as a percentage of the budget from 4.14% in 2014-15 to 3.2 percent in 2020-21. Even this budget amount had seen a downfall due to thecorona pandemic. There are many reflections based on how the government will financially increase by 6% GDP when the situation of the economy is not good as it should be. There is no such funding available for such an increase in India's current education system.



Source: Economic Survey(2019-2020)

Total Government spending in % v/s Education spending as a % of GDP



Source: Economic Survey (2019-2020)

- ***Three levels of Languages:***

The new education policy 2020 has advised that mother tongue/ local language/regional language should be used as a medium of instruction till class 5 preferably till class 8 and beyond it wherever possible new education policy comes with many challenges and issues. The most common criticism is that it will widen the gap between those who communicate in English and those who cannot, As the current scenario is different from the document. Most of the eminent schools of metro cities do not prefer to choose the medium of instruction in Hindi. Where local language will stand when they only emphasize the English language; this would be widening the gap between an influential and weak section of the society. And the second challenge is whichmother tongue/ local language should beused as a medium of instruction in school and which should not. In the 8th Schedule, there are total 22 languages consist to speak in different states, but the problem is children are not able to understand different states' languages of instruction very easily. If the policy is implemented the way it is proposed then it will also pose a challenge for higher education institutes where the medium of instruction is not the mother tongue but usually a common language like English or Hindi, the language barrier will be created among the students and it may happen they find it challenging to communicate with each other.

- ***Vocational Education and Skill:***

National Education Policy 2020 has mandated vocational courses starting from class 6 and set that every child will be thought skills like crafts, carpentry, cooking, gardening, etc. The first major challenge with respect to vocational courses is the lack of resources. For introducing vocational courses in a school, there are three things required that are infrastructure, proper setup, and trained personnel. One of the solutions is that schools can do a partnership with local Craftsman who have proper infrastructure and setup. Though this option is best in terms of money saving it also has its pros and cons. The next challenges are that when your child visits these kinds of places it is an overhead school w.r.t transportation and the parents pay fees. A lot of time is wasted in traveling if the place is far away from the school and it is a lot of pressure, they felt to cover the full syllabus within time.

- ***Lack of Professional Competent Teachers:***

NEP 2020 has broughta paradigm shift in the path of learning, for the foundational year, Pre School nursery kindergarten Class 1 and Class 2. School curriculum and pedagogy have been totally restructured.

5+3+3+4 multidiscipline teachers, the most common challenge is the lack of trained teachers. The current situationof apathetic job profiles, exploitation, and disincentive services leaves the teachers unmotivated and dejected which can affect their way of teaching. Providing training to the teachers in contrast with a new curriculum also comes with a lot of challenges. At the grass root level, a very large number of teachers are stuck in administrative work and other responsibilities living little are no time for such kind of training programs.

Secondly, there is a lack of skilled teachers, they are not aware of new techniques, technology, pedagogy, and the need of children so the teachers are not able totackle the situation accordingly.

- ***Digital Divide:***

New Education Policy emphasizes the use of technology and digital literacy from an early age. While there has been the utilization of technology in each part of the education sector like teaching, learning, and appraisal commonly setting up virtual labs preparing school coaching and strategies ignore the digital partition between the urban and rural, so many students who belong to rural areas not able to attend the classes online because they did nothave access to mobile phones andthe Internet. Some of the students whom not attend the proper classes due so far from the main city.

The digital divide is considerably more unpredictable when it has been observed in reference to sex, class, rank, and metropolitan country provincial contrasts. According to NSSO's 75th round national survey (2017-2018), there has a significant male-female digital literacy gap shown in Table 1 in reference to rural and urban areas with respect to the ability to operate a computer as well as access the internet. As you can see in Table 1, only 7% of females in rural India are able to operate a computer as compared to their male counterparts (17.1%). For urban areas remains although the level of users is higher.

Table 1

Ability	Urban Area		Rural Area	
	Male	Female	Male	Female
Able to operate a computer	37.5%	26.9%	12.6%	7%
Able to operate internet access	43.5%	30.1%	17.1%	8.5%

With respect to the introduced computer coding from class 6, it requires a lot of practiceand enough computers so that each student can practice individually. There are a lot of challenges facing here firstly a proper lab is needed, data of NSSO shows that only 35.1% of government schools had access to a functional computer. Secondly, there are much requirements of a proper laptop or computer setup, so that students from marginalized sections must afford it easily because they cannot afford to expensive gadgets.

As shown in Figure 2, the NSSO's report for 2019-2020 The literacy rate of rural and urban are 73.5% and 87.7% respectively. They can access the computer; urban people can access it more effectively than rural.

Figure 2

Sources: Report of NSSOs of (2019-2020).

- ***Multidisciplinary Courses:***

In NEP 2020, it is mentioned that students can choose the discipline of their own interest, but it makes some confusion to not choose the proper discipline of their own interest because they do not know the depth of the courses before. And the second challenge is still missing out on the fields of studies such as women's studies, cultural studies, general studies, media studies, studies of discriminations, exclusion, and environmental studies these studies not be concerned with the part of main discipline.

- ***Single Entrance Exam Agency NTA (National Testing Agency):***

As it is mentioned in NEP 2020, a single body conducts the entrance exam so that it drastically reduced the burden of students, universities, and colleges to take the entrance exam and the entire education exam. but here it is an unexpected situation arises that gives a burden to students to go through the entrance exam, that cannotmeasure the student's creativity, ability, and skill, it just measures the bookish knowledge of a student so how will it possible a single body can measure students all skills.

Conclusion

The New Education Policy 2020 has been proposed to be implemented. It is an ambitious move to revive the Indian education system with a modern approach. No matter how good this may look, the implementation of any policy has its own importance. An efficient implementation can make a policy a huge success and on the other hand, if the implementation is not good, it can be a huge disaster. The review paper discusses the challenges and issues in the implementation of NEP 2020. The on-ground reality is that the most important 3 pillars-infrastructure, funding, and a well-detailed plan strategy are still missing. Many other factors have been discussed in this review paper; each is genuine on its own term. The analysis of the good and bad is very important to point out. The NEP 2020 may look good on paper as well as bring some good changes in the real world also.

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The Impostor Phenomenon- What is It? And Why Does it Occur?

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Abstract

Impostor Phenomenon, commonly known as Impostor Syndrome, is a psychological condition where a person believes that others have inflated perceptions of their abilities and so they fear being evaluated. The impostor phenomenon describes a psychological experience of intellectual and professional fraudulence (Clance & Imes, 1978; Matthews & Clance, 1985). People who experience Impostor Phenomenon fear that if they are asked to replicate their achievement, they won't be able to do so. This fear exists even after many incidents and evidence of ongoing success. Such individuals also discount praise, are highly self-critical and attribute their achievements to external factors such as luck, hard work or interpersonal assets, rather than internal qualities such as ability, intelligence or skills (Harvey, 1981; Matthews & Clance, 1985). Such feeling of impostorism might affect the well-being of individuals both positively and negatively. If it causes positive changes in them then one can say that it will not be much an issue but if the effect of impostor phenomenon is negative, it can cause many psychological issues in an individual. In this paper, the Researchers attempted to clearly explain What's and Why's of Impostor Phenomenon- What is it?, How does a person experience Impostor Phenomenon,Why does a person experiences it? What can be its effects? And How is it different from other behavioural experiences of inferiority complex, low self-esteem, and burnout syndrome. The paper provides the conceptual understanding of the term "Impostor Phenomenon". It will help the stakeholders understand the term so that suitable measures can be taken to overcome the feeling of impostorism for people experiencing this phenomenon.

What is Impostor Phenomenon?

Siya recently appeared for her class 10th Board Exam and topped it with 97% marks. She was well praised by her teachers and friends yet somewhere in her heart she felt that her achievement is by luck rather than her hard work. She also doubts whether she'll be able to do well in the future or not? Will her luck favor or deceive her?

Brijesh, a third-year graduate student is a terrific singer and wins almost every singing competition he participates in at college. Still, many times he feels he is not good enough as a good voice is just a natural blessing. He thinks that he doesn't play an important role in just squeaking out a few words lyrically in sync. Brijesh is always hesitant to participate in national-level singing competitions because he thinks that he is not as great a singer to even participate in such competitions.

Meera, an extraordinary lawyer at a reputed law firm states that "I am a good lawyer because I know the law well and it's the result of attending law school regularly. So, for me, it's nothing to be proud of". She adds "Many of my friends are better lawyers and I stand nowhere when compared to them. Sometimes I doubt how I am even surviving this tough competition in their presence."

What is common among Siya, Brijesh and Meera is that they all think that their achievements are merely a result of fate, luck, and chance. None of them acknowledge their efforts and hard work. Do they experience Imposter Phenomenon? Maybe yes, maybe no!

Here are some definitions of Impostor Phenomenon:

"An internal experience of intellectual phoniness"- Clance and Imes (1978)

"The situation in which highly accomplished, successful individuals paradoxically believe they are frauds who ultimately will fail and be unmasked as incompetent" - APA Dictionary of Psychology

"Persistent doubt concerning one's abilities or accomplishments accompanied by the fear of being

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exposed as a fraud despite evidence of one's ongoing success."- Merriam Webster

"Imposter syndrome is the experience of feeling like a phony in some area of your life, despite any success that you have achieved in that area"- Arlin Cuncic (2022)

From the above definitions, we can point out the following characteristics of Impostor Phenomenon/ Syndrome :

(i) It is an internal experience i.e. it is not overtly visible.

(ii) A person experiencing Impostorism has intellectual phoniness. He/She does not consider his/her achievements to be genuine.

(iii) Impostor Phenomenon causes persistent doubts about oneself and one's achievement.

(iv) Impostor Phenomenon makes a person fear that if his/her success is to be replicated, his/her weakness will be exposed i.e. he/she will not be able to achieve the same success again.

(v) The Imposter Phenomenon makes one feel that their high achievements, intellect, and abilities are a false depiction of themselves in the eyes of others.

Based on above characteristics of Imposter Phenomenon, one can question that some of the same characteristics are also there in other psychological issues like Inferiority Complex, Low Self-esteem and Burnout Syndrome., so what is the difference between them and Impostor Phenomenon? Let us understand the difference here:

Impostor Phenomenon	Inferiority Complex	Low Self-esteem	Burnout Syndrome
As already pointed out above, Impostor Phenomenon, commonly known as Impostor Syndrome, is a psychological condition where a person believes that others have inflated perceptions of their abilities and fear being evaluated. This fear exists even after many incidents and evidence of on-going success. Such individuals also discount praise, are highly self-critical and attribute their achievements to external factors such as luck, hard work or interpersonal assets, rather than internal qualities such as ability, intelligence or skills (Harvey, 1981; Matthews & Clance, 1985)	The American Psychological Association (APA) defines Inferiority Complex as a "basic feeling or inadequacy and insecurity, deriving from actual or imagined physical or psychological deficiency". Going by this definition, one can say that Inferiority Complex develops in an individual when he/she has some deficiency (physical, psychological or any other) within themselves. It will not occur even when there are evidences of on-going success and everything normal in a person's life.	Self-Esteem is a person's overall opinion about oneself- how one feels about his/her abilities and limitations. When a person has a healthy self-esteem , he/she feels happy about oneself and see oneself as deserving the respect of others. When a person has low self-esteem, he/she put little value on others' opinions and ideas. Low self-esteem is when someone lacks confidence about who they are and what they can do. They often feel incompetent, unloved and inadequate. People who struggle with low self-esteem are consistently afraid of making mistakes or letting others down.	The concept of burnout was first used by psychologist Herbert J. Freudenberger in 1974. Burnout is defined as a syndrome that develops from the stresses experienced. The state of feeling worn out, with decreased energy, weakness, and dissatisfaction due to intense stress in work life is called burnout syndrome. Burnout syndrome has three sub-dimensions. These are emotional and physical exhaustion, reduced personal accomplishment, and depersonalization.

Thus, it is seen that the Impostor Phenomenon is different from the above-mentioned psychological conditions.

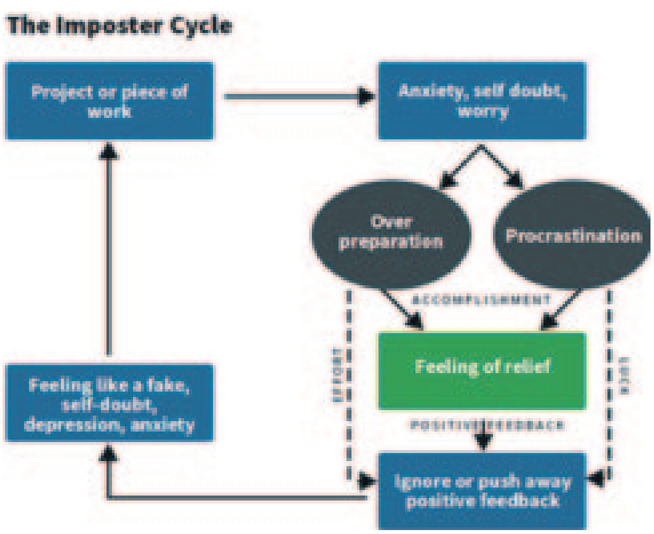
HOW does a person experience IMPOSTOR PHENOMENON?

"The brain wants to make sure we have all the boxes checked whenever we're in an uncomfortable new setting,"- Andrea Salazar-Nuñez, Ph.D., a clinical psychologist at the University of Washington Counselling Center.

Every person introspects themselves sometimes or the other. The way we introspect ourselves is different for every individual. Some introspect their achievements based on the expectations of others like family, friends, and associates; some others do introspection based on the targets they set for themselves, while others may have an altogether different approach to introspection.

Such introspection makes us feel something about ourselves like feeling good about achievements, feeling proud of ourselves, feeling accomplished to have fulfilled others' expectations, and so on. But, when such introspection makes one feel unaccomplished and fills us with self-doubt even when there isevidence of our achievements (good marks, good social image, good curricular and co-curricular record, etc.), then we can say that an individual is experiencing Impostor Phenomenon.

Here, it would be appropriate to quote the Impostor Cycle, the concept of which was originally given by Clance *et al.* in 1995:



WHY does a person experience IMPOSTOR PHENOMENON?

Based on how a person experiences Impostor Phenomenon, if we have to answer why a person experiences it, then the following can be some probable reasons:

1) *High Expectation of Others* - Impostorism occurs when a person feels that others expect him/her to do more than he/she is doing.
2) *Deflated Self-concept* - When a person has a deflated or low self-concept, it can also cause him/her to experience impostor phenomenon.
3) *Social Environment* - One may experience Impostor Phenomenon due to the social environment he/she lives in. Sometimes the pressure to stand out high in society and up to everyone's expectations gets too much in the head of the person.
4) *Perfectionism*- Impostor Phenomenon is likely to occur more in individuals who crave perfectionism in everything they do.
5) *Anxiety*- Anxiety can also make one feel like an impostor because anxiety causes self-doubt and self-doubt is one of the symptoms and causes of the Impostor Phenomenon
6) *Other reasons* - Any other reason that makes one doubt about their accomplishments can be a reason for Impostor Phenomenon.

Effects of Impostor Phenomenon

Impostor Phenomenon makes one doubt their abilities, intelligence and accomplishments and makes one feel that they are fake achievers i.e. they wont be able to achieve the same thing again if it is asked to replicate. Such feelings can have both positive and negative effects. It depends on individual that what effect Impostor Phenomenon has on him- Negative or Positive. They both are mentioned in the table below:

Positive Effects of Impostor Phenomenon	**Negative Effects of Impostor Phenomenon**
A person experiencing Impostor Phenomenon may have following positive effects : 1) He/She will put more efforts to do better. 2) He/She might try to improve any shortcomings that they feel they have.	A person experiencing Impostor Phenomenon may have following negative effects : 1) He/she may have more anxiety doubting their self-worth. 2) He/she may develop low self-esteem. 3) He/she might fall the prey of Depression. 4) He/she might develop other psychological issues like Burnout Syndrome etc.

What is The Need to study about Impostor Phenomenon?

Many studies have been conducted all over the world on Impostor Phenomenon (Braveta *et al.*, 2019). But the Researcher could not find many studies related to Impostor Phenomenon conducted in India. And the few studies that were found, were conducted on Adult Population- Medical students, Management students, Ph.D. students, Software Professionals etc. and very few on adolescents. However, there is a great need to conduct more studies on Impostor Phenomenon and know about the status of its prevalence among different populations including adolescents, because of the following reasons:

i. Impostor Phenomenon can exist in any individual who is subjected to Task-oriented activities. It includes all professionals and students.

ii. The New Education Policy, 2020 talks about activity based, experiential learning through a Constructivist approach. If the students are subject to Impostor Phenomenon, the construction of their knowledge might be hampered by their self handicapped behaviour and thus the objective of getting knowledge through Constructivist approach could not be properly achieved.

iii. The adolescent students studying at Senior Secondary Level are subject to various situations that could lead to a situation of self-doubt causing anxiety and stress which affects their psychological well-being. Impostor Phenomenon could be a probable reason behind this.

iv. In Patriarchal Indian Society, the attempts to empower girls and women have bear fruits but not sweet enough to completely eliminate the gender gaps prevalent in society. This could be a significant cause for girls to have more Impostor feelings than boys. This needs to be identified so that steps can be taken to bridge such gaps and girls can be safeguarded/provided with sufficient help to overcome Impostor Phenomenon.

v. Also, in view of Patriarchal Indian Society, it is also seen that the boys are subject to a lot of pressure of becoming the earning member of the family. At many instances in their life, when they are not able to perform well, they might suffer from Impostor Phenomenon and feel not good enough, even after being so capable. Prolonged feelings of imposterism in such boys can affect their psychological well-being.

vi. The previous Academic years (2020-2022) were affected by outbreak of Covid-19 virus which has further affected the studies of students. Online classes, seclusion, no/low peer contact, promotion on the basis of previous performance could have led to feelings of self-doubt and impostorism among the Senior Secondary Students. We need to find this out.

Conclusion

Impostor Phenomenon/Syndrome is a much talked about topic these days. Its understanding is important for better management of human resources. Although it is not listed in DSM (Diagnostic and Statistical Manual) but psychologists and others acknowledge that it is a very real and specific form of intellectual self-doubt. It may have both positive and negative effects on an individual's psychology, so attempt must be made to know and study about it more precisely in various fields like psychology, education, managements etc. This will help in better identification of those who suffer from Impostor Phenomenon and steps can be taken to overcome it on an institutional and personal level.

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$5 Trillion Economy: The Vision, Challenges and Roadmap for India

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Abstract

The government of India has expressed its intention to enhance the economy to a target of five trillion dollars by the year 2024-25. Although it is praiseworthy to address an ambitious objective, the government must establish a comprehensive plan tailored to the specific needs of each significant sector and a comprehensive plan to include quantifiable benchmarks, attaining international competitiveness and being made accessible to the general public. The industrious sectors, including agriculture, industry, and services, play a crucial role in driving economic growth are vital in achieving India's ambitious goal of becoming a US$ 5 trillion economy. The historical development of the Indian Economy has witnessed dynamic patterns in the growth and contribution of several industrious sectors, which have garnered significant attention from researchers and policy officials. Examining the growth curve of these industrious sectors, in line with the target of achieving a US$ 5 trillion GDP, assumes greater significance during the current challenging period marked by the unprecedented COVID-19 outbreak and the ensuing nationwide lockdown in the economy. This newly established objective would expedite holistic expansion and substantially contribute to the overall advancement of the economy. It is vital to delineate the fundamental concerns and establish a strategic plan for the forthcoming trajectory. The proposed approach aims to optimise the utilisation of innovations and institutions by implementing a proactive policy framework. This study examines the economic and sectoral growth trajectory, considering the disruption produced by the pandemic. It aims to address whether India will achieve its goal of becoming a US$ 5 trillion economy and, if so, when and how this might occur.

Introduction

In 2023, India commemorated its seventy-sixth anniversary of independence. These significant milestones afford an occasion for commemorating previous accomplishments and envisioning a future trajectory for the nation. The Government of India has established a goal of achieving the status of a "developed" economy by the year 2047. Prime Minister Narendra Modi has conceptualised the forthcoming 25 years as 'Amrit Kaal', a phrase borrowed from Vedic inspiration, signifying a period of exceptional significance. India's current situation has the potential to initiate a propitious phase and a novel global epoch. The economic significance of India cannot be overstated due to its substantial population, which accounts for nearly one-sixth of the world's total. By 2023, India is projected to surpass all other countries in terms of population, thereby establishing itself as the foremost contributor to the global workforce for the foreseeable future. The evident optimism around India's potential for progress is apparent in light of recent challenges such as sluggish world economic expansion resulting from exceptionally high levels of glodollarsbal debt to GDP, inflation, a slowdown in global population growth, and a stall in global commerce concerning GDP. As mentioned above, the trends have been further intensified due to the escalation of protectionist measures in the context of increasing geopolitical tensions.

The objective set forth by the Prime Minister of India is to achieve substantial economic growth, aiming to elevate India's GDP to a value of US$ 5 trillion by the fiscal year 2024-2025 (Ministry of Finance, 2019). Pursuing this hopeful economic objective has engendered deliberation and discourse among economists and politicians, prompting them to explore strategies and pathways to achieve it. The present discourse assumes greater importance in light of the ongoing local and global economic deceleration, domestic pricing volatility, the trade conflict between the United States and China, and, most notably, the prevailing COVID-19 pandemic. The extraordinary economic and medical issues have

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significantly affected production, employment, and global trade. In light of the prevailing global and internal obstacles, inquiries arise regarding the feasibility of India's aspiration to achieve a US$ 5 trillion economy. If this objective is attainable, the subsequent query pertains to the timeline for its realisation. The inquiry at hand pertains to the measures that must be undertaken to facilitate the Indian Economy's ascension to the esteemed US$ 5 trillion Gross Domestic Product threshold.

The gross domestic product (GDP) is influenced by three industrious sectors: agriculture, industry, and services. These sectors play a crucial role in determining the overall GDP and growth trajectory. The agricultural sector contributes approximately one trillion dollars to the national economy. Expanding a specific industry leads to broader economic growth, augmenting its overall contribution to GDP. The COVID-19 pandemic has negatively impacted all sectors, causing a decline in total growth. The Indian government has implemented reforms and stimulus packages to address macroeconomic failures, but this has primarily focused on supply shocks. (Segura & Braun, 2004). (BT Team. (2022).

Challenges Encountered in achieving a $5 Trillion Economy

Prime Minister Narendra Modi aims to achieve a US$5 trillion economy for India by 2024-25, despite challenges. The goal is a response to the global economic slowdown, which has led to a decrease in global economic growth from 3.8% in 2017-18 to 3.6% in 2018-19. Factors contributing to this slowdown include trade disputes, stronger lending regulations, technological disputes, military tensions, and Brexit. Central banks like the US Federal Reserve, European Central Bank, and People's Bank of China have implemented accommodating monetary policies to mitigate the effects of an imminent recession due to increased public debt and budget deficits. Policymakers are under intense political pressure to implement quantitative and credit easing measures. Semi-permanent monetisation of significant fiscal deficits may be helpful in addressing the impending economic crisis. (ET. 2020-21; Ghosh, M., & Mukherji, B.; Desai, A.V., 1999). (World Economic Outlook, April 2023, FT, Bloomberg, Google finance, Bank For International Settlements central bank policy rate as of 23rd May)

The current state of the Indian Economy

The IMF predicts global growth to slow from 3.4% in 2022 to 2.8% in 2023. However, advanced economies' purchasing managers' indexes show resilience. Labor markets face high competition and limited employment options. Inflation remains higher than set targets, and the global economic situation is unpredictable. India's economic growth rebounded to 7.2% in Q4 2022-23, higher than the Reserve Bank of India's and government predictions (Ministry of Finance, 2018-19, 2019-20 Economic Survey of India, ET. (2020-5).

The Indian Economy is anticipated to develop at a rate of 6.5% in fiscal year 2024, according to predictions issued by the Government and the Reserve Bank of India (RBI). Several organisations say the Indian Economy will expand between 6 and 6.5%. Surveys undertaken by the Reserve Bank of India (RBI) reveal the Purchasing Managers' Index (PMI) for manufacturing and services, which inspires confidence in India's growth prospects. Other underlying issues, such as the continuing geopolitical fragmentation and the pervasive uncertainty in the globaleconomy, continue to exist. The amount of foreign direct investment (FDI), venture capital/private equity (VC/PE) investments, and money raised through financial markets all decreased slightly or significantly in the fiscal year 2022-2023 (FY).

Data, Scope and Assumptions

This study examines the growth of agriculture, industry, and services in the Indian economy using historical data from the several government reports/survey. The analysis focuses on GDP growth trends and the impact of these industries on the economy. The study uses the unit of 'crore rupees' to represent GDP data. The research suggests that the contributions and growth rates of sectoral Gross Value Added (GVA) are indicative of sectoral Gross Domestic Product (GDP). The study also considers the appropriate currency conversion rate and suggests using nominal terms for achieving a GDP of US$ 5 trillion. (ET, 2020-21; Soni, S., & Subrahmanya, M.B., 2020).

Objectives

We aim to conduct an empirical analysis to diagnose industrious sectors' composition, growth patterns, and subtleties. This analysis will also assess the expected contributions of these sectors towards achieving the ambitious goal of increasing the GDP from the current level of US$ 2.9 trillion in 2019-2020 to US$ 5 trillion.Calculating the timeline and overall growth rates for the $5 trillion growth path, An analysis of GDP growth trends, and The growth pattern for a $5 trillion US GDP.

Results, Discussions & Way Forward

India, with a $2.72 trillion GDP, is the seventh-largest economy globally and the third-largest in purchasing power parity. Its rapid economic growth since 2014 has reached $2.7 trillion, and the nation aims for a $5 trillion GDP by 2025. The Commerce & Industry Ministry aims to boost India's GDP to $5 trillion by 2024-2025, despite COVID-19 challenges, through infrastructure development, quality of life enhancement, Digital India project support, and environmental conservation. (Ministry of Commerce and Industry Press Release) (Bloomberg Intelligence, 2022) Economic growth is driven by savings, investments, exports, and growth. Inflation has decreased in advanced economies, with the US's CPI rate dropping to 4.9% in April 2023. Central banks have stopped or delayed rate hikes, but inflation continues to rise. South-East Asia's growing countries have stable currency rates, with India having a positive G-secs yield. (Ghosh, M., & Mukherji, B.)

Despite global economic concerns, all major economies' PMIs show growth in services activity, with India's forecast for manufacturing and services remaining optimistic. India's manufacturing PMI reached a 31-month high of 58.7 in May, indicating resilient demand. (Office of Economic Advisor, Ministry of Commerce and Industry; MOSPI; as of 31st May)

India's real GDP increased by 7.2% from FY 2022-23, thanks mainly to strong growth in the first and fourth quarters of the year. Due to a base effect from the prior year, GDP increased by 13.1% in the first quarter of the fiscal year 2022-23. The fourth quarter growth rate of 6.1% for the fiscal year 2022-2023 has surpassed projections. India's growth averaged 5.6% from Q2 to Q4, showing its resiliency. Private consumption expenditures as a share of GDP increased slightly from the prior fiscal year's 58.3% to 58.5% in 2022-23. Private consumption expenditures as a percentage of GDP marginally increased. A 7.5% increase over the previous year was recorded. The government's capital expenditures are expected to have a significant impact on the gross fixed capital creation, which is predicted to expand at a significant rate of 11.4% for the fiscal year 2022-2023. The ongoing worldwide issues have restrained the expansion of the external sector. However, over the fiscal years FY 2022-23, there was a significant increase in the export of services.

Among all GVA sectors, agriculture has developed the most steadily during the last three fiscal years (FY 2022-23). After shrinking for two straight quarters, manufacturing output rose by 4.5% in the fourth quarter, turning the year's total manufacturing growth positive. There are still worries about a weaker global demand, which could impact India's manufacturing and export growth. Trade and transportation, financial services, and construction saw strong growth in the services sector. Construction industry growth was 10.4% in the fourth quarter of the fiscal year 2022-2023, as opposed to 4.9% the year before. The trade, hotel, and other services sector increased by 9.1% from Q4 FY 2021-22 to Q4 FY 2022-23. The financial industry expanded by 7.1% in the fourth quarter of the fiscal year 2022-2023 as opposed to 4.6% the year before.

Total Direct Tax receipts for FY 2022-23 were strong at INR 16.6 lakh crore, up 17% from the government's budgeted forecasts and 0.6% from revised estimates, yielding a buoyancy of 1.1. Actual CIT and PIT collections during the fiscal year 2022-23 increased in comparison to the same period in the prior fiscal year by 16.6% and 20.1%, respectively. The strong tax collection might be ascribed to a resilient economy as well as the government's focus on enlarging the tax base and closing loopholes. This is because activities accelerated more quickly after the COVID-19-led crises in previous years. (Budget 2023-24, 2022-23, 2021-22, Controller General of Accounts)

GST receipts rose by 22% in the fiscal year 2022-2023 compared to the prior year, reaching a buoyancy of 1.3. Since the tax's inception, the GST collection in April 2023 was the highest. The amount of customs tax collected increased by 7% during FY 2022-23. During the fiscal year 2022-2023, the amount of excise taxes collected decreased by 22.6% due to decreased excise duty rates on petrol and diesel. (Controller General of Accounts; GST Council/ PIB)

Tax collections for FY 2022-23 and FY 2021-22 increased by 13.5% in the eleven chosen states for whom the most recent data is available. Compared to the same period the year before, state revenues and capital expenditures rose by 9.6% during FY 2022-23. Regarding individual states, Uttar Pradesh saw the most extensive growth in tax receipts and capital spending during FY 2022-23. This shows that the economy of the state is now gaining strength. (Controller General of Accounts; GST Council/ PIB)

India's unemployment rate has risen month over month in 2023. It grew by 30 basis points from March

2023 to April 2023, reaching 8.1%. Net payroll increased by 1.3 million in March 2023 compared to the prior month. This illustrates a consistent rise in formal employment. However, compared to the prior year, the growth in net payroll was less. (CMIE, EPFO, World Economic Forum, Future of Jobs Survey 2023)

Sales of fertilisers in April 2023 fell 15% from April 2022. Between January and April 2023, overall growth is six percentage points more than during the same time in 2022. This number is still 2% below what it was during the same time in 2020. Tractor registrations have dramatically increased recently, rising by 35% in May 2023 compared to May 2022. Credit flow to associated businesses and agriculture remained strong in FY 23. In March 2023, compared to March 2022, it climbed by 15.4%, 70% higher than the prior fiscal year. In May 2023, compared to May 2022, the average hourly wage grew by 12%. According to the RBI, domestic growth in the first quarter of FY24 should be aided by both the kharif marketing season of FY23 and the rabi marketing season of FY24. (Ministry of Agriculture & Department of Fertilizers, MNREGA, MOSPI, RBI)

Indicators of high-frequency manufacturing activity indicate mixed economic activity. IIP in March 2023 climbed just 1% over March 2022. The rate of expansion has slowed after December 2022. In 2023, the manufacturing PMI remained in the expansionary range, reaching a 31-month high in May at 58.7. All sub-indices experienced the expansion, which showed that supply chain tensions were alleviating. Cement production is one of the indicators for the construction industry that fell in March 2023 compared to March 2022, but it is still 8% higher in FY23 compared to FY22. March 2023 saw a 9% increase in steel production over the previous month. The rate of expansion has, however, slowed. (HS Markit, DPIIT, RBI)

In 2023, the manufacture of both long-lasting and short-lasting consumer items started gradually. Following a strong increase in December 2022, the output index for non-durables fell by 2% in March 2023 compared to March 2022. In March 2023, compared to March 2022, IIP for consumer durables fell by 8%. This reduction was also present in 2023. Additionally, it is 11% below March 2021 values. (MOSPI RBI; as of 6th April, 202)

The surge in users of Digi-Locker and digital payments indicates that the Indian Economy is rapidly going digital. From Q1 2022 to Q1 2023, registrations for Digi-Locker climbed by 55%. The market share of UPI is still increasing, albeit more slowly than before. UPI payments have increased by almost 44% in absolute terms from April 2022 to April 2023. Card payments are growing overall despite a reduction in market share. In April 2023, compared to April 2022, they rose by 10%.On the other hand, the annual growth rate has slowed recently. Recent efforts with other countries to increase UPI's compatibility with other fast payment systems would hasten the adoption of UPI even more. (TRAI, RBI 2023)

The utilisation of bank credit has significantly increased. The credit increase from other sources, such as corporate bonds and commercial paper, has been much slower. It can be linked to the FY23 yield hike and bond market volatility. Due to rising international interest rates and growing demand for domestic credit, external commercial borrowings experienced $ 5.6 billion in outflows between April and December 2022. (TRAI, RBI 2023; Mishra *et al.*, 2022)

The Indian economy is predicted to grow similarly to its historical norms from 2020 to 2022, with agricultural, industry, and services industries expected to grow at 7.5%, 9.0%, and 11.4%, respectively. The projected value of the Indian economy is 3.8 trillion by 2024-2025, with a compound annual growth rate of 9.97% by 2027-2028. However, COVID-19's effects have pushed back India's goal of a $5 trillion economy by three years. (Hector G.A, Thomas E. Lubeck, Chandani, A., Divekar, R., & Nayak, J.K. (2022).

Conclusion

India aims to increase its GDP from US$2.7 trillion to around US$5 trillion by 2024, aiming for a 12 percent nominal growth rate. The growth rate includes an 8% increase in real GDP and a 4% inflation rate. The Economic Survey highlights the synergistic relationship between savings, investment, and exports. To boost savings and investment, consider three economic characteristics: augmented domestic consumption, attracting employable individuals to job-rich regions, and fiscal consolidation efforts. This will stimulate the manufacturing sector, revitalise industrial productivity, attract international investment, and alleviate concealed unemployment in agricultural and rural sectors.

This goal can be achieved by supporting the development of three vital industrious sectors- agriculture, business, and services- that act as engines for the services-based Indian Economy. Various sector's current makeup and historical growth trends, which make variable contributions, are forecast to sustain the anticipated economic growth. Nevertheless, our analysis shows that the current structure of the GDP and the trends in sectoral growth are insufficient to reach the targeted growth target of US$ 5 trillion. The rapid economic expansion in India will generate employment, income, and tax revenue, which can be used to improve the health and education sectors. This can reduce child mortality rates and address India's persistent challenges. To achieve a US$5 trillion GDP, the government must implement ambitious changes and encourage active participation from the population. Acknowledging the attainability of this goal is crucial. The COVID-19 epidemic has further increased the difficulties and made it impossible to achieve a US$ 5 trillion GDP by 2024-2025, forcing an additional three years of delay. Given the predicted economic rebound in the post-COVID-19 era, notably from 2021 to 2022 onwards, along with continued growth in productive industries throughout the following years, the fulfilment of this goal by 2027-2028 is achievable. During the post-COVID-19 recovery phase, the agricultural, industry, and services sectors must have growth rates comparable to their five-year norms of about 7.5%, 9.0%, and 11.4%. (Ghadially, F., 2021), The observed growth pattern shows that the services sector continues to dominate in terms of its GDP contribution. The performance of the services and industrial sectors has been strongly correlated throughout history with the pace of the gross domestic product (GDP) increase. These industries have repeatedly shown that they require ongoing stimulation in order to promote growth.

India is about to undergo one of the most significant changes since 1850. The World War did not reflect India's most significant shift between 1850 and 1950. Instead, it marked a significant worldwide turning point, similar to the Second World War. For India, gaining independence was a significant turning point, and some theorists contend that we are now approaching what might be the country's second-most significant change. India has to focus on some industries, including agriculture, tourism, healthcare, and education. The enormous potential in these areas to significantly close the current disparities must be emphasised. We can find workable answers by concentrating on the productive areas and studying their dynamics and makeup. According to the estimate, the combined productive sectors might experience growth rates that would push the Indian Economy above the US$ 5 trillion mark by 2027-2028 or, at the very latest, by 2024-2025. Based on the present study, Bharat will become a developed country only in Amrit Kaal, envisioned by visionary Prime Minister Shree Narendra Modi.

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Challenges of Multicultural Education in Teaching Learning Process

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सारांश

राष्ट्रीय शिक्षा नीति 2020 के अनुसार सांस्कृतिक जागरूकता और अभिव्यक्ति बच्चों में विकसित होने वाली प्रमुख दक्षताओं में से एक है, ताकि वह अपने साथ-साथ अन्य संस्कृतियों की पहचान व सराहना कर सके। अपने सांस्कृतिक इतिहास, कलाओं, भाषाओं और परंपराओं के बारे में एक मजबूत समझ और ज्ञान के विकास के माध्यम से ही बच्चे एक सकारात्मक सांस्कृतिक पहचान और आत्म-सम्मान का निर्माण कर सकते हैं। प्रस्तुत शोध पत्र शिक्षण अधिगम प्रक्रिया में बहुसांस्कृतिक शिक्षा की चुनौतियों का पता लगाने का एक प्रयास है। वर्तमान अध्ययन उत्तर प्रदेश के केन्द्रीय विद्यालय और नवोदय विद्यालय के 100 शिक्षकों के सर्वेक्षण और उसी नमूने से चयनित 24 स्कूल शिक्षकों के गहन साक्षात्कार पर आधारित है।

Multiculturalism

Society is enriched by preserving, transmitting, and respecting the culture and cultural diversity. How society deals with cultural diversity and coexists peacefully is known as multiculturalism. Multiculturalism is a fundamental belief that all citizens are equal. Multi-culturalism ensures that all citizens can keep their identities, can take pride in their ancestry, and have a sense of belonging. Acceptance of other's cultures gives a feeling of security and self-confidence, making them more open. According to Banks and Banks (2007), multiculturalism is a philosophical position and movement assuming that the gender, ethnic, racial, and cultural diversity of a pluralistic society should be reflected in all of the institutionalized structures of educational institutions, including the staff, the norms and values, the curriculum, and the student's body.

In India, diversity lies in its physical and social environment. People of India are living in harmony with these cultural differences that have been an integral part of Indian culture. This is reflected in various religious beliefs and traditional practices. Indian culture is composed of different sub-cultures. For the preservation and promotion of Indian culture peaceful co-existence of peopleis necessary. Multicultural education is very much a part of our classroom, without calling it by the name of multicultural education teachers are practicing it in teaching learning process.

Research question

What challenges do the teachers face in practicing multicultural school education?

Objective

To study the challenges perceived by the teachers in the teaching-learning process inthe light of multicultural education.

Methodology

Initial survey was conducted on 100 teachers and further Interviews were conducted and analyzed on multicultural education themes (thematic content analysis) to achieve the aboveobjective. Rational of choosing teachers of Kendriya Vidyalaya (KV) and Navodaya Vidyalaya (NV) as a research sample since the student and teaching staff of Kendriya Vidyalaya and Navodaya Vidyalaya usually are from different cultural backgrounds and represent cultural diversity as well. Semi-structured in-depthinterviews were carried out with 24 teachers of selected KV and NV. Interviews were recorded with the permission of the participants and field notes were prepared by the researcher. Researcher recorded all experiences of the day in field diary.After going through these transcripts thematic analysis was carried out.

Analysis and Discussion

Following challenges were perceived by the teachers while implementing multicultural education. They have been analyzed under following themes:

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- Linguistic challenges
- Challenges related to student's behavior
- Challenges related to parental co-operation
- Challenges related to role and biases of teacher
- Inappropriate study material and faulty policies.

By analyzing the data in the schools of Kendriya Vidyalaya and Navodaya Vidyalaya of Uttar Pradesh itwas found that these students can be differentiated on the regional, religious, and caste-based culture. In the Kendriya Vidyalaya school (KV) nearly 78% of students were from the urban areas and only 22% of students were from the rural areas in which several students were from the army and air force family background. 21% of teachers are of the view that most children from the army and air force family background are culturally more adaptive and their perception towards multicultural education is very good probably because of their parent's transferable jobs. NavodayaVidyalaya are boarding schools. In Navodaya Vidyalaya, 85% of students were from rural areas and only 15% of students were from urban areas. In each NV of Uttar Pradesh student comes from a different district of Uttar Pradesh. By the one-year migration policy of NV schools, Hindi lingual NV schools exchanged their 30% students from the students of southern non-Hindi lingual NV schools. In the NV 79% of teachers are of the view that 30% of student's perception towards multiculturalism is higher than the local students.

Linguistic challenges

In KV and NV students come from different linguistic regions and these linguistic differences enrich school culture. 12% teachers of KV are of the view that students who come from different linguistic background face linguistic challenges. In case of NV 35% teachers are of the view that as students come from diverse linguistic backgrounds, they face linguistic challenges. In several cases, teachers observed that students who come from different linguistic regions are unable to understand English as well as the Hindi language. In these cases, it is very difficult to transmit multiculturalism among them. 5% teachers of KV agreed that several students come from the rural areas are facing linguistic problem while in case of NV 8% teachers are of the view that students from rural backgrounds have a linguistic problem. If students are not fluent in the language, then it will affect their academic performance and also presents unique challenges for teachers. They have to develop ways to teach a new language and culture. They take care of student's primary language and transmit the message to the students. Many teachers agreed that schools, where students from different linguistic backgrounds are forced to speak English in the schools, disturb their self-confidence leading to lack of motivation results in a decline in learning outcomes. 19% of KV teachers are of the view that students communicating in their native language in school campuses create hindrance in their second language proficiency while only 5% of NV teachers agreed that students practicing mother tongue in the classroom can create hindrance in the second language proficiency.

Challenges related to student's behavior

Teachers are of the view that several behavioral problems among students induce hurdles in imparting multicultural education. 31% of teachers are of the view that students from minority section know more about the culture of majorities while the students from the majority section know very little about the minorities cultures because of the culture portrayed in the movies and serials, so in the chapters related with the minorities cultures non-minority students face more challenges. 33% of teachers of NV agreed that the biases of male and female students create an obstacle in implementing multicultural education. In NV teachers observed that boy and girl students do not talk with each other and if a boy student is talking with a girl student, then other students complained about it while in the case of KV only 8% of teachers are of the view that male and female student's biases towards each other create hurdles in imparting multicultural education. 40% teachers of NV are of the view that students are divided into groups according to their caste and region, and sometimes students from higher caste abuse other students belonging to a lower caste and some teachers also said that this tendency increases when they go for higher classes while in case of KV, most of the teachers do not observe any caste division in the class and some teachers are of the view that it is very rare in classes that students are divided according to caste factor but 10% teachers of KV agreed that students from urban areas bully students from rural background calling them as 'Dehati' and 'Jangali'. 30% of teachers think that students from rural backgrounds accept urban culture more frequently while it is difficult for students from urban backgrounds to accept the rural culture. It is observed that students from the urban background accept othercultures very easily while students from rural areas rarely accept other culture (other than urban culture) and they also said that it is very easy to inculcate multiculturalism in urban area students rather than rural area students. Some of the teachers are of the view that students with higher age groups misbehave with other students because of their more exposure to society.

Challenges related to parental cooperation

It is not only the school that inculcates multicultural education among students but the involvement of family and parents in their education is more essential. Most of the teachers define parental cooperation or parental involvement in terms of how much parents attend the school events like parent-teacher meetings, games, prize days, etc. More than 70%-80% teachers of NV are of the view that only 10%-15% of parents are cooperative in the matter of their ward's education. Many teachers agreed that role of parent's involvement in their ward's education is dependent on their education, if their parents are educated then they are aware of school activities and about their child's academics also. But in the case of NV 80% of students are from the rural areas and backward section, their parents are not interested to get involved in the school activities or they are not able to perform the supportive role in their ward's academic progress because most of them are from low socio-economic section and busy in earning livelihood. Most of the parents thought that their child's academic performance depends only on the teachers and school and many times they blame teachers for the failure of their wards. Several parents coming from different cultural or different linguistic areas are unable to speak proper Hindi or English feel shy or inferior because they thought that they would not understand the meetings anyway and what the teacher would say. Teachers observed that "most of the parents in NV never attend the parent-teacher meetings and if they come on any occasion or school activities to meet their child, it is very rare that they meet with their teachers. If their child is female then they come regularly to meet their child and may also discuss their child's progress with teachers but if their ward is the male child then they don't feel the need for meetings and discussion with their teachers on their progress while in case of KV 27% teachers are of the view that nearly 40% parents come on each parent-teacher meetings and most of the parents must attend the parent-teacher meetings at some point of time. 5% of teachers are agreed that students who took admission through the RTE quota which is 10% in every class from low socio-economic backgrounds, their parents do not care about the school activities and academics of their children. Neither they can help with their homework nor do they come to school to know the progress of their child. Teachers are of the view that "we organize parent-teacher meetings but most of them did not attend the meetings and even though they come they do not understand us they are illiterate. We can't communicate." Teachers also are of the view that "Many times we have furious and reacting parents. They alleged on teachers that teachers are not treating and teaching well their child because of their difference in caste and religion."

Challenges related to role and biases of teachers

Teachers play a pivotal role in the teaching-learning process but many teachers are of opinion that their role in the teaching-learning process is very much restricted nowadays. NV teachers agreed that as being boarding school the role of teachers in non-academic activities increases a lot and of view that "when the teacher is involved in non-academic and other activities then their teaching efficiency will be affected and another thing is that their teaching is according to the directive of higher officials". Teacher's attitudes, beliefs, perceptions have a strong impact on classroom's educational and social climate (Vollmer, 2000) while in the case of KV teachers are of opinion that many times teachers are busy inother duties and due to this extra non-teaching task, they lack time for actual teaching-learning. The success of multicultural education greatly relies on the teacher since they implement it in the classroom and are aware of students class diversity. 5% of teachers of NV are of the view that some teachers are biased while addressing the multicultural problem of students. Sometimes they show more affection with some students rather than others because of their same caste or category or religion calling him "apnebacche". Teachers of NV are of opinion that only 5% of teachers are gender-biased. It is observed in sports where boys are allowed to play sports on the field while girls are not allowed and if they get permission from the administration, they play their game separately. Most of the time girl students play indoor games. In the case of KV, 8% of teachers agreed that teachers may become unintentionally biased towards a particular caste, gender, religion, etc. but they don't show it publicly in class.

Inappropriate study material and faulty policies

12% of teachers of KV agreed that NCERT books and study material does not incorporate the contents of linguistic and religious minorities. Cultural things are missing from the textbooks. Teachers are of the view that the language of NCERT books published for the Hindi medium students is very difficult to understand. Teachers of English also have the opinion that the language of the content used in the English textbook is hard to understand

Challenges related to the role of administrators

18% of teachers of KV are of opinion that festivals of one religion are celebrated regularly within the school campus while festivals of other religions are not celebrated at all or celebrated only for the name while in the case of NV 10% of teachers are of the view that festivals of all religion and region are celebrated. Some teachers obliged that many administrators are biased with the caste and religion and they assign work and credits according to their caste and religion. Wilson (2012) stated that administrative support (local, state, or national) for multiculturalism is essential and multicultural education must receive encouragement and grooming from the administration that is accountable for the success of multicultural education.

Conclusion

Based on analysis of the findings it can be concluded that the most frequent challenges perceived by the teachers in implementing multicultural education in class is lack of parental co-operation specifically in the case of minority families and also from low socioeconomic groups. Parental engagement can be increased by initiating several steps such as taking more parental input in planning times for parent-teacher meetings, in organizing cultural and awareness programs during weekends or holidays to make sure that most parents can attend. The parents can be involved in the teaching-learning process by offering opportunities and can contribute to the academic achievement and education of the students and it may be organized in the form of guest lectures for them.

The second most perceived challenge is the lack of appropriate study materialfor a culturally diverse population. To counter this problem more and more content from culturally diverse groups should be incorporated in the textbook for the culturally diverse classroom. Teachers from different cultural backgrounds should prepare culturally diverse instructional materials for teaching culturally diverse classrooms. Other crucial problems perceived by the teachers were a lack of linguistic skills among students from diverse cultural backgrounds. It can be minimized by emphasizing more on the development of linguistic skills in pre-service teacher's training for teaching linguistically diverse groups also can be achieved by organizing workshops and seminars for compulsory language papers. The other problem perceived by the teacher was the behavioral problem of students from culturally diverse groups. Multicultural is based on the ideals of freedom, human dignity and equality, and acknowledgment of diversity. For the development of multicultural values, teachers should promote democratic values in the culturally diverse classroom.

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विभिन्न शिक्षा बोर्ड से संबद्ध विद्यार्थियों में आत्मविश्वास का तुलनात्मक अध्ययन

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यह अध्ययन विभिन्न शिक्षा बोर्ड से संबद्ध विद्यार्थियों में आत्मविश्वास का स्तर देखने के लिए किया गया है। इस अध्ययन में न्यादर्श 100 यू.पी. बोर्ड, 100 सी.बी.एस.ई. बोर्ड तथा 100 आई.सी.एस.ई. बोर्ड के विद्यार्थी थे। इस अध्ययन के मापन के लिये मापन प्रविधियों को आधार बनाया गया है। चरों के मध्य अंतर की तुलना करने के लिये टी-परीक्षण का प्रयोग किया गया है। तीनों बोर्डों के विद्यार्थी आज की तेजी से परिवर्तित परिस्थितियों के प्रति जागरूक हैं और भविष्य में उत्पन्न होने वाली हर समस्या का सामना करने को तैयार हैं। शायद यही करण है कि यू.पी. बोर्ड, सी.बी.एस.ई. बोर्ड तथा आई.सी.एस.ई. बोर्ड के विद्यार्थियों के आत्मविश्वास में शोधार्थी को सार्थक अन्तर देखने को नहीं मिला जबकि सी.बी.एस.ई. बोर्ड के छात्र-छात्राओं में सार्थक अंतर है।

प्रस्तावना

शिक्षा हमारे जीवन में प्रकाश की तरह है जिसके माध्यम से बालक की समस्त मानसिक, सामाजिक तथा आध्यात्मिक शक्तियों का विकास होता है जिससे वह समाज का उत्तरदायी तथा चरित्र संपन्न नागरिक बनकर समाज के सर्वांगीण उन्नति में अपना सहयोग देता है। बेहतर शिक्षा सभी के लिए जीवन में आगे बढ़ने एवं सफलता प्राप्त करने के लिए आवश्यक है। यह हमारे व्यक्तित्व निर्माण के साथ-साथ आत्मविश्वास भी विकसित करता है।

सर्वांगीण व्यक्तित्व विकास एवं अपनी स्वयं की क्षमताओं के लिए आत्मविश्वास की सुदृढ़ता नितान्त आवश्यक है। छात्र के अंदर यदि आत्मविश्वास है तो उसमें प्रायः किसी भी प्रकार की चिंता तनाव की कमी देखी जाती है, आत्मविश्वास अर्थात् स्वयं की क्षमताओं पर विश्वास होना।

यदि हमें स्वयं पर विश्वास नहीं है तो कोई भी हम पर विश्वास नहीं करेगा। ईश्वर ने हमें सुपर कंप्यूटर से भी तेज गति वाला मस्तिष्क दिया है। हमें अपने जीवन में किसी भी प्रकार की परेशानियों से घबराना नहीं चाहिए, न ही ईश्वर या अन्य किसी पर दोषारोपण करना चाहिए, जैसे सुपर कंप्यूटर का उपयोग तीव्र गति से अच्छा परिणाम देने के लिए किया जाता है, उसी प्रकार आश्चर्यचकित कर देने वाला परिणाम हम अपने मस्तिष्क का प्रयोग करके भी दे सकते हैं। जीवन में कुछ भी असंभव नहीं है, इसके लिए आत्मविश्वास का होना आवश्यक है।

आत्मविश्वास का तात्पर्य स्वयं और अपनी क्षमताओं पर विश्वास से है। आत्मविश्वास एक आंतरिक स्थिति को दर्शाता है जो व्यक्ति अपने बारे में और अपनी क्षमताओं के बारे में सोचता और महसूस करता है। आत्मविश्वास स्वयं का एक गुण होने के नाते किसी व्यक्ति की दूसरों पर भरोसा किए बिना परिस्थितियों को सफलतापूर्वक संभालने और रचनात्मक आत्म-मूल्यांकन को प्रोत्साहित करने की कथित क्षमता को संदर्भित करता है। इस प्रकार आत्मविश्वास स्वयं को महसूस करने, स्वयं की क्षमताओं पर विश्वास करने और प्रभावी ढंग से कार्य करने का साहस है। विश्वासों और क्षमताओं पर आत्मविश्वास शरीर और मन की क्षमताओं और योग्यताओं का मिश्रण कर उन्हें लक्ष्य की ओर निर्देशित करता है। कोई व्यक्ति अपने निर्णय में कितना सुरक्षित है, इसका वर्णन उसके आत्मविश्वास के स्तर से होता है। आत्मविश्वास किसी व्यक्ति के स्वयं और क्षमताओं पर विश्वास या भरोसे के स्तर को दर्शाता है। आत्मविश्वास एक दृष्टिकोण है जो व्यक्तियों को स्वयं और जीवन की परिस्थितियों के प्रति सकारात्मक और यथार्थवादी होने की अनुमति देता है।

व्यक्ति के अंदर बहुत सी मानसिक शक्तियां होती हैं। यह मानसिक शक्तियां, आंतरिक क्रियाओं को जन्म देती है कोई भी दो व्यक्ति समान व्यक्तित्व के नहीं होते फलस्वरूप प्रत्येक व्यक्ति अपने ढंग से अपने वातावरण के साथ समायोजन करता है और यही उसके व्यक्तित्व का निर्धारण करता है जिससे प्रत्येक व्यक्ति की एक निश्चित पहचान होती है और इसी पृथक पहचान के कारण व्यक्ति में आत्मविश्वास पाया जाता है।

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आत्मविश्वास मन की एक स्थिति को संदर्भित करता है जो लोगों को अपने और अपने मामलों के प्रति रचनात्मक और समझदार होने की अनुमति देता है। आत्मविश्वास का अर्थ है, लक्ष्य प्राप्त करने की अपनी क्षमताओं पर विश्वास। आत्मविश्वास को किसी व्यक्ति के लक्ष्य को प्राप्त करने के लिए खुद पर और अपनी क्षमताओं पर भरोसा करने की मानसिक मनोवृत्ति के रूप में वर्णित किया जा सकता है। माता-पिता, साथियों और शिक्षकों का सकारात्मक और सावधान रवैया छात्रों में आत्मविश्वास को बढ़ावा देता है और नकारात्मक रवैया आत्मविश्वास को बाधित करता है। शैक्षणिक प्रदर्शन, सीखने और सफलता के विकास में आत्मविश्वास की महत्वपूर्ण भूमिका है। सकारात्मक आत्मविश्वास वाले छात्रों की आत्म-छवि सकारात्मक और यथार्थवादी होती है। उनमें आलोचना को संभालने, स्नेह दिखाने और आशावादी और मुखर होने की क्षमता होती है। अतीत की सफलता आत्मविश्वास के विकास में महत्वपूर्ण भूमिका निभाती है। किसी भी क्षेत्र में सफलता आमतौर पर व्यक्ति के आत्मविश्वास को बढ़ाती है। आत्मविश्वास आशावाद की ओर ले जाता है और व्यक्ति को कार्य की चुनौतियों की परवाह किए बिना अपनी क्षमताओं पर विश्वास करने के लिए प्रेरित करता है। आत्मविश्वास व्यक्ति को जोखिम लेने, नए विचारों, नई चीजों को आजमाने और किसी स्थिति से निपटने के लिए कुछ अलग हासिल करने के लिए प्रोत्साहित करता है

वेलफ़ोर्ड (2013), "आत्मविश्वास का अर्थ है आप कब संघर्ष कर रहे हैं इसके बारे में जागरूक होना और इसके बारे में कुछ करने की ताकत और प्रतिबद्धता होना"। रूफस (2014) "आत्मविश्वास में आत्म-सम्मान और आप कौन हैं, आपको क्या पसंद है और आप क्या विश्वास करते हैं, इसके बारे में सच बताने का साहस शामिल है"। डिक्शनरी ऑफ साइकोलॉजी (2018) आत्मविश्वास को एक व्यक्ति के अपनी क्षमताओं, योग्यताओं और निर्णयों पर विश्वास या इस विश्वास के रूप में परिभाषित करता है कि वह दिन-प्रतिदिन की चुनौतियों और मांगों का सफलतापूर्वक सामना कर सकता है। नील (2005) के अनुसार, आत्म-सम्मान और आत्म-प्रभावकारिता मिलकर आत्मविश्वास का निर्माण करते हैं। "आत्मविश्वास से तात्पर्य किसी स्थिति पर काबू पाने और चीजों को ठीक करने के लिए प्रभावी ढंग से कार्य करने की व्यक्ति की कथित क्षमता से है" बसवन्ना (1975)। आत्मविश्वास स्वयं की क्षमताओं पर विश्वास है" डिक्शनरी ऑफ एजुकेशन, गुड (1959)। "आत्मविश्वास स्वयं पर या अपनी स्वयं की सहायता प्राप्त शक्तियों, निर्णय आदि पर विश्वास है, न्यू वेबस्टर डिक्शनरी (2004)। "आत्मविश्वास से तात्पर्य किसी व्यक्ति की दूसरों पर निर्भर हुए बिना परिस्थितियों से सफलतापूर्वक निपटने और सकारात्मक स्व-मूल्यांकन रखने की कथित क्षमता को संदर्भित करता है" अग्निहोत्री (1987)।

अध्ययन की आवश्यकता

भावी जीवन में प्रगति के पथ पर अग्रसर करने हेतु आत्मविश्वास की महत्वपूर्ण भूमिका है। प्रत्येक क्षेत्र में सफल होने के लिए विद्यार्थियों में आत्मविश्वास का गुण होना आवश्यक है। चाहे खेल हो, शिक्षा हो या अंतर्वैयक्तिक संबंध हो।

विद्यालयों में अध्ययनरत् विद्यार्थी विभिन्न प्रकार का ज्ञान प्राप्त करते हैं उन विद्यार्थियों के संपूर्ण व्यक्तित्व का विकास करने के लिए उन्हें स्वयं को समझने की आवश्यकता होती है। उनके आत्मविश्वास से ही उनके भावी जीवन का निर्धारण होना प्रारंभ होता है। इन तथ्यों को ध्यान में रखते हुए इस शोध की आवश्यकता अनुभव की गई। अतः यह अध्ययन उपयोगी सिद्ध होगा।

शोध के उद्देश्य

1. यू.पी. बोर्ड के छात्र एवं छात्राओं में आत्मविश्वास का तुलनात्मक अध्ययन करना।
2. सी.बी.एस.ई. बोर्ड के छात्र एवं छात्राओं में आत्मविश्वास का तुलनात्मक अध्ययन करना।
3. आई.सी.एस.ई. बोर्ड के छात्र एवं छात्राओं में आत्मविश्वास का तुलनात्मक अध्ययन करना।
4. यू.पी. बोर्ड तथा सी.बी.एस.ई. बोर्ड के विद्यार्थियों में आत्मविश्वास का तुलनात्मक अध्ययनकरना।
5. यू.पी. बोर्ड तथा आई.सी.एस.ई. बोर्ड के विद्यार्थियों में आत्मविश्वास का तुलनात्मक अध्ययन करना।
6. सी.बी.एस.ई. बोर्ड तथा आई.सी.एस.ई. बोर्ड के विद्यार्थियों में आत्मविश्वास का तुलनात्मक अध्ययन करना।

शोध की परिकल्पनाएं

1. यू.पी.बोर्ड के छात्र-छात्राओं के आत्मविश्वास में कोई सार्थक अंतर नहीं है।
2. सी.बी.एस.ई.बोर्ड के छात्र-छात्राओं के आत्मविश्वास में कोई सार्थक अंतर नहीं है।
3. आई.सी.एस.ई. बोर्ड के छात्र-छात्राओं के आत्मविश्वास में कोई सार्थक अंतर नहीं है।
4. यू.पी. बोर्ड एवं सी.बी.एस.ई. बोर्ड के विद्यार्थियों के आत्मविश्वास में कोई सार्थक अंतर नहीं है।
5. यू.पी. बोर्ड एवं आई.सी.एस.ई. बोर्ड के विद्यार्थियों के आत्मविश्वास में कोईसार्थक अंतर नहीं है।
6. सी.बी.एस.ई. एवं आई.सी.एस.ई. बोर्ड के विद्यार्थियों के आत्मविश्वास में कोई सार्थक अंतर नहीं है।

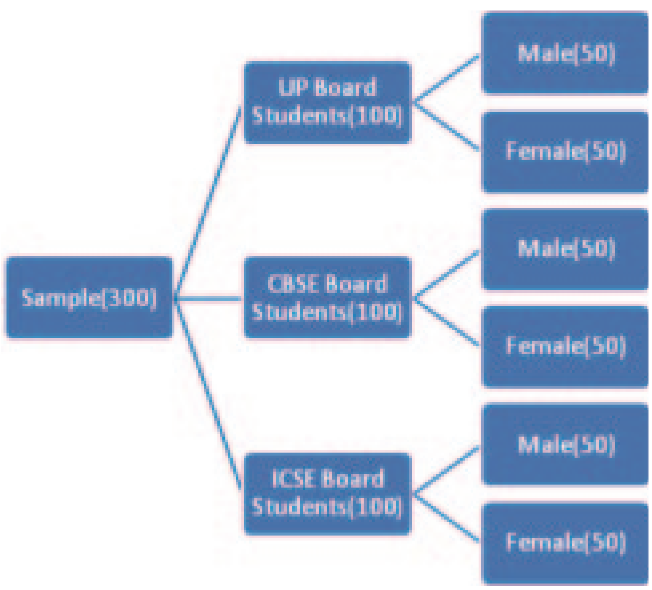
अध्ययन का परिसीमन

- प्रस्तुत शोध अध्ययन में लखनऊ जिले में अध्ययनरत् कक्षा 11वीं के विद्यार्थियों को शामिल किया गया है।
- विभिन्न शिक्षा बोर्ड यू.पी.,सी.बी.एस.ई. एवं आई.सी.एस.ई. बोर्ड के विद्यार्थियों को अध्ययन में सम्मिलित किया गया है।

शोध विधिः प्रस्तुत अध्ययन मेंवर्णानात्मक सर्वेक्षण विधि का प्रयोग किया गया है।

जनसंख्या : प्रस्तुत शोध में उत्तर प्रदेश राज्य के लखनऊ जनपद के सभी यू.पी. बोर्ड, सी.बी.एस.ई. बोर्ड तथा आई.सी. एस.ई. बोर्ड के 11वीं कक्षा में अध्ययनरत् विद्यार्थियों को सम्मिलित किया गया है।

न्यादर्शः प्रस्तुत शोध में यू.पी.,सी.बी.एस.ई. एवं आई.सी. एस.ई. बोर्ड में अध्ययनरत् 300 विद्यार्थियों को यादृच्छिक विधि द्वारा न्यादर्श में रूप में चुना गया है जिसमें प्रत्येक बोर्ड के 50 छात्र एवं 50 छात्राओं को शामिल किया गया है।



चर : प्रस्तुत अध्ययन में चरो का वर्गीकरण निम्नानुसार किया गया हैः

- **स्वतंत्र चर-** शिक्षा बोर्ड एवं लिंग
- **आश्रित चर-** आत्मविश्वास

उपकरण : विद्यार्थियों में आत्मविश्वास के स्तर को मापने के लिए डा. रेखा गुप्ता द्वारा निर्मित Self Confidence Inventory का प्रयोग किया गया है।

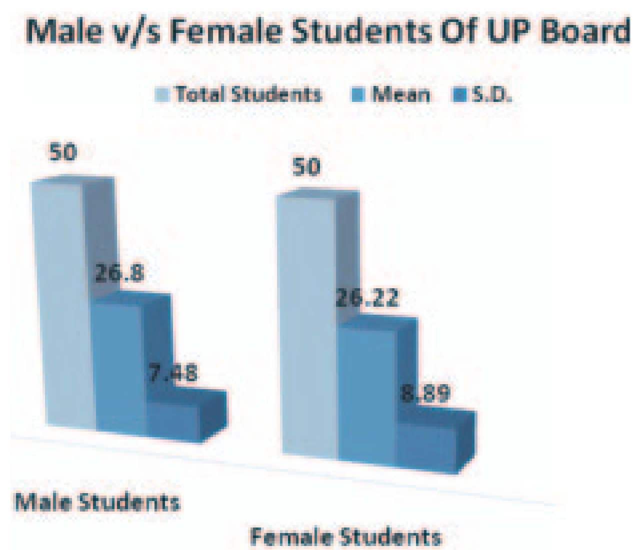
सांख्यिकीय विश्लेषणः प्रस्तुत शोध में सांख्यिकीय विश्लेषण हेतु मध्यमान, मानक विचलन एवं टी-टेस्ट की गणना की गई।

$H_0$1: यू.पी. बोर्ड के छात्र-छात्राओं के आत्मविश्वास में कोई सार्थक अंतर नहीं है।

सारणी संख्या-1: यू.पी. बोर्ड के छात्र-छात्राओं के आत्मविश्वास का मध्यमान, मानक विचलन एवं टी-मान

चर	सं.	मध्यमान	मानक विचलन	टी-मान (df=98)	परिणाम
छात्रों का आत्मविश्वास	50	26.80	7.48	0.35	0.05 स्तर पर सार्थक नहीं है
छात्राओं का आत्मविश्वास	50	26.22	8.89		

ग्राफ सं.-1: यू.पी. बोर्ड के छात्र-छात्राओं के आत्मविश्वास के स्तर के आधार पर माध्य एवं मानक विचलन का आलेखीय निरूपण



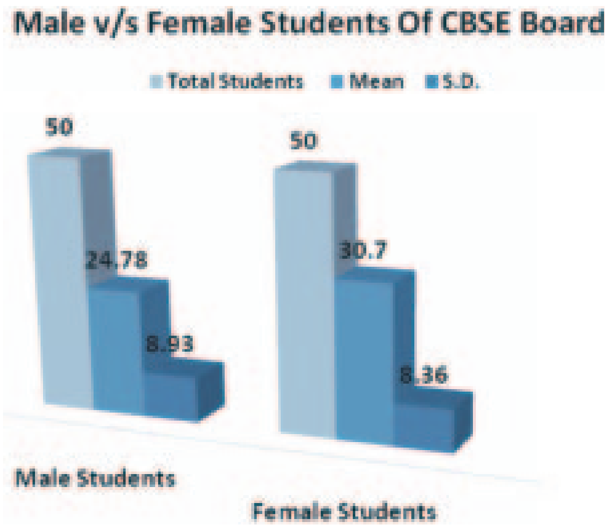
परिगणित या Calculated t का मान 0.35 है जो 0.05 सार्थकता स्तर पर प्राप्त सारिणी मान 1.98 से कम है। अतः शून्य परिकल्पना-01 स्वीकृत की जाती है अर्थात् यू.पी.बोर्ड के छात्र-छात्राओं के आत्मविश्वास में सार्थक अंतर नहीं पाया गया।

$H_0$2: सी.बी.एस.ई. बोर्ड के छात्र-छात्राओं के आत्मविश्वास में कोई सार्थक अंतर नहीं है।

सारणी सं.-2: सी.बी.एस.ई. बोर्ड के छात्र-छात्राओं के आत्मविश्वास का मध्यमान, मानक विचलन एवं टी-मान

चर	सं.	मध्यमान	मानक विचलन	टी-मान (df=98)	परिणाम
छात्रों का आत्मविश्वास	50	24.78	8.93	3.42	0.05 स्तर पर सार्थक है
छात्राओं का आत्मविश्वास	50	30.70	8.36		

ग्राफ सं.-2: सी.बी.एस.ई.बोर्ड के छात्र-छात्राओं के आत्मविश्वास के स्तर के आधार पर माध्य एवं मानक विचलन का आलेखीय निरूपण



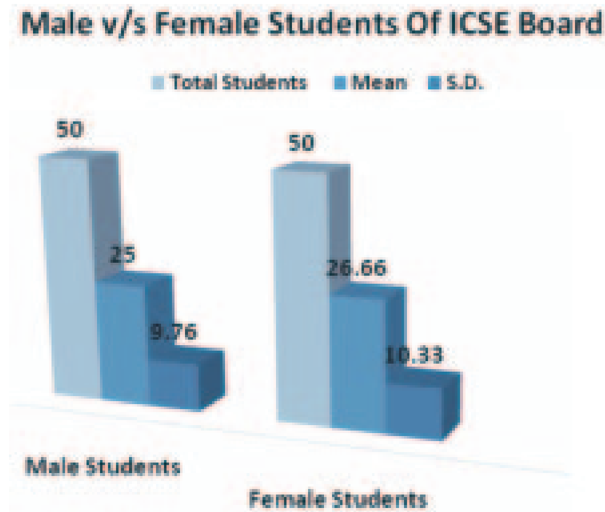
परिगणित या Calculated t का मान 3.42 है जो 0.05 सार्थकता स्तर पर प्राप्त सारिणी मान 1.98 से अधिक है। अतः यहां पर शून्य परिकल्पना-02 अस्वीकृत की जाती है तथा शोध परिकल्पना स्वीकृत की जाती है अर्थात् सी.बी.एस.ई. बोर्ड के छात्र-छात्राओं के आत्मविश्वास में महत्वपूर्ण अन्तर पाया गया।

$H_0$3: आई.सी.एस.ई. बोर्ड के छात्र-छात्राओं के आत्मविश्वास में कोई सार्थक अंतर नहीं है।

सारणी सं.-3: आई.सी.एस.ई. बोर्ड के छात्र-छात्राओं के आत्मविश्वास का मध्यमान, मानक विचलन एवं टी-मान

चर	सं.	मध्यमान	मानक विचलन	टी-मान (df=98)	परिणाम
छात्रों का आत्मविश्वास	50	25	9.76	0.82	0.05 स्तर पर सार्थक नहीं है
छात्राओं का आत्मविश्वास	50	26.66	10.33		

ग्राफ सं.-3: आई.सी.एस.ई.बोर्ड के छात्र-छात्राओं के आत्मविश्वास के स्तर के आधार पर माध्य एवं मानक विचलन का आलेखीय निरूपण



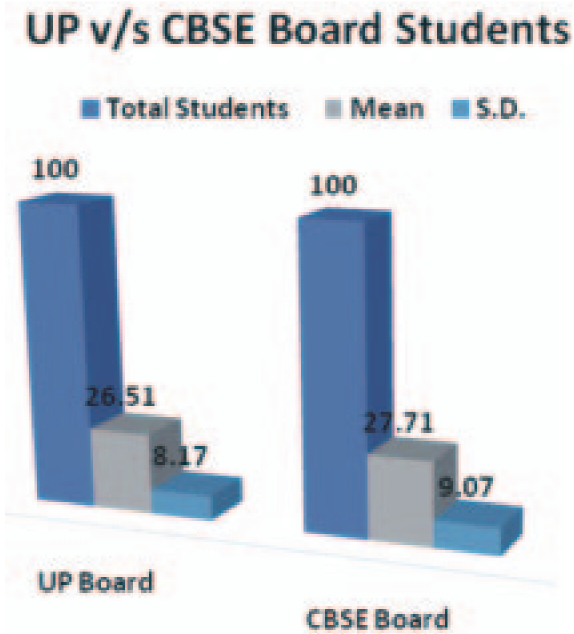
परिगणित या Calculated t का मान 0.82 है जो हमारी 0.05 सार्थकता स्तर पर प्राप्त सारिणी मान 1.98 से कम है इसलिए सार्थक अंतर नहीं पाया गया। अतः शून्य परिकल्पना-3 स्वीकृत की जाती है अर्थात् कहा जा सकता है कि आई.सी. एस.ई. बोर्ड के छात्र-छात्राओं के आत्मविश्वास में सार्थक अंतर नहीं पाया गया।

$H_0$4: यू.पी. बोर्ड एवं सी.बी.एस.ई. बोर्ड के विद्यार्थियों के आत्मविश्वास में कोई सार्थक अंतर नहीं है।

सारणी सं.-4: यू.पी. बोर्ड एवं सी.बी.एस.ई. बोर्ड के विद्यार्थियों के आत्मविश्वास का मध्यमान, मानक विचलन एवं टी-मान

चर	सं.	मध्यमान	मानक विचलन	टी-मान (df=198)	परिणाम
यू.पी.बोर्ड के विद्यार्थियों का आत्मविश्वास	100	26.51	8.17	0.98	0.05 स्तर पर सार्थक नहीं है
सी.बी.एस.ई. बोर्ड के विद्यार्थियों का आत्मविश्वास	100	27.71	9.07		

ग्राफ सं.-4: यू.पी. बोर्ड एवं सी.बी.एस.ई.बोर्ड के विद्यार्थियों के आत्मविश्वास के स्तर के आधार पर माध्य एवं मानक विचलन का आलेखीय निरूपण



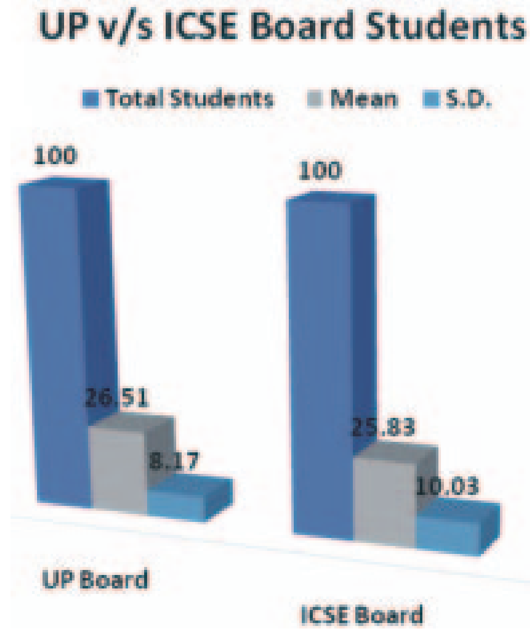
उपरोक्त तालिका के आधार पर प्राप्त t-मान 0.98 है जो 0.05 सार्थकता स्तर पर प्राप्त सारिणी मान 1.97 से कम है। अतः शून्य परिकल्पना-4 स्वीकृत की जाती है अर्थात् यू.पी.बोर्ड एवं सी.बी.एस.ई. बोर्ड के विद्यार्थियों के मध्य आत्मविश्वास में सार्थक अन्तर नहीं पाया गया।

$H_0$5: यू.पी. बोर्ड एवं आई.सी.एस.ई. बोर्ड के विद्यार्थियों के आत्मविश्वास में कोई सार्थक अंतर नहीं है।

सारणी सं.-5: यू.पी. बोर्ड एवं आई.सी.एस.ई. बोर्ड के विद्यार्थियों के आत्मविश्वास का मध्यमान, मानक विचलन एवं टी-मान

चर	सं.	मध्यमान	मानक विचलन	टी-मान (df=198)	परिणाम
यू.पी.बोर्ड के विद्यार्थियों का आत्मविश्वास	100	26.51	8.17	0.52	0.05 स्तर पर सार्थक नहीं है
आई.सी.एस.ई. बोर्ड के विद्यार्थियों का आत्मविश्वास	100	25.83	10.03		

ग्राफ सं.- 5: यू.पी. बोर्ड एवं आई.सी.एस.ई. बोर्ड के विद्यार्थियों के आत्मविश्वास के स्तर के आधार पर माध्य एवं मानक विचलन का आलेखीय निरूपण



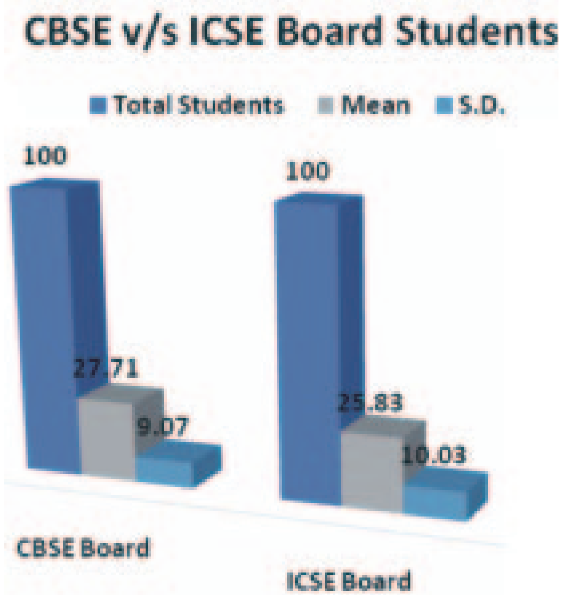
उपरोक्त तालिका के आधार पर प्राप्त t-मान 0.52 है जो 0.05 सार्थकता स्तर पर प्राप्त सारिणी मान 1.97 से कम है। अतः शून्य परिकल्पना-5 स्वीकृत की जाती है अर्थात् यू.पी.बोर्ड तथा आई.सी.एस.ई. बोर्ड के विद्यार्थियों के मध्य आत्मविश्वास में सार्थक अंतर नहीं पाया गया।

$H_0$6: सी.बी.एस.ई. एवं आई.सी.एस.ई. बोर्ड के विद्यार्थियों के आत्मविश्वास में कोई सार्थक अंतर नहीं है।

सारणी सं.-6: सी.बी.एस.ई. एवं आई.सी.एस.ई. बोर्ड के विद्यार्थियों के आत्मविश्वास का मध्यमान, मानक विचलन एवं टी-मान

चर	सं.	मध्यमान	मानक विचलन	टी-मान (df=198)	परिणाम
सी.बी.एस.ई. बोर्ड के विद्यार्थियों का आत्मविश्वास	100	27.71	9.07	1.38	0.05 स्तर पर सार्थक नहीं है
आई.सी.एस.ई. बोर्ड के विद्यार्थियों का आत्मविश्वास	100	25.83	10.03		

ग्राफ सं.-6: सी.बी.एस.ई. एवं आई.सी.एस.ई. बोर्ड के विद्यार्थियों के आत्मविश्वास के स्तर के आधार पर माध्य एवं मानक विचलन का आलेखीय निरूपण



उपरोक्त तालिका के आधार पर प्राप्त t-मान 1.38 है जो 0.05 सार्थकता स्तर पर प्राप्त सारिणी मान 1.97 से कम है। अतः यहां पर शून्य परिकल्पना-6 स्वीकृत की जाती है अर्थात् सी.बी.एस.ई. एवं आई.सी.एस.ई. बोर्ड के विद्यार्थियों के मध्य आत्मविश्वास में सार्थक अन्तर नहीं पाया गया।

निष्कर्ष : वर्तमान अध्ययन "विभिन्न शिक्षा बोर्ड से संबद्ध विद्यार्थियों में आत्मविश्वास का एक तुलनात्मक अध्ययन" है। प्रस्तुत अध्ययन में शोधार्थी ने पाया कि यू.पी.एवं आई.सी.एस.ई.बोर्ड के छात्र-छात्राओं के मध्य आत्मविश्वास का स्तर लगभग समान है लेकिन सी.बी.एस.ई. बोर्ड के छात्र-छात्राओं के आत्मविश्वास में महत्वपूर्ण अंतर है अर्थात् सी.बी.एस.ई. बोर्ड भूमिका अदा कर रहा है। सहर नजमुस (2019) के शोध से पता चलता है कि सी.बी.एस.ई. बोर्ड के छात्रों के आत्मविश्वास में सार्थक अन्तर पाया जाता है।

इस अध्ययन में पाया गया कि शिक्षा के विभिन्न बोर्डों में अध्ययनरत् विद्यार्थियों के मध्य आत्मविश्वास में अंतर नहीं है, अर्थात् यदि हम शिक्षा बोर्ड के अनुसार देखें तो लगभग सभी बोर्ड के विद्यार्थियों में आत्मविश्वास समान है। लेकिन छात्र-छात्राओं के मध्य देखा जाए तो आत्मविश्वास में अंतर है अर्थात् बोर्ड छात्र-छात्राओं के आत्मविश्वास पर पृथक-पृथक प्रभाव डालता है।

शैक्षिक निहितार्थः प्रस्तुत शोध अध्ययन का उद्देश्य विद्यार्थियों में आत्मविश्वास के स्तर को जानना है। शोध कार्य के परिणाम भावी नीति निर्धारण की आधारशिला बनते हैं। व्यक्ति विगत अनुभवों से सीखता है तथा उसके अनुरूप कार्य करता है। अतीत के अनुभव व्यक्ति के वर्तमान और भावी समस्याओं के समाधान का मार्ग प्रशस्त करते हैं एवं नीति निर्धारण का निर्णय लेने में सहायक बनते हैं। प्रस्तुत शोध अध्ययन अध्यापकों का ध्यान इस ओर इंगित करता है कि वे विद्यार्थियों की व्यक्तिगत व शैक्षिक समस्याओं को समझ कर उन्हें दूर करने का यथासंभव प्रयास कर अभिप्रेरित करें व विद्यार्थियों में निम्न आत्मविश्वास के कारणों को जानकर उन्हें दूर करने का प्रयास किया जाना चाहिए। प्रस्तुत शोध अध्ययन विद्यार्थियों के लिए भी उपादेयता रखता है। विभिन्न आत्मविश्वास वाले विद्यार्थी मेहनत करके अच्छी शैक्षिक उपलब्धि प्राप्त कर सकते हैं। प्रस्तुत शोध अध्ययन अभिभावकों के लिए भी विशेष रूप से उपयोगी है। अभिभावकों को चाहिए कि वे अपने पाल्यों की मुक्त कंठ से प्रशंसा करें एवं उनमें स्वस्थ प्रतियोगिता व आत्मविश्वास को विकसित करें जिससे उनमें तनाव प्रबंधन की क्षमता विकसित हो।

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Relevance of Rabindranath Tagore's Educational Philosophy in Contemporary India

*Jooli Sonker

Abstract

Particularly in the fields of curriculum design, teacher-student interactions, educational methods, and the teacher's role, the philosophy of Tagore may be seen throughout many facets of education. Education, in Tagore's opinion, should help a person reach his or her entire potential as a man. This study focuses on the components of Rabindranath Tagore's educational philosophy, showing how each person developed into a whole human being as a result and making novel recommendations for the education sector. The focus of this work was exclusively theoretical. Data for the study were acquired from secondary sources and then analysed. Hence, the research methodology here consists of an analytical approach. The study's finding is that Rabindranath Tagore's educational system can help someone grow morally, socially, academically, physically, and spiritually while preparing the road for them to become a fully mature man. Therefore, when Tagore's educational and philosophical views are included in educational policy, students will be able to flourish not just in academics but also in extracurricular activities with spiritual, moral, and artistic components that will enable them to gain awareness of human qualities. These principles serve as the foundation on which the students will create a society free from violence and discrimination.

Introduction

Philosophies of education appear to be of interest to everyone these days, because it helps in understanding and changing the educational process. It improves one's capacity to refute theories. It also clarifies the presumptions and ideas that underlie educational philosophies. Education philosophy is the practical application of philosophical premises to a variety of educational contexts. Educators and practical teachers employ this tactic to address educational issues by integrating philosophy into the classroom. "Education is the most powerful weapon you can use to change the world," said Nelson Mandela. (Biwi, 2003). In this way, Tagore sharpened his focus on bringing educational reform to modern India. His ideas about education are not only reformist; they are grounded in educational philosophy. His philosophical views on education, in particular, can be found in many areas, including the purpose of education, educational practices, curriculum design, teacher-student relationships, and the teacher's role.

The broadest path to finding solutions to all of our problems is education (Ravi & Samuel, 2015). Education can change the way that life is lived. The intellectual, physical, social, economic, moral, and spiritual components of life are stressed in Tagore's educational philosophy. He is regarded as the creative artist of the contemporary Indian subcontinent because of his enormous influence in bringing the best of Indian culture to the West and vice versa.Tagore placed equal priority on the growth of the mind and the arts. In the daily operations of the school, music, literature, art, dance, and theatre were accorded high significance. One of the first educators to consider the world as a village was Tagore (Chinthakindi, 2018).

Justification for the study

Like Radhakrishnan, Sri Aurobindo, and Vivekananda who pioneered the path for a new dimension in philosophy, giving much significance to education, spiritualism, and humanist thought, Indian philosophy has produced notable thinkers, notably in the eastern regions. Thoughts about educational reformation are critical in modernized India. Many of these contemporary Indian philosophers did not fail to put forward educational reformation thoughts. In this way, the reformation thoughts put forward by Tagore gave prominence to educational reformation thoughts. According to Tagore, his educational thoughts were not merely reformations but were instrumental in constructing the philosophy of education. Because Tagore was highly focused on the

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aspects of curriculum that are the basis of constructing the philosophy of education, in particular, Tagore has suggested that the purpose of education, educational practices, curriculum, teacher-student relationships, and the teacher's role are all elements of educational philosophy (Ahamad Shah, 2018).

Objectives

- To evaluate the components of Rabindranath Tagore's educational philosophy
- To offer some suggestions for the subject of education based on Tagore's ideas about education and his efforts to transform contemporary society.

Literature Review

In his study article "Tagore and his Contribution in the Field of Education," Ahamad Shah, S.H. (2018) examined how Tagore's educational system promotes the mental, physical, ethical, and spiritual development of people. Another important area of educational philosophy examined is the function of Tagore's Santiniketan in fulfilling the goals of education. In his research paper titled "Role and Impact of Rabindranath Tagore Education Philosophy in Contemporary Indian Education," Tirath, R. (2017) discussed Tagore's contributions to the educational philosophy, including intellectual development, natural growth in natural circumstances, learner freedom, self-realization, love of humanity, physical development, teaching that is practical and real, co-relation of objects, the importance of fine arts, and the use of the mother tongue as the medium of instruction.

In his research on the "Educational Ideals and Contributions of Rabindranath Tagore," Halakeri, B. (2017) examined how Tagore intends to strengthen the world-wide partnership he has put forward in his educational philosophical thinking to build a global citizen through his educational philosophical concepts. Researchers looked further into Tagore's Santi Niketan and Viswa Bharathi activities and concepts for modern education.

The Relevance of the Educational Philosophy of Tagore and Radhakrishnan in the Modern Scenario was examined by Santosh Thakare (2016) in his research, "The Educational Philosophy of Rabindranath Tagore and Dr. Radhakrishnan."

In their paper "Rabindranath Tagore's contribution to education," Singh & Rawat (2013) outlined Tagore's educational philosophies, methods, and goals based on his educational writings. such as speeches, correspondence, and writings. They stated in their research report that Tagore's educational philosophy can be developed on an intellectual, physical, moral, and aesthetic level. In their conclusion, they claimed that although Tagore's influence on education has been felt more, neither scholars nor educationists have been able to describe it.

Rabindranath Tagore's philosophy of international education was examined by Periaswamy in his 1976 paper, "Rabindranath Tagore's Philosophy of International Education," along with its applicability and ramifications. This study focused mostly on how Tagore's worldwide education shaped relationships between peoples and countries. According to the researcher, forging a new, peaceful, and brotherly world requires this bond. Without a knowledge of a people's cultural, social, and economic difficulties, it is generally believed that policy makers cannot have an accurate image of the issue. This awareness is crucial for both the general public and those responsible for formulating foreign policy.

The literature cited above leads one to the conclusion that Tagore wants to create the ideal educational system in India. One of the most all-encompassing educational goals is that of Tagore; it covers numerous facets of human personality as well as diverse social strata in India and the global community. Tagore places focus on all facets of a person's education, including their physical, mental, moral, religious, and spiritual development.

Research Methodology Data Collection

This research was purely theoretical based. Data of the research was collected from secondary sources and analysed qualitatively. Data was collected from texts, research articles, journals, and e-papers written by scholars about Tagore.

Methodology : The educational philosophies proposed by Tagore are examined using analytical methods.

Rabindranath Tagore: An Introduction

The first Nobel laureate from Asia and not just from India was Rabindranath Tagore. He is credited with starting Bengal's 19th-century religious and sociocultural revival. He established the Santiniketan School to foster spiritual thought and the Visva-Bharati University to connect students globally (Ghosh, 2019). He was regarded as a poet, playwright, social reformer, painter, educator, philosopher, naturalist, and realist, among other roles. His role is recognized as having several facets. He had the view that education should contribute to the development of the whole person. Every person is whole because of the community in which they were born. He viewed education as a tool for promoting personal development and overall well-being. The best education is one that transforms us into people who live in peace with everything around them (Ravi & Samuel, 2015).

According to Tagore, education not only provides us with information but also has the power to fully develop human personality, allowing a person to live a full life. According to Tagore, attaining authentic knowledge leads to enlightenment and self-realization.

He desired the young men and women to be bold, liberated, accepting, and curious. He stated that this should be given a chance. He also believed that when they improved student social interaction, their larger perspective and commitment to the community would grow. He pointed out that when education is presented to children in the classroom as a book, their knowledge does not advance, and that interest in learning rises as a result of exposure to processes and the natural world. He anticipated that learning in the student's native tongue would facilitate quick and easy learning.

He made the argument that everyone is constantly learning new skills to cope with change and that education is crucial for bringing about societal change. The teacher must therefore be a lifelong learner. He also emphasizes that education ought to serve as the cornerstone of humanity's development. Tagore referred to schools as "factories of role learning" and expressed his utter dissatisfaction with the current educational system at the time. He then promoted the idea of freedom for a successful education. According to him, children should be provided with independence so they can mature and develop in accordance with their own preferences.

The primary tool for a nation's socioreligious, economic, and political transformation is education. Today, educational philosophy is considered significant. Knowing this, Tagore improved his educational philosophy in order to modernize India.

Rabindranath Tagore's approach to Education

In Tagore's concept of education, individualism, naturalism, spiritualism, and internationalism are the four guiding tenets. These principles serve as the foundation for both Visva Bharathi and Santiniketan.

Individualism: The freedom for each person to exhibit their uniqueness is referred to as individualism.

Naturalism: He frequently thinks in terms of nature. His poetry reflects his love of the outdoors. Every living thing should coexist peacefully with the environment, he added.

Spiritualism: Santi Niketan was crucial to the growth of spiritualism. Every person should achieve spiritual perfection, he stated. Religion now has a prominent place in school thanks to Tagore. For him, religion is a spirit, an inspiration that permeates every facet of human life.

Internationalism: He established Visva-Bharati with the goal of fostering internationalism. He claimed that good things can only be shared and learned through international relationships.

Aims of Education

The educational goals that Tagore advocated for arose from his experience, practice, and experiments rather than from the outside world. He asserted that education should foster growth on a variety of levels, including the physical, cerebral, and social. He claimed that cultivating harmony is education's primary goal. In his opinion, the highest education is one that "makes our lives in harmony with all existences" (Ahamad Shah, 2018).

"The best education is one that transforms us into people who live in peace with all of existence rather than just providing us with facts." (Rabindranath Tagore)

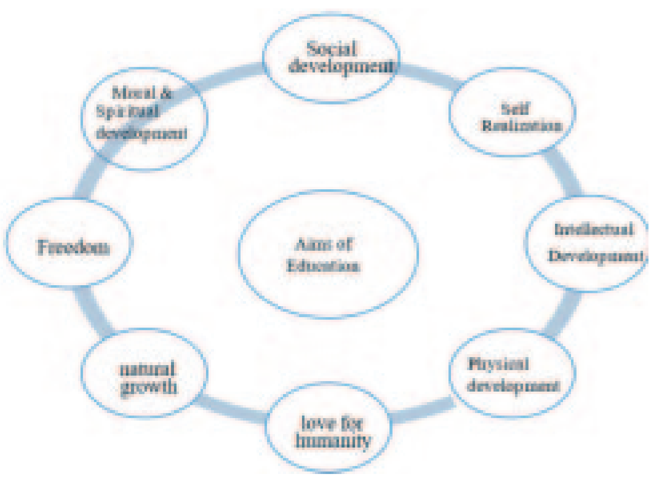
As a ***humanist,*** he discusses the spiritual interconnectedness of the universe and the brotherhood of man, as well as the need for education to foster the growth of students' physical, intellectual, and spiritual selves.

As an **individualist,** Tagore asserts that every kid has inherent talents that make them distinct and that perfection can be attained via the development of talents. He discusses Tapasya and sadhana as an idealist. He discusses this as a naturalist and suggests that in order for a youngster to learn a subject well, it should be taught using the numerous elements that are available in the child's environment. Inflexible classroom environments do not allow for proper educational development. Similar to the Gurukul method, where students learn subjects based on their own experiences, it needs to be in an open setting. He highlighted that people learn from their personal experiences in nature. God created the natural world; therefore, being in tune with it is being in tune with God.

For the learners' entire growth, freedom is essential. The following beautiful sentences from him help to explain it:

"Where the mind is without fear and the head is held high; Where knowledge is free; Where the world has not been broken up into fragments by narrow domestic walls; Where words come out from the depth of truth; Where tireless striving stretches its arms towards perfection; Where the clear stream of reason has not lost its way into the dreary desert sand of dead habit; Where the mind is led forward by thee into ever-widening thought and action into that heaven of freedom, my Father, let my country awake."

So, in his view, education entails mental and spiritual independence. It needs to be based on our own customs and traditions. He founded Shantiniketan and Viswabharati, two educational institutes, to give his educational theories practical form. In Shantiniketan, students and teachers coexist in a setting that is reminiscent of the "Gurukul system of education," away from the bustle of the city and with access to natural resources like fields, forests, and rivers. The worldwide university of Shantiniketan, Viswabharati, mixes western and Indian cultural, scientific, and literary elements. It places a strong emphasis on global understanding and human fraternity. Tagore supports the mother tongue as the medium of instruction because he wants to create a bridge between East and West through this, but he also stresses the value of English.Tagore prioritized teaching numerous crafts and talents so that students could support themselves in order to combat India's poverty through education.



Aims of Education

According to him, education should be based on real-world experiences and teach moral principles and human behaviour. For a person's personality to develop fully, moral education is more crucial than academic knowledge.

According to Tagore, "Serving others is serving God." (Mukherjee, 1982). He thought that sociability and a sense of humanity were essential traits of a person who was properly educated. The primary goal of education is to create a relationship of love and friendship between men, in addition to allowing us to benefit from the depth of knowledge (Singh & Rawat, 2013).

Self-realization is the process of reflection and the capacity to recognize oneself as a unique individual among others. It is a means of completely comprehending one's existence. To put it another way, to become aware of how one is thinking, to reflect on one's thoughts, and to direct them as necessary to the circumstances

Physical development was important to Tagore, both for the physical development of learners and for his own. In Shantiniketan, sports, games and yoga are encouraged. A goal of Tagore's educational philosophy is for children to grow physically. To promote physical health, education should be the starting point. He prioritized having a fit body. For instance, Santi Niketan's education program includes yoga, games, and sports.

Love for humanity entails a recognition of our shared humanity, as well as compassion and fraternity on a global scale.

Natural development in the environment: According to Tagore, nature is the best teacher. It offers students an atmosphere where they can gain knowledge at their own pace. The three types of freedom-freedom of the heart, freedom of the will, and freedom of the intellect-are included under the term "freedom," therefore education should be delivered in a way that would promote these freedoms.

Moral and spiritual growth should be adequately supported in education, both in terms of its development and advancement. It encompasses things like cooperating, sharing, and caring. Social development involves social skills that help students live moral lives while upholding social ties.

Tagore also placed a strong emphasis on **children's intellectual development,** which includes the growth of the child's creativity and imagination. He also believed that a child should be allowed to choose his own method of learning in order to achieve all-around development. (Singh & Rawat,2013). It is the combination of thought development, creativity, curiosity, freedom, and awareness, and it enables learners to discover their own learning preferences and achieve perfection in their daily lives.

"Service to man is service to God," according to Tagore, **a social reformer** (Mukherjee, 1982). He held that sociability and a sense of humanity were essential traits of a fully educated individual. The primary goal of education is to create a relationship of love and friendship between people, as well as to enrich ourselves with all available knowledge (Singh & Rawat, 2013).

Methods of Teaching: It includes those methods that are helpful in enhancing concrete knowledge, self-concept and are related to real-life situations, such as the activity method, teaching while traveling or walking, discussion, question-and-answer technique, cooperation technique, etc.

- **Activity Method:** He thought that the activity style of teaching and learning was quite effective. The teaching strategies should not be theoretical but rather practical. It will support the development of inventive and creative thinking. A student-cantered learning system resulted from the activity technique.
- **Traveling and educating:** Tagore claims that he does not favor a scholarly education. Tagore disapproves of traditional classroom instruction. He thought that exposure to nature was crucial for learning. He claimed that the best setting for educational activities is the natural world. While swimming, walking, climbing, and performing other daily activities, Tagore hopes to learn new things.
- **Discussion and debating:** Tagore asserted that he thought this approach would keep each pupil engaged in the educational process.
- **Heuristic Approach:** With this approach, learning is accomplished through doing. He didn't want to commit the study materials to memory.
- **Freedom:** According to Tagore, the education sector is greatly impacted by independence. Students have the right to behave, say, and think however they choose if they feel free to do so. He offered his students the freedom to pursue their interests in any subject they chose. For him, a man's education should come first in his priorities. Natural education delivery will result in the realization of one's freedom of heart, mind, and will (Trith.R, 2017). Students cannot gain greater knowledge if the teacher restricts the freedom of the teaching technique.
- **Accentuate the fine arts:** He worked to include the fine arts in the curriculum. A successful education system can lead to an individual's holistic development for peace. The growth of one's full personality and perspective on reality and truth are only empowered by the fine arts. The fine arts should play a significant role in life and education because, in addition to being enjoyable, they allow one to express their understanding of the harmonious relationship between the cosmos, their personal reality, and immortality.

Language of instruction

A language is an organized system of human communication; hence, Tagore has emphasized that a child's education should be conducted in their mother tongue. Children can communicate their ideas clearly in their native language.

Teacher

Even though the focus of education was on the student, teachers nevertheless held a crucial position in it. A teacher has the power to develop students' abilities and foster a sense of unity among them so that they can recognize their individuality, strive for excellence, and coexist in peace. In the "Gurukul education system," in which student instructors live together far from crowded cities and benefit from the natural resources of fields, forests, rivers, etc., Tagore describes the ideal teacher-student connection.

Curriculum

The importance of nature to children is something that Tagore intended to impart when he created a curriculum. He suggested including moral values in the curriculum. He suggests that the curriculum include those aesthetic pursuits. Tagore highlighted the need to use the mother tongue as the primary language medium. Tagore placed a strong emphasis on the usefulness of education, which enables students to communicate their ideas, pose questions, conduct experiments, have confidence in their own skills, and recognize their individuality. He was a strong advocate for unstructured environments. Curriculum may accomplish the purpose of education, which is why Tagore designed his curriculum in a way that would enable it to accomplish the purpose of education that he has identified. Mother tongue, other Indian languages, some foreign languages, mathematics, science, social studies, agriculture, technical disciplines, certain skill-oriented subjects, art, music, dance, philosophy, psychology, religion, outings, yoga, etc. are all included in the curriculum.

Recommendations

The key pillars of Tagore's education are freedom of the mind and spirit, self-realization, and coexisting in harmony. Each learner is unique and possesses some unique abilities; via this unique trait, one may handle life's challenges and succeed in life.The following recommendations could currently be incorporated into the curriculum.

- allowing children to choose their own subjects;
- designing the curriculum such that artistic ideals can be represented from an early age;
- promoting spiritual and moral values from a young age
- providing opportunities for practical learning.

When such issues are taken into account in educational policy, the student will be able to flourish in both academics and extracurricular activities, allowing him to develop knowledgeable human traits. These extracurricular activities serve as the foundation on which the students will create a society free from violence and discrimination.

"If the only tool one has is a Hammer (unique trait), one tends to see every problem as a nail."

Conclusion

The primary goal of Rabindranath Tagore's educational system was to assist students in developing into fully mature men. According to Tagore, a good educational system influences not just knowledge development but also the intellectual, physical, moral, social, and spiritual development of students. It promotes the growth of peace and creative expression. Through his educational philosophy, Tagore creates individualism, naturalism, spiritualism, and internationalism.In other words, the key pillars of Tagore's education are freedom of the mind and spirit, self-realization, and coexisting in harmony. Each learner is unique and possesses some unique abilities; via this unique trait, one may handle life's challenges and succeed in life.

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Leadership Effectiveness of Higher Secondary School Principals: An Enquiry into Teachers' Perception

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Abstract

This study aimed to investigate the perception of teachers about the leadership efficiency of their principals in Higher Secondary Schools (HSS) located in district Samba, Jammu and Kashmir, India. The study used a descriptive research design, and a sample of 52 teachers was selected through simple random sampling technique. Data analysis involved the use of statistical techniques such as mean, standard deviation, t-tests, and ANOVA. The results indicated that there were no significant gender-based differences in the perceptions of secondary school teachers regarding the leadership effectiveness of their principals. Furthermore, there was no significant difference between the perceptions of higher secondary school teachers regarding the leadership effectiveness of their principals based on the type of institution (public or private). However, the study found a highly significant difference in the perception of the leadership effectiveness of their principal by the teacher's based on their teaching experience. This study has implications for principals, policymakers, and educational institutions as it highlights the importance of effective leadership in the education sector and how teachers' perceptions can impact the effectiveness of leadership.

Introduction

Leadership is the ability to guide, inspire, and influence others towards achieving a common goal or vision (Redmond & Dolan, 2016). Effective leadership goes beyond mere authority and involves the application of skills, traits, and behaviors that maximize the potential of individuals and teams (Yukl, 2012). It is characterized by strong communication, empathy, strategic thinking, and adaptability. Effective leadership plays a pivotal role in organizations, communities, and various aspects of life by fostering growth, innovation, and positive change (Puccio *et al.*, 2010). It empowers individuals, builds trust, encourages collaboration, and motivates others to achieve their best (Blase & Blase, 2003; Harris & Muijs, 2002). By setting a clear direction, providing guidance, and promoting a supportive environment, effective leaders inspire and enable those around them to reach their full potential, driving overall success and progress.

Furthermore, effective leadership is crucial for creating a positive organizational culture and fostering a sense of purpose and commitment among team members. Leaders who demonstrate integrity, fairness, and accountability set the tone for ethical behavior and promote a climate of trust and respect (Bello, 2012). They cultivate an environment where individuals feel valued, empowered, and motivated to contribute their best efforts (Devi *et al.*, 2022.; Mantry *et al.*, 2022). Effective leaders also possess strong decision-making skills and the ability to navigate challenges and uncertainties with resilience and agility. They provide guidance during times of change, inspire innovation, and facilitate continuous improvement (Mantry *et al.*, 2022). Ultimately, effective leadership is essential for driving performance, achieving goals, and ensuring the long-term success and sustainability of any organization or community.

However, effective leadership plays a pivotal role in shaping the educational landscape and fostering a conducive learning environment within schools (Leithwood & Riehl, 2004; Mantry *et al.*, 2022). In the context of higher secondary education, principals serve as the key figures responsible for guiding and directing the academic and administrative affairs of their

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institutions. Their leadership effectiveness directly influences the overall quality of education and the professional growth of teachers. Thus, understanding teachers' perceptions of the leadership effectiveness of higher secondary school principals becomes crucial in assessing the efficacy of educational leadership.

Moreover, effective leadership in higher secondary schools is essential for creating a positive and productive learning environment (Jabari, 2014). Principals play a central role in setting the vision, establishing goals, and ensuring the smooth functioning of the institution. Their ability to inspire, motivate, and support teachers directly impacts the quality of education delivered and the professional growth of the teaching staff (Bredeson, 2000). Teachers' perceptions of the leadership effectiveness of principals provide valuable insights into the strengths and weaknesses of current leadership practices. When teachers have a positive perception of their principal's leadership, it fosters a sense of trust, collaboration, and job satisfaction among the teaching staff. On the other hand, negative perceptions can lead to low morale, resistance to change, and hindered professional growth.

Furthermore, various research in the field of educational leadership has highlighted the importance of effective leadership in improving student outcomes and creating a positive school environment (Drysdale & Gurr, 2011; Kemethofer *et al.*, 2022; Leithwood *et al.*, 2020). However, limited research has specifically focused on investigating teachers' perceptions of the leadership effectiveness of higher secondary school principals. Examining teachers' perceptions of leadership effective-ness allows us to understand how principals are perceived in various leadership domains. These domains may include setting a clear vision and goals, providing instructional support, facilitating effective communication, making informed decisions, and promoting a collaborative school culture. By understanding these perceptions, educational policymakers, school administrators, and principals can gain insights into areas of improvement and develop strategies to enhance their leadership practices. Therefore, this study aims to fill this gap by exploring the perspectives of teachers in order to gain a comprehensive understanding of the leadership practices and their impact on the teaching and learning process.

Literature Review

This section provides a quick overview of the researches on school principals' abilities as leaders. In recent times, Pranitasari (2020) conducted a study on how effective leadership and organizational trust impact teachers' work motivation and organizational commitment. A direct and positive correlation was found between leadership and organizational commitment. Similarly, a study carried out by Baroudi & Hojeij (2020) examined the role of self-efficacy in principals' leadership in schools (govt. & private) for K-12 students in Lebanon. The study revealed that private and public principals possess similar leadership abilities. Further, the findings revealed that in both types of schools, females scored higher than their male counterparts on the majority of dimensions. In addition to that, the study reported that age and gender have a great effect on the principal's self-efficacy. Furthermore, Ali & Anwar (2021) carried out research on the influence of strategic leadership effectiveness in organizations. The results showed that absorptive self-leadership for sustainable competitive advantage had the most effect, while managerial wisdom as self-leadership had the least effect. In addition to it, an article was communicated by Sangadji *et al.* (2021) on effective leadership as a mediating role for work motivation. In this paper, the researcher showed that teachers are more motivated to work and do a better job when they have good leadership. Furthermore, it has been observed that work motivation strengthens the association between effective leadership and a teacher's performance. Similarly, Paquita *et al.* (2021) carried out a study on the relationship between the effectiveness of a school principal's leadership and the performance of teachers. The findings showed that the effectiveness of school principals as leaders was high, while the performance of teachers was average. Further, it was discovered that there is a significant correlation between the effectiveness of school principals and teacher performance. Similarly, Dabesa & Cheramlak (2021) examined the impact of effective school leadership on students' academic achievement. It revealed a strong and positive correlation between leadership effectiveness and academic achievement among students.

In the context of the principal's leadership and its effect, Thibodeaux *et al.* (2015) conducted a study on the relationship between leadership and teacher retention. The findings demonstrated that a principal's leadership influences a teacher's decision to remain in the profession. Similarly, Mehdinezhad & Mansouri (2016) conducted a study to explore the connection between a school principal's leadership behaviors and teachers' perceived efficacy. Their research showed that there is a significant correlation between the various aspects of a principal's leadership style and teachers' sense of self-efficacy.

Additionally, their findings suggest that the two primary components of a principal's leadership behavior, idealized influence, and intellectual stimulation, have a noteworthy influence on teachers' perceived self-efficacy. Lambersky (2016) investigated the impact of the principal on teachers' morale, self-efficacy, tension, and dedication. A qualitative study revealed that the actions of principals have a significant impact on teachers' morale, burnout, stress, commitment, and perception of self- and groupefficacy. Tan (2018) conducted another study on the influence of school leadership on student achievement. The findings revealed that principal leadership has a significant impact on the academic achievement of students in three groups: disadvantaged, average, and privileged. Additionally, it has been observed that instructional leadership had a positive impact on the academic achievement of disadvantaged students.It was discovered, however, that distributed leadership negatively affected the academic performance of disadvantaged students. In addition, the study found that context has a significant impact on the leadership-performance relationship. Mulyani *et al.* (2020) conducted a study on the effectiveness of schools through the leadership of principals and teacher performance. The findings indicated that the leadership of principals and the instructional effectiveness of teachers have a positive and significant impact on the effectiveness of schools. It depicted that the efficacy of schools is directly tied to the leadership of principals and the teaching effectiveness of teachers. In addition, Gómez-Leal *et al.* (2022) presented a review paper on a systematic examination of the relationship between emotional intelligence and leadership in school leaders. Findings demonstrated that emotional intelligence is a crucial element of effective leadership. In addition, the study revealed that a relationship of trust between teachers and principals significantly contributes to the growth of teachers' satisfaction and performance.

From the earlier literature, it is also found that some studies have been done on the perception of school teachers towards principals. Verma (2018) conducted a study on the leadership effectiveness of secondary school principals in relation to their demographic and personal characteristics. The findings revealed that the leadership effectiveness of secondary school principals varied greatly based on variables such as caste, age, school location, type of school management, computer skills, type of family, in-service training, and academic credentials. In addition, Mei Kin *et al.* (2018) determined how teachers felt about the change in the principal's leadership. Results indicated that principal change leadership competencies are significantly associated with teacher change beliefs and that there is a positive correlation between teacher change beliefs and teacher attitudes toward change. Further, Naidoo (2019) conducted a study on teachers and school management teams' perceptions of the principal's leadership. The findings indicated that school development is significantly influenced by principal leadership. Moreover, private school principals with high leadership capacity perform better in terms of school development than those with low leadership capacity. Similarly, Bada *et al.* (2020) analyzed teachers' perceptions of instructional leadership provided by principals. The results indicated that there appeared to be significant disparities between male and female teachers' perceptions of the instructional leadership behavior of the principal. In addition, Sanchez *et al.* (2020) investigated the relationships between teachers' perceptions of principal leadership and their perceptions of school climate. According to the study's findings, experienced employees do not perceive their principal to be an effective leader. On the other hand, a study on the efficacy of school leadership in emergency remote learning during the coronavirus pandemic conducted by Onyefulu (2021) revealed that teachers view their principal as an effective leader. In addition, the majority of teachers reported that their principal utilizes a distributed leadership approach.

From the above the studies, it is observed that there is no significant difference in the perception of teachers towards the leadership effectiveness of their principals at higher secondary schools with respect to gender, type of school and teaching experience (Verma, 2018; Naidoo, 2019; Bada *et al.*, 2020; Onyefulu, 2021). Therefore, proposed following hypotheses as:

$H_0$1: There is no significant difference in the perception of teachers towards the leadership effectiveness of their principals at higher secondary schools with respect to gender.

$H_0$2: There is no significant difference in the perception of teachers towards the leadership effectiveness of their principals at higher secondary schools with respect to type of school management body.

$H_0$3: There is no significant difference in the perception of teachers towards the leadership effectiveness of their principals at higher secondary schools with respect to their teaching experience.

Methodology

In the present study, the Leadership Effectiveness

Scale, which was prepared and standardized by Dr. Haseen Tajin in 2010, was used to collect the data. The population of the current study consisted of all the higher secondary school teachers in the Samba District, of Jammu and Kashmir. There are 65 higher secondary schools existed in the district. The total number of government higher secondary schools and private higher secondary schools are 22 and 43 respectively. By using simple random technique, 5 government higher secondary schools and 5 private higher secondary schools were selected for the sampling framework. Followed by simple random sample technique 52 teachers were selected from the above selected schools. The data analysis techniques used in the present study were mean, standard deviation, t-test, and ANOVA.

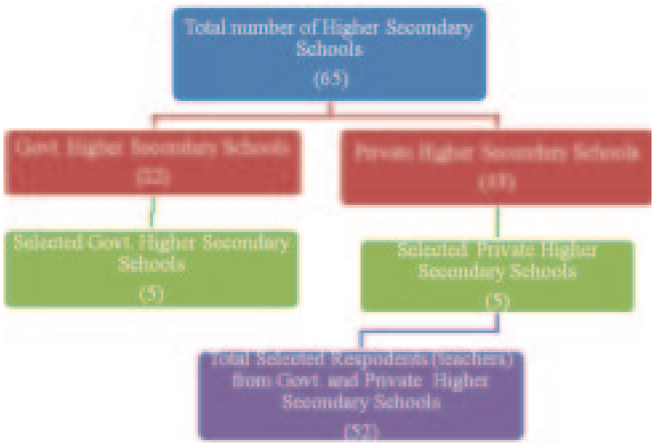

Figure 1: Sampling framework of the study

Analysis and Results

Table 1: Perception of teachers towards the leadership effectiveness of their principals at higher secondary schools with regard to their gender

Gender	N	Mean	Standard Deviation	t-value	Level of Significance
Male	25	308	37.47	-0.42	0.05
Female	27	312.81	42.41		

Table 1 clearly, shows that male and female teachers at the secondary level have similar perceptionsof their principals' leadership effectiveness, with mean scores of 308 and 312.81, respectively. Higher secondary school faculty members' perceptions oftheir principals' leadership effectiveness have a standard deviation of 37.47 and 42.41, respectively. At the 0.05 level of significance, the t-value of -0.42 that we calculated is smaller than the table value of 1.96. Thus, first hypothesis there is no significant difference between male and female teachers' perceptions of their principal's leadership effectiveness is accepted. Hence, we can assume that teachers in higher secondary schools share a common view on the leadership effectiveness of their principals regardless of their gender.

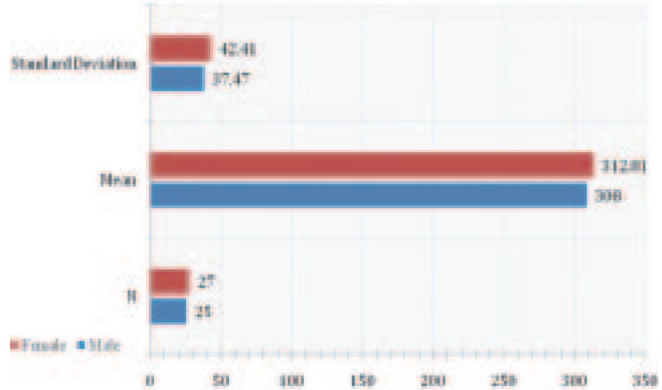

Fig. 2: Difference in the perception of male and female teachers towards the leadership effectiveness of their principals

Fig. 2, illustrate that the mean scores and standard deviation of male and female teachers' perceptionsare almost equal. Hence, we can say that the perception of male and female teachers of higher secondary schools towards the leadership effectiveness of their principals is the same in the Samba district.

Table 2: Perception of teachers towards the leadership effectiveness of their principals at higher secondary schools with respect type of school.

Type of Institution	N	Mean	Standard Deviation	t-value	Level of Significance
Government	25	308.45	42.99	-0.22	0.05
Private	27	311.03	37.48		

Table 2 clearly, depicts that teacher' mean ratings of their principal's leadership effectiveness range from 308.45 to 311.03. The largest disparity in the perception has been observed between government and private secondary school teachers. The standard deviations of teachers' perception of their principals' leadership effectiveness in public and private higher schools, respectively, are 42.99 and 37.48. The derived t-value of -0.22 is lower than the expected value of 1.96; hence the result is not statistically significant at the 0.05 level of significance. Therefore, second hypothsis is accepted, stating that there is no significant difference between teachers' perceptions of their principal's leadership effectiveness in Government and Private higher secondary schools. This suggests that regardless of the setting, educators in higher secondary schools share a same perspective of their principal's leadership effectiveness.

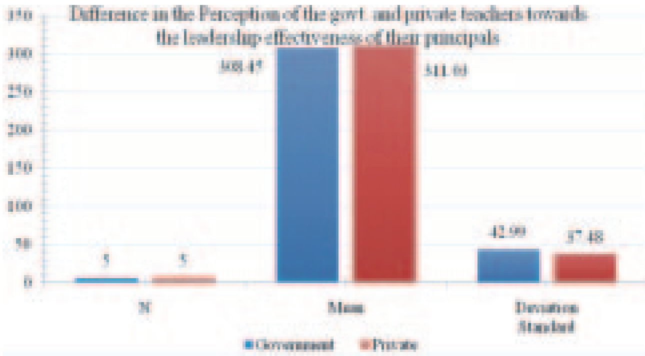

Fig. 3: Difference in the perception of govt. and private school teachers towards the leadership effectiveness of their principals

Fig. 3 shows that the mean scores and standard deviation scores of government and private higher secondary schools teachers' perception is equivalent. Hence, we can say that the perception of government and private higher secondary school teachers towards the leadership effectiveness of their principals is similar.

Table 3: Perception of teachers towards the leadership effectiveness of their principals at higher secondary schools with respect to their experience

Source of Variance	Sum of squares	Degree of Freedom	Means of sq. variance	Calculated F value	Table F value
Between groups	Sb=65,800.673	2	32,900.337	25.375	5.06
Within groups	Sw=63,532.000	49	1,296.571		

Table 3 indicates that the calculated value of F is 25.375, which is greater than the table value of F i.e., 5.06 at 0.01. Therefore, third hypothesis, there is no significant difference among the perceptions of higher secondary schoolteachers towards the leadership effectiveness of their principals with respect to their teaching experience, is rejected here. It means that there is a considerable difference in the perception of higher secondary school teachers towards the leadership effectiveness of their principals with respect to their teaching experience, which ranges from 2 to 6 years, 7 to 11 years, and 12 years onwards.

Table 3: Depiction of Number of Teachers, Mean Score Value and Standard Deviation

Teaching Experience	N	Mean Score Value	Standard Deviation
1 - 3 Yrs.	19	225	42
3 - 6 Yrs.	21	280	37
More than 6 Yrs.	12	316	20

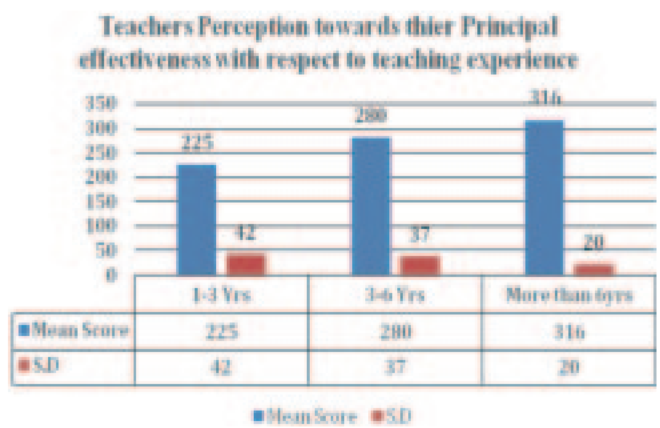

Fig. 4: Depicting calculated Mean Score and Standard Deviation

Fig.4, illustrate that the calculated Mean Score value and Standard deviation is not equal. Hence, we can say that perception of higher secondary school teachers towards the leadership effectiveness of their principal is not similar with respect to their teaching experiences.

Discussion and Conclusion

The main aim of this study was to assess the perceptions of secondary school teachers in the district of Samba concerning the effectiveness of their principals' leadership, with a focus on gender, institution type, and teaching experience. Contrary to the findings of Bada *et al.* (2020), who reported significant variations in male and female teachers' perceptions of principals' instructional leadership behavior, the current investigation revealed no discernible differences based on gender. The results indicated that both male and female teachers held similar views on the leadership efficacy of their principals.

Furthermore, the study examined whether there were any significant disparities in the perceptions of secondary school teachers regarding their principals' leadership effectiveness based on the type of institution (public or private). However, the findings of this investigation did not support the existence of any noteworthy distinctions. It suggests that teachers' perceptions of their principals' leadership effectiveness were not influenced by whether they worked in public or private institutions.

Additionally, the study explored the impact of teaching experience on teachers' perceptions of their principals' leadership effectiveness. The results revealed a highly significant difference in the perception of leadership effectiveness among high school teachers based on their teaching experience.Similar to the findings of Sanchez *et al.* (2020), which revealed that experienced teachers do not view their principal as an effective leader but the finding of this study suggests that teachers' perceptions of their principals' leadership effectiveness may be influenced by the number of years they have spent in the profession.

Based on the preceding discussion, it can be concluded that secondary school teachers in the Samba district share similar perceptions regarding the leadership effectiveness of their principals, regardless of gender or institution type. These findings suggest that teachers generally perceive their principals as effective leaders. Furthermore, the analysis reveals that teachers' perceptions of their principals' leadership effectiveness vary based on their level of experience in the field of education. This implies that teachers with different levels of teaching experience may have different perspectives on the effectiveness of their principals' leadership.

Educational Implications of the Study

The current study provides valuable educational implications for school and institutional leaders. Firstly, the study emphasizes the need for school principals to prioritize their relationships with teachers and staff members, promoting a culture of trust and open communication that can lead to improved academic outcomes for students. Secondly, the study highlights the importance of self-awareness and leadership behavior in becoming more effective leaders and school administrators. By understanding their leadership style and its impact on the school environment, principals can adapt to new challenges and create a positive work environment for their team. Thirdly, the research provides useful insights for institutional leaders, emphasizing the need for calm and consistent crisis management that can reduce anxiety and build trust among staff members and students. Lastly, the study highlights the role of leaders in promoting ethical and moral values, inspiring their teams to acquire strength in these areas and achieve excellence in their work. Overall, the educational implications of this study offer a roadmap for school and institutional leaders to promote collaboration, trust, and ethical values, leading to improved academic outcomes and a culture of excellence within their organization.

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Intelligent Methods in Business Analytics

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Abstract

Business analytics is a multidisciplinary field that leverages data-driven techniques to inform decision-making processes within organizations. Within the realm of business analytics, optimization methods play a pivotal role in helping organizations maximize efficiency, minimize costs, and optimize various aspects of their operations. In recent years, intelligent optimization methods have gained prominence in addressing complex and dynamic business challenges. This survey paper provides an overview of intelligent optimization methods in business analytics, exploring their applications, benefits, and emerging trends. In this paper, we discuss a range of intelligent optimization techniques, including genetic algorithms, particle swarm optimization, simulated annealing, and machine learning-based approaches. Additionally, we highlight real-world applications, challenges, and future directions in this evolving field.

1. Introduction

Data has become a crucial asset in the quickly changing world of modern business, holding the key to unlocking competitive advantages and guiding strategic decision-making. The era of big data has been ushered in by the phenomenal development of data sources, which include anything from sensor data and social media feeds to customer interactions and transaction records. Business analytics has become increasingly popular in this dynamic environment, offering a variety of tools and techniques for drawing insightful conclusions from this vast amount of data. Intelligent Optimization Methods, a potent strategy that combines cutting-edge computational algorithms and artificial intelligence (AI) techniques to optimize complex business processes, resource allocation, and decision-making, have emerged as one of the many tools available in Business Analytics. This paper explores the transformative role of Intelligent Optimization Methods in Business Analytics, drawing insights from a rich body of literature encompassing various industries and applications.

2. Literature Review

There are numerous fields in which Intelligent Optimization Methods are applied in business analytics, each with its own set of opportunities and challenges. For example, in supply chain management, optimization algorithms have helped to improve the effectiveness of demand forecasting and inventory management. The use of Bayesian optimization in high-dimensional spaces has been investigated by researchers like Cao and Carin (2019), who have provided a solid framework for optimizing difficult supply chain choices. Similar to this, Chen and Chen (2018) reviewed extensively how intelligent optimization techniques improve structural design procedures in the field of structural design and engineering. Their work serves as an example of how optimization methods like genetic algorithms and metaheuristics are used to identify the best solutions in challenging engineering areas.

Operations research and resource allocation both make extensive use of linear programming, a fundamental optimization technique (Dantzig, 1963). Deb's research on multi-objective optimization (Deb, 2001) has had a significant impact on how difficult decision-making situations are handled when numerous competing objectives must be balanced. Deb developed evolutionary algorithms to address multi-objective optimization, which resulted in the creation of a solid framework for resolving practical issues. Furthermore, Gendreau and Potvin's (2010) Handbook of Metaheuristics offers a thorough resource on numerous metaheuristic methods, stressing how they can be used for optimization across a variety of areas.

Research in this area has placed a lot of emphasis on using genetic algorithms for optimization (Srinivas & Patnaik, 1994). The traveling salesman problem and job-shop scheduling are two examples of combinatorial

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optimization issues where genetic algorithms are frequently applied. The theoretical underpinnings and practical uses of genetic algorithms in tackling challenging optimization issues were established by Michalewicz's work on genetic algorithms and data structures (Michalewicz, 1996). A thorough description of metaheuristic methods, such as genetic algorithms and simulated annealing, is also provided in the Handbook of Metaheuristics by Glover and Kochenberger (2003).

Operations research has benefited greatly from the use of linear programming, which is frequently used in resource allocation and decision support (Rardin, 1998). An approachable introduction to linear programming is given by Bertsimas & Tsitsiklis (1997), who emphasize its applicability to optimization issues in a variety of business sectors. Additionally, the study by Pirkwieser, Raidl, & Pferschy (2010) provides information on population-based metaheuristics and their uses in exact optimization, highlighting its usefulness in resolving practical issues.

In recent years, machine learning and artificial intelligence approaches have been incorporated into optimization methodologies, creating new opportunities for addressing challenging business issues. The Bayesian optimization study by Cao & Carin (2019) demonstrates how AI-driven methods may successfully address high-dimensional optimization issues. Bodur & Bisi (2020) offer a thorough overview of machine learning optimization approaches, demonstrating their potential to handle a range of practical issues.

3. Intelligent Optimization Methods

3.1 Genetic Algorithms (GAs)

Business analytics frequently uses genetic algorithms to solve optimization issues since they are inspired by the process of natural selection. Numerous fields, including labor scheduling, portfolio optimization, and supply chain optimization, have seen the application of GAs. For instance, Smith *et al.* (2018) showed how a genetic algorithm might be used to optimize resource allocation in a sizable manufacturing facility.

3.2 Particle Swarm Optimization (PSO)

Another well-liked optimization method that draws its inspiration from social behavior is particle swarm optimization, in which individuals (or particles) work together to discover the best answer. According to Wang & Li's (2019) study, PSO can be used to significantly reduce costs for e-commerce enterprises by improving the route of delivery vehicles.

3.3 Simulated Annealing

Simulated annealing imitates the metallurgical annealing procedure, in which a material is gradually chilled to reduce flaws. Numerous business analytics applications, such as facility site optimization and project scheduling, have found use for this technique. Simulated annealing was used in a study by Jones *et al.* (2020) to optimize the architecture of a new retail store, resulting in better customer flow and higher sales.

3.4 Machine Learning-Based Approaches

Business analytics has given rise to machine learning, and its fusion with optimization techniques has produced very intelligent systems. Deep reinforcement learning has been applied, for example, to dynamic pricing optimization (Chen *et al.*, 2021), allowing companies to modify their pricing strategies in real-time in response to changes in the market and in the behavior of their customers.

3.5 Swarm Intelligence

Swarm intelligence techniques have showed promise in resolving challenging optimization issues. These techniques were inspired by the group behavior of social insects. The use of ant colony optimization for optimizing drone routing in a logistics network, lowering delivery times and costs, was examined in recent research by Patel *et al.* (2022).

4. Applications in Business Analytics

To gather insights and make wise decisions, the field of business analytics uses data-driven approaches. Intelligent optimization techniques have been widely used in this field to solve challenging issues and improve decision-making. This section will look at many applications of intelligent optimization techniques.

4.1 Supply Chain Optimization

A key component of business operations is supply chain management, and optimization is essential for effective and economical logistics. Research by Chopra & Meindl (2019) demonstrates how supply chain networks, inventory levels, and distribution tactics are optimized using intelligent optimization techniques like genetic algorithms and simulated annealing.

4.2 Financial Portfolio Management

For financial institutions and investors, optimizing investment portfolios is a vital duty. Diversified portfolios that balance risk and return can be built with the help of contemporary portfolio theory and clever optimization techniques. The foundation for portfolio optimization was created by works by Markowitz (1952), and following research has added genetic algorithms and particle swarm optimization to improve portfolio management.

4.3 Marketing Campaign Optimization

The goal of marketing campaigns is to optimize return on investment (ROI) by strategically distributing resources across a variety of channels. Budgets have been assigned, ideal ad spots have been found, and marketing campaigns have been optimized using intelligent optimization techniques. The use of optimization approaches to increase the ROI of marketing campaigns is covered in research by Lewis and Rao (2015).

4.4 Operations and Production Management

For manufacturing and operations management, it is crucial to optimize the allocation of resources and the production process. Production schedules, resource distribution, and quality control are all optimized using genetic algorithms and other optimization techniques. Genetic algorithms were first introduced by Holland's work in 1975, and they have since been used to optimize production processes.

4.5 Revenue Management

In sectors including travel, lodging, and e-commerce, revenue management entails dynamically modifying prices and allocations to optimize income. Numerous studies and applications have been done on dynamic price optimization, which frequently uses machine learning and reinforcement learning. Talluri and van Ryzin's (2004) study offers optimization models for the management of airline revenue.

4.6 Human Resource Management

When it comes to managing human resources, intelligent optimization techniques are used for things like hiring new talent and allocating duties to the staff. For instance, genetic algorithms are used in the healthcare industry to optimize nurse scheduling, providing enough staffing while reducing labor expenses (Ayvaz, *et al.*, 2018).

4.7 Energy Management

Efficient energy consumption is critical for both cost savings and sustainability. Intelligent optimization methods are utilized to optimize energy usage in buildings, industrial processes, and transportation. Research by Mohsenian-Rad *et al.* (2010) discuss the application of optimization in the smart grid for efficient energy distribution.

4.8 Customer Relationship Management

Effective customer relationship management relies on personalization and targeted marketing. Machine learning-based optimization methods are used to analyze customer data and recommend personalized products or services. Research by Sun *et al.* (2018) explores the use of machine learning for customer churn prediction and retention strategies in telecommunications.

4.9 Inventory Management

Managing inventory levels is crucial for businesses to balance the costs of holding inventory against the risk of stockouts. Optimization techniques are applied to determine optimal reorder points, order quantities, and safety stock levels. Research by Silver *et al.* (1998) discusses the application of the genetic algorithm in inventory management.

4.10 Healthcare Operations

Optimizing healthcare operations is vital for efficient patient care and cost reduction. Genetic algorithms, particle swarm optimization, and other methods are used to optimize hospital scheduling, resource allocation, and patient flow. Research by Ayvaz *et al.* (2018) explores the use of optimization methods in healthcare delivery.

5. Benefits of Intelligent Optimization Methods

Numerous advantages of using intelligent optimization methods in business analytics include improved decision-making, streamlined operations, and ultimately increased organizational success. By utilizing cutting-edge computing algorithms and artificial intelligence techniques, these systems optimize intricate business procedures and plans, giving firms a competitive advantage. Here, supported by pertinent research findings, we explore some of the major advantages of using Intelligent Optimization Methods in the field of Business Analytics.

Enhanced Decision-Making: One of the main advantages of Intelligent Optimization Methods is its capacity to enhance organizational decision-making procedures. These techniques allow companies to make data-driven decisions that take into account a variety of limitations, goals, and uncertainties in addition to historical data. For instance, it has been demonstrated that supply chain decisions can be efficiently optimized when metaheuristic algorithms like genetic algorithms and simulated annealing are used (Chen & Chen, 2018). These algorithms can locate the most cost-effective product delivery routes while still satisfying client demand. This improved decision-making results in better resource allocation, lower costs, and higher profitability.

Operational Efficiency: Across a variety of domains, Intelligent Optimization Methods can dramatically improve operational efficiency. These techniques, for instance, have been used to healthcare to improve patient scheduling and hospital resource allocation (Afshar & Haq, 2015). As a result, there are shorter wait times for patients, better resource management, and higher levels of patient satisfaction. In addition, using these strategies in production scheduling has enhanced delivery performance and decreased production costs in the manufacturing sector (Król & Arabas, 2002). These efficiency improvements may result in greater customer service and a competitive edge.

Multi-Objective Optimization: Making business decisions frequently entails balancing several competing goals. Such multi-objective optimization issues are particularly well-suited for Intelligent Optimization Methods. Deb's (Deb, 2001) work on multi-objective optimization utilizing evolutionary algorithms has been crucial in giving decision-makers the tools they need to successfully balance conflicting objectives. Multi-objective optimization, for instance, can assist investors in finding portfolios that maximizes returns while lowering risk (Coello *et al.*, 2004). Organizations can make more balanced and informed decisions that are in line with their strategic goals by simultaneously optimizing numerous objectives.

Adaptability to Changing Environments: Businesses work in environments that are always changing, and Intelligent Optimization Methods are created to do just that. Self-adaptation in evolution techniques was first developed by Hansen and Ostermeier (2001), allowing optimization algorithms to modify their parameters while performing optimization. This adaptability is especially useful in situations when external factors, like the state of the market or the availability of resources, alter over time. In order to maintain resilience and competitiveness, businesses can continue to optimize their operations and strategies in response to changing situations.

Improved Customer Experience: Intelligent Optimization Methods can be crucial in enhancing the customer experience in the age of data-driven marketing and customer-centric business models. For instance, these techniques are used in e-commerce to tailor product recommendations, improving client happiness and driving up sales (Bodur & Bisi, 2020). Businesses can improve their marketing and product offers by researching consumer behavior and preferences, which will increase customer retention rates and strengthen brand loyalty.

6. Conclusion

In the realm of business analytics, intelligent optimization techniques have developed into essential tools that enable businesses to make better decisions, save money, and operate more effectively. These techniques continue to influence the structure of contemporary business, with applications ranging from supply chain optimization to marketing campaign management.

To fully utilize the promise of intelligent optimization approaches as the field develops, it will be crucial to address issues with data quality, interpretability, scalability, and ethics. However, the advantages they provide in terms of better decision-making, adaptability, resource allocation, and competitive advantage make them a resource for businesses looking to prosper in a world that is becoming more and more data-driven.

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Psychological Well- Being of College Students: Role of Gender and Residential Locale

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Abstract

In this study, researchers tried to find out the effect of gender and residential locale on psychological well- being of college students. For this purpose, 620 subjects (310 males and 310 females) were randomly selected. Out of which 155 students were residing in rural areas and 155 students were residing in urban areas. Psychological well-being questionnaire developed and standardized by Dr. Devendra Singh Sisodia and Pooja Choudhary was used to measure the psychological well-being of the subjects. 2*2 factorial analysis was used to test the hypotheses. Results showed that there is no significant main effect of gender on psychological well-being of college students while the main effect of residential locale on psychological well-being of college students was found significant. The interaction effect of gender and residential locale on psychological well-being of college students was found not significant. Further analysis shows that significant differences were found between females who were living in rural areas and those who were living in urban areas. On the basis of the result it can be concluded that gender does not significantly affect psychological well-being of college students while residential locale significantly affects psychological well-being of college students.

1. Introduction

Psychological Well-Being (PWB) has usually been defined as a combination of positive affective states such as happiness and functioning with optimal effectiveness in an individual (Deci and Ryan, 2008). Oishi & Lucas (2003) defined psychological well-being as one's emotional and cognitive evaluation of his or her life. These evaluations are based on one's mood, emotional reaction to events, and judgement about life. It is influenced by personal goals, life events, personality characteristics, and perceived social support. Psychological well-being is the combination of feeling good and functioning effectively. It indicates mental and physical wellness. A person with high psychological well-being is satisfied with their life, happy, well supported, and capable (Huppert, 2009). Further, psychological well-being refers to the extent to which people feel that they have a meaningful life and they have control over their life and their activities. A student with higher Psychological well-being maintains a good relationship with others maintains a positive attitude towards life and possesses good mental health. Nonetheless, problem related to Psychological Well-Being have become increasingly common among college students nowadays (Yang, 2010).

Many studies found that gender is not a significant factor in affecting psychological well-being (Tomer & Singh, 2019; Kantariya, 2017; Waghmare, 2016; Kaur, 2015; Sharma, 2014; Amran & khairiah, 2014; Kotar, 2013; Rathi, 2007; Jose & Thomas, 2005; Roothman, *et al.*, 2003; Twenge, & Campbell, 2001; Ryff & Keyes, 1995). Some studies found that gender is a significant factor affecting psychological well-being (Chamuah & Sankar 2017; Mughal & Fatma, 2015). Some studies found that females are higher on psychological well-being than male participants (Tomer & Singh, 2021; Akter, 2015; Tejal, 2010). Daraei, (2013) studied the impacts of some social factors on psychological well-being like; gender, family income, family relationships, educational levels of parents, and occupation of parents among 280 college students and revealed that family relationships, income, occupation, and educational levels of parents impact the psychological well-being of students while gender does not impact psychological well-being of students. Perez (2012) found that females scored significantly higher in two sub-scales positive relationship with others and purpose in life of psychological well-being, whereas male

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participants scored higher on the autonomy scale. There were no significant differences in the other sub-scales of Psychological Well-being.

Many studies show that urban adolescents reported higher well-being than rural adolescents (Yeresyan & Loahaus, 2014; Patel, 2015; Kawa & Shafi, 2015; Shaheen, 2016; Rehaman, Shafi, & Rizvi, 2016). Some studies found no significant difference between rural and urban students on well-being (Asokam and Muthumanikam, 2013; Sharma, 2014; Waghmare, 2016). But in another research Kaur & Singh (2016) found significant differences between rural and urban students in Psychological well-being. Tomer & Singh (2021) studied the effect of caste category and residential locale on psychological well-being among 438 college students and found that students living in rural area significantly have higher psychological well-being than those who were living in urban areas. It also found that students of general category living in rural areas significantly have higher psychological well-being than students who were living in urban areas. Waghmare (2017) found a significant difference between urban and rural college students on psychological well-being. They also revealed that rural college students have low psychological well-being, Life satisfaction, and Efficiency, then urban college students and rural college students have higher sociability, mental health, and interpersonal relations than urban college students.

Though there are a lot of studies related to gender, residential locale and psychological well-being but the sample chosen from one geographical area to another geographical area always leaves a scope for further research in the area.

Objectives: Objectives of the study were as follows:

- To study the effect of gender on psychological well-being of college students.
- To study the effect of residential locale on the psychological well-being of college students.
- To study the interaction effect of gender and residential locale on psychological well-being of college students.

Hypotheses: Hypotheses of the study were as follows :

- There is no significant effect of gender on psychological well-being of college students.
- There is no significant effect of residential locales on the psychological well- being of college students.
- There is no significant interaction effect of gender and residential locale on psychological well-being of college students.

2. Method

Research Design: 2*2 factorial design was used in this research. Details of the division of variables were as follows:

		Residential Locale (B)	
		Rural (B1)	Urban (B2)
Gender (A)	Male (A1)	A1*B1 (n=155)	A1*B2 (n=155)
	Female (A2)	A2*B1 (n=155)	A2*B2 (n=155)

Sample: Primarily there were 750 college students out of which 620 students were selected randomly using SPSS software. In the present study, the total sample consisted of 620 students. There were 155 males who were residing in rural areas and 155 males who were residing in urban areas. There were 155 females who were residing in rural areas and 155 females who were residing in urban areas. Thus, there were 310 male and 310 female college students. The age range of all the subjects was 18-21 years.

Tool used: For this purpose, Psychological Well-Being questionnaire developed and standardized by Dr. Devendra Singh Sisodia and Pooja Choudhary was used. It is a five-point rating scale containing 50 items. This scale has reliability (0.90) and validity (0.94).

Procedure of data collection: The researcher called the students into small groups of 10 to 15. After getting the primary information of each student like age, gender, education, and residential locale, etc, the researcher read the instructions of the psychological well-being scale before the subjects. There was no time limit, so the filled-in scale was taken back from the subject to the end when he/she finished the work. The subjects were thanked for their valuable cooperation.

3. Result and Discussion

Data were analyzed with the help of SPSS-17. To test the hypotheses 2*2 factorial analyses were used. Table-1 shows the two-way analysis of variance among gender and residential locale on psychological well-being among college students. F-ratio for gender was $F(1, 620) = 0.45$, $p = .505$. F-ratio for residential locale was $F(1, 620) = 4.76$, $p = .029$ and the F-ratio for interaction of gender and residential locale was $F(1, 620) = 1.73$, $p = .188$.

Table 1: Showing the Summary of Two-Way ANOVA for 2*2 Factorial Designs with N- 620

Source	SS	Df	MS	F-ratio	P-Value
Gender	216.06	1	216.06	0.45	p=.505
Residential Locale	2307.12	1	2307.12	4.76	p=.029
Gender* Residential Locale	840.78	1	840.78	1.73	p=.188
Error	298445.61	616	484.49		
Total	301809.57	619			

Table-2 showing the analysis of the simple effect of gender. F-ratio for male and female students living in rural areas was F(1, 620)=0.21, p=.646. F-ratio for male and female students living in urban areas was F(1, 620)=1.97, p=.161.

Table 2: Showing the Summary ANOVA for simple effect of A i.e Gender

Source	SS	Df	MS	F-ratio	P-Value
A for B1	102.21	1	102.21	0.21	p=.646
A for B2	954.63	1	954.63	1.97	p=.161
Error	298445.61	616			

Table-3 showing the summary of simple effects of residential locale. F-ratio for male students who were living in rural areas and who were living in urban areas was F(1, 620)=0.37, p=.541. F-ratio for female students who were living in rural areas and who were living in urban areas was F(1, 620)=6.12, p=.014 which was significant.

Table 3: Showing the Summary ANOVA for simple effect of B i.e Residential Locale

Source	SS	Df	MS	F-ratio	P-Value
B for A1	181.19	1	181.19	0.37	p=.541
B for A2	2966.71	1	2966.71	6.12	p=.014
Error	298445.61	616			

Results showed that the mean score of male students was higher than the female subjects. It means that the male students have higher psychological well-being than female students but this difference was found not significant. So, we accept our first hypothesis. Results also showed that the mean score of psychological well-being of students living in rural areas was higher than students who were living in urban areas. This difference was found significant. It means that students living in rural areas have significantly higher psychological well-being than students living in urban areas. So, we reject our second hypothesis. The interaction effect of gender and residential locale was found non-significant. So, we accept our third hypothesis. Further analysis shows that the mean score of male students living in rural areas was higher than male students living in urban areas but this difference was found not significant. Results also showed that female students living in rural areas significantly have higher psychological well-being than female students living in urban areas.

3. Conclusion

On the basis of the above findings, we can conclude that gender is not a significant factor that affects the psychological well-being of students while residential locale significantly affects the psychological well-being of students. Male subjects have a higher level of psychological well-being than female subjects. Students living in rural areas have higher psychological well-being than those living in urban areas. Females living in rural areas significantly have higher psychological well-being than females living in rural areas.

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Exploratory Data Analysis and Bootstrap Estimation with Real-Time Data Dataset Using R Software

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Abstract

Exploratory data analysis (EDA) and Bootstrap estimation has significant theoretical and well-established statistical tradition in the field of data science and statistical techniques. Continuous advancements in this fieldrequire ongoing skill development for researchers in order to retrieve important insights from complex datasets. In order to investigate the application of EDA and Bootstrap estimation this study aims to apply these approaches to real-time data utilizing various techniques such as scatter plot matrices, correlation matrices, principal component analysis (PCA), and bootstrap estimation with R software. The study use a Starbucks nutrition dataset, with a special focus on improving competency in EDA and Bootstrap Estimation using R software to extract critical insights and quantify uncertainty.

1. Introduction

The need for researchers to continuously enhance their abilities in gleaning important insights from complex datasets is driven by ongoing advancements in technology and methods in the fields of data science and statistics.In data-driven decision-making, exploratory data analysis (EDA) and bootstrap estimates are essential for gleaning meaningful insights from complex datasets (Beyer, 1981; Davison & Hinkley, 1997). This paper focuses on applying these methods to real-time data with R software and statistical tools such as principal component analysis (PCA), correlation matrices, scatter plot matrices, and bootstrap estimation. For statisticians and data scientists trying to understand the complexity of their datasets, R software-which is open-source-has become the go-to option due to its extensive ecosystem of statistical libraries and visualization tools (Solanki, 2017). Making a scatter plot matrix, which visually represents the correlations between multiple variables, is the first step in the EDA process. Subsequently, a correlation matrix offers numerical data regarding the strength and orientation of these associations. By identifying the key components that account for the majority of the data's variability, principal component analysis (PCA) delves deeper into the data's underlying structure (Komorowski *et al.,* 2016; Shlens, 2014). Additionally, the study concentrates on bootstrap estimation, a resampling method that enables us to determine population parameters. Two estimators, T1 and T2, are presented, and simulated datasets that mimic real-world situations are produced. By using this process, the empirical distributions of both estimators are produced, enabling a performance comparison (Zoubir & Iskander, 2007). Consequently, the goals of this study are to demonstrate the value of statistical approaches in R software-based bootstrap estimation and exploratory data analysis. Our goals are to provide a comprehensive picture of the dataset, identify potential correlations, and develop robust estimators for critical parameters by integrating EDA with bootstrap approaches. As we move through the many phases of analysis, our ultimate objective is to provide as a foundation for further statistical research in a variety of subjects.

1.1 Objective

The objective of this study is to improve proficiency in Exploratory Data Analysis (EDA) and Bootstrap Estimation using R software, enabling the extraction of significant insights and estimation of uncertainty from datasets.

2. Materials and Methods

The data used for this study were obtained from a dataset named "8310_7310_assignment_data.csv" from Kaggle.com (Starbucks, 2017). The file was downloaded and saved to the desktop for analysis. In this case, the subjects were the food items included in the Starbucks nutrition dataset. Total Fat_(g), Cholesterol_(mg), Sodium_(mg), Total_carbs_g_(g), Sugar_(g), and Caffeine_(mg) are among the nutritional components of

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Starbucks menu products included in the dataset. All analysis had done on R software version-4.3.2.

2.1 *Data Loading and Exploratory Data Analysis (EDA)*

The Starbucks nutrition information was read from the CSV file using the R programming language. The "tidyverse" and "GGally" packages were used for data manipulation and visualization. EDA techniques like correlation matrix computing and scatter plot matrix production were utilized to look into the correlations between the main nutritional components.

2.2 *Data Standardization*

To ensure that every variable in the dataset had a mean of 0 and a standard deviation of 1, the dataset was standardized. This stage is essential to guarantee that no one variable will control later research. This section is essential to guarantee that no one variable will control future research. The standardization process involves the transformation of each observation (X_i) using the formula:

$$Z = \frac{X_i - \bar{X}}{\sigma}$$

Where Z is standardized value, X_i are the observations, $\bar{X}$ is the average of all observations and σ is the standard deviation.

2.3 *Principal Component Analysis (PCA)*

Principal Component Analysis was performed on the standardized data using R's "prcomp" function. To determine the importance of each principal component in capturing the variability of the dataset, the percentage of variance explained by each was computed.Cumulative variance percentages were used to compute the number of major components needed to capture a significant portion of the variability in the dataset. To visually depict the correlations between nutritional factors and main components, a "biplot" was created. This visualization facilitates understanding the dataset's structure (Shlens, 2014; Jolliffe & Cadima , 2016). Calculate the covariance matrix ($\sum$) of the standardized data. The covariance between two variables is given by:

$$COV\ (X,Y) = \frac{\sum_{i=1}^{n}(X-\bar{X})(Y-\bar{Y})}{n-1}$$

Eigen values (λ) and eigen vectors (v) can be obtained by performing eigen decomposition on the covariance matrix. The directions of maximum variance are represented by the eigenvectors, and the magnitude of the variance in those directions is shown by the associated eigen values. The eigen values should be sorted in descending order. The principal components that account for the majority of the variation in the data are represented by the eigenvectors that correspond to the top k eigen values.

The projection of an observation Xi onto the principal components is given by:

$$Projection\ (Xi) = X_i V_k$$

where V_k is a matrix containing the top k eigenvectors. Calculate the proportion of variance explained by each principal component.

$$Proportion\ of\ Variance = \frac{\lambda_i}{\sum_i^n \lambda_i}$$

2.4 *Bootstrap Estimation*

As a resampling technique, bootstrapping entails taking replacement samples from the original dataset many times in order to estimate the sampling distribution of a statistic (Zoubir & Iskander, 2007). First, create two synthetic datasets, X and Y, that closely resemble the properties of your original data.Defined the estimators T1 and T2 as follows:

$$T_1 = t_1(X,Y) = \frac{(nX + mY)}{(n + m)}$$

The expected value of X is μ and the expected value of Y is μ, so the expected value of T1 is:

$$E\ (T1) = E\left[\frac{(nX + mY)}{(n + m)}\right]$$

$$= \left[\frac{(nE(X) + mE(Y))}{(n + m)}\right]$$

$$= \left(\frac{n\mu + m\mu}{n + m}\right)$$

$$= \mu$$

$$T_2 = t_2(X,Y) = \frac{(X + Y)}{2}$$

The expected value of X is μ and the expected value of Y is μ, so the expected value of T2 is:

$$E\ (T2) = E\left[\frac{(X + Y)}{2}\right]$$

$$= \left[\frac{(E(X) + E(Y))}{2}\right] = \mu$$

The creation of T1 and T2 histograms allows for the visual evaluation of the bootstrapped value distribution. Using the quantile function and the bootstrapped values'

Empirical Distribution Function (ECDF), the 95% confidence intervals for T1 and T2 were calculated. The figure below which p percent of the data fall in a distribution is called the p^{th} percentile, or quantile. Usually, you look at the $\alpha/2$-th and $1-\alpha/2$-th percentiles for a confidence interval.

So, $100(1-\alpha)$ % confidence interval for a parameter θ is given by:

$$(Q_{\alpha/2}, Q_{1-\alpha/2})$$

Where $Q_{\alpha/2}$ and $Q_{1-\alpha/2}$ is $\alpha/2^{th}$ quantile and $1-\alpha/2^{th}$ quantile simultaneously.

This methodical methodology sought to identify trends in the Starbucks nutrition data, evaluate the efficacy of the estimators, and offer significant insights into the underlying structure of the dataset. (Chernick & LaBudde, 2011; Efron, Tibshirani, Cox, Reid,& others, 1993).

3. Results

3.1 Exploratory Data Analysis (EDA)

To begin, the R code loads the information and creates a scatterplot matrix for each of the following variables: Total_Fat_(g), Total_Carbs_(g), Sugar_(g), Sodium_(mg), and Caffeine_(mg). The correlation matrix shows significant positive connections, the most notable of which are between calories and sugar_(g)(0.900) and total_carbs_(g) (0.921). Additionally, there is a moderate to high positive association between total_fat_(g) and cholesterol_(mg) (0.870) and sodium_(mg) and calories (0.841).

R command:

setwd("C:/Users/HP/Desktop/R assignment")#Sets the working directory to the specified path.

data=read.csv("8310_7310_assignment_data.csv")#Reads the CSV file named "8310_7310_assignment_data.csv" and stores its contents in a data frame named 'data.'

View(data)#Launches a viewer window to display the contents of the 'data' data frame, allowing you to inspect the data interactively.

install.packages("tidyverse")

library(tidyverse)#loads the tidyverse package,which includes a collection of packages for data manipulation and visualization.

install.packages("GGally")

library(GGally)#similarly GGally is used for creating scatterplot matrices.

ggpairs(data[,2:7])#Creates a matrix of scatterplots for columns 2 to 7 in the 'data' data frame, showing pairwise relationships between variables.

correlation_matrix<- cor(data [,2:7])

print(correlation_matrix)#Calculates the correlation matrix for columns 2 to 7 in the 'data' data frame and assigns it to 'correlation_matrix.' The resulting matrix is then printed to the console.

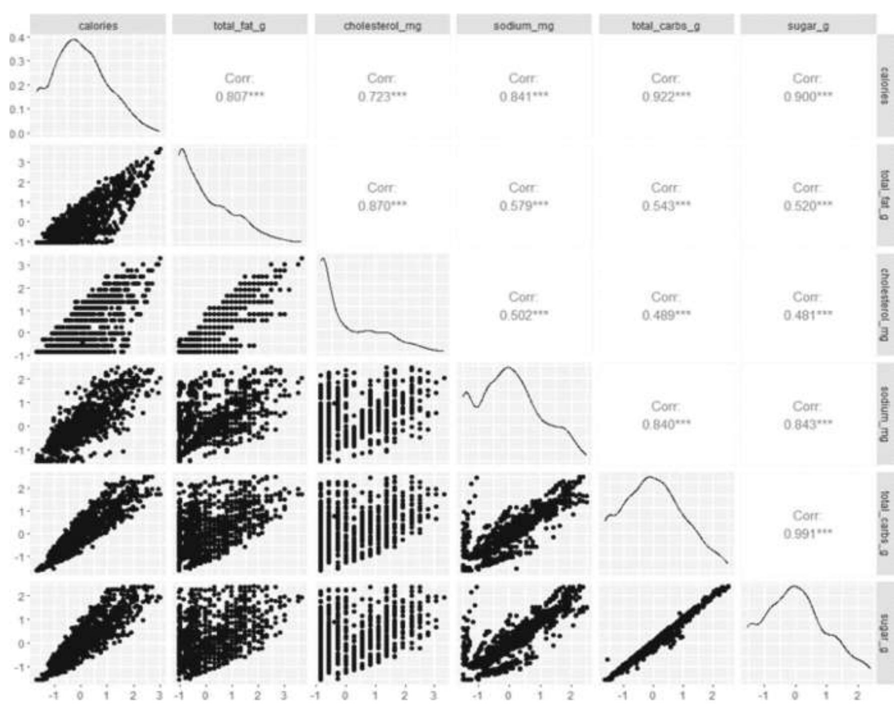

Figure 1: Scatter plot Matrix and Correlation Matrix

The variables Total_Fat_(g), Cholesterol_(mg), Sodium_(mg), Total_Carbs_(g), Sugar_(g), and Caffeine_(mg) are plotted in a scatterplot matrix using this code. The matrix's plots each demonstrate the relationship between two variables. The distribution of every variable is displayed in the diagonal graphs. We can observe that there is a high positive correlation between a number of variable pairs from the presented correlation matrix. Calories and total_carbs_(g) have the highest connection (0.921), which makes sense given that carbohydrates are the diet's main source of energy. Additionally, sugar_(g) (0.900) and calories have a substantial positive association, which makes sense considering that sugar is a form of carbohydrate. Additionally, total_fat_(g) and cholesterol_(mg) have a moderate to high positive connection (0.870), which makes sense given that cholesterol is a component of fat. Furthermore, there is a significant positive connection (0.841) between sodium_(mg) and calories, which may be explained by the high sodium content of many items rich in calories (Figure 1).

Standardization of Data:

Every variable in the data has a mean of 0 and a standard deviation of 1. To make sure that standardization is successful, the algorithm examines each column's mean and standard deviation.

R command:

```
# Check if data has already been standardized
data_standardized<- scale(data)
# Check mean of each column
colMeans(data_standardized)
# Output should be approximately 0 for each column
# Check standard deviation of each column
apply(data_standardized, 2, sd)
# Output should be approximately 1 for each column
```

```
>colMeans(data_standardized)#calculates the column-wise means of the data_standardized dataset.
      calories    total_fat_gcholesterol_mgsodium_mgtotal_carbs_gsugar_g
   2.374469e-17   3.393827e-17   2.879611e-18   6.530546e-18   2.031154e-17  -3.166362e-17
 > apply(data_standardized, 2, sd)#calculates the standard deviation (sd) for each column (specified by 2) in the data_standardized dataset.
      calories total_fat_gcholesterol_mgsodium_mgtotal_carbs_gsugar_g
             1           1            1            1            1           1
```

3.2 Principal Component Analysis (PCA)

PCA is performed on the standardized data, and the proportion of variance explained by each principal component is calculated. The first three principal components explain 97.41% of the variance.

R command:

```
>#Perform PCA
>pca<- prcomp(data_standardized, scale = FALSE)#Proportion of variance explained by each principal component
>pca_var<- pca$sdev^2#squares the standard deviations (eigenvalues) of each principal component, resulting in the variance explained by each component.
>prop_var<- pca_var/sum(pca_var)#calculated by dividing each eigenvalue (variance) by the sum of all eigenvalues.
>prop_var
[1] 0.7747555674 0.1640662899 0.0352411836 0.0221012976 0.0031867209
0.0006489405
```

The proportions of variance explained by the principal components are as follows:

PC1 explains 77.48% of the variance

PC2 explains 16.41% of the variance

PC3 explains 3.52% of the variance

PC4 explains 2.21% of the variance

PC5 explains 0.32% of the variance

PC6 explains 0.07% of the variance

The cumulative variance percentage can be calculated by taking the cumulative sum of the proportion of variance explained. In this case, it would be:

PC1: 77.48%

PC1 + PC2: 93.89%

PC1 + PC2 + PC3: 97.41%

PC1 + PC2 + PC3 + PC4: 99.62%

PC1 + PC2 + PC3 + PC4 + PC5: 99.94%

PC1 + PC2 + PC3 + PC4 + PC5 + PC6: 100.00%

It is determined that the first three primary components are essential, accounting for 97.41% of the variation. This indicates that 95% of the variability in the dataset may be captured by keeping these components. 97.41% of the variance in the dataset appears to be explained by the first three main components, according to the percentage of variance explained by each principle component. This indicates that the first three primary components would need to be included in order to account for at least 95% of the variation.

R command:

Create biplot

biplot(pca, scale = 0)#The biplot function generates a biplot for the PCA results and The scale = 0 argument indicates that the variable vectors should not be scaled. This means that the length of the variable vectors in the biplot is proportional to the standard deviations of the variables.

ggplot(data.frame(pca$x), aes(x = PC1, y = PC2))+

geom_point() +

labs(title = "Principal Component Analysis of Starbucks Nutrition Data",

x = "Principal Component 1",

y = "Principal Component 2")#The ggplot function is used to create a scatter plot with the scores of the first two principal components (PC1 and PC2). geom_point() adds points to the plot. labs sets the title and axis labels.

ggplot(data.frame(pca$x), aes(x = PC1, y = PC2))+

geom_point(color = "#2E86C1", alpha = 0.7) +# set color and transparency of points

labs(title = "Principal Component Analysis of Starbucks Nutrition Data",

x = "Principal Component 1",

y = "Principal Component 2",

color = "") + # remove color legend title

theme_bw() + # set black and white theme

theme(plot.title = element_text(color = "#2E86C1", size = 14, face = "bold"), # format plot title

axis.title = element_text(color = "#2E86C1", size = 12, face = "bold"), # format axis labels

axis.text = element_text(color = "#2E86C1", size = 10))# format axis tick labels

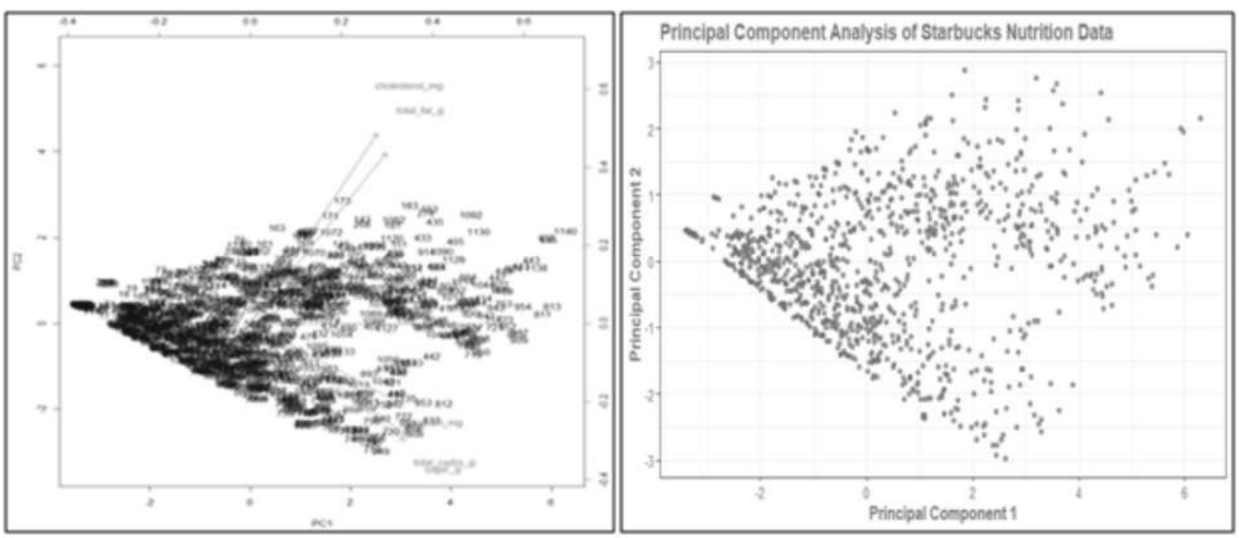

Figure 2: Biplot Graph of Principle Component Analysis

Plotting the variables and principal components on the same scale is guaranteed by the "scale = 0" option. The variables are represented as vectors pointing in the direction of their association with each principle component, and the first and second principal components are displayed as axes in the final plot. The vectors' length and angle reveal the direction and intensity of the link.

Understanding the variables in the dataset is necessary in order to interpret the plot. We are able to draw some broad conclusions, nevertheless. As an illustration, we may observe that whereas "total_carbs_(g)" and "sugar_(g)" are negatively associated, the variables "calories," "total_fat_(g)," "cholesterol_(mg)," and "sodium_(mg)" are all favourably related with the first main component. This implies that a gauge of the general healthfulness or nutritional content of Starbucks' menu items might be represented by the first primary component.

However, compared to the other variables, there appears to be a stronger correlation between the second main component and "total_fat_(g)" and "sugar_(g)". This implies that the second main component might be a gauge for how decadent or wealthy the food offerings at Starbucks are. All things considered, the biplot is a helpful tool for visualizing the connections between the variables and the principal components and can be used to learn more about the underlying structure of the data.

3.3 Bootstrap Estimation

A simulated dataset with two normal distributions, X and Y, each with 200 and 300 samples is generated.

R command:

set.seed(123) # sets the seed for the random number generator, ensuring reproducibility. The same seed will produce the same sequence of random numbers each time the code is run.

n_X<- 200

n_Y<- 300#specify the sample sizes for the random variables X and Y

mu <- 5#mean of the normal distribution.

sigma_sq<- 12#variance of the normal distribution

X <- rnorm(n_X, mean = mu, sd = sqrt(sigma_sq))

Y <- rnorm(n_Y, mean = mu, sd = sqrt(sigma_sq))# generate random samples from a normal distribution

print(X)#output of X

```
  [1]  3.058455408  4.202641787 10.399523989  5.244248233  5.447865852 10.941159391  6.596660574
  [8]  0.617699334  2.620671926  3.456181650  9.240343732  6.246431659  6.388313029  5.383416175
 [15]  3.074509827 11.190048683  6.724604646 -1.812561669  7.429568111  3.362202521  1.300950175
 [22]  4.244912746  1.445816333  2.475046715  2.834800463 -0.842877022  7.902179454  5.531300065
 [29]  1.057377998  9.343342293  6.477315398  3.977842399  8.100806248  8.041943632  7.846040352
 [36]  7.385519816  6.918827038  4.785531543  3.940114242  3.682009791  2.593464432  4.279753421
 [43]  0.616538455 12.513483863  9.184503109  1.109437743  3.604365991  3.383458436  7.701878426
 [50]  4.711201082  5.877521073  4.901111139  4.851492380  9.740977383  4.217906364 10.253208270
 [57] -0.365037091  7.025161434  5.429043686  5.748043537  6.315109745  3.259900515  3.845735764
 [64]  1.471551370  1.287206281  6.051454057  6.552644218  5.183612027  8.194828225 12.101701671
 [71]  3.299018145 -2.999195632  8.483980447  2.543256493  2.616668240  8.552683438  4.013517366
 [78]  0.771309801  5.628053677  4.518866207  5.019967726  6.334650460  3.715995985  7.232185842
 [85]  4.236212145  6.149326437  8.799561797  6.507512905  3.870939868  8.979586327  8.441598312
 [92]  6.899702793  5.826990989  2.824869548  9.713438345  2.920639795 12.577143754 10.309118946
 [99]  4.183510005  1.444373701  2.539079475  5.889871272  4.145434265  3.796077120  1.703496584
[106]  4.844019386  2.281011160 -0.777920356  3.682856697  8.183497638  3.006939658  7.106050191
[113] -0.604510103  4.807527705  6.799279334  6.043225848  5.366073075  2.780529282  2.056537803
[120]  1.452313802  5.407539767  1.717851659  3.300659167  4.112870623 11.387325350  2.741579293
[127]  5.815403005  5.270064305  1.668030880  4.752981544 10.004070962  6.564055920  5.142835032
[134]  3.536428041 -2.112657016  8.919067068 -0.059805629  7.563253368 11.613328758 -0.001792631
[141]  7.431052250  4.091721253 -0.446067121 -0.246962666 -0.547884046  3.160885859 -0.063669883
[148]  7.383013604 12.274990773  0.541595649  7.728807414  7.664040469  6.150783490  1.506880963
[155]  4.586204032  4.028682067  6.950252951  3.709834303  8.384335087  3.702413846  8.646699488
[162]  1.365544237  0.634694181 16.227291673  3.555962956  6.033090682  7.205142036  3.324134753
[169]  6.790462643  6.278130615  4.253900036  5.226181703  4.881987571 12.373173661  2.431936432
[176]  1.203357561  5.130902855  6.075536866  6.512161688  3.412175911  1.316530222  9.375801809
[183]  3.788775526  2.001775495  4.181503564  4.316962666  8.844876668  5.293538591  7.612118935
[190]  3.270401717  5.742860343  3.875255010  5.327646953  1.898370345  0.459250291 11.918550112
[197]  7.080916406  0.665468855  2.882859161  0.893376524
```

>print(Y)#output of Y

```
  [1] 12.61690248  9.54633191  4.08151058  6.88167942  3.56468432  3.35023236  2.26819964
  [8]  2.94018536 10.71891122  4.81284108  5.41307762  5.84415802  9.26942168  3.21230245
 [15]  1.56185438 10.80478445  3.47176579  2.49522601  0.71742429  0.54961419  3.01169754
 [22]  7.14076567  8.84462673  7.45115796  3.74025417  5.20697985  2.55920625  2.51548341
 [29]  8.06451922  1.48188411 11.77333698  4.68712375  5.74318430  2.44166499  3.01025921
 [36]  0.43772229  4.36632787  6.45139763  6.12342320  2.29267819  2.26813336  3.26033261
 [43] 10.18250618  1.06026469  4.37974708 11.58997466  4.65021274  0.28937362  2.69717113
 [50]  6.68168270  3.69887349  3.05360318  3.80863575  5.31348958 10.53739682  4.69320145
 [57]  8.74399928  7.18499635  4.60633985 -0.31012830  3.19479666  3.30303897  5.16334775
 [64]  9.50402034 12.94345858 10.36097805  4.53875153 -1.08478939  3.65322704  5.30902289
 [71]  7.92721091  8.33429469  7.37051740  0.16662787  7.94324985  3.45308043  5.60553432
 [78]  5.25825285  6.48321318  5.08547665 -0.77630318  7.55129686  6.33723526  4.07975578
 [85]  5.40926459  5.46432349  5.76563390 10.68405785  4.24118723  5.58219557  9.04740046
 [92]  8.65179019  8.96730779  2.99959216 11.93680366  5.23105859 11.46696449  0.32033582
 [99]  5.07268928  9.32983108  2.52232838  2.39260893  1.74880656  1.35398705  3.48563496
[106]  6.14723831 -1.97742984  5.73432176  9.28396803 12.05836345  9.50740586  7.62154468
[113] -0.98156956  2.91631964  3.78047530  7.43707829  4.63394376  0.63991325 10.83505646
[120]  8.15715205  5.82248259  9.21965200  0.36234983  7.28914866  3.18857839  7.36856397
[127]  4.78930657  7.19264023  9.62636873  5.02525361  8.52492652  0.88314374  2.50028889
[134] 10.26272453  6.30731029 -2.10910839  0.27483566  4.30447416  7.99914783  4.64706605
[141]  7.16224883  8.32209208 10.78870373  5.19404766  4.81992939 -1.07339237  5.34408088
[148]  3.01905329  1.62593183  4.37678653  8.51586628 -1.90308326  3.51986113  5.40404340
[155]  1.90583821  6.15667372  6.42523505  4.88555939 -3.54212192 13.90779232  4.28882251
[162]  7.25579970  5.94835494  8.54957221  7.83245541  4.27325514  6.31001159  1.72500774
[169]  7.96846839  3.40291635 13.37194848 -0.71940115  3.39270104  7.85919972  6.76715098
[176]  2.95797778  1.54705022  5.50047852  4.95043767 -1.20171613  5.11968841  5.65897714
[183]  5.60526999  1.34531376  6.64937406  9.77550704  6.58044926  1.06620615  3.49087982
[190]  6.19893811  2.75856818 -2.47430615  8.06313469  2.12660527  3.01312894 10.20966453
[197]  2.31828330  7.92969999  0.63286640  3.77182909  4.74519448  0.95167271  2.80116751
[204]  4.90008993  7.32335899 -0.71766095  3.78841578  7.62026877  3.13351032  5.78736231
[211]  6.70512978  5.92780771  7.26295098  4.57492473  3.56698252 -4.15613655  4.67804287
[218]  6.49054991  6.85467599  3.07645937 11.16437890  5.99220329  5.43757097  9.40726141
[225]  2.51116000  3.43998125 13.30501901  5.03855264 10.65884701  0.01686681  4.34003044
[232]  6.31089886  6.03936401  1.51637381  5.06671608  1.26770538  7.46887674  8.75777114
[239] -2.70758347  9.28056772  0.70089575  6.57536696  7.28596979  4.30756132  2.76525970
[246]  5.57268882  6.52011257  8.05985073 -2.10950386 -0.66858407  9.95505906  8.62562868
[253]  6.50788515  7.47745068  8.17718711 -4.21770696  8.84611268  3.31995368  5.79888014
[260]  3.97754339  8.02057521  3.79285603  6.79614973  3.64662753  1.21447406  9.19159936
[267]  7.56655293 10.97301961  5.22569984  8.89712383 11.84305234  4.02491735  0.41716291
[274]  4.17086185  4.25853939  5.52543668 10.93159844  3.87020442  6.29212603  4.21127926
[281]  5.07084333  6.08792766  9.60107067  5.42025919  7.46935823  7.69805029  8.16886757
[288]  3.01023890 10.63568184  3.68032714  4.63355289  9.86377280  9.48283815  1.22415739
[295]  1.97559334  0.29547614  5.62993715  5.57102552  6.26133028  6.91273043
```

Estimators T1 and T2:

Two estimators, T1 and T2, are defined as weighted averages of means of X and Y. T1 has slightly larger variance than T2, likely due to its weighted nature.

R command:

```
>n_X<- length(X)
>n_Y<- length(Y)#calculate the number of elements in the vectors X and Y, respectively.
>T1 <- (n_X*mean(X)+n_Y * mean(Y)) / (n_X + n_Y)
>T2 <- 0.5*(mean(X)+mean(Y))#the weighted average of the means based on the sample sizes
>print(T1)
[1] 4.998718
>print(T2)
[1] 4.943522
```

Bootstrap Procedure:

Bootstrapping is performed with 100 iterations to obtain distributions of T1 and T2. Histograms illustrate their empirical distributions.

R command:

set.seed(123) # for reproducibility

B <- 100 # number of bootstrapped samples

T1_boot <- numeric(B) # vector to store the bootstrapped values of T1

T2_boot <- numeric(B) # vector to store the bootstrapped values of T2 for (i in 1:B) {

generate a bootstrapped sample for X and Y

X_boot<- sample(X, replace = TRUE)

Y_boot<- sample(Y, replace = TRUE)

calculate the bootstrapped values of T1 and T2

n_X_boot<- length(X_boot)

n_Y_boot<- length(Y_boot)

T1_boot[i] <- (n_X_boot * mean(X_boot) + n_Y_boot * mean(Y_boot)) / (n_X_boot + n_Y_boot)

T2_boot[i] <- 0.5 * (mean(X_boot) + mean(Y_boot))

}

constructs histograms of the bootstrapped values of T1 and T2

hist(T1_boot, main = "Histogram of T1", xlab = "T1")

hist(T2_boot, main = "Histogram of T2", xlab = "T2")

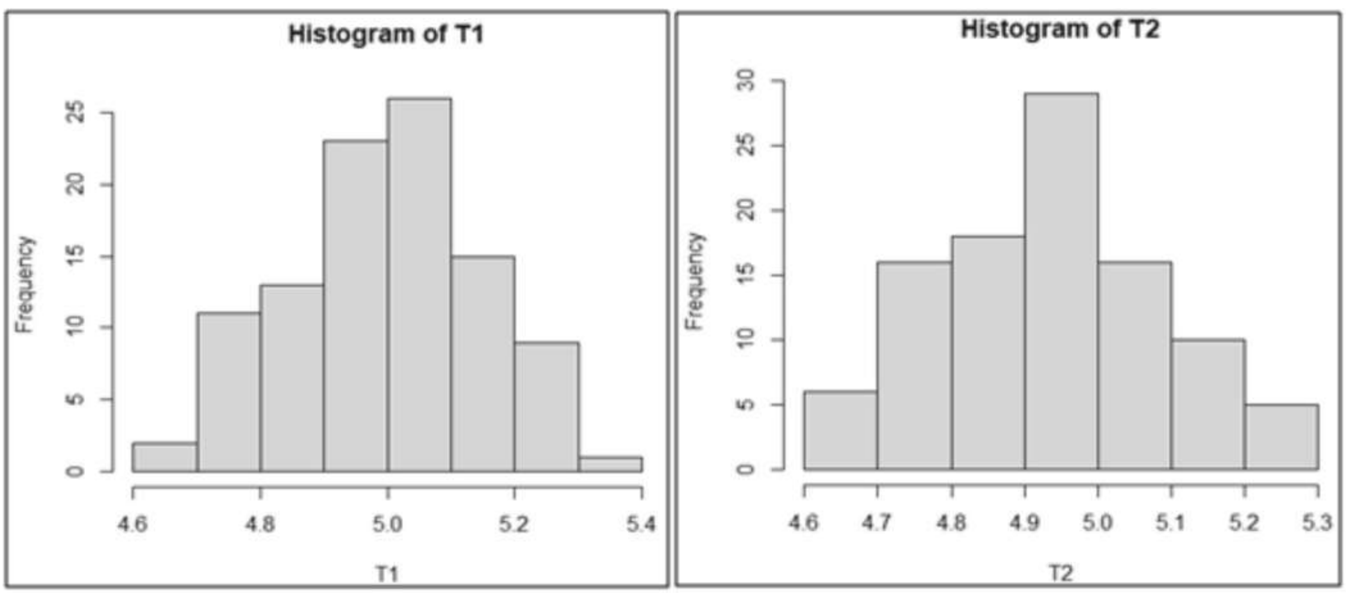

Figure 3: Histograms of the bootstrapped values of T1 and T2

The forms of the histograms are comparable, but T1's variance is marginally higher than T2's, indicating that T2 would be a better estimator because of its simplicity. Both estimators, as shown in Figure 3, exhibit distributions that are similar and roughly normal in form. But compared to the bootstrap distribution for T2, the variance of the T1 bootstrap distribution is somewhat higher. This is probably because T2 is just the average of X and Y, but T1 is a weighted average of X and Y. Given that T2 has a somewhat lower variance than T1, we might favor it over T1. Furthermore, T2 is an easier estimator that doesn't need to know X and Y's sample sizes. It is important to remember, nevertheless, that because T1 accounts for sample sizes, it might be more appropriate in cases when X and Y have significantly differed sample sizes.

3.4 Confidence Intervals

The Empirical Distribution Function (ECDF) and bootstrapped results are used to determine the 95% confidence intervals for T1 and T2. We can use the quantile function to create a 95% confidence interval for both estimators using the bootstrapped values and the Empirical Distribution Function (ECDF). The confidence interval for T1 can be calculated as:

R command:

```
>quantile(T1_boot, c(0.025, 0.975))#95% bootstrap confidence interval for a statistic
    2.5%    97.5%
4.727418 5.265383
```

Therefore, the 95% confidence interval for T1 is [4.727418, 5.265383].

For T2:

R command:

```
>quantile(T2_boot, c(0.025, 0.975)) #95% bootstrap confidence interval for a statistic
    2.5%    97.5%
4.654383 5.234744
```

Hence, the 95% confidence interval for T2 is [4.654383, 5.234744].

4. Conclusions

This study shows how to use bootstrap estimates and EDA approaches to Starbucks nutrition data using R software. The Starbucks dataset's nutritional components exhibit strong positive correlations, according to the EDA results. It ensures that no single variable dominates subsequent research through the use of standardization.A biplot aids in the examination of the dataset's structure, while principal component analysis (PCA) finds important components that account for 97.41% of the variation in the dataset. The Bootstrap estimating process includes the creation of artificial datasets, estimators, and histograms to gauge estimator performance. The study provides insightful information about Starbucks nutrition data, demonstrates the value of statistical methods, and provides a framework for additional statistical research in a variety of domains.

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राष्ट्रीय शिक्षा नीति-2020, संभावनाएं एवं चुनौतियाँ: दिव्यांगजनों के सन्दर्भ में एक समाजशास्त्रीय विश्लेषण

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सारांश

शिक्षा समाज में व्यक्ति के अस्तित्व को स्थापित करती है। वह शिक्षा ही है जो व्यक्ति को जैविक प्राणी से सामाजिक एवं बौद्धिक प्राणी बनाती है। उच्च शिक्षा दिव्यांगजनों की शारीरिक कमियों को नकारते हुये, उन्हें समाज की मुख्य धारा में सामाजिक-आर्थिक एवं मनोवैज्ञानिक रूप से जोड़ने का कार्य करती है। उच्च शिक्षा दिव्यांग विद्यार्थियों को सशक्त करने के साथ-साथ उनके लिए रोजगार के अवसरों में महत्वपूर्ण भूमिका निभाती है। ऐसे में "राष्ट्रीय शिक्षा नीति-2020" की दिव्यांग छात्रों का उच्च शिक्षा में नामांकन अनुपात बढ़ाने में महत्वपूर्ण भूमिका हो सकती है। जहां एक तरफ उच्च शिक्षण संस्थान समावेशी वातावरण की ओर बढ़ रहे हैं, लेकिन वास्तविकता धरातल पर बहुत ही चिंताजनक है, भारतीय उच्च शिक्षण संस्थानों तक बहुत कम संख्या में दिव्यांग छात्र पहुँच पा रहे हैं। "राष्ट्रीय शिक्षा नीति" (2020) में "दिव्यांग अधिकार अधिनियम" (2016) में वर्णित प्रावधानों को सम्मिलित किया गया है, जो दिव्यांग छात्रों का उच्च शिक्षा में समावेशन करने की पुष्टि करता है।

इस शोध लेख के माध्यम से राष्ट्रीय शिक्षा नीति-2020 से संबंधित संभावनाएं एवं चुनौतियों को उच्च शिक्षण संस्थानों में पढ़ने वाले दिव्यांग छात्रों के संदर्भ में देखा गया है। इस नीति को लागू करने में प्रारंभिक समस्याओं को भी जानने का प्रयास किया गया है।

प्रस्तावना

प्रस्तुत शोध पत्र का संबंध 'राष्ट्रीय शिक्षा नीति-2020' की संभावनाएं एवं चुनौतियां से है, जिसको विश्वविद्यालय में पढ़ने वाले दिव्यांग छात्रों के संदर्भ में देखा गया है। शिक्षा महत्वपूर्ण तब हो जाती है, जब समाज के सबसे उपवर्जित समूह को सामाजिक आर्थिक रूप से सशक्त करना हो, ऐसी स्थिति में दिव्यांगजनों के लिए और ही सारगर्भित हो जाती है। दुनिया भर में अलग-अलग प्रकार के दिव्यांगों की संख्या कुल आबादी का लगभग 15 प्रतिशत है।[1] भारत में कुल आबादी का 2.68 करोड़ या 2.21 प्रतिशत लोगों में अलग-अलग प्रकार की दिव्यांगता या निशक्तता है।[2] जबकि विभिन्न राज्यों के द्वारा जारी प्रमाण पत्रों में दिव्यांगों की संख्या कहीं अधिक है। कुल दिव्यांग आबादी का 44 प्रतिशत महिला एवं 56 प्रतिशत पुरुष है, जिसमें 30 प्रतिशत आबादी शहरों में एवं 69 प्रतिशत आबादी गांव में निवास करती है।[3] शिक्षा का अधिकार अधिनियम 2009 दिव्यांग छात्रों को समावेशी शिक्षा से जोड़ने की वकालत करता है। भारत में समय-समय पर दिव्यांग छात्रों को शिक्षा एवं समाज की मुख्य धारा से जोड़ने के लिए उनके अनुकूल नीतियां बनती रही हैं, लेकिन धरातल पर उनके क्रियान्वयन में कमियां लगातार बनी हुई हैं, जिसके कारण आज भी शिक्षा से जुड़ने में समर्थ नहीं हो पा रहे हैं। यूनिफाइड डिस्टिक इनफॉरमेशन फॉर एजुकेशन (2020-21)[4] के आंकड़ों के अनुसार उच्च शिक्षा में दिव्यांग छात्रों के नामांकन में गिरावट 1.1 प्रतिशत से घटकर 0.25 तक हो गयी है, जबकि उनके लिए अनुकूल परिस्थितियां बनाकर उनके नामांकन को बढ़ाया जा सकता है। दिव्यांग जनों को गरिमापूर्ण जीवन प्रदान करने के उद्देश्य से समय-समय पर उनके लिए नीतियां बनाई जाती हैं। शिक्षा का महत्व तब बढ़ जाता है, जब किसी समाज, समुदाय या व्यक्ति का सामाजिक-आर्थिक विकास करना हो, उस स्थिति में दिव्यांग छात्रों के लिए शिक्षा अत्यधिक महत्वपूर्ण हो जाती है, क्योंकि दिव्यांगजन समाज के सबसे उपवर्जित, वंचित समूह से होते हैं। दिव्यांगजनों को समाज की मुख्यधारा में लाने के लिए शिक्षा एक महत्वपूर्ण साधन के रूप में उपयोगी हो जाती है। शिक्षा ही एक ऐसा माध्यम है, जिससे किसी व्यक्ति को सामाजिक-आर्थिक रूप से सशक्त किया जा सकता है। इन सब तथ्यों को ध्यान में रखते हुए समय-समय पर शिक्षा से संबंधित नीतियां बनाई जाती रही हैं, जिससे कि शिक्षा में सभी वर्गों का समावेशन सुलभ हो सके। दिव्यांग छात्रों को ध्यान में रखते हुए इस प्रकार की नीतियां बनाई जाती रही हैं। जैसे-विकलांग व्यक्ति अधिनियम (1995) (विकलांग लोगों को समान अधिकार, उनके अधिकारों का संरक्षण एवं उनकी पूर्ण सहभागिता) सुनिश्चित किया गया। लेकिन समाज के बदलते परिदृश्य को देखते हुए वर्तमान भारत सरकार ने दिव्यांग अधिकार

* शोध छात्र, समाजशास्त्र विभाग, बाबासाहेब भीमराव अंबेडकर विश्वविद्यालय, लखनऊ

अधिनियम 2016 में "दिव्यांग'' (डिफरेंटली एबल्ड पीपल) शब्द पर जोर दिया। राष्ट्रीय शिक्षा नीति-2020 में दिव्यांगजन अधिकार अधिनियम 2016 में वर्णित प्रावधानों को समाहित किया गया है जिसमें, सभी दिव्यांग बच्चों के लिए अवरोध मुक्त शिक्षा उपलब्ध कराने की पहल की गई है।

प्रस्तुत शोध पत्र में हमने दिव्यांगता के अर्थ एवं शिक्षा के अर्थ को समझा है, उसके पश्चात् भारत में दिव्यांगजनों की शैक्षिक स्थिति को समझने का प्रयास किया है। तदुपरांत राष्ट्रीय शिक्षा नीति-2020 की संभावनाओं पर प्रकाश डाला गया है, जो दिव्यांगजनों को समावेशी शिक्षा का अवसर प्रदान करती है। किन्तु यह आसान कार्य नहीं होगा, इसलिए राष्ट्रीय शिक्षा नीति-2020 के अंतर्गत उसे लागू करने की चुनौतियों पर भी प्रकाश डाला गया है।

अध्ययन पद्धति

प्रस्तुत लेख में विश्लेषणात्मक अध्ययन पद्धति के माध्यम से राष्ट्रीय शिक्षा नीति-2020 का विश्लेषण करने का प्रयास किया गया है जिसमें तथ्य संकलन के लिए द्वितीयक स्रोतों का उपयोग किया गया है। द्वितीयक स्रोत के रूप में राष्ट्रीय शिक्षा नीति-2020, भारत की जनगणना 2001 एवं 2011, दिव्यांग अधिकार अधिनियम 2016, समाचार पत्र, संबंधित शोध लेख, इंटरनेट सामग्री एवं मासिक योजना तथा संबंधित सरकारी प्रकाशित व अप्रकाशित दस्तावेज इत्यादि का प्रयोग किया गया है।

परिणाम

इस अध्ययन के परिणामस्वरूप यह निष्कर्ष निकलकर आता है कि राष्ट्रीय शिक्षा नीति 2020 समाज के सबसे वंचित तबके को शिक्षा व्यवस्था से जोड़ने में तब तक सफल नहीं होगी जब तक समावेशी शिक्षा के मानक को पूरा नहीं किया जाएगा। एनईपी सभी बच्चों को बाधामुक्त परिसर तथा सहायक उपकरण के साथ-साथ शिक्षण-अधिगम सामग्री उपलब्ध कराने के लिए प्रतिबद्ध है। विगत वर्षों से उच्च शिक्षण संस्थानों में दिव्यांग छात्रों का नामांकन अनुपात अल्प संख्या में बढ़ा हुआ प्रतीत होता है जिससे यह आलोकित होता है, कि यदि उच्च शिक्षण संस्थानों को जितना अधिक समावेशी बनाया जाएगा उतनी ही अधिक संख्या में दिव्यांग छात्रों को शिक्षा व्यवस्था से जोड़ा जा सकता है।

दिव्यांगता या विकलांगता की समझ

दिव्यांगता एक चिरस्थायी वैश्विक घटना है, जो वर्ग राष्ट्र एवं धन से परे होती है। विकलांगता अध्ययन सैद्धांतिक रूप से इस आधार पर आधारित है कि विकलांग व्यक्ति द्वारा अनुभव की जाने वाली 'बाधाएं' मुख्य रूप से समाज के द्वारा विभिन्न प्रकार के 'अंतरों' के प्रति प्रतिक्रिया करने के तरीकों को दर्शाता है।[5] विकलांगता मुख्यतः दो स्वरूपों में उत्पन्न होती है, पहला सामाजिक दूसरा शारीरिक। शारीरिक विकलांगता कुछ विशेष तरह के कार्यों को न कर सकने की शारीरिक असमर्थता है, जबकि सामाजिक विकलांगता समाज द्वारा तय किए गए मानकों पर खरा न उतर पाने के परिणामस्वरूप किए जाने वाला प्रत्यक्ष या अप्रत्यक्ष सामाजिक बहिष्कार है। इससे स्पष्ट होता है कि विकलांगता की भावना सामाजिक अधिक है। बोमैन एवं सिंधिया के अनुसार, शारीरिक रूप से विकलांग व्यक्ति अनुकूल परिस्थितियों जैसे ढांचागत वातावरण में स्वयं को सक्षम या सशक्त महसूस करेगा वहीं दूसरी तरफ प्रतिकूल सामाजिक ढांचे में शारीरिक रूप से सक्षम व्यक्ति भी अपने आप को दिव्यांगता का अनुभव महसूस करेगा अर्थात दिव्यांगता संदर्भगत परिस्थितियों से पनपती है। इस प्रकार हम देखते हैं कि दिव्यांगता की अवधारणा शारीरिक कम सामाजिक अधिक है।

एन.एस.एस. 75वें चक्र के अनुसार

विकलांगता का अर्थ है एक लंबे समय से शारीरिक, मानसिक, बौद्धिक या संवेदनहीनता वाला व्यक्ति जो इस प्रकार के बाधाओं के कारण दूसरों के साथ बातचीत तथा समान रूप से समाज में उसकी पूर्ण व प्रभावी सहभागिता नहीं हो पाती है, ऐसे व्यक्ति को विकलांग माना जाता है। "बाधा" से तात्पर्य ऐसे तमाम कारक (जैसे-वार्तालाप, सांस्कृतिक, पर्यावरण, राजनीति, सामाजिक-आर्थिक व्यावहारिक व सचनात्मक कारक) जो समाज में विकलांग व्यक्ति के पूर्ण व प्रभावी भागीदारी को बाधित करता है।[6]

दिव्यांग अधिकार अधिनियम 2016 के अनुसार

"दिव्यांगता' से ऐसे दीर्घकालिक शारीरिक, मानसिक, बौद्धिक या संवेदनाविहीन व्यक्ति अभिप्रेत है, जिससे बाधाओं का सामना करने में अन्य व्यक्तियों के साथ समान रूप से समाज में पूर्ण व प्रभावी भागीदारी में रुकावट उत्पन्न होती है।[7]

शिक्षा

शिक्षा व्यक्ति की अंतर्निहित क्षमता तथा उसके व्यक्तित्व को विकसित करने वाली प्रक्रिया है। यह प्रक्रिया उसे समाज में वयस्क की भूमिका निभाने के लिए सामाजीकृत करती है, शिक्षा समाज द्वारा अपने से निचली पीढ़ी को अपने ज्ञान का स्थानांतरण है। इस प्रकार शिक्षा एक संस्था के रूप में कार्य करती है, जो व्यक्ति विशेष को समाज से जोड़ने में महत्वपूर्ण भूमिका निभाती है, समाज की संस्कृति की निरंतरता को बनाए रखती है। शिक्षा द्वारा ही समाज के आधारभूत नियमों, व्यवस्थाओं, समाज के प्रतिमानों, मूल्यों को सीखा जाता है। शिक्षा का संबंध सीखने-सिखाने की प्रक्रिया से होता है।

"शिक्षा का अर्थ अंतः शक्तियों का वाह्य जीवन से समन्वय स्थापित करना है।" -हरबर्ट स्पेंसर

"शिक्षा उन सभी भीतरी शक्तियों का विकास है, जिससे वह अपने वातावरण पर नियंत्रण रखकर अपने उत्तरदायित्वों का निर्वाह कर सके।" -जॉन ड्यूवी

उच्च शिक्षा

उच्च शिक्षा का अर्थ, सामान्य रूप से सबको दी जाने वाली शिक्षा से ऊपर किसी विशेष विषय या विषयों में विशेष विशद (ज्ञान) तथा सूक्ष्म शिक्षा से है। यह शिक्षा के उस स्तर का नाम है, जो विश्वविद्यालयों, व्यवसायिक विश्वविद्यालयों, कम्युनिटी महाविद्यालय, लिबरल आर्ट कालेजों एवं प्रौद्योगिकी संस्थानों आदि के द्वारा दी जाती है।[8]

राष्ट्रीय शिक्षा नीति-2020

जीवन में शिक्षा के महत्व को देखते हुए भारत सरकार द्वारा गुणवत्तापूर्ण शिक्षा उपलब्ध कराने के उद्देश्य से शिक्षा के क्षेत्र में व्यापक बदलावों के लिए राष्ट्रीय शिक्षा नीति-2020 को लाया गया। भारत में पहली बार शिक्षा नीति 1986 में बनाई गई, और आखिरी बार 1992 में उसमें संशोधन किया गया था। इसके बाद 2020 में वर्तमान सरकार द्वारा राष्ट्रीय शिक्षा नीति लाई गई, जिसके अंतर्गत समाज के सभी वर्गों को सम्मिलित करने का प्रावधान किया गया है। इस शिक्षा नीति में विकलांग बच्चों को विश्वविद्यालय परिसर में बाधामुक्त वातावरण उपलब्ध कराने की जिम्मेदारी तय की गई है[9] जिससे कि दिव्यांग छात्रों का उच्च शिक्षा के क्षेत्र में उचित संख्या में प्रतिनिधित्व हो सके। दिव्यांग छात्रों का प्रतिनिधित्व उच्च संस्थानों में आज भी संतोषजनक नहीं है। दिव्यांग जनों के नामांकन अनुपात को बढ़ाने में यह शिक्षा नीति महत्वपूर्ण भूमिका में रहेगी। राष्ट्रीय शिक्षा नीति-2020 के माध्यम से पाठ्यक्रम सामग्री को कम करने के साथ-साथ बच्चों के अंदर एक आलोचनात्मक सिद्धांत या सोचने-समझने की तरीकों को विकसित किया जाएगा, जिसकी 21वीं सदी में जरूरत है। इसलिए इन लक्ष्यों को प्राप्त करने के लिए पाठ्यक्रम और पढ़ने के तरीकों के सभी पहलुओं को पुनर्गठित करने की आवश्यकता है। इस नीति में शिक्षा के मूल सिद्धांत पर विशेष बल दिया गया है, कि शिक्षा का उद्देश्य छात्रों को साक्षर बना देने या अंक ज्ञान तक सीमित या फिर विवेचनात्मक सोच विकसित कर देने मात्र तक सीमित नहीं होना चाहिए बल्कि शिक्षा के माध्यम से सामाजिक, सांस्कृतिक और भावनात्मक कौशल का विकास हो सके। राष्ट्रीय शिक्षा नीति-2020 में समाज के सभी समूहों को स्कूली शिक्षा उपलब्ध कराने तथा ज्यादा से ज्यादा बच्चों को स्कूल में दाखिल कराने पर जोर दिया गया है। इस नीति में दिव्यांग छात्रों को स्कूली शिक्षा से लेकर विश्वविद्यालय स्तर तक की शिक्षा व्यवस्था में कैसे जोड़ा जाये? आईसीटी को सबके लिए कैसे सुलभ बनाया जाए? इन तमाम प्रकार के बिंदुओं पर यह शिक्षा नीति ध्यान आकर्षित कराती है। महामारी के दौरान शिक्षा पद्धति में एक बदलाव देखा गया जो कि ऑनलाइन अधिगम प्रक्रिया के रूप में उभर कर सामने आयी। शर्मा, ए. (2021)[10] ने अपने लेख "आईसीटी इंडिया" में इस बात पर प्रकाश डाला है, कि न केवल भारत बल्कि पूरी दुनिया को कोविड-19 महामारी में अपने शिक्षा व्यवस्था को अधिक प्रौद्योगिकी संचालित तंत्र में स्थानांतरित करना पड़ा था। महामारी के समय स्कूलों के बंद होने के कारण कई शैक्षिक नवाचार हुए। इस प्रकार के नवाचारों में भारत भी पीछे नहीं रहा। विभिन्न शिक्षा कठिनाइयों के कारण डिजिटल रूप से मौजूदा और भविष्य के शैक्षिक प्लेटफार्म की क्षमता को अधिकतम करने के प्रयास किए गए ताकि वह सबके लिए सुलभ हो सके। यह नीति अलग-अलग प्रकार के दिव्यांगता वाले बच्चों को उनकी आवश्यकताओं के अनुसार ऑफलाइन या ऑनलाइन शिक्षा व्यवस्था तक जोड़ने एवं आईसीटी और ऑनलाइन पद्धति के माध्यम से शिक्षा को सबके लिए आसान पहुंच, सुलभ एवं समावेशी बनाने के लिए प्रतिबद्ध है।

भारत में दिव्यांगजनों की शैक्षिक स्थिति

भारत में दिव्यांग लोगों का एक बहुत बड़ा समूह भारतीय उच्च शिक्षा व्यवस्था से अपने आप को जोड़ने में असमर्थ रहा है। विकलांगता औपचारिक शिक्षा ग्रहण करने में एक बड़ी बाधा के रूप में कार्य कर रही है। हालांकि विकलांग व्यक्तियों की शैक्षिक उपलब्धि उनके जीवन जीने के तरीके एवं गुणवत्तापूर्ण जीवनयापन के लिए महत्वपूर्ण है, साथ ही उनका सामाजिक-आर्थिक, राजनैतिक सशक्तिकरण करने के लिए एक सशक्त साधन है जो उनकी प्रतिभाओं के विकास को गति देने एवं उनके अधिकारों को प्राप्त करने तथा भविष्य निर्माण के लिए मार्ग प्रशस्त करती है।[11] एमिल दरखाइम के अनुसार "कोई भी समाज एक समान्य आधार पर कुछ विचारों, मनोभावों और व्यवहारों के बगैर जीवित नहीं रह सकता है, जिसे शिक्षा द्वारा सभी बच्चों को बिना भेदभाव के संप्रेषित किया जाना चाहिए, चाहे वह किसी भी सामाजिक श्रेणी का क्यों न हो"।[12] हालांकि ऐतिहासिक रूप से दुनिया भर के सभी जगहों पर विकलांग लोगों को मुख्य शिक्षा व्यवस्था से जुड़ने के अवसर से दूर रखा गया है। दिव्यांगजनों से संबंधित आंकड़ों के लिए भारत में जनगणना एवं नेशनल सैंपल सर्वे ऑर्गेनाइजेशन दो महत्वपूर्ण श्रोत है। दोनों में ही दिव्यांगों की शैक्षणिक स्थितियां निराशाजनक तस्वीर प्रस्तुत करती है।

सारणी क्रमांक 1: भारत में विकलांग व्यक्तियों के शैक्षिक स्तर में विकास का विवरण निम्न सारणी में प्रदर्शित है (वर्ष 2001 से 2011 के बीच बदलाव प्रतिशत में)

शिक्षा का स्तर	जनगणना 2001			जनगणना 2011			वर्ष 2001 से 2011 के बीच बदलाव		
	कुल संख्या	पुरुष	महिला	कुल संख्या	पुरुष	महिला	कुल संख्या	पुरुष	महिला
अशिक्षित	50.7	41.9	62.7	45.5	37.6	55.4	-5.2	-4.3	-7.3
शिक्षित	49.3	58.1	37.3	54.5	62.4	44.6	5.2	4.3	7.3
शिक्षित लेकिन प्राथमिक शिक्षा से कम	26.5	25	29.9	19.4	18.5	21.5	-7.1	-6.1	-8.4
प्राथमिक लेकिन उच्च प्राथमिक शिक्षा से कम	26.4	25.6	28.1	24.3	23.5	25.8	-2.1	-2.1	-2.3
उच्च प्राथमिक लेकिन मैट्रिक्स कक्षा 10/12 से कम	16.6	16.6	14.8	16.6	17.3	15.8	0.3	0.7	1
कक्षा 10/12 लेकिन स्नातक से कम	20	21.5	16.9	23.6	24.9	21.4	3.6	3.4	4.3
स्नातक या उससे ऊपर	6	6.6	4.6	8.5	9	7.7	2.5	2.4	3.1

स्रोत- महारजिस्ट्रार एवं जनगणना आयुक्त कार्यालय गृह मंत्रालय भारत सरकार (2001, 2011)[13]

उपरोक्त सारणी क्रमांक 1 के अनुसार दिव्यांग आबादी के शैक्षिक स्तर के संबंध में जनगणना 2011 से प्राप्त आंकड़ों के अनुसार, भारत में 26.8 मिलियन दिव्यांगों में से लगभग 14.6 मिलियन (54.5%) साक्षर है, शेष 12.2 मिलियन (45.5%) निरक्षर है। हालांकि पिछले एक दशकों (2001 से 2011 के बीच) तक दिव्यांगजनों कि शैक्षिक स्थितियों में 5.2% की बढ़ोत्तरी देखी गयी है। यह बढ़ोत्तरी तुलनात्मक रूप से दिव्यांग पुरुषों की अपेक्षा दिव्यांग महिलाओं मे 3% ज्यादा है। प्राथमिक शिक्षा या उससे नीचे के स्तर पर कुल दिव्यांग आबादी का 26.5% लोग (जिसमें 25% पुरुष एवं 29% महिला) शिक्षित थे, जबकि यह आंकड़ा जनगणना 2011 तक घटकर 20% (जिसमें 18.5% पुरुष एवं 21.6% महिला साक्षर है) तक पहुंच गया। उच्च प्राथमिक स्तर या उससे नीचे की कक्षाओं तक 26.4% लोग (25.6% पुरुष एवं 28.1% महिला) साक्षर हैं, जबकि वर्ष 2011 तक आंकड़ा घटकर 24.3% (जिसमें 23.5% पुरुष एवं 25.8% महिला) तक हो गया। जनगणना 2011 तक उच्च माध्यमिक स्तर या उनसे नीचे की कक्षाओं में दिव्यांग छात्रों की शिक्षा में 0.3%(2001 में 16.6 से बढ़कर 2011, 16.9% तक हो गया) की बढ़ोतरी देखी गई। जनगणना 2001 में माध्यमिक स्तर की शिक्षा में 20% लोग (21.5% पुरुष एवं 16.9% महिला) साक्षर थे, जबकि यह आंकड़ा 2011 तक बढ़कर 23.2% (24.9% पुरुष एवं 21.2% महिला) तक पहुंच गया। इसमें पुरुषों की तुलना में महिलाओं की माध्यमिक स्तर की शिक्षा में 4.3% की वृद्धि देखी गई है। स्नातक एवं स्नातक स्तर के ऊपर की शिक्षा व्यवस्था में दिव्यांगों का नामांकन 2001 में कुल 6% (6.6% पुरुष एवं 4.6% महिला) लोग साक्षर थे, जबकि जनगणना 2011 तक यह आंकड़ा बढ़कर 8.5% (9% पुरुष एवं 7.7%महिला)तक पहुंच गया। जहां दिव्यांग महिला का नामांकन अनुपात पुरुष की तुलना में 0.7% अधिक देखा गया। सरकार द्वारा बनाई गई दिव्यांग जनों के प्रति सकारात्मक नीतियों का ही परिणाम रहा कि आज दिव्यांगजनों का उच्च शिक्षण संस्थानों में नामांकन अनुपात बढ़ा है। लेकिन दूसरी तरफ भारतीय उच्च शिक्षण संस्थानों में दिव्यांग जनों के अनुकूल आज भी उचित या पर्याप्त पर्यावरण का न होना उनके नामांकन अनुपात को प्रभावित कर रहा है।

राष्ट्रीय शिक्षा नीति-2020 की संभावनाएं

राष्ट्रीय शिक्षा नीति-2020 में इस तथ्य की पुष्टि की गई है कि सभी के लिए समान शिक्षा उपलब्ध हो, समाज के सभी वर्गों को शिक्षा से जोड़ने का एक प्रयास किया गया है जिसमें बेंचमार्क विकलांगता वाले बच्चों के पास दिव्यांग अधिकार अधिनियम-2016 के अनुसार नियमित व स्कूली शिक्षा का विकल्प होगा। विशेष आवश्यकतावाले शिक्षकों एवं प्रशिक्षकों के साथ-साथ ऐसे संसाधन केंद्र उपलब्ध कराया जाएंगे जो अति गंभीर या बहुविकलाँगता वाले छात्रों के पुनर्वास एवं शैक्षिक आवश्यकताओं को पूरा करेगा।

● **शिक्षा के समावेशीकरण की संभावनाएं :** यह नीति सभी के लिए समानता पर आधारित और समावेशी शिक्षा की व्यवस्था सुनिश्चित कराने की उद्देश्य से लाई गई है। शिक्षा तक सबकी पहुंच, सभी की भागीदारी एवं शिक्षणस्तर के मामले में विभिन्न वर्गों के बीच अंतराल को समाप्त करने पर विशेष ध्यान आकर्षित

करती है। इसमें समानता को ही समावेशी शिक्षा का आधार माना गया है। यह नीति सामाजिक-आर्थिक रूप से पिछड़े वर्गों को शिक्षा व्यवस्था से जुड़ने के लिए जितने भी संभावनाएं होंगी, उन सभी को तलाशने के लिए प्रतिबद्ध है, जिससे कि सभी को शिक्षा से जोड़ा जा सके। इस बात पर विशेष ध्यान दिया गया है कि समावेशी शिक्षा के तहत दिव्यांग एवं बिना दिव्यांग छात्र कक्षा मे एक साथ पढ़ें, जिससे कि उनके अंदर अलगाव की भावना विकसित न होने पाए।

● **विशेष योग्यता वाले शिक्षक की उपलब्धताः** विशेष आवश्यकता वाले दिव्यांग बच्चों के लिए कुछ कौशलपरक शिक्षकों की आवश्यकता होती है जिसके अंतर्गत उनके पढ़ाने व समझाने के तरीके कुछ विशेष प्रकार के होते हैं। अलग-अलग छात्रों की उनकी दिव्यांगता के अनुसार आवश्यकताएं होती हैं। शिक्षा में बदलाव के बीच ऐसे शिक्षकों की आवश्यकता निश्चित रूप से बढ़ी है, जो इस प्रकार के विशेष शिक्षा को देने के साथ-साथ उनके पसंद की चीजों में निपुण बनायेंगे, जिससे उनकी जिंदगी सरल हो सके। इस नीति के माध्यम से ऐसे शिक्षक को विशेष प्रशिक्षण देकर उन्हें योग्य बनाया जायेगा, जिससे इस प्रकार के छात्रों को शिक्षा से सीधे जोड़ा जा सके।

● **बाधामुक्त परिसर की संभावनाएंः** इस नीति की सबसे महत्वपूर्ण बात यह है कि यह दिव्यांग अधिकार अधिनियम 2016 में निर्दिष्ट सभी पहलुओं पर ध्यान केंद्रित करती है जिसके अंतर्गत दिव्यांग छात्रों को बाधामुक्त परिसर उपलब्ध कराना, दिव्यांग बच्चों के एकीकरण को ध्यान में रखते हुए विद्यालय एवं विश्वविद्यालय परिसरों को वित्तीय मदद की दृष्टि से सुस्पष्ट व कुशल प्रावधानों की व्यवस्था की जाएगी। कक्षा में शिक्षकों एवं अन्य सहपाठियों के साथ जुड़ने के लिए विशेष आवश्यकता वाले बच्चों को कुछ सहायक उपकरण, तकनीकी आधारित उपकरण भाषा उपयुक्त उपकरण पर्याप्त मात्रा में उपलब्ध कराए जाएंगे। इस प्रकार की बाधाओं के कारण जो दिव्यांग छात्र शिक्षा व्यवस्था से नहीं जुड़ पा रहे थे। अब ऐसे छात्रों को शिक्षा व्यवस्था से जुड़ने की संभावनाएं दिख रही हैं।

● **डिजिटल शिक्षा को बढ़ावा :** यह नीति शिक्षण अधिगम के अलग-अलग पद्धतियों को विकसित करने पर जोर देती है, जिसमें डिजिटल शिक्षा भी है। यह पद्धति कुछ विशेष आवश्यकता या बहु विकलांगता वाले दिव्यांग छात्र जो विद्यालय तक नहीं पहुंच पा रहे हैं, उन्हें यह पद्धति ऑनलाइन के माध्यम से शिक्षा से जुड़ने में सार्थक साबित होगी। दृष्टिबाधित और श्रवणबाधित छात्रों के लिए विशेष राष्ट्रीय प्रयास के तहत एन.आई.ओ.एस. विशेष रूप से अक्षम छात्रों के लिए पठन सामग्री प्रदान कराएगी। जैसे- श्रवण बाधित छात्रों के लिए सांकेतिक भाषा में और नेत्रहीन विद्यार्थियों के लिए ईपब और सक्षम बुक्स, टॉकिंग बुक्स आदि उपलब्ध कराया जाएगा। कुछ विशेष परिस्थितियों में स्कूल और विश्वविद्यालयों को ई-माध्यम मुहैया कराया जाएगा।

इस प्रकार यह नीति दिव्यांग बच्चों या विशेष आवश्यकता वाले बच्चों को किसी भी अन्य बच्चों के समान गुणवततापूर्ण शिक्षा प्राप्त करने के लिए सक्षम बनाने के महत्व को पहचानेगी।

राष्ट्रीय शिक्षा नीति को लागू करने की चुनौतियां

राष्ट्रीय शिक्षा नीति 2020 में यह दावा किया गया है कि यह समाज के सभी वर्गों जो सामाजिक-आर्थिक रूप से वंचित समूह है, उसको शिक्षा से जुडने में मदद करेगी। लेकिन वास्तविकता में इस नीति के समक्ष कई चुनौतियां हैं, जिससे पार पाकर ही मुकम्मल शिक्षा में सुधारों के लक्ष्यों को पूरा किया जा सकता है। राष्ट्रीय शिक्षा नीति 2020 को लागू करने में निम्नलिखित चुनौतियां हैं-

● **समावेशी इंफ्रास्ट्रक्चर का न होना :** इस नीति को समावेशी बनाने में सबसे बड़ी चुनौती इंफ्रास्ट्रक्चर की है। विश्वविद्यालय परिसर को समावेशी बनाने के उद्देश्य से समय-समय पर नीतियां बनती रही हैं, जिसके द्वारा समाज के सभी वर्गों के साथ-साथ दिव्यांगजनों को शिक्षा के साथ जोड़ा जा सके लेकिन धरातल पर वास्तविकता कुछ अलग है। दिव्यांग अधिकार अधिनियम 2016 के अनुच्छेद 45 में स्पष्ट रूप से प्रत्येक सरकारी भवनों को सुगम परिसर में परिवर्तित करने का निर्देश वर्णित है। लेकिन वास्तव में इस प्रकार की समस्या अभी भी बनी हुई है। अवरील (2016)[14] अपने लेख "अनेबलिंग ह्वोम क्रिटिकल डिसेबिलिटीज स्टडी नाउ" में कहते हैं कि अमेरिकी विकलांग अधिनियम' (ADA) के पारित होने के 25 वर्ष बाद भी इस अधिनियम में किए गए वादे (जैसे- रोजगार क्षेत्र में समान अवसर, बाधामुक्त पर्यावरण, वाणिज्यिक सुविधायें, आवास एवं परिवहन में विकलांग व्यक्तियों को समान अवसर) को पूरा नहीं किया गया है, इस प्रकार की समस्याएं आज भी बनी हुई हैं। ठीक इसी प्रकार भारत में भी दिव्यांगजनों के लिए बनाई गई नीतियों को लागू करने में शैक्षणिक संस्थानों द्वारा कोई ठोस कदम नही उठाया गया है।

● **शिक्षा का निजीकरण :** इस नीति में विदेशी विश्वविद्यालयों के प्रवेश का मार्ग प्रशस्त किया गया है, जिसके प्रवेश से भारतीय शिक्षा व्यवस्था महंगी होने की संभावना है, क्योंकि यह नीति विश्वविद्यालयों को आटोनोमस बनाने के नाम पर शिक्षा के निजीकरण को बढ़ावा दे रही है जिसके कारण उच्च शिक्षा आम आदमी की पहुंच से दूर होगी। ऐसे में दिव्यांगजनों के लिए महँगी शिक्षा व्यवस्था से जुड़ना चुनौतीपूर्ण रहेगा। शिक्षा के निजीकरण की प्रक्रिया सबके लिए समवेशी व समान शिक्षा की धारणा को नकारती है।

● **व्यवसायिक शिक्षा की चुनौती** : नई शिक्षा नीति व्यवसायिक शिक्षा पर जोर देती है जो कि सही भी है, लेकिन इस प्रकार की शिक्षा का कुछ लोगों तक सीमित होना कहा तक सही है? इस प्रकार की शिक्षा गंभीर विकलांगता या विशेष आवश्यकता वाले बच्चे, जिनको हर पल किसी न किसी की जरूरत होती है, ऐसे बच्चों के लिए व्यवसायिक शिक्षा शिक्षा सार्थक नहीं है। उनके लिए यह चुनौतीपूर्ण बनी रहेगी।

● **ऑनलाइन शिक्षण पद्धति की समस्याएं** : यह नीति स्कूल और उच्च शिक्षण संस्थानों में ई-माध्यम से शिक्षा मुहैया कराने की दावा करती है, बदलते परिवेश को देखते हुए यह सही भी है। लेकिन क्या इस प्रकार की शिक्षा व्यवस्था से सभी लोग जुड़ पा रहे हैं? यह पद्धति शारीरिक रूप से दिव्यांग छात्रों के लिए तो सही है, लेकिन बहुस्तरीय या मूकबधिर छात्रों के लिए शिक्षा का यह माध्यम उपयोगी नहीं है, जो अलग-अलग चुनौतियों से भरा पड़ा है। हैदराबाद विश्वविद्यालय द्वारा कराए गए एक सर्वे के मुताबिक मात्र 37% छात्रों द्वारा ऑनलाइन कक्षाएं लेने की बात कही गई थी, जबकि भारत के बड़े-बड़े तकनीकी संस्थानों (आईआईटी) में लगभग 10% या इससे अधिक संख्या में छात्रों ने कहा कि कमजोर इंटरनेट कनेक्टिविटी या अपर्याप्त डेटा प्लान की वजह से ऑनलाइन क्लास नही कर सकते। इन आकड़ों से स्पष्ट होता है कि, इस प्रकार की समस्याओं को खत्म किये बिना ऑनलाइन शिक्षण पद्धति को नही अपनाया जा सकता है।

● **होम स्कूलिंग की चुनौती**: इस नीति में यह दावा किया गया है कि, गंभीर अथवा एक से अधिक विशेष आवश्यकता वाले छात्रों के पुनर्वास एवं शिक्षा से संबंधित आवश्यकताओं में मदद किया जाएगा। ऐसे बच्चे जो स्कूल जाने में असमर्थ अथवा गंभीर और गहन दिव्यांगता वाले बच्चों के लिए गृह आधारित शिक्षा के रूप में एक विकल्प उपलब्ध रहेगा, जो कि अपनेआप में हास्यप्रद हैं। इस प्रकार की व्यवस्था अपने आप में एक चुनौती है, क्योंकि बहुत से छात्र ऐसे हैं जिनके माता-पिता अशिक्षित हैं उनके लिए यह विकल्प सही नहीं होगा। ऐसे बच्चों के लिए विशेष शिक्षक की आवश्यकता होती है, जो कि वर्तमान में इनकी उपलब्धता नही है।

अतः राष्ट्रीय शिक्षा नीति 2020 को लागू करने में आने वाली अलग-अलग प्रकार की चुनौतियों का समाधान किए बिना उसके उद्देश्यों को पूर्ण तरीके से साकार नहीं किया जा सकता है।

विमर्श

यह नीति सार्वभौमिक रूप से दिव्यांग छात्रों को स्कूली शिक्षा से लेकर विश्वविद्यालय स्तर की शिक्षा व्यवस्था से जोड़ने की दावा करती है। लेकिन वास्तव में भारतीय शिक्षा व्यवस्था में दिव्यांग छात्रों को जोड़ना उतना आसान नहीं है, जितनी आसानी से यह नीति दावा करती है। वर्ल्ड बैंक (2007)[15] के अनुसार 9% छात्र प्राथमिक शिक्षा के बाद उच्च शिक्षा में पहुँच पा रहे हैं। वहीं जनगणना 2011 के अनुसार 8.5% दिव्यांग छात्र उच्च शिक्षा तक पहुंच रहे हैं।[16] दिव्यांग छात्रों से संबंधित नामांकन अनुपात यह प्रतिबिंबित करता है, कि आज भी विश्वविद्यालयों में ऐसे छात्रों का समावेशीकरण करने में अलग-अलग प्रकार की कठिनाइयां बनी हुई हैं। जबकि राष्ट्रीय शिक्षा नीति-2020 निःशक्त छात्रों के समावेशन की पुरजोर समर्थन करती है जिसके अंतर्गत दिव्यांग व बिना दिव्यांग छात्रों को एक कक्षा में पढ़ाने की बात कही गई है, जिसकी वकालत दिव्यांग अधिकार अधिनियम 2016 की धारा 45 में की गई है। इस धारा में यह निर्दिष्ट किया गया है, कि प्रत्येक सरकारी भवनों को सुगम्य परिसर में परिवर्तित किया जाये। लेकिन आज भी विश्वविद्यालयों में समावेशी इंफ्रास्ट्रक्चर की कमी है, इस प्रकार के कमियों के अभाव में दिव्यांग छात्रों का एक समूह अपने आप को शिक्षा व्यवस्था से जोड़ने में असमर्थ है। वही व्यावसायिक शिक्षा से सभी प्रकार के दिव्यांगों को नहीं जोड़ा जा सकता है क्योंकि उनकी शारीरिक गतिविधियां इस प्रकार के शिक्षा व्यवस्था से जुड़ने में बाधा उत्पन्न करती हैं। इस नीति के माध्यम से व्यक्ति के अंदर सामाजिक-सांस्कृतिक और भावनात्मक कौशल का विकास करने की बात कही गई है, जिससे कि वह समाज में एक सशक्त नागरिक के रूप में अपने आप को स्थापित कर सकें।

निष्कर्ष एवं सुझाव

राष्ट्रीय शिक्षा नीति 2020, शिक्षा के महत्व को पहचानने पर जोर देती है। यह समाज के सभी तबकों को, विशेष करके दिव्यांग तथा महिला को शिक्षा से जोड़ने के उन तमाम विकल्पों को चिन्हित करती है, जिससे शिक्षा में उनका समावेशन हो सकें। यह नीति अपने दृष्टिकोण और इरादे में वैश्विक के साथ स्थानीय भी हैं, इसका लक्ष्य शिक्षा की बुनियाद को मजबूत बनाना है, सबसे कमजोर समूह की जरूरतों को पूरा करना है। यह नीति दिव्यांग अधिकार अधिनियम 2016 में वर्णित प्रावधानों को साकार करने के उद्देश्य सेशिक्षा के क्षेत्र में एक विशेष प्रकार के कार्य योजना के तहत दिव्यांग छात्रों को शिक्षा व्यवस्था से जोड़ने पर ध्यान केंद्रित करती है। यह नीति दिव्यांग छात्रों को शिक्षा से जोड़ने के साथ उन्हें व्यवसायिक शिक्षा के माध्यम से रोजगार के क्षेत्र में समावेशन करने की ओर अग्रसर हैं। लेकिन गंभीर दिव्यांगता वाले छात्रों की आवश्यकताओं को पहचाने बिना, उन्हें रोजगार के क्षेत्र में समायोजित नहीं किया जा सकता है। यह नीति स्कूल परिसर में दिव्यांग बच्चों को शामिल करने के लिए संसाधनों के उपलब्ध कराने और ऐसे बच्चों को पढ़ाने के लिए प्रशिक्षित विशेष शिक्षकों को नियुक्त करेगी एवं विशेष आवश्यकता

वाले बच्चों को समान अवसर प्रदान करने वाले तंत्र को पहचान कराएगी। इस नीति में स्पष्ट किया गया है कि राष्ट्रीय पाठ्यचर्या की रूपरेखा तैयार करते समय दिव्यांग अधिकार अधिनियम 2016 के विषेषज्ञों से परामर्श किया जाएगा, जिससे दिव्यांगजनों के अनुकूल पाठ्यचर्या तैयार किया जा सके। इस स्थिति में यह नीति पूरी तरीके से सारगर्भित हो सकती है। आज हम आजादी का अमृत महोत्सव मना रहे हैं, लेकिन समाज का एक वर्ग जिसकी कोई जाति या धर्म नहीं है, उसकी पहचान उसकी विकलांगता या दिव्यांगता है, जो भारतीय शिक्षा व्यवस्था से जुड़ने में तमाम प्रकार चुनौतियों का सामना कर रहा है जिसका कारण नीतियों का गंभीरतापूर्वक धरातल पर लागू न करने की इच्छा शक्ति है। दिव्यांगजनों के शैक्षिक सुधारों को लेकर जिस प्रकार की नीतियों का दावा किया जा रहा है यदि वास्तव में ऐसा होता है तो उस स्थिति में दिव्यांगजनों को गुणवत्तापूर्ण शिक्षा, रोजगार, स्वास्थ्य और अन्य सेवाओं तक पहुंच बढ़ाने में मदद मिल सकती है जिससे उनके जीवन में गुणवत्तापूर्ण सुधार हो सकता है। इस प्रकार के तमाम प्रावधानों के बाद भी इस राष्ट्रीय शिक्षा नीति-2020 को दिव्यांगजनों का उच्च शिक्षा में समावेशन करने मे बहुत से चुनौतियों का सामना करना पड़ सकता है।

विकलांग छात्रों के समावेशी शिक्षा की आवश्यकताओं की कमी को बढ़ावा देने के लिए उससे संबंधित परिस्थितियों को सक्षम बनाने की जरूरत है, तथा उनको शिक्षा की तरफ आकर्षित करने के लिए प्रोत्साहन पैकेजो में राष्ट्रीय आवंटन बजट में शिक्षा का हिस्सा बढ़ाने की जरूरत है। दिव्यांगजनों को कार्य प्रणाली के रूप में परिभाषित करने के लिए शिक्षण अभ्यास के साथ अनुसंधान पर भी ध्यान देने की जरूरत है, जिससे कि दिव्यांगता के अलग-अलग आयामों को सामाजिक-आर्थिक राजनैतिक पटल पर लाया जा सके।

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Analyzing Arunachal Pradesh Budget 2023-24 with Special Focus on 'Quality Education' in terms of NEP 2020

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Abstract

Education is the most needed quality of any human beings to have true lifelong learnings along with innovativeness for the upliftment of them in holistic manner such as social, cultural, and economical, so that they can compete with the world meeting with the present demand. Education holistically can be considered as knowledge of natural phenomena which makes human to understand the environment and culture simultaneously. The recent approval of implementing National Education Policy 2020 (NEP 2020) has some special focus over interconnectedness of four main pillars supporting sustainable development i.e., environment, politics, economics and socio-cultural to promote Indian form of education system. The Goal 4 of Sustainable Development Goals (SDGs) has emphasized over quality education. The term 'quality education' can be considered as the goal of all goals as it can embed all the sixteen remaining goals of SDGs under it. The goal of quality education is not only limited to ensuring inclusiveness, equitable access, and promoting lifelong learnings but at the same time it reflects and motivates the people to express the learnt ability and creativity by raising questions in their mind. Arunachal Pradesh is a state in North-Eastern part of India having majority of their population as tribes. In terms of educational profile, it is the state of having second lowest literacy rate after Bihar in India. The recent budget of Arunachal Pradesh has focused over the education. This article will analyze the Budget 2023-24 of Arunachal Pradesh keeping in view of NEP 2020 and SDGs using secondary source of information like Government reports, budget report, articles, books etc.

Introduction

According to the 2011 Census Report, Arunachal Pradesh, one of India's most popular tourist destinations due to its beautiful scenery, comparatively good in economic status and healthy environment, ranks second lowest in terms of literacy rates (PTI, 2023). The budget analysis of Arunachal Pradeshfor the preceding four years demonstrated greater interest in raising the state's educational standing, which may be discernible on a bigger scale. The Government of Arunachal Pradesh (GoAP) has demonstrated a proactive approach towards delivering high-quality education through a variety of interventions, including programs, policies, schemes, and other initiatives that work hand in hand with support from the central Government. NEP 2020, the newer form of integrating Indian version of education system having multi-dimensional topics into it, is about to be implemented in many educational institutions in Arunachal Pradesh in phased manner. The GoAP has ensured that the NEP 2020 will be implemented in all Government funded institutions of the state in full-fledged manner by 2030 (Observer, 2022). Arunachal Pradesh is having share of around 70 percent of their population as Scheduled Tribes listed in the Indian Constitution. The socio-economic status of tribes in the state is far better in comparison to other tribal states. However, their interests towards the education, innovativeness, and creativity in terms of holistic developmental approach needs more acceleration to reach the hundred percent literacy rates.

Objective

The main objective of this article is to understand and analyze the budget 2023-24 presented by GoAP focusing on education from perspective of SDGs and NEP 2020.

Research Methodology

The research methodology used in this article is exploratory anddescriptive followed by analytical method based on secondary source of information such as articles,

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budget reports and annual reports of GoAP, NEP 2020, annual budget of Government of India, books, local newspaper etc. Mixed method approach has also been taken into consideration in compiling the data meta-analytically from all the above-mentioned secondary sources.

Interconnectedness of NEP 2020 and SDG 4

National Education Policy which emphasizes more over integrating the different newer disciplines or topics into existing curricula will robust the Indian form of education. The latest pedagogical reforms which is more aligned towards the Indian Knowledge System (IKS) respects the uniqueness of everyonealong with participation of individuals, groups, and communities from different social institutions. Till date, the British influence over education in India has consistently moved towards making people, the lesser self-reliant. Paul Baran (1957) studied the process of underdevelopment in India under British colonialism (Baran, 1957). The instrumental rationality of English utilitarian colonial policy was successful in extracting wealth from a relatively prosperous India and transferring it to England to support its rapid industrialization and modernization making us dependent upon others permanently. The British cultural policy in India was designed to systematically undermine Indian cultural rationality and create a mass of docile subjects. The colonial Government used most educational resources to organize a select English educated class of Indians to mediate the skewed relationship between the ruling class and the colonial subjects. As a result, in the case of India, an amalgam of instrumental rationality and the devaluation of Indian cultural logic was primarily to blame for a phase of under development from which the nation could not recover for years after independence. The way of recent curriculum construction is tending towards the employability along with economic orientation which will leadsglocal (i.e., global plus local) competitiveness among the Indian students. The policy will face many challenges at different level like systemic challenge, leadership intent, planning, equity, and adequacy challenge etc. The need of the hour is systemic reforms and institutional engagement with greater interests of eachindividual of the nation so that quality education in Indian can be felt by the whole world. The goal 4 of the SDGs which talks about ensuring the inclusive and equitable quality education along with promoting lifelong equal opportunity to everyone in learning and implementing the knowledge learnt through various experiences can boost the economical profitable outcomes. The term 'quality education' as mentioned in the abstract can be considered as the goal of goals as it can embed all the sixteen remaining goals of SDGs under it as its smaller targets touches all other goals. It talks about ensuring all the learners to acquire the knowledge and skills needed to promote sustainability of all through education, lifestyles, human rights, gender equality, culture preservation and promotion, non-violence and peacefulness. The quality education asks for quality teacher training through international cooperation to create effective leaning environments into and outside the class. The quality education is all about raising questions and trying to find out the solutions of that, and it is only possible by the practicing and thinking out of the box. Training the students for getting job is not ultimately the solution for being self-reliant and responsible towards the nature and environment. The recent curricular and pedagogical reforms mentioned under the NEP 2020 in alignment with SDGs can be categorized into four categories:

1. *Integration of Multiple Subjects:*

The NEP 2020 places a strong focus on inclusion, equity, and accessibility in higher education in paragraphs 9.3 and 10.8. Also, the advantages and disadvantages of offering an open platform for distant learning in higher education are discussed in paragraph 9.3. The effective implementation of NEP 2020 will be aided by research on the curriculum used in other ancient educational institutions, such as Takshashila University, Nalanda University, Vallabhi University, and Vikramshila University noted in para 10.2. The integration of subjects like autonomy, freedom, and accountability in higher education is also mentioned in paragraphs 10.5 and 10.12. Public-private partnerships (PPPs) in higher education should be coordinated well. In Paragraph 10.11, the difficulties between single stream or discipline higher education institutions and interdisciplinary institutions are discussed. Holistic and multidisciplinary education concepts are discussed in paragraphs 11.1 and 11.8 along with implementation-related problems. In Paragraph 10.11, it is indicated that higher educational institutions' teaching and research are oriented toward a diverse and cross-disciplinary approach. In Section 11.2, the integration of science, technology, engineering, and mathematics is also covered. The fourth industrial revolution is specifically discussed in paragraph 11.4 as a tool for education where the internet of things and cyber technology may play a significant role.The success of the NEP will be aided by the active pedagogy for interdisciplinary and cross-disciplinary thinking indicated in paragraphs 11.6, 12.1 and 12.2. The discussion in paragraph 11.8 covers environmental education, which covers topics like climate change, pollution, waste management, sanitation, conservation of biological diversity, management of biological resources and biodiversity, forest and wildlife protection, and sustainable development and living. Value-based education is also discussed, which is based on the principle of humanistic, ethical, constitutional, and universal human values.

2. *Need of Interventions at different levels:*

Governmentinterventions have a significant impact on the tribes of Arunachal Pradesh by bringing about changes in the economic, cultural, and social spheres. Although accepting some changes to their economy and culture, indigenous peoples have rejected foreign exploitation and injustice. The dynamics of tribal societies, tribal communities in transition, tribals as peasant communities, and their connection with urban-industrial contexts have all been identified by many specialists of tribal culture and development. Community involvement, participation, and service are discussed in relation to the projects and practices as per NEP 2020 under paragraph 11.8.This paragraph also discusses internships with local firms, industries, artists, craftspeople, and other indigenous talents that are connected. In paragraph 12.1, it was suggested that ongoing formative evaluation will aid in developing the methods of instruction and learning. Moreover, it gives faculty the freedom to experiment with curriculum, pedagogy, and assessment, and it continually reviews the choice-based credit system to foster creativity and flexibility in accordance with the rules outlined in paragraph 12.2. Paragraph 12.3 and 19.5 give instructions for creating an institutional growth plan. The students will be guaranteed by the requirements indicated in paragraph 12.8 that credits obtained at various colleges, whether domestically or internationally, will be considered toward the award of a degree. The organization of Faculty Development programs, encouragement, and support systems for students from Socio-Economically disadvantaged groups (SEDGs) backgrounds under paragraphs 10.6 and 12.4 will improve the teaching learning environment for weaker sections of the society. Teaching and research collaborations and academicians exchanges with high quality foreign education institutions are mentioned in paragraph 12.8. In addition to highlighting the merit of students from Scheduled Castes (SCs), Scheduled Tribes (STs), and Other Backward Classes (OBCs), Paragraph 12.10 also discusses counseling mechanisms for managing stress and emotional changes. For better conduct of innovative learning, teaching, and research, paragraphs 13.2 and 13.4 mention that classrooms must be technologically advanced and equipped with the most up-to-date infrastructure. At the same time, teachers should have the freedom to create their own curricula and pedagogical approaches within the framework that has been approved. The recruitment of teachers through an open method and a system of varied performance evaluation criteria are both explicitly acknowledged in paragraph 13.6. In paragraphs 12.9 and 14.4.2, it is mentioned that there will be high-quality medical facilities for all students, there will be a gender balance in admissions and multilingual instruction using mother tongue, there is higher chance of an increase in employability potential, and there is special provision for wheel chair facilities with proper connectivity to all the buildings of educational institutions. Together with the implementation of anti-discrimination and anti-harassment laws, paragraph 14.4.2 has also considered the establishment of bridging courses for students from underprivileged educational backgrounds. The chance to enroll in credit-based courses in teaching, education, pedagogy, and writing that are connected to their chosen Ph.D. field gives Ph.D. applicants exposure to pedagogical techniques, curriculum design, and assessment systems. The emphasis of paragraph 17.8 is on an all-encompassing strategy for improving the amount and quality of research in India, including research and internships in undergraduate programs.

3. *Opening up of Learning Platforms*

Discussion of opening clusters of higher education institutions and knowledge centers, are documentedin paragraph 10.1. To encourage the creation of incubation centers, technological development centers, centers for cutting-edge research, research labs, and multidisciplinary research centers by startups. Establishing topic-centered clubs in science, mathematics, poetry, language, literature, debate, music, sports, etc. is mentioned in paragraph 12.3. To protect students' physical, psychological, and emotional wellbeing, paragraph 12.4 mentions professional, academic, and career counseling facilities. The creation of an office for foreign students, campuses abroad, and a student wellness center are all specifically mentioned in paragraph 12.8.

4. *Launching Courses based on Indian Knowledge System*

Launching of high-quality open distance learning programs is covered in paragraph 12.5 of this report. In order to accomplish "Internationalization at home," paragraph 12.7 calls for courses and programs in disciplines like Indology, Indian languages, AYUSH

(Ayurveda, Yogaand Naturopathy, Unani, Siddha, and Homeopathic) systems of medicine, yoga, arts, music, history, and culture. The request in paragraph 4.27 is to start a course on "Indian Knowledge." For touching the roots of education through IKS interventions, there is need to create a database of people and organizations that have contributed to the study, transmission, publication, and preservation of ancient and modern, rich systems of Indian knowledge, including those in the fields of art, music, dance, drama, mathematics, astronomy, science, technology, life sciences, environmental studies, medicine, yoga, economics, social sciences, psychology, philosophy, management, linguistics, and oral traditions.

Range of Interventions: Arunachal Pradesh Budget 2023-24

Most of the tribes in Arunachal Pradesh, India, have seen one or more forms of inclusionary interference by the Government, non-Government organisations, commercial companies, and dominating civilizations over the previous 200 years. These interventions came from British colonialism, neo-Hindu movements such as the Bhakti movement, Western Christian missionary evangelism, and Indian nationalist political movements. They also came from the emerging capitalistic economic expansion and industrialization, planned development programs under the post-independence Government's Five-Year Development Plans, and voluntary organization programs for rural development. By integrating the tribal people into their more developed economy, Government, culture, and civilization, the interventionists hoped to improve the quality of life for the tribal people.In reality, however, the participation of the tribal peoples was not up to expected mark so on an equal footing but rather as inferior members-colonial subjects, members of lower-class within the tribes or economic classes, objects of ineffectual development schemes, and marginal power groupings. The programs had some beneficial effects on raising political awareness, consumer economy involvement, public health, and literacy. They also damaged the traditional tribal way of life and economics. There has not been expected successin the effort to rebuild tribal cultures from the both inside as well as from outside help in order to make them more competitive. The two main influences influencing the character and course of development of the tribes of Arunachal Pradesh today are entrepreneurship and Indian nationalism. The most recent budget, on the nationalist front, demonstrated an attitude of a constructive mindset for making things more in Indian version. People from Arunachal Pradesh now feel differently and are more positive as a result of the unique interventions from numerous initiatives and policies. Still the literacy rate of the state is comparatively lowto the national average literacy rate. The authors have shown interests in explaining the budget changes in last few years with the help of Government reports and newspapers etc.As far asthe budget estimates in the field of education is concerned, the past four years trends says that the Government attitude towards education sector is positive, as they are increasing the education budget in subsequent financial years since 2019-20 to 2023-24 (see table number 1). The state budgets have shown significant improvement since last five years (shown in figure 1 and figure 2). As per the table 1, the education budget is increasing in elementary education, secondary education and higher cum technical education. The budget estimate for the research has been quite less in comparison to previous financial years (Investment, 2023).

State budgets are normally presented before the Vidhaan Sabha by the State Finance Minister, much like the Union Budget. There is a lot of effort done behind the scenes to prepare the budget and carry it through, even though, that activity is the public presentation of the State budget. A state Government determines where and how much it may generate money for its receipts budget at the beginning. The Government must simultaneously determine how the funds obtained will be spent in order to create its budget. In addition to revenues and expenditures, the State Budget also includes important information, such as the detailed demand for funds, gender budget statement, education budget statement on the welfare of children, etc. With all of these elements, it is essential to comprehend the complex nature of State budgets and the numerous processes that go into creating them. The budgeting process involves the creation of estimates, discussions with legislative committees and spending agencies, executive enactment, allocating funds and keeping track of expenditures, as well as ex post audit and review (L.R. Jones, 1986).

The state forecasts total collections of Rs 29,657.16 crore in the 2023-24 budget, i.e., 14% more than the total predicted receipts of Rs 26,111.63 crore in the 2022-23 budget. The six pillars, i.e., "Governance Reforms and Prudent Financial Management,""Synergy and Convergence", "Investment in the Health Sector", "Investment in Human Capital", "self-reliant", or "Atma-Nirbhar Arunachal Pradesh", and "Environment Protection and Climate Resilient Development", which are the foundation of the budget for 2023-24, are intended to support the aspirations of the people by promoting them holistically (Service, 2023). According to the Union Budget Estimate for 2022-23, the Share of Central Taxes was projected to be worth Rs. 14,348.54 crores, however the Revised Estimate for the current fiscal year 2022-23 increased that estimate to Rs. 16,689.17 crores. The seven priorities, or "Saptarishi", that would direct the people of Arunachal Pradesh during the "Amrit Kaal" have been outlined in the Government Budget for the Financial Year 2023-24. These are: Financial Sector, Youth Power, Green Growth, Infrastructure and Investment, Reaching the Last Mile, Unleashing the Potential, and Inclusive Development. The NEP 2020 is a comprehensive plan to transform the educational system in the nation and prepare our children for the future.Everything needed for the holistic and all-around growth of responsible and capable citizens is covered, from early childhood care and education through teacher preparation to higher and technical education. For the construction of 50 model schools in Arunachal Pradesh, the Prime Minister has provided a special grant worth Rs. 500 crores. With this help, the state will be able to upgrade its educational facilities from the outdated North East Frontier Agency (NEFA) infrastructure to modern national standards, achieving the goals of the NEP 2020, and giving students access to top-notch learning pedagogy and infrastructure. The finance minister has suggested allocating Rs. 200 crores in Budget Estimate 2023-24 for the improvement of the nominated schools and has shown his keen interest that the education department will initiate the projects right away.

Table No. 01: Education and Research Budget of Arunachal Pradesh (Rupees in Lakh)

Education Category	Financial year (2019-20)	Financial year (2020-21)	Financial year (2021-22)	Financial year (2022-23)
Elementary Education	Rs.35948.76/-	Rs. 43878.19/-	Rs. 62858.55/-	Rs. 64091.08/-
Secondary Education	Rs. 19954.65/-	Rs. 23627.30/-	Rs.15806.65/-	Rs. 20260.56/-
Higher and Technical Education	Rs.12,210/-	Rs.7242/-	Rs.11390/-	Rs.23311.11/-
Research	Rs.1100/-	Rs.553/-	Rs.850/-	Rs.510/-
Total	Rs 69213.41/-	Rs. 75300.49/-	Rs. 90905.2/-	Rs. 108172.75/-

The budget speech report also included the conversion of 118 Government Upper Primary Schools into "BaLA-Building as Learning Aid Program" compliant schools during the previous fiscal year under the BaLA. The budget also includes a proposal to maintain the provision of Rs. 5 Crores for upgrading 125 Government Upper Primary Schools, which would aid in the development of the state's children's fundamental and numeracy abilities.

Figure 1: Education and Research Budget (In lakhs) of Arunachal Pradesh from 2019 to 2023

Many schools lack housing for the instructors, particularly those in remote locations. There is also a unique provision that announces Rs. 9 Crores for the construction of 60 bachelor barracks in rural schools to address instances of teacher absenteeism caused by this issue.The State now offers students who gain admission to IITs, IIMs, AIIMs, and NLUs a set amount of Rs. 2 Lac under the "Golden Jubilee Distinguished Student Award" program.

The finance minister has suggested to spend Rs. 2 crores for the same. The finance minister has set aside Rs. 1 crore for Technological Intervention- ICT & Digital Initiatives under Mission Shiksha and Rs. 5 crores for improving DIETs for improved teacher training infrastructure in the State. For student school uniforms, a budget of Rs. 20 crores are allocated.An allocation of Rs. 7 crores have been made under the "Mukhya Mantri Shiksha Kosh" initiative of the Government to enable Principals and Headmasters of Government Higher Secondary Schools and Government Secondary Schools to meet the minor operational requirements and efficiently manage the daily operations of Schools.

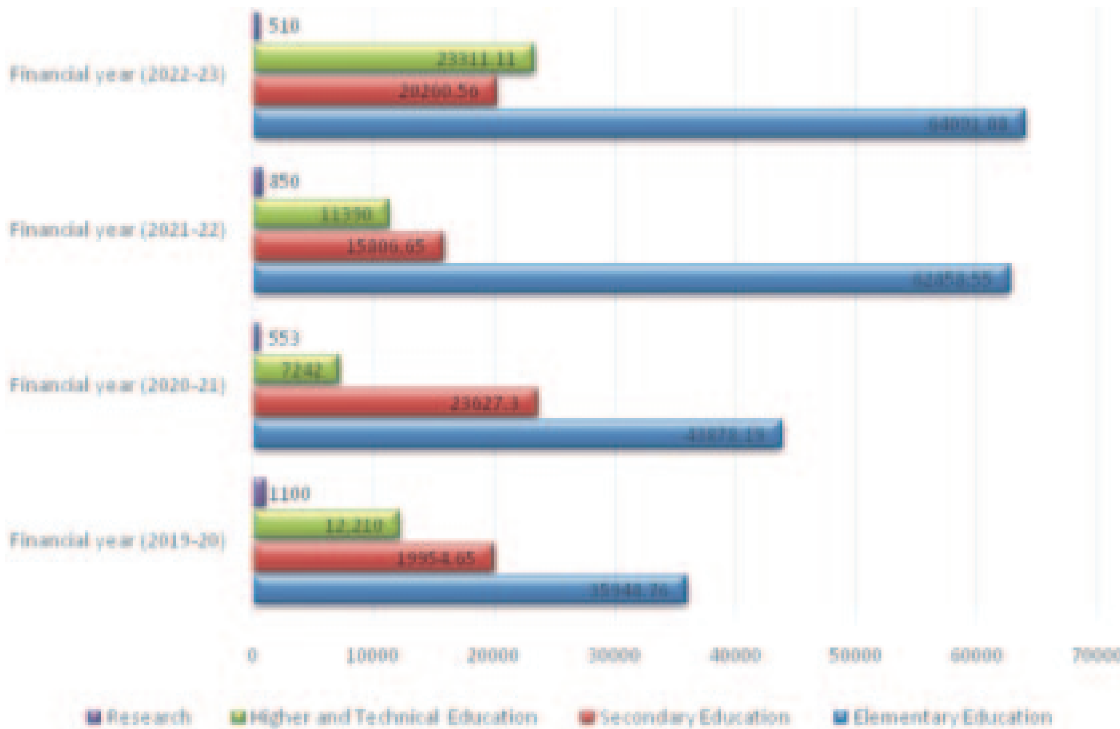

Figure 2: Budget Estimate (rupees in Lakhs) in different category of education by GoAP from 2019-20 to 2022-23 respectively

With an allocation of Rs. 3 crores, the Champion Fund for events like essay competitions, elocution, extempore, drawing and painting competitions, story writing, quizzes, sports competitions, etc. will continue. This year's budget has increased the previous allotment to Rs 1 Crore for activities under the Pakke Declaration Clubs in an effort to raise environmental and climate change awareness among school children. A budget of Rs 1.5 Crores has been set aside to continue the past interventions that involved giving computers to class X and class XII district toppers. The Government hopes to achieve a 70% pass rate in Class X and a 90% pass rate in Class XII for all students enrolled in Government Schools by 2024-2025 through these and other initiatives. As school-age children and teens, they gain a lot of vital skills from their NCC days, including self-sufficiency, patriotism, discipline, and teamwork. Hence, it brings me great pleasure to announce a sum of Rs. 30 Crores for the construction of the National Cadet Corps (NCC) Academy Complex at Balijan and for upgrading the infrastructure of three NCC Battalions in the State at Pasighat, Tawang, and Naharlagun. Along with giving Rs. 5 Crores as Grant-In-Aid to continue the development efforts at Arunachal Pradesh University, Pasighat, the budget also includes Rs. 1 Crore for the NCC Development Fund and another Rs. 1 Crore to cover operating costs for NCC expansion in Arunachal Pradesh. And with great delight, the budget has earmarked Rs. 25 crores for the university's infrastructure development in the upcoming fiscal year.Academic activities will begin in the upcoming academic session with the appointment of the Vice Chancellor and the completion of the University's academic building construction. By completing unfinished projects, the Government is dedicated to enhancing higher and technical education. To this aim, funds in the amount of Rs. 10 crores and Rs. 15 crores, respectively, will be granted for the infra-structure development of the Government Engineering

Colleges in Toru and Tezu, respectively. The infrastructure development of the Government Model Degree College in Piyong will receive Rs. 5 crores, while the infrastructure development of the Government Model Degree College in Kanubari will receive a similar amount of Rs. In addition to the aforementioned, the budget also includes an amount of Rs 10 crore for the construction of the Govt. Model Degree College in Daporijo. Similar to that, Rs. 10 crores would be allocated for the infrastructure improvement of Binni Yanga Govt. Women College, Poma. Also, the finance minister announced plans to spend Rs. 8 crores building Girls Hostels (G+1) at DPG College in Kamki and IGG College in Tezu. A 300-bed boys' hostel is also being built at Dera Natung Government College in Itanagar. The state Government of Arunachal Pradesh has been trying to develop the talents of our young by teaching them 21st century skills and giving them employment chances in both the public and private sectors. The Chief Minister's Yuva Kaushal Yojana has received an allocation of Rs. 10 crores, which is a 43% increase over the amount given in the prior fiscal year. The Apprenticeship Promotion Plan has received a budget of Rs 1 crore. The Dual System of Training, which has been implemented in three ITIs in the State, establishes strong connections between training facilities and businesses to assist our kids find jobs and prepare for it. The finance minister has also recommended implementing a dual system of training at the three remaining ITIs in the State during this fiscal year, and Rs. 1 crore has been set aside for the introduction of new skills (Mein, 2023).

Conclusion

Budget analysis and educational aspects are discussed in the context of the dynamics of sustainable development. It has been argued that education is a broad category that may encompass all of the SDGs. The NEP 2020 which has been given utmost priority by both the state and the center in the latest budget, which places a specific emphasis on education. The Indianization of the educational system, a key component of NEP 2020, will soon be accomplished as it has been observed that both the state and the center are working hand in hand at every stage to achieve the objective of the NEP 2020. If individuals receive a high-quality education, self-improvement and natural processes will inevitably lead to sustainable progress. Only when schools, colleges and universities will modify the quantity or quality of their production, or when preferences for the features of their output change in response to public demand, would help in the change of the state's financial conditions. The quality education can help in raising awareness about the collective responsibility towards the nation and nature. The increase in allocating the education budget estimate since 2019-2023 from Rs 69213.41/- lakhs to Rs. 108172.75/- lakhs shows that GoAP is highly interested in the education, environment, and entrepreneurship in the state. Indian form of education is viewed as an enhanced pattern of human behavior toward the natural environment and is characterized in terms of the property of humanity, encompassing human knowledge, beliefs, morality, customs, etc. Therefore, for achieving the goals for the betterment of the society and its individuals a coordination of both the state and the people will be highly appreciated.

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Examining the Efficacy and Engagement of Virtual Classrooms Learning Environments: A Comprehensive Review

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Abstract

In recent times, there has been a surge in the prevalence of online learning, accompanied by the emergence of virtual classrooms learning environment as a novel addition to conventional educational approaches. The primary objective of this review article is to examine the efficacy and engagement levels associated with online learning environments that incorporate virtual classrooms. This study investigates various aspects of virtual classrooms, including their benefits and drawbacks, instructional strategies, and technological considerations. This research provides valuable insights into the potential of virtual classrooms environments in enhancing learning outcomes and promoting active student engagement. These insights are obtained through a thorough analysis of existing research and established methodologies. Educators, instructional designers, policymakers, and other stakeholders with an interest in online education may find the findings and recommendations of this review article to be beneficial. If stakeholders recognize the potential of virtual classrooms and implement effective strategies, students' educational experiences can be greatly enhanced.

Introduction

Over the past few years, online learning environments have become increasingly popular in many academic settings. With the proliferation of access to the internet and technological advancements, online courses and "virtual classrooms" have become increasingly common for distance learning. Online learning environments leverage digital tools and platforms to create interactive and engaging educational experiences, allowing students to gain access to educational content, communicate with teachers and peers, and take part in a wide range of learning activities regardless of their physical location. The primary objective of e-learning was to foster innovation in the delivery of instructional content and facilitate learning opportunities that are accessible at any given time and location (Shahalizade & Musavi,2021).

Engaging and effective learning should be two of the most important things in any learning environment, even online classrooms. When students are interested in what they are studying, they are more likely to be motivated, pay attention, and take an active role in the learning process. They have a better chance of learning more and remembering things for longer. It's even more important to create an environment that encourages active participation in the learning process in virtual classrooms because students are geographically separated from both their teachers and their classmates.

Maintaining the efficiency of the courses is equally important. The effectiveness of a learning environment can be determined by the extent to which it facilitates meaningful learning experiences and facilitates the achievement of intended learning goals. Participation in virtual classrooms that employ instructional practices based on sound pedagogical principles, make use of appropriate technologies, and address the unique challenges of online learning increases the likelihood that students will achieve positive educational outcomes.

The goal of this review article is to delve into the effectiveness and engagement of virtual classrooms learning environment. It provides a thorough analysis of the merits and drawbacks of online education, as well as the various pedagogical approaches and technical considerations involved. This study aims to shed light on how virtual classrooms learning environment can be used to boost student engagement by analyzing the current literature and established best practices in the field. Hence in this paper, researchers raise major questions after reviewing literature that needs to be answered.

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1. What are the benefits of virtual classrooms learning environment?
2. In a virtual classroom learning setting, what kinds of challenges do we have to overcome?
3. What kind of strategies are required for effective engagement in virtual classrooms learning environment?

Reviews Related to Virtual Classroom & Online Learning Environments

Kapoor, G., & Chowdhary, S. (2022) studied in their research entitled "Students Attitude Towards Online Teaching Environment for Higher Educational Institutes of Rohilkhand Region". The purpose of this study was to evaluate teachers' attitudes towards virtual science education as well as their technical skills in using the internet. The study also sought to determine whether there was a gender disparity in the investigated characteristics, as well as whether there was a statistically significant relationship between respondents' attitudes towards online education and their technical skills and access. The findings of this investigation were extremely intriguing. According to the research findings, the effectiveness of future e-learning initiatives will be influenced by students' attitudes and perceptions towards e-learning, as well as their contentment with technology and previous experiences with e-learning. The study compared students' attitudes towards online learning to their demographics, access to and use of technology, level of technological competency, and level of satisfaction with technology. The study's findings were extremely important and valuable to scholars, administrators, and decision-makers involved in the development of future e-learning strategies in higher education.

In the study "The Perspective of E-learning in Higher Education: A Systematized Review" Shahalizade, M., & Musavi, S. (2021) examine the goals, strategies, obstacles, enablers, and innovations of e-learning in higher education systems in Iran and other countries. The study employed a rigorous methodology by conducting a systematic literature review that encompassed both domestic and international studies, adhering to the PRISMA guidelines. The study encompassed a total of 41 studies sourced from Iranian databases, as well as an additional 22 studies obtained from international databases. The review found that Iranian e-learning prioritized quality, cost reduction, and educational justice, while international databases prioritized innovation in providing instruction and learning anytime and anywhere. The employed methodologies encompass instructional design, needs assessment, appropriate multimedia integration, blended learning approaches, evaluation of educational systems, and an interdisciplinary perspective on e-learning. The innovations that were up for discussion included Massive Open Online Courses (MOOCs). According to the study it is advisable to incorporate these variables into policy-making processes concerning e-learning in higher education.

Sormunen M. *et al.* (2021) were examined in their article entitled "Learning Outcomes of Digital Learning Interventions in Higher Education: A Scoping Review" digital technologies in higher education, including nursing, are modern and innovative, but their effectiveness in improving learning outcomes is uncertain. The objective of this scoping review was to analyze the existing body of research that pertains to the effects of digital technologies on academic achievements in the context of higher education. The authors searched five electronic databases for relevant studies and used a scoping review method to analyze and synthesize the evidence. A total of 86 articles, spanning six different disciplines, were found to meet the established selection criteria. One notable observation is that the interventions yielded predominantly favorable results. Professional competence has improved as a result of increased knowledge, skills, and attitudes. Overall competence is enhanced by academic, collaborative, and learning skills. The results imply that digital technology can enhance learning across a range of subject areas.

Pittman, Severino, DeCarlo-Tecce, & Kiosoglous, (2021) studied on "An action research case study: Digital equity and educational inclusion during an emergent COVID-19 divide".This article centered around an action research case study that examined the issue of digital equity and educational inclusion amidst the COVID-19 pandemic. Four faculty members from an urban school of education were asked to share their experiences and practices related to online learning and addressing digital equity for the study. How could institutions, schools, or teachers offer learning opportunities to support digital equity and inclusive education practices to keep and strengthen relationships and core multicultural education practices while people were physically far apart during COVID-19? And what have their experiences, challenges, and victories been? These were some of the key questions that the research revolved around. Reports from the study showed that teachers have become better at using new technologies and lesson plans to make learning environments more inclusive and equitable to everyone.

Innocent and Masue (2020) conducted an examination entitled "Applicability of E-Learning in Higher Learning Institutions in Tanzania," and found these findings. The integration of online learning has emerged as a significant factor in augmenting the efficacy of teaching and learning practices within Tanzanian Higher Learning Institutions. The researcher examined three Morogoro Region universities' e-learning implementation in Tanzania. The data was collected from a sample of 90 participants by administering questionnaires and conducting interviews. Simple random and purposive sampling methods were employed to gather the data, while descriptive statistics were utilized to conduct the analysis. The findings revealed that e-learning has limited applicability in the three Higher Learning Institutions studied. The limited effectiveness of e-learning can be attributed to user attitudes, inadequate skills, and insufficient Information and Communication Technology (ICT) infrastructure. Consequently, the study proposed that governmental resources be allocated to ensure that universities possess adequate ICT infrastructure, alongside implementing an ICT curriculum spanning from primary to tertiary levels. This measure aims to enhance students' receptiveness towards e-learning.

Sivalingam & Ajith (2018) found that there has been a rise in the amount of interest in e-learning that has been shown in the process of teacher preparation that takes place at universities. Educational methods, like many other processes, have evolved as technology has advanced. The authors said that e-learning is an online class that can be accessed through the Internet, an intranet, or a computer. Experiment research revealed that the experiments in the new model were appropriate for teacher training programs and could be successfully administered to large groups. The findings also indicated that there is a need for extra investment in the country's technological infrastructure. Individuals need help with learning topics because their success depends on how well they can get help. Consequently, educators responsible for e-learning programs are required to participate in comprehensive in-service training.

Alves, P., & Miranda, L. (2017) studied on "The influence of Virtual Learning Environments in students' performance". The purpose of this article was to investigate the impact of Virtual Learning Environments (VLEs) on student performance in higher education. Institutions have widely adopted VLEs, which were online platforms that support teaching and learning. The study focused on the frequency with which students accessed VLEs and how this relates to their performance. The study's goal was to provide indicators that aided in understanding the relationship between VLE use and student academic success. The study gathered information from approximately 6,300 undergraduates at a Portuguese public higher education institution. The data analysis revealed a positive relationship between the number of VLE accesses and the number of course units passed by students. This suggested that greater use of VLEs can lead to improved academic performance. Overall, the study emphasized the value of VLEs in higher education as well as the potential of learning analytics to provide insights into students' learning processes.

Henrie, C.R. *et al.* (2015) studied in their review article entitled "Measuring student engagement in technology-mediated learning: A review". Although student engagement is crucial in any learning environment, review article focuses on student involvement in technology-mediated learning experiences, which include any interactions a learner has with teachers, other students, or course materials through digital devices. This may occur in person or via telephone, and the courses may be blended, face-to-face, or entirely online. When compared to traditional face-to-face learning experiences, these technology-mediated learning contexts present distinct measurement challenges. For instance, distance learning is costly to monitor and challenging to expand. Also, many of the systems used in technology-mediated learning keep track of both summative and real-time data about how students interact with the system. This means that technology-mediated learning may give us useful information about how engaged students are that we wouldn't normally get.

Chen *et al.* (2010) examined the impact of web-based learning technology on college student engagement. Research showed that learning technology improved student engagement and learning. The frequency of web and internet technology use among college students was also investigated in this study, and the findings indicated that the majority of students used these technologies for assignments that were related to the coursework they were taking. Online courses that use web-based applications require students to learn IT skills. Computers in education have pros and cons, including potential disadvantages for certain student groups. The document stressed the importance of web-based learning technology for student engagement and education.

As a result of a careful study of above-mentioned existing literature, review-based research papers, case study and empirical data on online learning environments and virtual classrooms. The study's findings on the benefits, challenges, and strategies extracted from the reviewed literature are further explained.

Benefits of Virtual Classroom learning Environments

Virtual classrooms are very important in online learning environments because they give teachers and students a place to work together and be fully involved in a digital learning environment. The responsibilities that come along with the role cover a wide variety of areas and provide a variety of advantages, including the following:

A. *Flexibility and Accessibility:*

One of the primary advantages offered by online classrooms is the flexibility they provide to both students and teachers. Students have the capability to retrieve instructional materials and engage in educational courses through the utilization of virtual classrooms learning environment and online platforms, which can be accessed from any location with an internet connection. Geographical barriers are eliminated as a result of this flexibility, which also allows individuals with different schedules and responsibilities to take part in learning at a leisurely pace. It was determined through research conducted by Sormunen M. and *et al.*, (2021) that the incorporation of digital technologies into educational settings of all kinds has become a policy priority worldwide. A further acceleration of educational institutions' efforts to reorganize their teaching and introduce new digital learning technologies has been caused by the COVID-19 pandemic. A more personalized learning experience is provided by the flexibility with which students can access course materials, turn in assignments, and communicate with teachers and fellow students.

B. *Enhanced Collaboration and Communication:*

The integration of a wide range of tools and features provided by virtual classrooms learning environment enables the facilitation of improved collaboration and communication between students and educators. Students may actively engage in group work, idea exchange, and thought-provoking debates by using tools like discussion boards, real-time chat, video conferencing, and collaborative document editing. Group projects promote a collective sense of involvement, facilitate the development of critical thinking and problem-solving abilities among participants, and enable peer-based learning for students.

C. *Personalized Learning Experiences:*

The use of virtual classrooms enables the creation of personalized learning experiences tailored to the specific needs of each individual learner. The availability of adaptive learning tools on the web could revolutionize education. These technologies assess students' existing knowledge and abilities before providing information and resources tailored to each student's learning preferences and level of advancement. Students can study at their own pace, focus on topics that interest them or present a challenge, and receive immediate feedback and assistance by using this individualized method. It's possible that by evolving in virtual learning environment, students can get more interested in learning and understand the material better. This can be made possible only by making the learning experiences fit the needs of each student.

D. *Increased Student Motivation:*

Virtual classrooms can motivate students, but the platform, instruction, and learner preferences vary. However, virtual classrooms can be an effective tool for increasing students' interest in and commitment to their education when they are developed and used in the right way. Virtual classrooms often use different kinds of multimedia content, as well as interactive simulations and game-like elements, to get students more interested and involved. The learning process can be more enjoyable, interesting, and aesthetically appealing with the assistance of these kinds of elements. When lessons in virtual classrooms use case studies, real-life examples, and multimedia, the material is easier for students to understand and increasingly useful in their everyday lives. Allowing students to track their progress, set goals, and receive feedback on a regular basis in online classrooms may boost their motivation even more and encourage them to take charge of their own learning.

Educators can enhance students' learning experiences by strategically leveraging the adaptability, collaborative features, individualization, and motivating factors inherent in virtual classrooms. Encouraging learning outcomes and higher student satisfaction with online learning are the results of effectively utilizing these benefits.

Challenges in Virtual Classroom learning Environments:

The phrase "challenges in virtual classrooms" refers to the problems that students, teachers, and schools face when they use digital platforms for online learning. These challenges can be found in online learning environments. These issues might have an impact on the standard of instruction that is provided, how well students perform academically, and how satisfied they are with their virtual learning experience in general. The following issues are ones that frequently are encountered in virtual classrooms, and they are as follows:

A. *Technical Issues and Infrastructure Requirements:*

As a challenge in the virtual classroom environment, technical issues and infrastructure requirements refer to the difficulties and constraints associated with the technology and resources required for effective online learning. These challenges can have a significant impact on educational quality and the learning experience. Technical problems include problems connecting to the internet, bugs in the software or hardware, firewalls, security restrictions, and limited bandwidth. Virtual classrooms also face infrastructure issues and requirements, such as institutional investments in computers, laptops, battery backup, electricity, and so on. Holding virtual lessons online necessitates relying on technological advancements and acquiring the appropriate digital tools, both of which require continuous and high-quality power to function. One of the most significant challenges in online learning is the lack of a computer (or laptop), appropriate software, an uninterrupted power supply, and dependable and stable bandwidth internet connections on the part of either the instructor or the student.

To enhance student enthusiasm and engagement, virtual classrooms learning environment frequently incorporate gamification strategies, interactive simulations, and multimedia components. Students exhibit a higher propensity to direct their attention towards and sustain their interest in stimuli that possess aesthetic appeal, captivate their engagement, and provide pleasurable experiences. These outcomes are attained through the incorporation of these aforementioned elements.

B. *Lack of Face-to-Face Interaction:*

The absence of face-to-face or in-person interaction inherent in online courses poses a distinctive and potentially challenging barrier. Effective communication and the development of a positive relationship between educators and learners are greatly influenced by the utilization of nonverbal cues and the physical presence of teachers. If teachers cannot observe their students' body language and facial expressions, it may be difficult for them to determine whether or not their students have comprehended the material and to modify their instruction accordingly. Additionally, students might miss out on the social aspects of traditional classrooms, like engaging in spontaneous conversations and small talk with their peers. The lack of in-person interaction could potentially impact students' level of engagement, their capacity for collaborative learning, and their sense of belonging within a learning community.

C. *Maintaining Student Engagement and Focus:*

Maintaining student engagement and concentration in online classrooms presents greater difficulties in comparison to conventional in-person environments. There are numerous distractions in online learning environments, such as notifications from other applications, access to social media, and the temptation to multitask. Additionally, the physical separation from the teachers and peers may reduce the perceived accountability and social pressure to actively participate. Without proactive strategies to promote engagement, students may become passive, unmotivated learners with suboptimal learning outcomes.

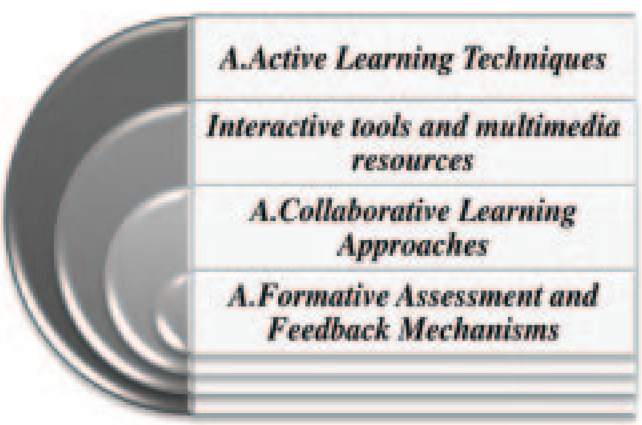
D. Addressing Equity and Inclusion:

The utilization of virtual classrooms can present obstacles in terms of equity and inclusion, as there exists a disparity in the availability of resources and support among students. The existence of disparities in technology access, encompassing both the availability of devices and the reliability of internet connectivity, can pose obstacles for students hailing from socioeconomically disadvantaged backgrounds. Accessing and navigating online learning environments that are not designed with accessibility in mind may present additional obstacles for students with disabilities. To effectively tackle the challenges related to equity and inclusion, it is imperative to implement proactive strategies, including the provision of technological assistance, the availability of alternative access options, and the assurance of inclusive design and content.

By recognizing and addressing these obstacles, teachers and institutions can lessen the impact of technical issues, find inventive ways to foster interaction and engagement, and promote equity and inclusion in virtual classrooms. Strategies such as providing technical support, establishing clear communication channels, implementing active learning techniques, and adopting the concepts of inclusive design can assist in overcoming these obstacles and creating a more effective and engaging online learning experience.

Strategies for Effective Engagementin Virtual Classroom Environments

Strategies for effective engagement in virtual classrooms are the ways that teachers get students involved and motivated in their online classes. These strategies create a vibrant and engaging virtual classroom, improving student learning and online course success. Teachers must balance structure and flexibility with student needs and preferences.



A. Active Learning Techniques:

By acknowledging and resolving these obstacles, educators and educational institutions can minimize the consequences of technological difficulties, devise innovative methods to encourage participation and active involvement, and advocate for fairness and inclusivity within online learning environments. Various strategies, including the provision of technical support, the establishment of clear communication channels, the implementation of active learning techniques, and the adoption of inclusive design principles, can be employed to address these challenges and enhance the efficacy and engagement of online learning.

B. Interactive Tools and Multimedia Resources:

The integration of interactive tools and multimedia resources has the potential to greatly augment student engagement within virtual classrooms. Online platforms provide a diverse array of interactive functionalities, including but not limited to polls, quizzes, virtual whiteboards, and multimedia presentations. These educational tools facilitate the delivery of instructional material in a manner that is both captivating and interactive, thereby fostering students' inquisitiveness and active participation. Teachers can better accommodate their students' varying learning styles and preferences by making use of a variety of visual aids such as videos, animations, infographics, and more.

C. Collaborative Learning Approaches:

Collaborative learning methodologies effectively promote active participation and cultivate a communal atmosphere within online educational environments. Group projects, case studies, and problem-solving activities that require students to collaborate with one another and share their knowledge and points of view can be conceived of and developed by teachers. Virtual breakout rooms or online discussion forums can be employed as tools to enhance small-group discussions and foster peer-to-peer interactions. Collaborative learning not only encourages engagement but also improves communication skills, teamwork, and a deeper understanding of the subject matter through the exchange of ideas and diverse perspectives.

D. Formative Assessment and Feedback Mechanisms:

Formative assessment and feedback are necessary to keep students interested and help them make progress in virtual classrooms. Formative assessments in the form of quizzes, assignments, and discussions serve as effective tools for teachers to actively monitor the progress of student learning and deliver prompt feedback. The provision of immediate feedback on assessments has the potential to facilitate students' comprehension, rectify any misconceptions, and foster a greater motivation for continued learning. Teachers have the opportunity to utilize peer feedback and self-assessment activities as a means of fostering active reflection and developing metacognitive skills. Teachers can make a continuous learning cycle that keeps students interested and motivated by using feedback and assessment loops that happen all the time.

E-learning in university teacher training has grown in popularity over the past decade (Sivalingam & Ajith, 2018). It is important for teachers to use a mix of these strategies in virtual classrooms to get students more involved and help them learn better. Teachers can make a lively and interesting online classroom that encourages active participation, critical thinking, and knowledge retention by getting students involved, using interactive tools, encouraging collaboration, and giving timely feedback. Teachers should also keep thinking about how well their strategies are working, ask students for feedback, and change their methods based on how their virtual classrooms work.

Conclusion

The emergence of virtual classrooms as effective and engaging online learning environments that provide a wide range of benefits as well as its own set of distinct challenges is noteworthy. Virtual classrooms learning has become increasingly popular in recent years. The objective of this study was to examine the researches based on the effectiveness and level of involvement associated with virtual classrooms by delving into their advantages and disadvantages, as well as the instructional methods and technological aspects that ought to be considered. Virtual classrooms learning environment are found beneficial as they let learners access learning resources and take classes whenever they want, from anywhere. Students and teachers are better able to communicate and have meaningful exchanges due to the interactive nature of virtual classrooms, which also promotes active learning and classroom interaction.

Adaptive technologies that cater to the unique needs and preferences of each student make it possible to create individualized learning environments. Moreover, the incorporation of multimedia resources and gamification techniques increases the motivation and interest of students in their academic pursuits. However, virtual classrooms learning present a number of challenges that must be discussed with the goal of maximizing student participation and efficiency. To ensure uninterrupted connection and access to resources, it is necessary to overcome certain technical obstacles and meet certain infrastructural requirements. To keep the relationship between the teacher and the students strong and to build a sense of community, virtual classroom learning environments need creative ways to keep people talking to each other. In a distractible environment, it is essential to have strategies to maintain student engagement and focus.

Equity and inclusion issues must be addressed to ensure that all students have equal learning opportunities. Active learning techniques, interactive tools and multimedia resources, collaborative learning, and formative assessment and feedback can help online educators engage students. Integrating multiple instructional methods can help students engage, think critically, and retain information in a dynamic learning environment.

Virtual classrooms learning environment can improve education by increasing access, participation, and results. With the help of virtual schools, learners may experience rich and beneficial learning opportunities in modern times. This is possible by exploring and implementing effective strategies, using appropriate technologies, and addressing challenges. It is imperative for educational institutions and educators to possess the capability to proficiently develop and manage online learning experiences. This entails considering the most efficient pedagogical practices, ensuring the reliability of the technology, and addressing concerns pertaining to digital equity and accessibility. Due to the continuous advancement of online learning, it is probable that virtual classrooms learning environments will assume a progressively pivotal position within the realm of education.

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Indian Post Office: Transforming Communication, Connectivity, and Financial Inclusion

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Abstract

This research paper aims to provide a comprehensive overview of the Indian post office, its historical significance, and its role in shaping communication, connectivity, and financial inclusion in India. The Indian post office, operated by the Department of Posts, is the largest postal network in the world, serving a vast and diverse population. The paper examines the evolution of the Indian post office from its establishment during British rule to its modernization in the digital age. It explores the various services offered by the post office, including mail delivery, money transfer, savings schemes, and postal banking. The study also highlights the post office's role in bridging the digital divide and promoting financial inclusion in rural and remote areas of the country. Furthermore, the paper explores recent initiatives and technological advancements undertaken by the Indian post office, such as e-commerce delivery, e-post, and digital financial services. Through an analysis of primary and secondary data, this research paper provides valuable insights into the Indian post office's contribution to India's socio-economic development and its future prospects.

Introduction

India Post is the national postal service of India and is operated by the Department of Posts, which is a part of the Ministry of Communications and Information Technology of the Government of India. It is one of the largest postal networks in the world and has been in operation for more than 160 years.

Here is some background information on India Post:

1. **Establishment:** India Post traces its roots back to 1854 when the British East India Company established the first post office in India. Over time, the postal system expanded, and in 1858, it came under the direct control of the British government.
2. **Independence and Expansion:** After India gained independence in 1947, the Department of Posts was formed as a government department responsible for the postal services in the country. India Post expanded its services rapidly, reaching remote areas and serving as a lifeline for communication and transportation.
3. **Postal Services:** India Post offers a wide range of postal services to cater to the needs of the Indian population. It provides services such as mail delivery, parcel delivery, money orders, speed post, registered post, and postal banking.
4. **Network and Reach:** India Post has an extensive network of post offices throughout the country. As of 2021, it had over 1.55 lakh post offices, making it the largest postal network in the world.
5. **Modernization and Technology:** In recent years, India Post has undergone significant modernization to keep pace with the changing times. It has introduced various technology-driven initiatives, such as computerization of post offices, core banking solutions, e-commerce services, and track-and-trace systems. India Post has also launched the e-post service, allowing users to send messages electronically.
6. **Financial Services:** In addition to its postal services, India Post also operates as a banking entity. It provides basic banking services through its Post Office Savings Bank, including savings accounts, recurring deposits, fixed deposits, and money transfers.
7. **Philately:** India Post is known for its philatelic activities, issuing commemorative postage stamps on various themes and occasions. These stamps showcase India's rich cultural heritage, historical events, prominent personalities, and important milestones.

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India Post plays a crucial role in connecting people, facilitating communication, and promoting financial inclusion across the country. Its vast network and diverse range of services make it an essential institution for millions of Indians.

Research Objectives

The research objective of the Indian Post Office in the context of transforming communication, connectivity, and financial inclusion includes the following:

1. **Enhancing Communication Services:** The Indian Post Office can aim to implement innovative technologies and strategies to improve communication services. This could involve exploring new methods for efficient mail delivery, tracking systems for packages, digitalization of postal records, and modernizing communication channels to provide faster and more reliable services.
2. **Strengthening Connectivity in Rural Areas:** One of the key objectives could be to research ways to enhance connectivity in rural and remote areas of India. This could involve studying the feasibility of establishing post offices or mobile post units in underserved regions, providing access to internet services, and leveraging partnerships with other stakeholders to bridge the digital divide.
3. **Expanding Financial Inclusion:** India Post can focus on research initiatives that promote financial inclusion among the unbanked and underbanked population. This may involve studying the needs and requirements of these segments, exploring new banking products and services, improving accessibility to banking facilities, and conducting research on financial literacy programs to empower individuals in managing their finances.
4. **Digitization and E-Governance:** Research can be conducted to drive the digitization of postal services and explore e-governance initiatives. This could involve studying the implementation of digital platforms for services like e-post, e-money order, and online tracking systems.
5. **Innovations in Financial Services:** The research objective may include exploring new and innovative financial services to cater to the diverse needs of the population. This could involve studying the potential for offering microfinance services, insurance products, pension schemes, and mobile banking solutions that leverage technology to reach the underserved sections of society.
6. **Policy Recommendations:** Research can focus on analyzing the existing policies and regulations governing the postal and financial services sector and providing recommendations for reforms.

Overall, the research objectives of the Indian Post Office in the context of transforming communication, connectivity, and financial inclusion would aim to identify opportunities, challenges, and innovative solutions to leverage technology and improve services, with a focus on reaching the underserved and marginalized sections of society.

Research Methodology

This is a conceptual and descriptive research paper based on secondary source of data. The data is collected from national and international journals, published government reports, RBI report, websites etc. secondary research involves re-analyzing, interpreting, or reviewing past data. Help in understanding what happened and what happening at present.

Historical Perspects

Post-Independence Era: In the post-independence era, the Indian Post Office witnessed significant developments and reforms. Here's a brief overview of the post-independent era of the Indian Post Office history:

1. **1947-1950:** After India gained independence in 1947, the Department of Posts was formed as a government department responsible for postal services. Efforts were made to expand the postal network and provide efficient services throughout the country.
2. **1950s-1960s:** During this period, the Indian Post Office focused on strengthening its infrastructure and expanding its reach. Many new post offices were established, particularly in rural areas, to ensure better connectivity & communication. The emphasis was on providing basic postal services to the population.
3. **1970s-1980s:** The Indian Post Office witnessed advancements in technology during this period. Automation and computerization were introduced in post offices, improving efficiency and reducing manual processes. The postal savings bank services were also expanded, providing financial inclusion opportunities to the public.
4. **1990s:** The 1990s saw a shift towards liberalization and modernization in India. The Indian Post Office

began adopting new technologies and services to keep up with the changing times. Electronic mail services were introduced, allowing faster communication.

5. **2000s:** The Indian Post Office embraced e-governance initiatives, aiming to provide convenient services to the public. Various online services were launched, including e-post, e-money order, and track-and-trace systems. The focus was on leveraging technology to enhance efficiency, transparency, and customer experience.

6. **Recent years:** In recent years, the Indian Post Office has continued to modernize and adapt to the digital age. It has expanded its e-commerce services, partnering with major e-commerce companies to facilitate package deliveries. The Post Office Savings Bank has also introduced new schemes and offerings to meet the evolving financial needs of the population.

Throughout the post-independence era, the Indian Post Office has played a crucial role in connecting people, facilitating communication, and promoting financial inclusion. It has undergone significant transformation and modernization to keep pace with changing times and meet the diverse needs of the Indian population.

Services Offered by The Indian Post Office

1. Mail Delivery and Parcel Services Standard Mail Delivery
2. Speed Post
3. Registered Post
4. Express Parcel Services
5. Business Parcel Services
6. **Value-Added Services:** India Post offers various value-added services for mail and parcel delivery. These include options such as Cash on Delivery (COD), delivery on an appointment basis, and the ability to request redirection or hold mail.
7. **International Mail and Parcel Services:** India Post has tie-ups with postal authorities in other countries to facilitate international mail and parcel services. These services include international mail delivery, international registered post, and international speed post.

It's important to note that the availability of specific services and their features may vary based on the destination and specific requirements.

Role of Indian Post Office in Financial Inclusion

India Post plays a crucial role in promoting financial inclusion in rural areas through its extensive network and a range of financial services. Here are some key roles of India Post in rural financial inclusion:

1. **Banking Services:** India Post provides basic banking services through its Post Office Savings Bank (POSB). This includes opening savings accounts, recurring deposits, fixed deposits, and providing remittance facilities.
2. **Accessibility:** The vast network of post offices in rural areas ensures that financial services are accessible to remote and underserved communities.
3. **Savings Schemes:** India Post offers various savings schemes that cater to the specific needs of rural populations. For example, schemes like the Post Office Savings Account, Kisan Vikas Patra (for farmers), and Sukanya Samriddhi Yojana (for girl child) encourage savings and provide financial security to individuals in rural areas.
4. **Remittance Services:** India Post facilitates remittance services, allowing individuals in rural areas to receive money from their family members working in urban areas or abroad.
5. **Financial Literacy**
6. **Government Schemes and Benefits:** India Post acts as a crucial link between the government and rural communities. It assists in the distribution of various government subsidies, welfare benefits, and pension schemes.
7. **Microfinance Services:** India Post has also ventured into microfinance initiatives in collaboration with various banks and financial institutions. These initiatives provide small loans and credit facilities to micro-entrepreneurs and self-help groups in rural areas, promoting entrepreneurship and economic development.

The presence of India Post in rural areas helps bridge the financial inclusion gap by offering accessible and affordable financial services to the underserved population. It empowers individuals with banking facilities, savings options, remittance services, and opportunities to access government benefits, thus contributing to their financial well-being and socio-economic development.

Services For The Unbanked Population

The Indian Post Office offers several services specifically designed to cater to the needs of the unbanked population. These services aim to provide financial inclusion and accessibility to individuals who may not have access to traditional banking services:

1. Post Office Savings Account
2. Money Order
3. Recurring Deposits
4. Public Provident Fund (PPF
5. Rural Postal Life Insurance (RPLI)
6. Savings Schemes:
7. Money Remittance.

By offering these services, the Indian Post Office aims to bridge the financial inclusion gap and provide the unbanked population with avenues for saving, investment, insurance, and secure money transfers. These services play a vital role in empowering individuals, particularly in rural areas, and providing them with basic financial services.

Initiatives

Modernization Indian Post Office has undertaken various initiatives for modernization to keep pace with technological advancements and changing customer needs. These initiatives aim to enhance operational efficiency, improve service quality, and provide a seamless customer experience. Here are some key modernization initiatives in the Indian Post Office:

1. **Computerization and Core Banking Solutions:** The Indian Post Office has implemented computerization in post offices across the country. This includes the digitization of various processes and the introduction of core banking solutions.
2. **E-Post**
3. **Track and Trace System**
4. **Speed Post and Express Parcel Services**
5. **E-Commerce Services**
6. **Postal Financial Services:** The Post Office Savings Bank (POSB) has introduced various technology-driven initiatives. This includes the implementation of core banking solutions, internet banking, mobile banking, and interoperable ATM services.
7. **Postal Life Insurance:** The Indian Post Office has modernized its Postal Life Insurance (PLI) system.
8. **Digital India Initiatives:** The Indian Post Office actively participates in the Digital India campaign initiated by the government. It has expanded its digital services, including e-stamps, online payment facilities, and electronic money orders, to promote a cashless and digitally inclusive ecosystem.

These modernization initiatives undertaken by the Indian Post Office showcase its commitment to leveraging technology and innovation to provide efficient, convenient, and customer-centric services. The aim is to transform the postal network into a modern and digitalized organization that meets the evolving needs of customers in the digital age.

Challenges and Future Prospects

1. **Infrastructure and Technological Challenges:** One of the significant challenges faced by the Indian Post Office is the need to upgrade and modernize its infrastructure and technology. Many post offices, especially in remote and rural areas, may lack adequate infrastructure and connectivity. Addressing these challenges requires investments in improving physical infrastructure, including post office buildings, equipment, and connectivity infrastructure such as internet access.
2. **Competition and Regulatory Environment:** The Indian Post Office operates in a competitive landscape alongside private courier companies, logistics providers, and digital service providers. The increasing competition poses challenges in terms of service differentiation, customer retention, and adapting to changing market dynamics. Navigating these regulatory challenges while staying competitive requires a proactive approach and collaboration with relevant stakeholders.
3. **Leveraging Data Analytics and AI:** Data analytics and artificial intelligence (AI) have the potential to revolutionize postal services, including route optimization, delivery tracking, customer segmentation, and personalized services. However, the Indian Post Office may face challenges in terms of data collection, quality, and privacy. Implementing robust data analytics and AI capabilities will require investments in technology, skilled resources, and adherence to data protection and privacy regulations.
4. **Strengthening Last-Mile Connectivity:** Last-mile connectivity refers to the final leg of delivery from the post office to the customer's doorstep. In a vast and diverse country like India, ensuring reliable and timely last-mile connectivity can be challenging, particularly in remote areas with inadequate road infrastructure. Addressing this challenge requires

investments in transportation logistics, including vehicles and delivery systems. Strengthening last-mile connectivity is crucial to meet customer expectations, especially in the e-commerce and digital era.

6. **Future Prospects:** Despite the challenges, the Indian Post Office has several future prospects. With its extensive reach and existing infrastructure, it is well-positioned to tap into the growing e-commerce market. By leveraging technology and expanding digital services, the Indian Post Office can offer value-added services to customers, such as real-time tracking, electronic payments, and integrated logistics solutions. Embracing innovative technologies like blockchain and IoT (Internet of Things) can also unlock new possibilities for the Indian Post Office, improving operational efficiency and enabling new service offerings. Overall, by addressing the challenges and embracing the opportunities, the Indian Post Office can play a vital role in the future of communication, connectivity, and financial inclusion in India.

Conclusion

- The Indian Post Office has been playing a crucial role in transforming communication, connectivity, and financial inclusion in India. With its extensive network, the Indian Post Office has been able to connect people across the country, bridging the gap between urban and rural areas. It has facilitated communication through mail delivery services, providing a reliable and accessible means of sending letters, postcards, and documents.
- In terms of connectivity, the Indian Post Office has strived to improve last-mile connectivity, ensuring that even remote areas have access to postal services. It has expanded its reach through the establishment of post offices in rural and underserved regions, making it easier for people to access essential financial services and government schemes.
- Financial inclusion has been a key focus for the Indian Post Office. Through its Post Office Savings Bank (POSB), it has provided basic banking services to the unbanked population, allowing them to open savings accounts, make deposits, and avail remittance facilities. The Indian Post Office has also introduced various savings schemes, insurance products, and microfinance initiatives to promote financial security and entrepreneurship among individuals in rural areas.
- To keep pace with the changing times, the Indian Post Office has embraced modernization initiatives. It has leveraged technology to introduce services such as e-post, track and trace systems, and online banking facilities. These initiatives have improved operational efficiency, transparency, and customer experience.
- However, the Indian Post Office does face challenges, including infrastructure and technological limitations, competition from private courier companies, and the need to leverage data analytics and AI. Addressing these challenges will be crucial to continue the transformation of the Indian Post Office and meet the evolving needs of the population.
- Looking ahead, the Indian Post Office has promising prospects. With its vast network, it can further expand its role in e-commerce, offering specialized services to support the growing online retail sector. Collaborations with other stakeholders and the adoption of innovative technologies can unlock new opportunities and enhance the offerings of the Indian Post Office.

Overall, the Indian Post Office's commitment to transforming communication, connectivity, and financial inclusion has made it an essential institution in the socio-economic development of India. With continued efforts and adaptation to emerging trends, the Indian Post Office has the potential to shape the future of communication, connectivity, and financial services in the country, contributing to the overall progress and well-being of the nation and its citizens.

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G-20 Presidency in India 2023: Mission & Vision

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Abstract

As the Mexican, Asian, and Russian financial crises were dealt with ineffectively by the pre-existing geo-economic multilateral order in the late 1990s, nations pushed toward founding the G20. The new organisation was chosen as the "ideal combination" of the old and new worlds since it consists of developed and growing economies, such as OECD and BRICS. On all significant international economic issues, the G20 played a significant role in developing and strengthening the global governance and infrastructure. It acknowledged the interdependence of economic possibilities and difficulties around the world. The current problem is to develop fresh strategies to go past the severe world unrest and the grouping's weaknesses in the international sphere.

History

As a forum for the Finance Ministers as well as Central Bank Governors to debate international economic and financial concerns, the G20 was established in 1999 following the Asian financial crisis. After the global financial and economic crisis of 2007, it was elevated to the level of Heads of State/Government, and in 2009 it was named the "primary platform for international economic cooperation."

Annually, the G20 Summit is conducted with a rotating Presidency in charge. The G20's agenda has now been expanded to cover topics including trade, climate change, sustainable development, health, agriculture, energy, environment, and anti-corruption. The G20's early focus was mostly on broad macroeconomic issues.

Introduction

On December 1, 2022, India took over as the G20 grouping's president from Indonesia. India will occupy the position for one year. This presents India with a special chance to contribute to the global agenda on urgent issues of global significance.

Since globalisation advanced and numerous concerns grew more intricately connected, recent G20 summits have been focusing on a wide variety of global issues that have a significant impact on the global economy in addition to macroeconomics and trade. Global development, energy and climate change, health, counter-terrorism, as well as migration and refugee challenges, were among them.

Through its efforts to address these international problems, the G20 has aimed to actualize a just and sustainable world.

Research Objective

- To present a comprehensive analysis of the G-20 group
- The India perspective on the G-20
- To research India's G-20 opportunities and difficulties
- To assume something about the future.

G20 India Presidency

The G20 logo for India features the lotus, the country's national flower, and the phrase "One Earth-

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One Family-One Future" in contrast. The brilliant colours of India's national flag–saffron, white, green, and blue–were used as inspiration for the G20 Logo. India's pro-planet philosophy of living in complete harmony with nature is reflected in the Earth.

The topic also emphasises Lifestyle for Environment, with it's own accompanying environmentally sound and responsible decisions made at the level of both individual lifestyles and national development, leading to internationally transformative activities that result in a cleaner, greener, and bluer future.

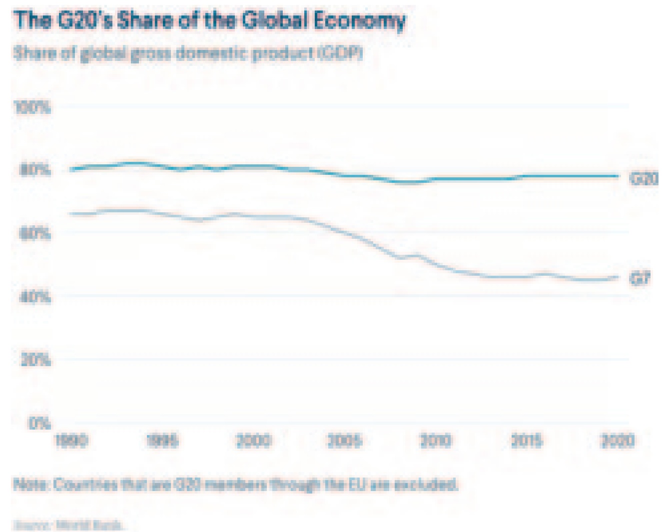
For India, the G20 Presidency also heralds the start of "Amrit Kaal," the 25-year period starting from the 75th anniversary of it's own independence on 15 August 2022 and ending with the centennial of its independence and aimed at creating a future-oriented, prosperous, inclusive, and developed society that is characterised by a focus on the process at its core.

G20
भारत 2023 INDIA

वसुधैव कुटुम्बकम्
ONE EARTH • ONE FAMILY • ONE FUTURE

Significance of G20

- First, compared to its predecessors like the G7, which primarily included industrialised economies and disregarded the interests of the global south, it is a more representative body. Furthermore, the G20's proportion of the world economy has been relatively stable while that of the G7 has been declining.
- Second, it is crucial in addressing financial crises that have an impact on the world economy. For instance, in order to stimulate economies during the financial crisis of 2007, G20 members worked together to increase spending and lower trade barriers.



- Third, it provides a chance for leaders of 20 nations to have bilateral or trilateral discussions outside of G20 summits.
- Fourth, the organisation has a decisive voice in important international issues like global trade, climate change, data decentralisation, etc. thanks to its economic and financial strength.
- Fifth, it was crucial in helping countries get relief during the COVID-19 pandemic. The G20 nations decided to forgo the billions of dollars in repayments owed to themselves by some of the world's poorest nations. Further, G20 leaders committed in October 2021 to assist in immunising 70% of the world's population by the middle of 2022.

A new global vision for G20

- First, the foundation for progress should be the 1993 Vienna Declaration on Human Rights, which reaffirmed the universal consensus that all human rights are interdependent. International cooperation should be based on ensuring that everyone has access to enough job, food, shelter, education, health care, and water.
- Second, grouping must make use of the revolutionary changes in digital information technology. This necessitates rethinking digital access as a "universal service" that goes beyond sharing existing opportunities and physical connectivity. Additionally, open access software should be made available for better governance, sustainable growth, and more affordable service delivery alternatives.
- Thirdly, it has to concentrate on the space sector to develop answers to issues with natural resource

management, such as encouraging agricultural innovation, preventing climate science natural disasters, and planning urban and infrastructure.

- Fourth, public health needs to be prioritised, particularly in light of COVID-19's fatal effects. Antimicrobial resistance, which is spreading rapidly and requires novel drugs and cooperation amongst existing biotechnology institutions, is also a significant global concern.
- Fifth, a proposed world's economic transaction tax that the G20 discussed in 2011 has to be reactivated in order to generate revenue for a fund supporting green technology in least developed nations.

Challenges for G20 Countries

- ***Rising Geopolitical Rifts:*** The international economy is struggling to deal with escalating geopolitical tensions like the conflict between the two largest economies in the world, the US and China, or the decline in trade between the UK and also the euro area after the Brexit vote.
- ***Major Economies Slowing Down:*** Due to its protracted real estate crisis, China, one of the main drivers of the global economy, is currently suffering through a severe downturn.
- ***Expected Recession:*** While a recession is anticipated in some of the world's greatest economies, such as the US and the UK, others, such as those in the euro area, are more likely to see a slowdown or even a stop.
- ***Consistently High Inflation:*** Globally, rising inflation has lowered purchasing power and slowed economic growth. In certain nations, inflation is at historic highs.
- ***Russian invasion of Ukraine's effects:*** Russia's invasion of Ukraine has dramatically boosted global inflation in addition to greatly creating geopolitical ambiguity. The situation has gotten worse as a result of the related Western sanctions. Read more about the conflict between Russia and Ukraine in the article that is linked.
- ***Impact of Rising Inflation:*** In reaction to the high inflation, the world's central banks have raised interest rates, which has further slowed economic activity.

Indian Presidency in 2023

India will hold the 2023 G20 Presidency. On December 1st, 2022, India will take up the G20 Presidency. While it holds the G20 presidency, India will host close to 200 meetings in 32 different industries at various locations around the country. G20 Theme: The theme of India's G20 Presidency is "Vasudhaiva Kutumba-Kam," or "One Earth, One Family, One Future."

India would make efforts to prevent there from being a "first world or third world," but rather "simply one world." India's attempts to realise its vision of unifying the entire world in pursuit of a common objective and a better future are embodied by the G20 Theme.

Following are some reasons why India should host the summit in 2023:

- India has a unique chance to contribute to the global agenda on important issues of global importance during its G20 Presidency.
- Constructing a global consensus on UN reform was the first step toward creating a new international order for the post-Covid era.
- It is a chance to assume the position of leader of the Global South.
- The G20's growing significance in a world where urgent challenges like climate change, the COVID-19 pandemic, and the conflict in Ukraine exist.

Significance of India's G20 Presidency:

- The G20 is the leading platform for worldwide economic cooperation, representing over two-thirds of the world's population, over 75% of global trade, and 85% of the world's GDP.
- India will host nearly 200 sessions in 32 different sectors under its G20 Presidency at various places all throughout the country.
- On September 9 and 10, 2023, in New Delhi, the G20 Leaders' Summit at the level of Heads of State/ Government will take place.
- During this time, India may have the chance to showcase its competence in areas such as democratisation, women's empowerment, and digital technology to the rest of the world, according to Prime Minister Modi.
- India can demonstrate to the rest of the world that when democracy becomes ingrained in a society, the scope of conflict may be reduced. The escalating war between Russia and Ukraine makes this more significant.
- India's foreign policy prioritises the "common benefit of the world." India intends to expand this approach

through its G20 leadership in order to find long-term answers to some of the major global issues that result from the interconnection of the world, including climate change, new and developing technologies, food and energy security, etc.

- The G20 Troika would consist of India, Indonesia, and Brazil during India's Presidency.
- The Troika would now consist of three rising economies and developing nations for the first time.
- It is envisaged that this would lead to a change in the G20's power structure that will favour emerging nations and give them a bigger voice in decision-making.
- India has a fantastic opportunity to address long-standing anomalies that disadvantage developing nations, particularly in the area of agriculture and food subsidies, during its G-20 Presidency.

India's G20 Priorities

Finance and Climate Action. Just LiFE and Energy Transitions : The opportunity to lead the G20 comes at a time when existential threats are intensifying, and the COVID-19 epidemic has revealed how vulnerable our systems are to the cascading effects of climate change. In this context, addressing climate change is a top priority for India's presidential agenda, with an emphasis on both just energy transitions for the world's developing countries as well as climate financing and technology.

India recognises that the problem of climate change affects every industry, sector, and area of society. As a result, India offers the world LiFE (Lifestyle for Environment), a behavior-based movement that draws on the rich, long history of sustainability of our country to encourage consumers and markets to adopt environmentally friendly habits. This is strongly related to the G20 theme for India, "One Earth. One Family. One Future," also known as "VasudhaivaKutumbakam."

Increasing SDG Implementation: The key halfway point of the 2030 Agenda conflicts with India's G20 Presidency. India is aware of the COVID-19's negative effects as a result of the fact that they turned the present decade of action into a decade of recovery. in keeping with this viewpoint. India intends to concentrate on the G20's renewed commitment to working toward the goals outlined in the 2030 Agenda for Sustainable Development.

Developmental Digital Public Goods and Data: As the G20's leader, India can highlight its commitment to a human-centric view of technology, encourage increased information exchange in crucial areas like financial inclusion, public digital infrastructure, and tech-enabled development in everything from agriculture to education.

Debt Distress : India seeks to promote agreement on important and divisive topics like taxation and to discuss methods to restructure development financing, which must "not imprison a country," according to the FM.

Multilateralism in Reform: India's top G20 priority will be to keep pushing for multilateralism reform that results in more inclusive and responsible international organisations.

Development headed by women: India intends to highlight comprehensive growth and progress on the G20 platform, with women's empowerment and representation at the forefront of India's G20 discussions.

Its relevance in changing times: The recent G20 summits had already focused not only on macroeconomics and trade but also on a wide range of global issues that have a significant impact on the world economy, like development, climate change as well as energy, health, counterterrorism, as well as migration and refugees. As globalisation advances and various issues become even more intricately intertwined, these recent summits have become more and more important.

Through its efforts to address these international problems, the G20 has aimed to actualize a just and sustainable world.

Road ahead

East-West bridging powers: In order to address the global economic disruption brought on by Western sanctions imposed and the prolonged exclusion of Russia from international economic forums, countries like India, Indonesia, and South Africa must take proactive measures. They have the ability to serve as bridges between the East and the West.

G20 formalisation: The G20 must have objectives, vision, and mission statements, as well as a permanent secretariat and staff to monitor commitments and guarantee agenda continuity.

Focus more on home commitments: The G20 should place greater emphasis on domestic promises and begin putting them into action. For instance, the G20 nations should gradually phase down domestic coal consumption rather than stopping international financing for coal power. Given that the G20 countries account for more than 75% of global greenhouse gas emissions, this will have a substantial impact.

Make it more representative: The G20 must improve its representation after a 2011 report challenged its exclusivity.

Conclusion

India will be responsible for maintaining the G20's existence in a highly divisive globe through 2023 as it holds the G20 Presidency beginning in December 2022. India's task will be to help Indonesia safeguard the G20 concept and prevent it from disintegrating in the face of geopolitical cracks. The formation of the G20 was done in order to foster equal global growth and development. They convene the world's most potent economies, both developed and emerging, to discuss financial and economic stability on a global scale. To remedy the problem, however, the following steps must be taken:

Governments must come up with strategies to help the weak without necessarily raising debt levels. There would be a significant problem in this regard if external dangers weren't carefully monitored.To address the global supply constraints, the G20 leaders must promote "more open, stable, and transparent rules-based commerce."

Increasing the robustness of the global value chains would help protect against upcoming shocks. The G-20's top objective is to stop the spiralling inflation. G-20 cooperation is necessary for a robust, long-lasting, equitable, and inclusive recovery, and this cooperation entails not just keeping the peace in Ukraine but also "helping prevent future division".

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Role of Inclusive Teaching in Physical Education and The Health of Children

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Abstract

Physical education (P.E.) is an essential part of a student's educational experience since it helps pupils develop favourable attitudes and habits that will last a lifetime regarding physical activity and health. An active lifestyle is promoted, which helps prevent illness, improves physical strength and fitness, fosters academic achievement, strengthens self-confidence, and hones social and emotional qualities such as sportsmanship, cooperation, and teamwork. The purpose of young people participating in physical education is to assist them in making positive choices about their mental and physical well-being at an early age. The majority of schools provide reasonably balanced physical education courses. Students can collaborate toward the common goal of competing at a high level and being successful in an activity that requires a significant amount of physical effort. The spirit of competition among the students is fueled, and they get terrific exercise while also gaining an appreciation for the need for sportsmanship. The fundamental objective of this study is to give a background for better comprehending the beneficial benefits that P.E. has on the health of students while they are engaged in academic pursuits. In addition to that, it offers recommendations for changes to existing laws and regulations that could make PE more successful. According to the findings of this study, officials will be able to improve children's health and well-being as well as their potential for lifetime physical activity if they address the quality, quantity, and intensity of physical education throughout the country.

Introduction

A student's overall education is complete with the inclusion of physical education (PE), which promotes lifelong positive attitudes and behaviours toward physical exercise and health. By encouraging regular practice, we may reduce health problems, become stronger and fitter, do better in school, feel better about ourselves, and develop positive character traits like sportsmanship, collaboration, and teamwork. Young people's involvement in physical education is meant to help them learn to make good mental and physical health decisions from an early age. Now more than ever, students are expected to participate in rigorous and enriching physical education programmes. Students can work together to achieve a shared goal: excelling at a physically demanding sport at a competitive level (Anderson, 1989). The children get a great workout and feed their competitive juices while also learning the value of sportsmanship. The primary purpose of this research is to provide the groundwork for a more nuanced understanding of the potential health advantages of P.E. for students while they pursue academic goals. It also suggests changes to laws and regulations that, if adopted, might significantly improve PE's effectiveness. The research concluded that improving the quality, quantity, and intensity of physical education programmes nationwide would allow policymakers to maximize children's potential for lifelong physical activity and health and well-being (Mitchell, 2016).

The Main Goals in Teaching Modern Physical Education

Physical education consists of many different sports and activities, allowing students to compete in and learn various games. This class is included in students' schedules as part of their daily school routine, essentially giving them a break from the academic courses; however, while P.E. has a lot in common with extracurricular activities, it is still a school course that provides a learning experience goes beyond fun activities and games.

- To give kids and teens a wide range of ways to get exercise and stay healthy. P.E. is one of the few ways to guarantee that kids will be active and healthy. This is because almost all kids can take part in it.
- To teach people how to stay fit and healthy for the rest of their lives.

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- To get people to report and track their own exercise.
- To customise the length, intensity, and type of activity for each person.
- To give feedback about the work, not the result.
- To show people how to behave.

Physical educators need to help kids and teens build and improve their motor skills and give them a basic set of skills that builds their movement repertoire. So, kids and teens can always play games, play sports, and do other physical activities.

There are many ways to reach these goals. Often, national, state, and local rules tell physical education teachers what standards they must teach. These standards say what should be taught, who should teach it, and which books and other materials must be used. These different standards include teaching sports education, which is the use of sports as exercise, fitness education, which is about overall health and fitness, and movement education, which is about moving in a setting that isn't a sport. In the 1800s, Francois Delsarte, Liselott Diem, and Rudolf von Laban, the founders of physical education (P.E.), focused on how children could use their bodies to show who they were. These plans and programmes are made with their ideas in mind. This, along with ideas from the 1960s that focused on the body, spatial awareness, effort, and relationships, led to the way physical education is taught today.

When kids and teens learn about health in the right way and in a good way, it can be very good for their health. Some of these include a lower risk of metabolic disease, a healthier heart, and a healthier mind. Research has also shown that exercise is good for the brain and helps it grow. PE classes can also help students do better in school. In 2007, researchers found that students who had 56 hours of physical education a year did much better on standard English Arts tests than those who had 28 hours of physical education a year.

Physical education is the course where students learn about fitness, which is the state of being physically healthy, and study different types of physical activities. Students in levels K-12 can participate in fitness activities, such as playing games and sports, but they also learn about essential topics concerning health and wellness. The class typically takes place at the school's gymnasium, though it may also have access to athletic fields, such as a soccer field, football gridiron, or baseball diamond. While many of the games played in P.E. use frisbees, foam balls, hula hoops, and bean bags, a P.E. teacher may also organize sports competitions to use these playing fields. Common sports played in P.E. include:

- Dodgeball
- Basketball
- Volleyball
- Soccer
- Baseball
- Tennis

Fundamental Movement Skills

Many kids don't need to attend formal PE classes to develop essential motor abilities like running, leaping, rolling, throwing, and catching. Play and other activities might be a great way to pick up these abilities. However, only a physical education instructor can provide kids with the chance to hone and perfect these abilities via practice and experience. In the long run, young individuals who take advantage of this possibility will have a better shot at attaining their sports goals.

Sports like gymnastics, dance, and yoga may all need particular abilities from competitors. These abilities include mastery, equilibrium, adaptability, and coordination. You may discover that some kids prefer these imaginative sports to ones with technical characteristics, like netball and cricket, although it is part of a physical education teacher's role to promote the importance of exercise to kids regardless of how well the kids perform in the activity. If this is the case, remember that advocating for the benefits of physical activity is a crucial aspect of your role.

Students' physical education programmes should intensely focus on working together as a team and competing against one another. Young people benefit greatly from having a physical education instructor guide them through the steps of learning how to work together effectively in a variety of sports and activities.

Kids must learn to take both wins and losses in stride and embrace the value of fair play. A child's maturity includes the formation of moral and attitudinal figures, such as the ability to accept failure without becoming a pampered winner. Among them are the value of and skill in playing by the rules (Weiller Abels & Bridges, 2010).

Encouragement

It is essential for the success of a physical education teacher's classroom that they can inspire and excite the pupils in their class. Children who aren't naturally athletic may have difficulty succeeding in physical education programmes. After all, only some people are interested in playing rugby at nine in the morning.

It is essential that you, as a teacher of physical education, motivate your pupils to develop a positive attitude toward their courses, acquire new athletic skills, and make positive strides toward improved physical health. It is required of teachers of physical education to help pupils with varied skill levels and degrees of interest in the subject. The intention is not to coerce children into engaging in physical activity but rather to inspire them to do so of their own will because they see the benefits.

It is possible to accomplish this objective through several excellent methods, including organizing exciting athletic events, getting to know each child individually, and modifying your teaching approach so that every student is included. Students who choose not to participate in physical activity may still contribute to the overall learning experience by filling out paperwork indicating their decision not to participate. In addition, many types of physical education programmes may be quickly diversified by modifying the amount of time spent on a particular activity, moving the location of the objectives to make them nearer or farther away, or rewriting the rules of sports until the kids have mastered them. (Tremarche, Robinson, & Graham, 2007)

Health

The fundamental objective of pupils participating in physical education is to improve not just their sports skills but also their general level of physical fitness. In addition to this, it is the responsibility of the instructor to make sure that the pupils understand the value of living an active and healthy lifestyle and that they are aware of this significance.

This includes teaching on all areas of physical health, such as the many ways in which we may consist of physical activity in our everyday lives as well as the value of keeping a decent diet.

It is the responsibility of the children's teachers of physical education to also educate the students about the scientific principles that underlie fitness, such as the way in which cardiovascular exercise really functions. Children need to be able to comprehend the information of this nature in order for them to understand why it is essential for them to strive to be physically fit, in order for them to be able to take this knowledge with them when they leave school and in order for them to be able to bring this knowledge with them into adulthood. (Rossi & Jeanes, 2018)

The Benefits of Physical Education in Schools

The benefits to body and mind from regular physical education participation are many, making it essential to a healthy lifestyle. Regular exercise has been linked to improved weight management, better cardiovascular health, and a reduced risk of acquiring chronic diseases, including diabetes, heart disease, and obesity.

Children's mental health may benefit from having physical education classes and numerous physical ones. Studies have shown that regular exercise may help reduce stress and anxiety, improve mood, and sharpen mental clarity. Participation in physical education programmes has been shown to have positive effects on students' sense of achievement and self-esteem, particularly those who are struggling in more traditional academic areas.

The capacity to work in teams, make friends, and enhance communication are some of the social benefits that students may reap from participating in physical education programmes at school. Possessing these skills is essential to succeed in both your personal and professional life.Beginning their schooling with some PE is very beneficial for several reasons, including the fact that it encourages students to become physically active, fearless, and self-assured while also improving their health and focus. Despite the fact that physical education and exercise have several positive effects on children, few parents recognize the value of these subjects for their children. It's a shame since both of these things should be common knowledge among parents.

We as parents have always been quite strict about our kids giving their time and attention to schoolwork first and foremost. However, at the same time, we fail to appreciate the value of physical exercise. You may be wondering, "Why should we put so much emphasis on PE?" Let's discuss it and the benefits it offers to the students. (Cockburn, 2009)

Physical Growth and Healthy Fitness

Students are required to take physical education classes in order to maintain a healthy lifestyle and get knowledge about a variety of different types of physical exercises that will help them develop strong muscles and bones. A child's physical growth and personality development are both aided by consistent participation in physically active pursuits such as running, cycling, walking, swimming, and yoga. It will be more advantageous for your child's physical development if they engage in everyday physical activities. If they do so, you should encourage them.

Mental Development

The promotion of positive mental health is one of the primary advantages that come with participating in physical education activities. Because it contributes to a sense of emotional steadiness, having a healthy mind is just as important as having a healthy body. Playing and engaging in physical activities will keep them away from many mental illnesses or disorders like anxiety disorders, depression, and bipolar disorder, which can result in severe conditions over the long term. (Ajisafe, 1980)

Reducing Stress Level

One of the essential advantages of participating in physical education is that it contributes to maintaining positive mental health. The capacity to maintain a level of emotional steadiness depends on both one's physical and one's mental health. Playing and participating in other physically active pursuits may help children avoid numerous mental diseases and disorders, including anxiety disorders, depression, and bipolar disorder, all of which can lead to severe ailments over the course of their lifetime. (Cambridge, 1966)

Self-Esteem and Discipline

Promoting positive mental health is one of the essential advantages of participating in physical education activities. Because it contributes to an individual's capacity to maintain consistent feelings, having a healthy mind is just as important as having a healthy body. Playing and participating in other physically active pursuits will protect kids against a wide variety of mental diseases and disorders, including anxiety disorders, depression, and bipolar disorder, all of which have the potential to develop into more serious issues over time.

Improving Focus and Concentration Skills

Physical education enables students to remain alert, concentrated and proactive. Regular physical exercise will keep their mind at rest and help them focus on their studies and sports. They'll be mentally and physically fit. One of the essential benefits of physical education is that students will have a good quality of sleep.

Personality and Character Development

Students who engage in healthy behaviours and have beneficial self-esteem benefit from participating in regular physical activity. Students will be able to improve their leadership skills, develop a stronger sense of team spirit, and become more self-assured while making choices. (Baley & Field, 1976)

Conclusion

Attitudes must shift, and perhaps more importantly, teaching practices must be adjusted so that all kids get the attention and support they need to succeed. It is well-known that planning for inclusive education is a challenging undertaking. However, the physical education instructor must recognize that inclusive instruction is a process that calls for constant dialogue, commitment, and esteem. As soon as including kids with disabilities becomes a need, classroom instruction must shift to foster learning among students of all abilities. As soon as the presence of children with disabilities in the classroom ceases to be a choice and becomes a reality, this teaching configuration as a challenge is set into motion. As a result, instructors are being urged to rethink how they present lessons on inclusion, for example, by grounding their pedagogical actions in an appreciation of the unique qualities of each human being who has the right to a comprehensive education that considers the limitations and possibilities it presents. When thinking about how to best support children with disabilities in mainstream classrooms, it's important to remember that everyone benefits when kids of all abilities work together. The academic community must contribute with further research to show and analyze the reality of physical education in schools from the perspective of inclusion in light of the current status of public policy on inclusive education. Based on the results of the study presented here, it is evident that academics are increasingly interested in investigating physical education from the perspective of inclusion, exceedingly physical education in the setting of schools.

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A Comparative Review on Working Capital Management of Selected Food and Beverages Companies

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Abstract

The present study is entitled "A comparative review on working capital management of selected food & beverages companies in the Indian context". Working capital works as a gadget in the financial decision. Without having insufficient working capital, no one can run their business empower effectively. The study considers a total of 4 companies namely; Nestle India, Britannia Industries, Tata Consumer Products, and Hindustan Unilever over four years from the year 2019 to the year 2022. For the data has been collected from moneycontrol.com and represented with the help of SPSS Software and Gretl Software. Before executing the panel data regression, the study has gone through the process of pre-testing with the help of the Kolmogorov Smirnov test and Shapiro-W Test as both models are part of a non-parametric test.Thereafter, it revealed a higher correlation of CR (0.917) with the QR while the value of r = 0.974 between DER and LTDR which indicates the problem of multicollinearity. It also described Durbin Watson's Statistics which is used to detect the autocorrelation in the residuals from the regression analysis.Further, the study is more concerned about the pooled least square (POLS) as it assumes that the intercepts are the same for all the selected firms.

Lastly, the study indicates a perfect positive association between the dependent and independent variables as the value of 'r' is 0.949 which is near to 1.

Introduction

The availability of working capital, which needs to be sufficient, acts as an influential monitor for a commercial firm to cover day-to-day operating costs under all conditions. Working capital must be maintained since it has an essential role in businesses, similar to how circulation does in human beings. Maintaining enough resources is crucial since doing so reduces the risk of any commercial firm suffering loss or not fulfilling its commitments (Khan, M., 2017). The components of working capital management are considered an important part of corporate finance which meet the requirements of short-term obligations as well as the investment decisions of an entity (Sharma & Kumar, 2011).

From the previous studies, the current research paper found that there wasa lot of work done by the research academicians on working capital management especially in the food & beverages sector in the Nigerian context.

As per the opinion of Singh and Asress (2011), sometimes insufficient or inadequate working capital is responsible for the lower-level performance of the firm. So they suggested that the working capital of any firm should not be too much high or low. Deloof (2003) observed two important aspect/perspective of working capital management which higher level of working capital promote the expansion of sales of the firm and a second perspective deals with a greater discount if the firm chooses the option for early payment and therefore, may rise companies' worth. Owele (2014), suggested SME industry should screen out their working capital on a timely basis as it has a direct effect on the firm's financial performance. While Runyora (2012) agreed if the company wishes to run their business smoothly then they need to manage their day-to-day activities of working capital.

Objective: To examine the relationship between components of working capital management of the selected food and beverage companies.

Literature Review

Ali, J., *et al.* (2020) conducted a study on working capital management to check the profitability performance of manufactured firms. In the study, an investigation worked only 17 out of 35 companies and

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the rest were excluded due to the unavailability of data based on the Pakistani Stock Exchange between the duration years 2007 to 2018. Cement industries have been targeted as they believed that is one of the rapidly growing industries in Pakistan. A few important variables were selected such as return on asset (ROA), inventory conversion cycle (ICP), receivable collection period (RCP), payable deferral period (PDP), cash conversion cycle (CCC), etc. and results revealed by applying ordinary least square (OLS), generalized method of moments (GMM), system generalized method of moments (SGMM). The study found a positive association between ICP and PDP with the ROA and also had a negative impact of CCC on return on assets. Lastly, it recommended that the firms need to setoff their obligations and collection should be done from customers on an earlier basis. Moreover, a financial manager should create value for shareholders by balancing their receivable and payable accounts.

Farhan, N.H., *et al*. (2021), did an analysis of working capital management in India in which they essentially concentrated on the urgent need of short-term capital. Working capital management was analyzed among the small, medium, and large firms in the sector of Indian Pharmaceutical. Based on the secondary source, the data has been collected from the Prowess IQ Database for the period year 2008 to 2017 in which 82 Pharmaceutical companies played an important role. The data analysis has been done by applying the Generalized Method of Moment (GMM) model which put an effective impact to achieve the estimated results. Therefore, the results revealed noticeable differences in managing working capital at different sizes of business. While, no. of the days collection period, no. of days payable period, no. of days inventory holding period found a positive impact on the performance of selected pharmaceutical companies. They also recommended that the components of working capital management should have more prominenceabout increase the firm's profitability.

The components of working capital play an important role in the avoidance of risk, and shortage of funds to meet the short-term obligations, helpful in eliminating the blocked funds by managing properly its current short-term funds i.e. current assets and current liabilities. The existing study mainly provides an abstract understanding ofthe impact of working capital on the liquidity & profitability performance of Kerala Minerals and Metals Ltd. He believed that the necessity of working capital is in every enterprise either doing business on a small scale or a large scale. The financial statement and annual reports of Kerala Mineral and Metals Ltd have been used for data for the period of the year 2009-10 to 2018-19 to comprehend the performance of selected firms. Findings and results exhibited by using Spearman's Rank correlation method and T-test used to analyze the relationship between components of working capital and profitability. The study found weak & negative impacts between the working capital components and liquidity of the firms. Lastly, it suggested that a firm needs to set the benchmark for the current ratio as it helps increatinga sound liquidity position (Sunilraj, N.V. (2020).

Prasad, P., *et al.* (2019) tried to explore the past study has been done by academicians, and researchers in the area of working capital attributes, how poor WCM impact to the financial performance of the firm, and also talked about the scope and further research is required which portion can be remained to cover. A systematic review study has been possible to perform with the help of Google Scholar. They were primarily concerned about the articles which came under the detailed citations of 50 and above as of June 05, 2018. The study categorized the common themes of the articles as they assumed that thorough content analysis will support an impactful study as well as identifying the highest to lowest category cited journals. Based on the observations, a maximum of the highly cited journals were written and published on the relationship between WCM and firms' profitability.

Kasiran, F.W., *et al.* (2016) marked a study to check the effectiveness of working capital management of selected small, and large enterprises, and data has been extracted from Suruhanjaya Syarikat Malaysia with the sample of 24 companies for the period of year 2010-2013. The study largely focused on the performance index of working capital (PI_{WCM}), utilization index of working capital management (UI_{WCM}), and efficiency index of working capital management (EI_{WCM}). Only one out of 24 companies achieved the performance index and the rest did not reach the up to the expectations which means the value lies below 1. Unproductiveconsumption of assets and decreased immediate investment are expected to be the outcomes of poor working capital management. More importantly, the firm will likely miss out on many possibilities to improve its operations as it will face an urgent shortage of cash that will see its credit score downgraded. The study advised that a larger size sample would give better outcomes if future researchers wish to conduct their study, particularly in this area.

Data Analysis

Descriptive Statistics

Descriptive Statistics				
	Minimum	Maximum	Mean	Std. Deviation
RONW	4.83	103.12	50.8425	39.31952
CR	.56	3.41	1.1669	.77085
QR	.32	1.88	.8425	.43469
DER	.00	.91	.1138	.25869
LTDR	.00	.29	.0469	.09228
ICR	16.51	1115.36	127.4463	273.74924
ITR	4.05	17.34	10.6894	4.02650
DTR	21.53	99.38	48.8225	28.85750
Valid N (list-wise)	16			

Kaur, P., *et al.* (2018) expressed a connection across attributes in a group or sample, statistical analysis provides a way to organize and summarize information. Before doing logical numerical analysis, descriptive figures ought to always be produced. This is an essential step in doing investigations. Indicators of distribution/ variation, central tendency, frequency, and place are all included in statistical analysis, along with different kinds of data (nominal, time frame, as well as proportion).

Normality Test

1. One-Sample Kolmogorov-Smirnov Test								
	RONW	CR	QR	DER	LTDR	ICR	ITR	DTR
Test Statistic	.173	.232	.166	.439	.385	.384	.115	.283
df	16	16	16	16	16	16	16	16
Asymp.Sig. (2-tailed)	.200[c,d]	.021[c]	.200[c,d]	.000[c]	.000[c]	.000[c]	.200[c,d]	.001[c]

Test distribution is Normal.
This is a lower bound of the true significance.

2. Shapiro-Wilk Test	
Shapiro-Wilk W	p-value
0.992912	0.971877

A normality test is used to check whether the sample data has been distributed from the population properly or not. The present study conducted a pre-testing model (normality test) through the Kolmogorov Smirnov test and Shapiro -W Testas both models are part of the non-parametric test. The above test is isolated into the criteria of acceptance or rejection.

As per the KS test, if the p-value is larger than the significance level (0.200 > 0.05)it means the decision goes towards the rejectionof the null hypothesis. And for the other variables like; DER, LTDR, ICR, and DTR p-value indicates less than the significance value (0.05) which means accepting the null hypothesis.

Shapiro-Wilk Test is preferable to the KS Test as this test has control over the KS Test. From the above table, we can identify that the p-value is 0.971 which is higher than the significance value (0.05) means here the particular test is rejecting the null hypothesis (i.e. 0.971 > 0.05).

Panel Data Regression

Panel data analysis is also known as longitudinal data or cross-sectional time series data. There are several units/firms in the panel data set, and several dimensions have been taken for many of them at different points in duration. It may deal with the individual effect, time effect, or both which are evaluated by any of the effects; fixed effect model and random effect model. The current research paper is more concerned about the pooled least square (POLS) as the study assumes that the intercepts are the same for all the selected firms.

Karl Pearson's Correlation

	RONW	CR	QR	DER	LTDR	ICR	ITR	DTR
RONW	1							
CR	-0.610	1						
QR	-0.697	0.917	1					
DER	0.101	-0.309	-0.036	1				
LTDR	0.111	-0.337	-0.031	0.974	1			
ICR	-0.149	0.135	0.176	-0.181	-0.207	1		
ITR	0.232	-0.561	-0.350	0.175	0.257	0.375	1	
DTR	0.816	-0.571	-0.690	0.123	0.146	-0.225	-0.077	1

Source: Researchers' Computation

Regression Model,

$$RONW = \beta0 + \beta1(CR) + \beta2(QR) + \beta3(DER) + \beta4\ (LTDR) + \beta5\ (ICR) + \beta6(ITR) + \beta7(DTR) + \varepsilon$$

A coefficient correlation is generally applied in statistical analysis to check the relationship between two variables (i.e. variables X and Y) in linear regression. It is always expressed by "r" and ranges between -1 to +1. The above table exhibits the relationship between all the selected independent variables and the dependent variable (RONW). We can observe that there is a higher correlation of CR (0.917) with the QR while the value of r=0.974 between DER and LTDR which indicates the problem of multicollinearity.

Pooled OLS Model with the dependent variable; Return on Net Worth (RONW)

Variables	ROA		
	Coefficient	t-stat	p-value
CR	–21.28	–0.89	0.53
QR	109.76	1.72	0.33
DER	392.59	3.96	0.15
LTDR	–1333.32	–3.59	0.17
ICR	–0.080	–8.37	0.07
ITR	10.77	6.00	0.10
DTR	2.06	6.69	0.09
R	0.949		
R-Square	0.901		
Adjusted R-Square	0.815		
Durbin's Stats	2.066		
F-Stats	10.41		
Sign.	.002		

Source: Gretl OUTPUT

A popular method for calculating the correlation coefficients of equations involving linear regression that represent the connection with multiple quantitative variables that are independent, and an underlying variable is called ordinary least squares regression (OLS). The study representsa minimal square error (SSE) by using the least square method. The pooled OLSmodelis used to observe the relationship between all the components of working capital management and the profitability performance of the firms. The study indicates a perfect positive association between the dependent and independent variables as the value of 'r' is 0.949 which is near 1. The value of adjusted $R^2 = 0.815$ represents that around 81% of variations have been explained internally and the rest of the variations (19%) were uncovered due to the other responsible external factors. While the significance and worth value of R-square are measured by the p-value (0.002). The calculated value of F-stats is larger than the critical value (10.41 > 3.17) which means here the study rejects the null hypothesis. Lastly, the study also described Durbin Watson's Statistics which is used to detect the autocorrelation in the residuals from the regression analysis. It always ranges between 0 and 4, and the study has a positive autocorrelation among the variable as the value found (2.066).

Conclusion

The present research paper adds to the body of knowledge by doing a comparative study on working capital management in the sector of food and beverages in the Indian context. Based on the secondary sources, data has been gathered from the moneycontrol.com website and interpreted through SPSS Software as well as Gretl Software. Hence, under the study, variables like; return on net worth were observed as a dependent variables while current ratio, quick ratio, debt equity ratio, long-term debt ratio, inventory turnover ratio, and debtors turnover ratio, were participated as independent variables. By observing the different kinds of literature, the study mainly focused on a comparative study especially four selected food & beverages companies, and found the profitability performance of Nestle India up to the remarkable point.

A normality test is used to check whether the sample data has been distributed from the population properly or not. Then after, the study used pooled OLS model to observe the relationship between all the components of working capital management and the profitability performance of the firms. India is the global leader in the food & beverage industry and it has the 5th largest sector, particularly in manufacturing concerns.

It suggested that a firm should enhance the raw-material cycle by driving up its manufacturing process. It also recommended that the sector should receive a grant from the govt. and participating samples also bargain from the suppliers for a discount by paying early. Lastly, there are many other indicators of profitability like gross profit, net operating profit, ROI, and Tobin's Q that may be used to access the results regarding reliability.

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Teacher's Concern about Inclusive Education in the Light of Sustainable Development Goals (SDGs4)

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Abstract

This present research paper emphasizes the importance of the Sustainable Development Goal (SDG) in addressing problems in Haryana state, especially the significance of equitable and quality inclusive education for all CWSN in rural areas. It also emphasizes accessing the level of concern about inclusive education among government school teachers. A sample of 41 government school teachers from the Panipat district was selected for data collection. For analysis of the data, descriptive and inferential statistics was used. Present study findings about inclusive education indicate that most government school teachers agree that they are aware of the inclusion of CWSN in regular classrooms and accessibility of quality education in the light of SDGs4 in Haryana.

Further, analysis results for concern about inclusive education show that most government school teachers have an average concern about inclusive education. Moreover, analysis results for different categories (i.e. resources, difficulties, appropriateness and workload) also show a similar trend. The comparison between male and female teachers shows no significant difference in teachers' concern about inclusive education. Further, a comparison of concerns about inclusive education based on the length of the teaching experience and age shows similar trends. On the other hand, the comparison results based on the level of teaching indicate that two out of four levels of teaching, i.e. primary and senior secondary level teachers, differ significantly in their concerns about inclusive education. Moreover, analysis results from Pearson product-moment correlation depict no significant relationship between concerns for inclusive education and accessibility of quality and equitable education for CWSN in the light of SDGs4.

Introduction

The important target of the SDG is to ensure inclusive, equitable, and quality education for all children without discrimination based on disability. It also talks about the lifelong learning of these children. Every nation or society must invest in education to develop its sociological resources, human resources and economy. It can be practically achieved in India, but with caution and attentiveness. Education helps to develop a child's physical skills, personality, intellectual skills, and vocational skills. Another crucial aspect of education is that it nurtures children with special needs with a sense of being accepted in society, allowing them to progress normally without being perceived as social misfits.

According to United Nations Development Program (2018), some barriers may exist to accessible, quality and equitable education for all due to poverty, lack of awareness among parents, and lack of professional commitment in teachers that impede the SDG agenda. Education is a powerful tool for both individual and state development. According to the literature review on effective school education, teaching and learning changes happen in the classroom. The classroom teacher is in charge and works as the driving force for change in the classroom. If a teacher is not confident in meeting the educational and instructional requirements of the students with special needs, the program's success may be jeopardized. It also hinders accessibility of vocational and educational opportunities to people with disabilities, by 2030, as one of the SDG's important goals. The findings of this study have significant implications for the higher authorities in Haryana. They are responsible for the pre-service as well as in-service training practices of general school teachers.

The social cognitive theory given by Bandura in 2006 suggests that an individual feels threatened and tries to

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avoid those situations in which they are incompetent. Most research published on inclusive education indicates that if general education teachers are not adequately competent to deal with and interact with CWSN, they usually try to resist the implementation of an inclusive classroom. According to Das *et al.* (2013), most teachers in India lack available support services for an inclusive classroom. Teachers at the primary and secondary levels perceived themselves as poorly competent in dealing with children with special needs. However, as a result of the inclusive education movement worldwide, classrooms are becoming more heterogeneous (Yadav *et al.,* 2015). It is also an important step as education gives these children a feeling of being accepted in society and helps them to develop normally, not thinking of themselves as outcasts (Kusimo *et al.*, 2017). The researchers visited Haryana state government schools for this study to observe teachers' opinions about inclusive learning environments.

Inclusive education in India

The movement toward an inclusive educational program focused on human rights, social justice, and equitable, quality education besides every child's right to obtain basic education, including CWSN (Forlin, 2013). It is time for government agencies and mainstream institutions to recognize that segregating these children is not a moral task and is unjustifiable, moreover promotes the violation of human rights. NEP stresses the attainment of foundational numeracy and literacy up to grade third for all children, including CWSN, establishing it as a national mission to achieve this objective by 2025. ASER (Annual Survey of Education Report) and NAS (National Achievement Survey) reports state that children with special needs cannot read their respective grade-level textbooks. The NEP stressed an increasing learning crisis, where children are enrolled in schools yet had not attained the foundational skills of literacy and numeracy.

Objectives of the study

1. To assess the level of concern among government school teachers regarding the inclusion of children with special needs in the regular classroom.
2. To compare the inclusive education concern of teachers in relation to their personal and professional backgrounds.
3. To examine the relationship between teachers' concern about inclusive education and the implementation of SDG by 2030.

Method

Participants

The researchers used an online survey to collect data from pre-primary, primary, secondary and senior secondary government school teachers. A sample of the teachers was selected using a multistage random sampling procedure. Firstly, researchers selected the Israna block of the Panipat district of the Haryana state. The researchers collected the list of the government schools of Israna block, where children with special needs were studying. Researchers randomly collected data from teachers of the listed government schools. A total of 41 pre-primary, primary, secondary and senior secondary school teachers completed the survey.

Instrument

This study is based on the descriptive survey method.The study used two questionnaires for data collection. One questionnaire titled "Concerns about Inclusive Education Scale-Short Form (CIES-SF)", developed by Sahli Lozano *et al.* (2022) was used to measure the concern of teachers about inclusive education. Besides some demographical questions, respondents received 12 items CIES-SF scale. These 12 items are clustered around four categories. The categories were 1) Resources, 2) Difficulties, 3) Appropriateness and 4) Workload. Each category contains three items. Participants indicated their responses on a 4-point Likert-type scale varying from 1 (not at all concerned) to 4 (extremely concerned). The second questionnaire, which was modified in Indian settings taken from Kusimo *et al.* (2017), asked the respondents about equitable, accessible,inclusive education for children with special needs in the light of sustainable development goals. This questionnaire contained 11 items. All the items were answered on a 5-point Likert scale, varying responses from 1 (strongly agree) to 5 (strongly disagree).

Analysis

Table 1 shows data on awareness among teachers regarding accessible, equitable and quality education for children with special needs and the possibility of achieving quality and equitable, inclusive education in the light of SDG in Haryana. Study results indicate that 31.70% of respondents strongly agree that they are aware of the quality and inclusive education that should be provided for children with special needs, and 63.41% agree that they are aware of inclusive education and quality education for these children. At the same time, 4.88% of respondents were unaware of the inclusive and quality education that should be provided to these children.

About 66% of the respondents strongly agree that children with special needs should be allowed to learn in regular or inclusive classroom settings. In contrast, 7.32% of respondents are undecided about whether these children should be allowed into the regular classroom or not. On the other hand, 9.76% of respondents disagree that these children should be allowed into regular classrooms. The results show that most respondents agree that children with special needs should be allowed into the regular classroom.

Results from Table 1 also depict that 34.15% of respondents strongly agree that sufficient special educators are available in school. 43.9% of the respondents strongly agree that schools have enough special educators. On the other hand, 4.88% of the respondents are undecided about the adequacy of special educators in the school. Even 17% of respondents believe that schools have inadequate special educators.

Concerning the sufficiency of trained teachers, 80% of the respondents strongly agreed to provide high-quality education for children with special needs. On the other hand, 9.76% of the respondents are undecided about the adequacy of special educators in the school. Even 10% of the respondents believe that are inadequate special educators in schools. Results from Table 1 also revealed that 80% of the respondents strongly agreed that special teachers should be assignedto regular schools to deal with children with special needs. 2.44% of the respondents are undecided responses whether there should be assigned special teachers in regular schools. There are very few numbers, i.e. 9.76% of respondents strongly disagree that special teachers should be appointed to deal with these children in regular schools.

Moreover, Table 1 shows that 29.27% of the respondents strongly agreed that these children could gain quality and inclusive education in Haryana. 63.41% of the respondents agree that children with special needs can gain quality and inclusive education in Haryana. Only 2.44% and 4.88% of respondents have undecided and disagree responses, respectively. Interpretation of the results indicates that most respondents agree that these children can gain quality education in Haryana.

Further results from Table 1 it is evident that 88% of the respondents agreed that upgraded educational facilities are available in regular schools for children with special needs to achieve effective learning outcomes. On the other hand, 7.32% of the respondents are undecided that upgraded educational facilities are available for children with special needs to achieve effective learning outcomes in regular schools. Only 4.88% of respondents disagree that upgraded educational facilities are available for children with special needs in regular schools to achieve effective learning outcomes. Hence, the interpretation revealed that most respondents agree that upgraded educational facilities are available for children with special needs in regular school to achieve effective learning outcomes.

Results from Table 1 also depict that only 78% of the respondents agreed that they had received pre-service or in-service training for professional and competency development for children with special needs. 12.19% of respondents disagree that they have received pre-service or in-service training for professional development and competency development for dealing with children with special needs. Only 7.32% and 2.44% of respondents were undecided and strongly disagreed, respectively. Most respondents agree that they have received pre-service or in-service training for professional development and competency development for dealing with children with special needs.

Moreover, Table 1 also revealed that 21.95% of respondents strongly agreed that equitable, quality and accessible education for all children is covered in NEP-2020. 70.73% of respondents agreedthat NEP-2020 covered the equitable, accessible and quality education provision for all children. While there are only 4.88% and 2.44% of respondents disagree and strongly disagree that equitable, accessible and quality education is covered in NEP-2020 for all children. Interpretation also shows that most respondents agree that equal, quality education access for all is covered in NEP-2020.

Results from Table 1 also indicate that 19.51% of the respondents strongly agreed that there are possibilities of implementing sustainable development goals on inclusive education by 2030 in Haryana. 68.2% of respondents agree that implementing sustainable development goals for inclusive education is possible. Only 7.32% of respondents have undecided responses. Moreover, 2.44% of respondents have disagree and strongly disagree responses. Moreover, the interpretation results indicate that most respondents agree that implementing sustainable development goals for inclusive education by 2030 in Haryana is possible.

Table 1: Inclusive education and accessibility of education for children with special needs in the light of SDGs4

Sr. No.	Items	Strongly Agree	Agree	Undecided	Disagree	Strongly Disagree
1.	I am aware of inclusive and quality education for children with special needs.	13(31.7%)	26(63.41%)	0(0%0)	2(4.88%)	0(0%)
2.	Children with special needs should be allowed into regular classroom.	11(26.83%)	23(56.09%)	3(7.32%)	4(9.76%)	0(0%)
3.	There are adequate special educators in school.	14(34.15%)	18(43.90%)	2(4.88%)	5(12.19%)	2(4.88%)
4.	There are sufficient professionally trained teacher in order to provide the high quality education for children with special needs.	12(29.27%)	21(51.22%)	4(9.76%)	3(7.32%)	1(2.44%)
5.	There should be assigned special teacher in regular school to deal with children with special needs.	13(31.70%)	23(56.09%)	1(2.44%)	4(9.76%)	0(0%)
6.	Regular classroom teacher get support from special educator to deal with the learning requirements of children with special needs.	13(31.71%)	22(53.66%)	4(9.76%)	1(2.44%)	1(2.44%)
7.	Children with special needs are able to gain quality and inclusive education in Haryana.	12(29.27%)	26(63.41%)	1(2.44%)	2(4.88%)	0(0%)
8.	In regular school, upgraded educational facilities are available for the children with special needs to achieve the effective learning outcomes.	10(24.39%)	26(63.41%)	3(7.32%)	2(4.88%)	0(0%)
9.	I have received pre-service or in-service training for professional developments, competency development for dealing children with special needs.	1(2.44%)	31(75.61%)	3(7.32%)	5(12.19%)	1(2.44%)
10.	Equitable, quality access to education for all is covered in NEP-2020.	9(21.95%)	29(70.73%)	0(0%)	2(4.88%)	1(2.44%)
11.	There are possibilities of implementing the sustainable development goals (providing equitable education, quality education and life long learning opportunities for children with special needs) on inclusive education by 2030 in Haryana.	8(19.51%)	28(68.29%)	3(7.32%)	1(2.44%)	1(2.44%)

Level of teacher's concern about inclusive education

Table 2 & 3 represents that concern about inclusive education among government school teachers. Results indicate that 12.19% of government school teachers are concerned about inclusive education. 58.54% of government school teachers have an average concern about inclusive education. However, 29.27% of government school teachers have low concerns about inclusive education. It also indicates that most government school teachers have an average concern about inclusive education.

Further, analysis results for different categories of CIES-SF, i.e. resources, difficulties, appropriateness and workload, are indicated in Table 3, showing that 19.51% of government school teachers have more concern about resources. 60.97% of the government school teachers have low concern about resources for inclusive education. Hence, most government school teachers have low concern about the resources for inclusive education.

Analysis results for category difficulties of CIES-SF depict that 14.63% of the government school teachers are concerned regarding difficulties faced in regular classrooms while dealing with children with special needs. 19.51% of the government school teachers have average level of concern about the difficulties faced in the inclusive classroom. In contrast, 65.85% of government school teachers are not concerned about the difficulties faced in an inclusive classroom. Hence, most government school teachers have a low level of concern about the difficulties faced in an inclusive classroom.

Analysis results for the appropriateness category of CIES-SF show that 9.76% of the government school teachers are concerned about the appropriateness of academic standards among students other than children with special needs studying in the inclusive classroom. 51.22% of government school teachers have average concern, and 39.02% of government school teachers havea low level of concern about the appropriateness of the academic standards in the inclusive classroom. Hence, the results revealed that most government school teachers have average and low levels of concern about the appropriateness of academic standards in the inclusive classroom.

Further analysis results for the workload category of the CIES-SF indicate that 12.19% of government school teachers are highly concerned regarding increasing workload by including these children in the regular classroom. 34.14% of government school teachers have average concern about the workload in the inclusive classroom. At the same time, 53.66% of government school teachers have low concern about the workload in the inclusive classroom. Hence, the analysis shows that most government school teachers have concern about increasing workload in the inclusive classroom.

Table 2: Level of CIES-SF scale among government school teachers

Level of Inclusive Education Concern	Frequency	Percentage
High	5	12.19%
Average	24	58.54%
Low	12	29.27%

Table 3: Level of different categories of CIES-SF scale among government school teachers

Level of Concern	Resources		Difficulties		Appropriateness (Academic Standard)		Workload	
	F	Percentage	f	Percentage	F	Percentage	f	Percentage
High	8	19.51%	6	14.63%	4	9.76%	5	12.19%
Average	8	19.51%	8	19.51%	21	51.22%	14	34.14%
Low	25	60.97%	27	65.85%	16	39.02%	22	53.66%

Teacher's concernsbased on personal and professional background

An Independent t-test was computed to compare inclusive education concerns among government school teachers. While for comparing the inclusive education concern regarding teaching, teaching experience and age, ANOVA was computed. Moreover, the relationship between the inclusive education concern and accessible, quality and equitable education for children with special needs in the light of SDG was also computed by using the Pearson product-moment correlation method.

Gender

Results of the analysis from Table 5 represent the comparison of concern about inclusive education among government school teachers on the basis of gender. Results indicate no significant difference in total concern regarding inclusive education between male and female government school teachers. It further depicts that male and female government school teachers are equally concerned about inclusive education.

Further, results of comparison for different categories of the CIES-SF scale i.e. resources (female (M=6.08, SD=3.01), male (M=5.57, SD=2.36)), difficulties (female (M=5.08, SD=2.36), male (M=5.32, SD=1.91)), appropriateness (academic standard) (female (M=4.38, SD=1.80), male (M=5.21, SD=1.95)) and workload (female (M=4.62, SD=1.45), male (M=5.64, SD=1.75)) indicate that there is no significant difference of concern about resources (t=0.58, p=0.56), difficulties (t=-0.35, p=0.72) faced in the inclusive classroom, appropriateness (academic standards) (t=-1.29, p=0.20) and workload (t=-1.84, p=0.07) between male and female government school teachers. Hence, concerns about resources, difficulties, appropriateness (academic standard) and workload do not differ significantly based on gender.

Table 4 Descriptive statistics for CIES-SF on the basis of gender

	Group	N	Mean	Median	SD	SE
CIES-SF Total Score	Female	13	20.15	20.00	6.72	1.863
	Male	28	21.75	21.00	6.27	1.185
Resources	Female	13	6.08	5.00	3.01	0.836
	Male	28	5.57	5.00	2.36	0.447
Difficulties	Female	13	5.08	5.00	2.36	0.655
	Male	28	5.32	5.00	1.91	0.360
Appropriate-ness (Academic Standards)	Female	13	4.38	3.00	1.80	0.500
	Male	28	5.21	5.00	1.95	0.369
Workload	Female	13	4.62	4.00	1.45	0.401
	Male	28	5.64	5.50	1.75	0.330

Table 5: Comparison of concern about inclusive education on the basis of gender among government school teachers

Independent Samples t-Test		Statistic	df	p
CIES-SF Total Score	Student's t	-0.742	39.0	0.463
Resources	Student's t	0.584	39.0	0.563
Difficulties	Student's t	-0.354	39.0	0.725
Appropriateness (Academic Standards)	Student's t	-1.296	39.0	0.202
Workload	Student's t	-1.844	39.0	0.073

Level of teaching

Results of ANOVA indicate that there exists statistically significant difference in concern about inclusive education for different levels of teaching (i.e. Pre-primary, Primary, Secondary and senior secondary). Results from Table 6 shows that F value is 2.73 (p=0.05). Further, post hoc comparison results from Table 7 show that two out of the four teaching levels, i.e., primary and secondary level school teachers, are concerned about inclusive education differ significantly (t=-2.36, p=0.02) at 0.05 level.

Table 6: Comparison of concern about inclusive education on the basis of the level of teaching among government school teachers

ANOVA

	Sum of Squares	Df	Mean Square	F	p
Level of teaching	295	3	98.3	2.73	0.05
Residuals	1331	37	36.0		

Table 7: Post Hoc Comparisons - Level of teaching

Comparison								
Teaching Level		Teaching Level	Mean Difference	SE	Df	t	P	Cohen's d
Pre-Primary	-	Primary	-6.38	6.22	37.0	-1.026	0.312	-1.065
	-	Secondary	-11.86	6.21	37.0	-1.910	0.064	-1.977
	-	Senior Secondary	-10.00	6.22	37.0	-1.607	0.117	-1.667
Primary	-	Secondary	-5.47	2.31	37.0	-2.369	0.023	-0.913
	-	Senior Secondary	-3.62	2.35	37.0	-1.537	0.133	-0.603
Secondary	-	Senior Secondary	1.86	2.31	37.0	0.804	0.427	0.310

Teaching experience

Analysis results from Table 8 indicate that concern about inclusive education based on the length of the experience is not statistically significant, having F value 0.347 and p-value 0.70. This indicates that concerns about inclusive education among government school teachers does not differ significantly based onthe length of the working experience.

Table 8: Comparison of concerns about inclusive education on the basis of teaching experience

ANOVA					
	Sum of Squares	Df	Mean Square	F	P
Teaching Experience	29.1	2	14.6	0.347	0.709
Residuals	1596.4	38	42.0		

Age : Results of comparison for different age group shows that concern about inclusive education among different age groups of government school teachers do not differ significantly. Further, results also revealed that concerns about inclusive education having F value 0.017 and p-value 0.98 not statistically significant at .05 level of significance.

Table 9: Comparison of concerns about inclusive education based on age

ANOVA

	Sum of Squares	Df	Mean Square	F	p
Age	1.45	2	0.727	0.0170	0.983
Residuals	1624.11	38	42.740		

Relationship between concern about inclusive education & accessibility of education for children with special needs in the light of SDGs4 : Analysis results that the coefficient of correlation (r) between concern about quality, inclusive education and accessible education for children with special needs in the light of sustainable development goals is -0.061 and p-value>0.05. It further shows that results are not significant at .05 level of significance. It also indicates that there exists no significant relationship between concern about inclusive education and accessibility of education for these children in the light of SDGs4.

Discussion and Conclusion

A lot of work has been donein the area of inclusive education especially on appointing special educators and conducting training programmes for the professional development of government school teachers in inclusive education.The study results indicate that these efforts have increased the concern about inclusive education among government school teachers. Moreover, most teachers agree that inclusive education and accessibility of education for children with special needs in the light of SDGs4 can be achieved in Haryana until 2030. This finding contradicts previously conducted research in other countries (Kusimo *et al.*, 2017). The analysis also revealed that most of the government school teachers have average concern about inclusive education.

Further, results for different categories also show similar trends. Results of the comparison of concern about inclusive education based on gender, level of teaching, teaching experience and age group among government school teachers align with the findings of Aiello *et al.* (2017) and Yadav *et al.* (2015). Singh *et al.* (2020) also observed that concerns regarding inclusive education did not differ on the basis of gender. On the other hand, the present study's results indicate that there is no relationship between inclusive & accessible education for children with special needs in the light of SDGs4 and concern about providing inclusive education to these children among government schools, specially located in rural areas. The study finding emphasizes the fact that there is no alternative way to educate 36 million children with any disability. Seventy-eight percent of Indians lives in rural areas without access to special education (Sanjeev *et al.*, 2013). As a result, regular schools must meet the requirements of all the children with or without disabilities in every community and at the national and state levels. This study, however, has several limitations. It indicates that this study's sample size is limited and demands some modifications for widespread application to Indian society, which is characterized by large regional distinctions and socioeconomic conditions.

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Future Skills Prime: Initiative for Capacity Building and Skills Acquisition in Age of Intelligent Technologies by Government and Indian Industry

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Abstract

The technology landscape globally is witnessing massive disruption, catalyzed by mega trends such as automation, mobility, convergence and connectivity, and Big Data & Analytics. Global economic systems are more interlinked than before, technology is more pervasive, and the world is becoming more interconnected. Emerging technologies like artificial intelligence, big data and analytics, cloud computing, robotics process automation, virtual reality (VR), augmented reality (AR) and additive manufacturing (i.e., 3D-printing) which are heralding the fourth industrial revolution and are resulting in massive shifts across global economies.

Amidst this disruption, one concept that has emerged as a focal point amongst researchers is the idea of Future of Work. Future of Work is a construct to define and explain how the different factors and forces will interact to impact and define how organizations function in the future and the employees that work in these organizations. A World Economic Forum (WEF) study projected that almost 97 million jobs will be created over the next five years. This will overlay with 85 million workers needing to prepare and navigate the shift of tasks between humans and machines. (World Economic Forum, 2020)

Introduction

Labor markets in advanced as well as emerging economies are feeling the pressure of the disruption caused by rapid technology advancement and evolution to the nature of work itself. But while companies embrace technology, they recognize that human capital will always be a source of advantage in this period of disruption. There is a need to 'future-proof' their talent pipelines and ensure their employees possess the relevant skills to operate in a more digitalized environment. Companies will need to retool their corporate structures and their approaches to work. That change will require redesigned business processes and a new focus on the talent they have-and the talent they need.

It is challenging to fully envisage the jobs that new technologies will create. Maintaining mobility and flexibility while investing in training and continuously updating skills curricula will help workers adapt and close emerging skills gaps.

The shortening lifespan of and increasing demand for skills means that to skill, upskill and reskill workers will keep becoming shorter. The collaboration of governments, companies and civil society will be necessary to create and sustain opportunities for job creation and employment protection.

Governments and policy makers can design macro-economic growth strategies that promote employment and job creation.

This case study aims to provide a detailed outline about one such initiative undertaken by the Government of India (GOI)–Future Skills PRIME (Programme for Reskilling Upskilling of IT Manpower for Employability), which is part of Indian government's digital agenda to build India's digital talent stack. It is first initiative of its kind wherein industry, academia and government have joined hands to upskill nearly 4.12 lakh citizens.

The programme targets to re-skill/ up-skill aspirants, so that they stay relevant in the present job with improved prospects, besides finding new avenues in future job roles, especially for those whose jobs/ skills may not be relevant because of disruptive and emerging technologies.

This programme is notable for the following reasons:

1. The government has made skilling a part of its overall digital agenda and is playing an active part in the

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creation and enablement of an ecosystem that equips citizens with the skills needed for the workplace of the future.

2. GOI has taken an interesting approach by going the aggregator route, involving NASSCOM (National Association of Software and Service Companies) as the implementation agency to ensure that the skilling platform is informed by industry requirements and builds employability skills amongst learners.
3. The programme is envisioned as a mass initiative to drive maximum reach and participation of learners irrespective of their present profile/ skill.
4. It seeks to create value through a repository of free and curated content/ pathways on new, emerging technologies which can be used by Indian citizens to tap into the immense potential of these technologies.

Objectives

1. To understand the role of Future Skills Prime (FSP) program as an initiative for upskilling and re-skilling
2. To understand the benefits and expected outcomes from FSP as a Skill building initiative.

Evolution of Future Skill Prime

Launched in November 2020, FutureSkills PRIME (FSP) is a successor to NASSCOM's B2B platform called FutureSkills. The latter was developed by NASSCOM as "An Industry driven ecosystem to get India accelerated on the journey to building skills and becoming the global hub for talent for emerging technologies". This was to be a Learning Exchange Platform (LXP) to enable the IT sector in India to skill and upskill 2 million employees over a period of five years.

The genesis of this platform lay in an incisive study conducted by NASSCOM and the Boston Consulting Group to conceptualize the impact of emerging technologies on workforce skilling. The study pinpointed the technologies that would experience rapid growth, the associated job roles, and the corresponding skills needed to do these jobs. Furthermore, it uncovered that almost 50 percent of the more than 4 million workforce employed in the IT-ITeS industry, would need to update their skills over the next 3-5 years.

A definitive conclusion from the study was that the advancement in technologies and ongoing disruption needed to be translated into an opportunity. And to skill and reskill the tech workforce would be the need of the hour to put the nation on the path to being the global talent hub for emerging technologies.

Coupled with the national skilling agenda and initiatives like Skill India, Digital India, the government signed an MoU with NASSCOM to develop a B2C platform for skill development, which would be funded and facilitated by the GOI. NASSCOM was chosen as for the Future Skills PRIME program.

NASSCOM and the Ministry of Electronics and Information Technology, Government of India (MeitY) would partner together to enable skill development and continuous learning not only for individuals in the IT-ITeS industry and its aspirants, but also, employees belonging to other sectors.

The overarching vision behind this program was that a skilling platform for new, emerging IT technologies would complement the Digital India initiative of the Government of India. While Digital India is empowering people on the ground, through a robust digital infrastructure and availability of digital services, this platform would make talent available Indian industry to embrace job opportunities from new and emerging technologies.

a. The Advantage of Having NASSCOM as a Partner

Given NASSCOM's prior experience with the B2B skilling platform that it built and operates, it was a logical decision on the government's part to bring the industry body on board for building a tech-skilling platform for the country. This decision was in no small part catalyzed by the vantage position NASSCOM holds as the industry association for IT and IT Enabled Services (ITeS) companies in India. In that position, it represents the ~$200 bn IT industry in India.

It has a current membership base of 3000+ companies which constitute nearly 90% of the revenue generated by the IT industry. NASSCOM collaborated with more than 150+ global MNCs, native enterprises & SMEs, online course providers and academia affiliates, in the pursuit of creating endless opportunities in skill development. (NASSCOMpdfoncloud)

Moreover, the association also encompasses within it the IT-ITeS Sector Skills Council (called SSC NASSCOM) which is the body for development of job roles and job standards for IT and has been set up under the purview of Ministry of Skills Development & Entrepreneurship (MSDE). SSC NASSCOM is also responsible for driving a range of talent development including skilling initiatives for working professionals, provisioning of faculty training & trainer licensing, courseware development, authorizing accreditations and certifications, enabling channels for talent hiring, apprenticeships delegation, and more. SSC NASSCOM therefore augments the credibility of the FSP program through the former's own unique position within the skilling ecosystem of the country. Further, SSC NASSCOM works closely with regulatory bodies such as the NCVET for establishment of standardized norms for vocational, long- and short-term training. In practical terms, this translates to there being a greater level of quality assurance around the training content offered and greater recognition for certifications provided on the FSP platform.

b. What Future Skills Prime offers

LXPs are typically designed with the perspective of offering a consumer-like user experience akin to platforms like Netflix, Amazon, Zomato. Users are looking for a visually attractive, intelligent, mobile-enabled interface that gives them a true "learning environment."

FSP offers learners multiple options from different content providers for their skilling needs. There is a variety of learning content: from bite-sized content (named "smartcards" and "pathways") to Foundation courses, industry certifications, and deeper skilling content.

The learning paths are curated to offer multiple entry and exit points for a learner throughout their learning journey. This is an effective way to think about vocational training in the country, with the following key principles being kept in mind for the design of the platform:

1. Training content is credit-based and modular in nature.
2. Skilling and training is designed to be employment oriented
3. Multiple entry and exit points offer a learner the option to leave and join back as and when feasible. Skilling and learning is on-demand to so learners can enhance their qualifications and skills as they aspire to move up in their career graph or attain a higher educational level.
4. Promotes continuous learning by supplementing formal learning with ongoing, informal learning

The first module of FutureSkills PRIME was launched in November 2020, and subsequent modules have been launched/ will be launched across 2021.

The salient features of the platform, which make it noteworthy are:

1. ***It is offered online:*** An online platform encourages any-time, any-were, self-paced learning for learners across the country. It eliminates need to set up a physical training infrastructure which can be capital and time intensive. An online training catalog can be updated easily which helps ensure content and platform can stay relevant with emerging skill requirements.
2. ***Aggregator model:*** The platform offers greater choice to learners via a diversified course catalog, which includes courses from renowned industry partners and leading online training partners who are integrated on to the platform.
3. ***A focus on affordability and credibility:*** A key tenet at the core of FSP has been to offer high quality content at affordable prices to cater to a broad learner base. The platform has world-class content from globally recognized providers available either free of cost or at 'discounted' prices.
4. ***Focused list of skills:*** FSP has taken a very focused approach to the skill areas that it provides content on. By not trying to cater to all skill areas, it maintains a niche positioning that aligns with the Government's overall digital agenda.
5. ***EdCast,*** a global company, known for its award-winning Knowledge Cloud for unified discovery, knowledge management and personalized learning experience, was selected as the platform to power the FutureSkills initiative. Its advanced AI-driven infrastructure provides personalized, automatically delivered content and insights, relevant for users accessible on any device. EdCast's solution will help address the growing market need for technology-focused upskilling.
6. The platform has a strong framework of Assessment & Certification built into the learning journeys. These are accredited certifications that are acceptable in the industry as they are based on the industry-validated and government approved National Occupational Standards (NOS). NOSs are building blocks of Qualification Packs (QPs), which are related to the National Skill Qualification Framework (NSQF).
7. ***Government Incentives:*** To encourage citizens to upskill themselves, Gol is also offering incentives worth INR 14,500 to eligible learners on the FutureSkills Prime platform. The categories of these eligible learners, called beneficiaries, is outlined in a future section of this document. This is the first-of-its-kind incentive program for digital upskilling. While the platform offers numerous industry-handpicked

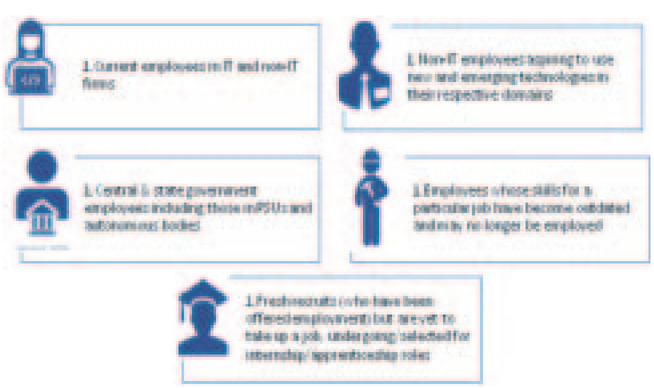
courses and pathways, many of them free of cost, this incentive program will help candidates upskill in the paid technical courses while earning reimbursement on completion.

8. Learners can earn Skill Badges for completing the different types of courses. This is a great way to motivate and recognize the efforts of a learner. These can be shared on social media platforms like LinkedIn. At a deeper level, these serve as subtle nudges and drive action, and add an element of gamification to the learner journey.
9. The platform has a Skills Passport, which serves as an online repository of skills attained and certifications received. This is again a unique feature of the platform and allows to record learner's progress and can help with future employability too.
10. FSP has Partnerships with CDAC and NIELET, both of which are autonomous bodies under the GOI and aim to promote scientific thinking, capacity building and skill development in IT computing and technology. They are accountable for offering Bridge courses in blended mode, undertake the pan-India training of government officials on emerging technologies.

Spotlight on Government Incentive Program under FSP

FutureSkills Prime has been hailed as the first-of-its-kind incentive program for digital upskilling. The incentive program was launched in September 2021. Under this program, GoI is providing incentives to eligible Indian citizens by reimbursing them for course completion, assessments, and diagnostic. The purpose of this incentive is to encourage citizens to upskill themselves on emerging technology areas by completing courses and attaining certifications on FSP.

Figure 1: Target Beneficiaries for GOI Incentive on FSP



An example of the FSP ecosystem in practice

Background: Microsoft recently launched the Future Ready Talent program, which is a group of strageic partners collaborating "to empower India's youth with technology skills for employability". This is an internship program aimed at students in their second year of college and up. The goal of the program is to impact over 1.5 lakh higher education students who will join the workforce between 2022-2024.

The virtual internship program is a great example of how the sum of parts can be greater than the whole. Each of the collaborating entities lends a unique facet/ dimension to the program structure, which is designed to for students with an opportunity to learn the in-demand technology skills and work towards solving real world problem, as outlined in the graphic below.

Figure 2: An example of the FSP ecosystem in practice

Current Outcomes Achieved on the FSP Platform

As of March 2022, the FutureSkills PRIME platform reports the following outcomes: (FutureSkills Prime, 2022)

1. 7 lakh Sign-ups since launch in November 2020
2. More than 2.5 lakh Course Enrollments
3. More than 7 lakh Badges Earned for digital fluency
4. 600+ Courses and Pathways

Why The Futureskills Prime Platform Works?

1. **Timing of launch:** The launch of FSP coincided with a time when the world was in the midst of a deadly pandemic and the country, like many others, was moving to adoption of more online solutions. Working from home, also created opportunities for employees to invest in upskilling/ reskilling themselves.
2. **Ease of use:** Creating one's account and getting started is fairly straightforward and takes a few minutes. One only needs to be a citizen of India and above 18 years of age. The platform can be accessed as a website or an app on one's mobile phone. Signing up on the platform is free of cost. Similarly, enrolling in beneficiary program is easy and covers a broad set of categories-with the aim that a large citizen base can avail these benefits.
3. **Employment-oriented:** The learning platform enables discovery of content on the emerging technology areas, provides information about job roles which are in-demand across these technologies, as well as skills needed for these technologies.
4. **Availability of a Content Marketplace:** A few years back EdCast acquired Leapest which gave it the capability to create an online marketplace of training providers (suppliers) that training is most relevant for them. While the actual consumption of content can happen on the platform itself or on training partner's platform, FSP serves as single gateway to match supply and demand.

Future Opportunities for FSP Platform

The potential opportunities that the FSP platform can tap into, for expanding its reach and impact to an even wider user base.

1. The National Education Policy 2020 emphasizes the relevance of learning in one's vernacular language. FSP could look at offering courses in regional languages in addition to English.
2. The platform access and content can be made accessible to younger students to learn better.
3. The "content aggregator" and "ecosystem" model can be replicated for other priority sectors like healthcare, consumer products, telecom etc. which all have the potential for employment for the youth of this country.
4. While the publicized duration of the government scheme wrt FSP is three years, the platform can become a self-sustainable mechanism that would continue to operate beyond this initial three-year period. It has the potential to be a go-to source for online continuous learning that evolves are the technologies themselves evolve.

Conclusion

Future Skills PRIME is an idea that is timely and relevant, and one that will likely bring a significant shift in how skill training is imparted in the country. Online training/ learning is still not popular in India and often there is very little inventive for learners to complete an online course. By anticipating some of these constraints and addressing them in the design of the platform and the government incentive program, FutureSkills Prime is truly giving wings to the aspirations of a digital India.

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Academic Anxiety of Indian Adolescents in relation to their Home Environment

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Abstract

The present study intended to explore the academic anxiety of Indian adolescents in relation to their home environment. In this context the major objective of the research study was to explore the academic anxiety of adolescents from different home environments in the northern region of India. The study also compared the levels of academic anxiety in Indian adolescents. The investigator collected data from 687 students belonging to both 11th and 12th standard students studying in the government and private schools of northern India. The investigator employed a descriptive research design. The data were collected by the survey method with the help of a self-made questionnaire on academic anxiety and Home Environment. Data were interpreted using percentage analysis, and the t-test was employed for analyzing the data and drawing comparisons between the two groups. The findings of the study revealed that most of the secondary school students, i.e., 11th and 12th standard students, have moderate levels of academic anxiety, and the other results depict that the majority of the students have a democratic type of home environment. At the same time, there is a significant difference in academic anxiety among adolescents belonging to a democratic and authoritarian kind of home environment. These results highlighted that the home environment plays an essential role in the life of adolescents. On the basis of the findings of the study, it can be recommended that more seminars and counselling sessions may be arranged on sensitizing parents about the home environment and how it affects the academic anxiety of adolescents.

Introduction

Academic anxiety has been considered the most critical aspect to a student's success or failure in their life and especially in the academic life. Academic anxiety usually is caused by many factors like unpleasant and authoritarian home environment, impractical targets to achieve and poor academic environment. The phenomena of academic anxiety get more worsened in case of the adolescents because they are already under stress and strain due to substantial physiological and mental changes. It does not mean that academic is completely a negative concept and it need be avoided rather academic anxiety to a certain extent is desirable for academic adjustment and achievement. Academic anxiety directly affects how students manage their emotions and those of other people surrounding them. It was founded by Singh (2013) that students with high academic anxiety are better at the level of adjustment than those with low academic anxiety. Not only level of adjustment but academic anxiety is beneficial to better adjustment and securing good grades. But excess academic anxiety puts pressure on student's life. Personality is a significant determiner of academic anxiety in adolescents, as explored by (Cassady *et al.*, 2019). Academic anxiety is significantly related to a person's financial status and commitment, as found by Alam (2001) that individuals with good socioeconomic status possess low academic anxiety. Gautam (2012) revealed that parents' socioeconomic status was one of the causes of academic anxiety. Everyone will agree that a good family environment can do magic in the life of the adolescents. The adolescents need support, care, recognition and opportunity to channelize their

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innumerable potentialities. Family variables like relationships within families, where individuals first begin socialisation processes, family surroundings, etc., have an important place in laying the personality of the adolescents. In addition to studies showing significant relationships between the family experiences of individuals with psychological symptoms (Daniel & Shek, 1998), studies also show that educational life affects academic anxiety (Kumari, 2010; Kumar, 2012; Mahajan, 2015; Rani, 2017; Kaur & Chawla, 2018). However, studies also document no statistical correlation between family structure/status and students' academic anxiety (Sharma & Jaswal, 2002; Waring, 2012; Banga, 2014; Hasan, 2018; Jabeen & Andrabi, 2018).

It has been mentioned that "students who properly regulate their emotions are less likely to have an emotional breakdown, stress and anxiety". It can be said that better academic anxiety results in better decision-making management and reduces student stress. On the other hand, it is also seen that anxiety negatively affects students' academic achievement (Ballado, 2014). However, a study found that success was not affected by academic anxiety; in other words, there was no relationship between academic anxiety and achievement, as reported by Das *et al.* (2014), that most high school students were identified as having high academic anxiety. But most students have average academic anxiety, as studied by Khemka (2016). Jones (2000) found that significant differences exist between the fear of failure, the pressure of friends and the importance of schools with academic anxiety among male and female students. Pressure on the part of parents was found to be a more affecting factor than other variables. It was revealed by Daulta (2008) that home environment and academic anxiety were positively correlated. Good quality of the home environment is positively correlated with high academic anxiety. Regarding the favourable home environment, Thakur (2002) explored those lacking essential facilities hurts girl's academic achievement. Also, in some studies, boys feel more rejected by the autocratic atmosphere at home than girls, who experience more nurturance than boys Goel (2004). Most of the studies revealed a significant difference between the academic anxiety levels of male and female students. Studies showcased that girls were higher in school anxiety than boys (Bhansali & Trivedi, 2008; Attri & Neelam, 2013; Aparnath, 2014; Das *et al.*, 2014; Banga, 2016; Hasan, 2018; Kaur & Chawla, 2018). Khosravi (2005) explored that these differences exist due to self-concept differences in boys and girls. Moreover, the locality where the students are being nurtured affects the levels of academic anxiety; as claimed by Gautam (2012), urban and rural adolescents' socioeconomic status and academic anxiety were correlated.

Home environment also plays a significant role in the academic anxiety of adolescents, as claimed by Gosain (2019); a vital relationship was reported between academic anxiety and home environment. Students from urban areas are found to possess high levels of academic anxiety compared to students from rural areas, as stated by (Gautam, 2012; Sahu & Jha, 2014; Hasan, 2018). In addition to the locality, the type of school in which a student studies also emphasises the student's academic anxiety. Numerous studies reveal that girls and boys possess different levels of academic anxiety. Due to biological differences, girls depict more academic anxiety than boys. Also, students from urban backgrounds outcast the students from rural backgrounds. Due to better facilities available in urban areas like schooling, i.e., private schools, the good financial status of the family, and parental involvement (Kamuti, 2015), Urban area students showed less academic anxiety than rural area students (Alam, 2016). In contrast, students attending state schools had more academic anxiety than students in private schools (Hasan 2018; Jabeen & Andrabi, 2018).

Where most studies resulted in a significant difference in academic anxiety scores of students from urban and rural areas, few studies claim that there is no significant difference between the academic anxiety of students from urban and rural backgrounds. The area from which a person belongs does not affect academic anxiety, as stated by Kumar (2012). On the broader level, Ballado (2014) and Khemka (2016) explored the level of academic anxiety of secondary school students and found that most students fall into the moderate to high level of academic anxiety. Singh (2013) claimed that the academic anxiety level of higher secondary school students was average. Overall, female students scored high anxiety levels than boys, as examined by Khosravi (2005), Pahwa *et al.* (2008) and Khemka (2016), that female students with neuroticism and extraversion temperaments were high. External factors like home and school environment and internal factors such as academic achievement, academic motivation and study habits are the key correlates of adolescent academic anxiety (Kaur, 2021). It appears that there are adverse outcomes of anxiety in academic life. For example, intense anxiety negatively affects school performance (Vankar, 2013), (Shakir, 2014), may trigger feelings of hopelessness in students (Cole *et al.*, 1999), (Jones, 2000), may negatively affect many areas from undertaking new tasks (Vijayakumari,

2010) to language learning (Hemamalini, 2010). Additionally, academic anxiety was stated to be a predictor of aggressive and hostile behaviour among students (Sarason *et al.*, 1960). The anxiety is related to probable threats that may occur in academic environments involving specific academic topics like mathematics, science, language learning and the attitude of teachers (Banga, 2014; Bihari, 2014; Ramana *et al.*, 2017). Additionally, Eysenck *et al.* (2007) emphasised that academic anxiety may occur due to various causes like peer pressure, expectations of friends or family, academic performance history and self-assessment.

For this reason, academic anxiety appears to affect the success and performance of children and adults and impact social and psychological development; considering students' educational and career processes, it is vital to understand this construct. Academic anxiety in students appears to be an essential factor with negative impacts over a broad range from academic achievement to mental health. From primary to higher education, students must know they may experience academic anxiety at all stages. Academic anxiety is a problem that has affected the academic life of many students in schools and colleges for many years. But academic anxiety at a moderate level helps or motivates them to take the academic pressure seriously and further helps in their improvement. However, increased academic anxiety hampers the students' psychological, behavioural, and cognitive levels, as many teachers observed that some children do not perform at their level in the situation categorized, such as examinations. Teachers have noticed that students cannot perform up to that level in the examinations as they do in their classwork. Now a day, most schoolchildren have high levels of academic anxiety (Mattoo & Nabi, 2012). Moreover, the higher secondary level is a crucial moment in the academic life of adolescents. They get tense about their academic performance or might think they will not get admission into any prestigious institution. In India, it is seen that the primary cause of anxiety among adolescents is the pressure exerted by the parents for academic achievement (Deb, 2001). The parental pressure to score good marks in the entrance examinations doubles their stress and anxiety. Parents and teachers should collaborate to ensure children's optimal development. The competition in the present educational system has killed the students' curiosity. The pressure of family, peers, and neighbours severely affects the students' mindset. Many factors like lack of confidence, poor study habits, fear of failure and poor social and academic success are often rejected by the parents or undetected. The frequency of anxiety varies from 4% to 25%, with a mean of 8%, as per empirical data (Costello *et al.*, 2003). Due to this blooming coaching industry, unhealthy competition, suicides, fear of failing in exams, and rote learning are increasing.

A home environment is of great importance as far as academic anxiety is concerned. The resources present in the home, i.e., books, gadgets, and electronic devices (like a tablet, computers, etc.), play a significant role in the development of adolescents. Likewise, the educational qualification and income of parents also play essential roles in the achievement of the students. A good family environment motivates a child to achieve the goals of education. However, nowadays, the high unreasonable expectation and pressure of Indian parents are seen towards their children. The issue of academic pressure from parents is a global concern, particularly in India's educational system, where many parents exhibit demanding and controlling behaviours that pressure their children significantly. The current investigation endeavours to ascertain the correlation between academic anxiety and home environment among Indian adolescents, a pertinent research area. The researcher aims to evaluate the academic anxiety levels of Indian adolescents in different home environments. This study intends to contribute to the existing body of knowledge on the subject and provide valuable insight into the relationship between anxiety and home environment among Indian adolescents. It also aims to determine whether the home environment contributes to increased or decreased levels of academic anxiety among adolescents.

Objectives

The research study has the following objectives;

1. To find out the level of academic anxiety of Indian adolescents.
2. To determine the percentage of students belonging to different types of home environments.
3. To compare the academic anxiety of adolescents belonging to democratic and authoritarian types of home environments.
4. To determine the academic anxiety of boys belonging to democratic and authoritarian types of home environments.
5. To compare the academic anxiety of girls belonging to democratic and authoritarian types of home environments.

Hypotheses

The study has the following hypotheses:

1. The academic anxiety of adolescents belonging to democratic and authoritarian types of home environments does not differ significantly.
2. The academic anxiety of boys belonging to democratic and authoritarian types of home environments does not differ significantly.
3. The academic anxiety of girls belonging to democratic and authoritarian types of home environments does not differ significantly.

Methods and Materials

Research Design: This research study aimed to compare the academic anxiety of Indian adolescents in relation to their home environment and determine the levels of academic anxiety of Indian adolescents belonging to the northern region of India. In view of such objectives the study involved a comprehensive mode of data collection from a relatively large sample to draw inferences. Hence, the investigator followed the survey method of descriptive type of research.

Population and Sampling Frame: The population in the present study covers 11th and 12th standard students enrolled in north India region. As per the Unified District Information for Education Plus (UDISE Report 20-21), the total numbers of students enrolled in 11th and 12th standard in different schools of the northern region in India are 9417559.

Sample of the Study: Data were collected from the 11th and 12th standard students studying in the government and private schools affiliated with the government board and CBSE, New Delhi. The sample were taken from union territories and states like Haryana, Punjab, Delhi, Himachal Pradesh, Rajasthan, Jammu & Kashmir, Uttar Pradesh and Uttarakhand. As per the Rao soft sample size calculator a sample of 643 was required with a 99% confidence level. However, data were collected from 687 adolescents studying in 11th and 12th standard. The sample was selected proportionally from different strata i.e. states and union territories as mentioned.

Tools of Data Collection: To collect data on academic anxiety and types of home environment the investigator used two self-made tools, i.e., a home environment scale and questionnaire on academic anxiety. The home environment scale consisted of 25 items under two dimensions of namely authoritarian home environment and democratic home environment. The authoritarian home environment has 13 items and the democratic home environment has12 items in total. The second tool was the academic anxiety questionnaire. The questionnaire on academic anxiety consisted of 27 items and has four dimensions: general worry, lack of confidence, poor study habits and fear of failure. The number of items under each dimension is general worry (5), lack of confidence (4), poor study habits (11), and fear of failure (7).

Analysis and Interpretation

I. Academic Anxiety Levels of Indian Adolescents

The data collected from 687 students of 11th and 12th standard on their academic anxiety reveals that 189 (28%), 292 (42%) and 206 (30%) students belong to low, moderate and high levels of academic anxiety. Such data have been presented in figure No. 1.

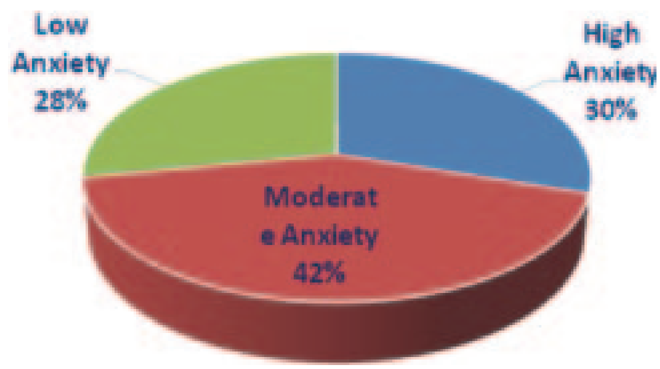

Figure 1: Levels of Academic Anxiety

II. Types of Home Environment of Adolescents

Keeping in mind the objective of the study the types of home environment of the adolescents were explored and it was found that out of 687 11th and 12th standard students 587 (85.45%) and 100 (14.55%) students belong to democratic and authoritarian home environment. Such data have been presented in figure 2.

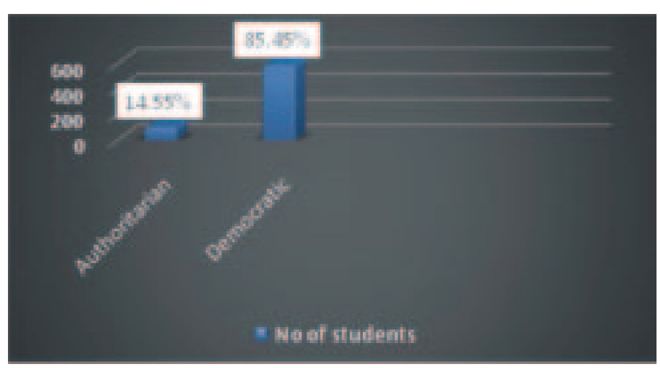

Figure 2: Distribution of Students belonging to different types of Home Environment

III. Academic Anxiety of Indian Adolescents belonging to different types of Home Environment

The second objective of the study was to compare adolescents' academic anxiety in democratic as well as authoritarian home environments. In this context, the data collected from 687 students studying in 11^{th} and 12^{th} standards were subjected to finding the significance of their respective mean scores using the 't-test. Hence as pre condition to application of t test the normality of the data was tested through K-S test and it was found to be normal (p value>0.05). The analysis of the data has been presented in table 1.

Table 1: Significance of difference in mean scores on academic anxiety of Indian adolescents belonging to different types of home environment

Category of Home Environment	N	M	σ	SED	df	t	Remarks
Authoritarian Democratic	100 587	14.73 12.22	3.95 5.064	0.446	685	5.627	Significant at 0.01

The analysis of the results as depicted in table1 revealed that the calculated 't' ratio 5.627 is greater than the criticalratio of 't' with 685 degreesof freedom i.e., 2.59 at 0.01 level of significance. Therefore, it can be inferred that there existssignificant difference in the academic anxiety of adolescents belonging to democratic and authoritarian home environment. Hence the null hypothesis "The academic anxiety of adolescents belonging to a democratic and authoritarian type of home environment does not differ significantly" is rejected and on the basis of examining the mean scores, it can also be interpreted that the adolescents belonging to authoritarian home environment are having more academic anxiety as compared to the adolescents belonging to Democratic home environment. The result of the present study corroborates with the findings of the earlier studies conducted by Daulta (2008), Ajay Kumar (2012), and Kritika Gosain (2019).

IV. Academic Anxiety of Indian Adolescent Boys Belonging to Different Types of Home Environment

The third objective was to compare the academic anxiety of adolescent boys' belonging to democratic and authoritarian home environments. In this context, the data collected from 353 students studying in 11^{th} and 12^{th} standards were subjected to finding the significance of their perspective mean scores using the 't-test. Hence as pre condition to application of t test the normality of the data was tested through K-S test and it was found to be normal (p value>0.05). The analysis of the data have been presented in table 2.

Table 2: Significance of difference in mean scores on academic anxiety of Indian adolescent boys belonging to different types of home environment

Category of Home Environment	N	M	σ	SED	df	t	Remarks
Authoritarian	52	14.557	4.539	0.697	351	4.012	Significant
Democratic	301	11.760	5.246				at 0.01

The analysis of the table 2 revealed that the calculated 't' ratio 4.012 is greater than the critical ratio of 't' with 351 degrees of freedom i.e., 2.59 at 0.01 level of significance. Therefore, it can be inferred that there exists significant difference in the academic anxiety of adolescent'sboys belonging to democratic home environment and authoritarian home environment and the null hypothesis "The academic anxiety of adolescents boys belonging to a democratic and authoritarian type of home environment does not differ significantly" is rejected and on the basis of examining the mean scores it can also be interpreted that the adolescent boys belonging to authoritarian home environment are having more academic anxiety as compared to the adolescents belonging to democratic home environment.

V. Academic Anxiety of Indian Adolescent Girls Belonging to Different Types of Home Environment

The fourth objective of the study was to compare the adolescent girls' academic anxiety belonging to democratic and authoritarian home environments. In this context, the data collected from 334 students studying in 11^{th} and 12^{th} standards were subjected to finding the significance of their perspective mean scores using the 't-test. Hence as a pre-condition to application of t test the normality of the data was tested through K-S test and it was found to be normal (p value>0.05).The analysis of the data has been presented in table 3.

Table 3: Significance of difference in mean scores on academic anxiety of Indian adolescent girls belonging to different types of home environments

Category of Home Environment	N	M	σ	SED	df	t	Remarks
Authoritarian	49	14.836	3.171	0.534	332	4.129	Significant
Democratic	285	12.631	4.823				at 0.01

The analysis of the table 3 revealed that the calculated 't' ratio 4.129 is greater than the critical ratio of 't' with 332 degrees of freedom (df) i.e., 2.59 at 0.01 level of significance. Therefore, it can be inferred that there exists significant difference in the academic anxiety of adolescent girls belonging to democratic and authoritarian home environment and the null hypothesis "The academic anxiety of adolescents girls belonging to a Democratic and Authoritarian type of home environment does not differ significantly" is rejected and on the basis of examining the mean scores, it can also be interpreted that the adolescent girls belonging to authoritarian home environment are having more academic anxiety as compared to the adolescent girls belonging to democratic home environment.

Major Findings

The major findings of the study are as follows:

1. Out of 687 students of 11th and 12th standard it was observed that 42% show moderate level of academic anxiety, 28% and 30% respectively show low and high level of academic anxiety.
2. Most of the students i.e. 587 in number, comprising 85.44% of the total, fall under the democratic home environment where as 100 in number i.e. 14.55% fall under authoritarian home environment.
3. There is a significant difference in the academic anxiety of adolescents belonging to democratic and authoritarian home environment.Such findings corroborate with the results of earlier research conducted by Daulta (2008), Ajay Kumar (2012), and Kritika Gosain (2019).
4. There is a significant difference in the academic anxiety of adolescent boys belonging to democratic and authoritarian home environment.
5. There is a significant difference in the academic anxiety of adolescent girls belonging to democratic and authoritarian home environment.

Educational Implications

The educational implications of the research study are as follows:

1. Home is the primary source of motivation, and it helps facilitate or nurture the students' environment. Parents may create a home environment of such type that inculcate productivity and creativity in the mindset of the students.
2. Schools can provide feedback to parents in parent-teacher meetings and help organise counselling sessions to spread awareness among parents about academic anxiety, how parenting style influences academic performance, and how to cope with it. Orientation and training be provided to parents of adolescent students, particularly from Authoritarian families, to build their academic achievement motivation.
3. The schools can conduct family seminars and workshops to sensitize the families regarding academic anxiety and what factors can reduce the students' productivity. This led to academic anxiety.
4. Teachers may help students in overcoming the academic anxiety caused by academic activities in a variety of ways educating students about anxiety, providing an open-communication in a classroom, teaching and discussing positive coping skills with students, and allowing students to practice and apply coping strategies etc., for this different seminars & workshops for a teacher to help them learn how to identify student's psychological problems and their probable solutions can be of great help.

Conclusion

Academic anxiety of the adolescents plays a vital role in their educational life which usually affect all other aspects of one's life. Hence a conducive environment both at the home as well as the school is essential to reduce the academic anxiety level of the adolescents. It is a well-known fact that adolescents undergo the period of stress and strain due to multiple physiological and mental change in their life. If academic life will be an additional feature to their life it will hinder their holistic development and will make them crippled on all respect. Therefore, they need be provided with a conducive democratic home environment that will reduce their academic anxiety. The findings of the study revealed that the type of home environment plays an important role in determining the academic anxiety of the adolescents and especially the authoritarian environment makes the situation worse. In this context it is the responsibility of all to provide a conducive environment not only at home but also in the school also and to develop the awareness of the parents in this regard.

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Factors Influencing Consumer Adoption of Ayurvedic Products: A Systematic Review

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Abstract

This systematic review paper offers a comprehensive analysis of consumer behavior pertaining to Ayurvedic products within the Indian market. Ayurveda, an ancient medical system deeply rooted in traditional knowledge, has garnered extensive recognition on both local and global scales. The comprehension of the determinants that impact consumer adoption is of utmost importance for businesses aiming to optimize their market share and enhance customer attraction, given the escalating demand for Ayurvedic products.

This review paper presents a synthesis of findings derived from a multitude of studies conducted in various regions of India. The research studies utilized a variety of research methodologies, encompassing both quantitative and qualitative approaches, in order to investigate consumer preferences, attitudes, and purchasing behavior in relation to Ayurvedic products. This paper examines the influence of different variables on consumer adoption, encompassing product-related characteristics, consumer demographics, and marketing tactics.

Introduction

A. *Background and Context*

In recent times, there has been a surge in scholarly attention towards traditional medicine and natural health products, resulting in a heightened emphasis on Ayurvedic products. Ayurveda, a time-honored medical system originating from India, presents a comprehensive framework for addressing health and well-being concerns through the utilization of herbal remedies and naturally derived constituents. The consumer market has witnessed a notable increase in the adoption of Ayurvedic products as individuals actively explore alternatives to conventional pharmaceuticals and embrace a more holistic lifestyle[1,2].

Ayurvedic products are sourced from traditional knowledge and practices, and their global popularity has been steadily increasing, extending beyond the borders of India[3]. Given the escalating demand for these products, it is imperative to comprehend the factors that exert influence on consumer adoption. The identification of these factors can offer valuable insights for marketers, policymakers, and researchers seeking to enhance the acceptance and utilization of Ayurvedic products[4].

B. *Research Objectives*

The objective of this systematic review is to identify and analyze the primary determinants that influence the consumer adoption of Ayurvedic products. The primary aims of this review are as follows:

- The aim of this study is to examine the product-related factors that have an impact on consumers' adoption of Ayurvedic products. These factors encompass perceived effectiveness and efficacy, safety, packaging, and price.
- The objective of this study is to analyze the consumer-related variables that contribute to the acceptance of Ayurvedic products. These variables encompass aspects such as health consciousness, familiarity with Ayurveda, cultural and social influences, as well as perceived risk and trust.
- The objective of this study is to examine the impact of marketing and distribution elements on consumer adoption, specifically focusing on promotional strategies, product availability, accessibility, and brand image.
- The objective of this study is to perform a comprehensive and methodical examination of the available literature in order to consolidate and analyze the current body of knowledge pertaining to the various factors that impact consumer acceptance and utilization of Ayurvedic products.

In order to ascertain areas of research that have not yet been explored and suggest potential avenues for future investigation, this study aims to examine the consumer adoption of Ayurvedic products.

To achieve these aims, we will undertake an

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extensive review of the literature, encompassing academic databases, scholarly journals, and pertinent publications. The review will encompass the systematic examination and evaluation of pertinent studies that contribute to the advancement of our comprehension regarding the determinants that impact consumer behavior in relation to Ayurvedic products.

In this systematic review, the utilization of in-text citations will be employed to appropriately attribute the sources of information and bolster the analysis. This study aims to synthesize and analyze existing research to develop a holistic and comprehensive comprehension of the determinants that impact consumer acceptance and adoption of Ayurvedic products.

C. Scope of the Review

This review aims to examine the various factors that exert influence on consumer adoption of Ayurvedic products. The scope of this domain encompasses a diverse array of product categories within the field of Ayurveda, which includes herbal supplements, medicinal oils, skincare products, and various other natural remedies. The review will encompass studies conducted in different geographical regions in order to encompass a wide range of consumer perspectives and cultural influences. However, it is important to note that the scope of this review will be restricted to studies that have been published in the English language, and the research that has been conducted up until the current date.

D. Importance of Ayurvedic Products

Ayurvedic products possess considerable significance within the global health and wellness market. The ancient principles of Ayurveda, which are firmly grounded in the natural world and traditional wisdom, present a potentially advantageous alternative to contemporary medical practices in terms of enhancing overall wellness and managing diverse health conditions. With the increasing awareness and concern among consumers regarding their health, there is a growing interest in sustainable and natural solutions. Ayurvedic products have emerged as a compelling choice for individuals due to their perceived effectiveness, safety, and compatibility with holistic approaches to health. Gaining insight into the determinants that influence consumer acceptance and utilization of Ayurvedic products is of paramount importance for enterprises, policymakers, and healthcare practitioners in order to effectively address shifting consumer inclinations and foster the expansion of the Ayurvedic sector.

Research Methodology

A. Systematic Review Approach

The present study employs a systematic review methodology to identify, analyze, and synthesize the various factors that impact the consumer adoption of Ayurvedic products. The selection of a systematic review is based on the objective of ensuring a methodical and transparent approach that reduces bias and improves the dependability of the results. The systematic approach encompasses predetermined criteria for the selection of studies, extraction of data, and analysis.

B. Inclusion and Exclusion Criteria

The criteria for inclusion in the selection of pertinent studies are as follows:

- The research findings presented in scholarly journals or academic publications.
- Research has been conducted on the consumer behavior pertaining to Ayurvedic products.
- Various studies have been conducted to investigate the factors that influence consumer adoption, encompassing product-related, consumer-related, and marketing factors.

The research investigations were carried out in the English language.

- Studies published to date.

The exclusion criteria are outlined as follows:

- Research conducted on topics unrelated to the consumer adoption of Ayurvedic products.
- Research studies characterized by inadequate data or methodological constraints.
- Studies focused on languages other than English.
- Research articles published prior to the specified time period.

C. Search Strategy

In order to ascertain pertinent studies, a thorough search strategy will be implemented. The search will involve the utilization of electronic databases, namely PubMed, Scopus, and Google Scholar, to explore Ayurvedic products and consumer adoption. This will be accomplished by employing suitable keywords and search terms. The search strategy will be formulated to encompass a comprehensive selection of scholarly literature pertaining to the subject matter.

D. Data Sources

The main sources of data for this systematic review will comprise academic databases, scholarly journals, and pertinent publications. Furthermore, the reference lists of chosen studies will be thoroughly examined in order to identify any supplementary sources that satisfy the predetermined criteria for inclusion.

E. Study Selection Process

The process of selecting studies will encompass several stages. In the first stage, the elimination of duplicate entries will be conducted in the search results. Subsequently, a pair of autonomous reviewers will evaluate the titles and abstracts of the remaining studies in accordance with the predetermined criteria for inclusion and exclusion. The complete texts of studies that may be relevant will be obtained for subsequent evaluation. Any inconsistencies in the process of selecting studies will be addressed by engaging in discussions or seeking input from a third reviewer.

F. Data Extraction and Analysis

The process of data extraction will entail the systematic gathering of pertinent information from the chosen studies. This will encompass various aspects such as the characteristics of the studies, their research design, sample size, methodology employed, as well as the key findings pertaining to the factors that influence consumer adoption of Ayurvedic products. The collected data will be systematically categorized and analyzed using both qualitative and quantitative approaches.

G. Quality Assessment of Included Studies

The assessment of the studies included in the analysis will be conducted using suitable instruments or checklists to appraise the dependability and credibility of the research. The methodological rigor of each study will be assessed by two independent reviewers, and any discrepancies will be resolved through consensus or by seeking input from a third reviewer. In the process of data analysis and synthesis, studies of superior quality will be accorded greater significance.

The systematic review methodology will facilitate a comprehensive and impartial evaluation of the determinants that impact the acceptance of Ayurvedic products among consumers. This approach will yield reliable findings and significant knowledge for diverse stakeholders in both the industry and academic sectors.

Systematic Literature Review

Study	Objective	Methodology	Main Findings
Chopra and Baxi[5]	Understand consumer behavior towards Ayurvedic products in Ahmedabad, India	Quantitative research approach, data collected through questionnaires	Provided valuable insights into consumers' decision-making processes and preferences when selecting Ayurvedic products, offering implications for Ayurvedic companies.
Dhar and Dey[6]	Understand factors influencing demand and sustainable growth of Ayurvedic medicine industry in Kolkata, India	Mixed-method approach, primary data collected through questionnaires	Analyzed consumer behavior towards Ayurvedic products, taste preferences, social and economic factors, and scientific aspects, contributing to the emergence of Ayurvedic products as a sustainable sector in the medicine industry.
Bharathi and Mayya[7]	Identify factors influencing consumer buying behavior of Ayurvedic products	Review study, secondary data from articles, papers, books, journals, and websites	Revealed multiple factors influencing consumer purchasing behavior of Ayurvedic products, facilitating the development of effective marketing strategies.
Ghalawat *et al.*[8]	Explore consumer awareness and factors influencing choice of Ayurvedic products	Convenience sampling, data collected from 100 customers in Hisar city, Haryana District	Identified factors influencing consumer choices of Ayurvedic products and highlighted the benefits of Ayurvedic medicines when used alongside allopathic and homeopathic medicines.

Nivetha *et al.*[9]	Delve into consumer purchasing behavior towards herbal products using Theory of Planned Behavior (TPB)	Quantitative research with Partial Least Square method	Consumer knowledge significantly influenced purchase of herbal personal care products. Recommendations to spread comprehensive information about products through effective advertisements and social media.
Pallathadka *et al.*[10]	Explore customers' preferences for Ayurvedic beauty products compared to cosmetic products	Qualitative investigation in Coimbatore city	Shed light on consumer preferences and awareness, indicating an increasing interest in Ayurvedic products in India and global markets.
Gawas[11]	Investigate green buying behavior of Indian consumers for Ayurvedic cosmetic products	Study conducted in Panjim City, Goa	Consumers consider qualitative and quantitative factors when purchasing Ayurvedic cosmetic products. Provided insights into green buying practices and consumer preferences.
Venkataraman[12]	Explore consumer outlook in the skin care segment in India	Quantitative study	Revealed diverging trends based on different geographical locations in India, influencing factors when making skincare product choices. Identified potential for natural/Ayurvedic products in various regions.
Sharma and Saluja[13]	Understand customer preferences for Ayurvedic hair oil products	Research conducted in Punjab, Haryana, Himachal, and Jammu and Kashmir	Increased disposable income and purchasing power contributed to rapid growth in the Ayurvedic hair oil industry. Provided insights into consumer purchasing habits, guiding marketing strategies.
Kaur and Kochar[14]	Present a comprehensive review of factors influencing consumer behavior towards online shopping	Review study	Technology-oriented factors (guaranteed quality, cash on delivery, discounts) significantly influence consumer attitudes toward online shopping.
Bhadauriya, Jadon, and Upadhyay[15]	Investigate use, attitude, and knowledge of herbal cosmetic products among consumers in the Gwalior region	Survey-based study	Found a growing demand for herbal cosmetics in the personal care industry, particularly among the younger population.
Sahni and Chandhoke[16]	Explore changing perception of Indian consumers towards Ayurveda amid COVID-19 pandemic	Exploratory study with interviews	Spiritual leaders' endorsement of Ayurvedic products influenced consumer perceptions and purchase decisions during the pandemic.
Kolhe *et al.*[17]	Investigate demand for Ayurvedic medicines during the COVID-19 pandemic in Pune city	Mini survey	Certain Ayurvedic products like Ashwagandha and Chyavanprasha experienced high demand during the pandemic.

Katoch *et al.*[18]	Provide a comprehensive review of modern science and Ayurvedic perspectives on lifestyle, immunity, and COVID-19	Review study	Highlighted the significance of lifestyle modifications in boosting immunity to combat infectious diseases like COVID-19.
Dutta and Bhattacharjee[19]	Examine changes in consumer behavior and purchasing patterns of medicines through e-pharmacy during the COVID-19 pandemic in Silchar, Assam	Cross-sectional study with structured questionnaire	Consumers in Silchar showed a strong inclination towards using e-pharmacy platforms during the pandemic.
Bhatia and Rathore[20]	Examine the impact of spiritual leaders on the Indian FMCG market and New Age Consumers	Survey-based study	Spiritual leaders have a significant impact on brand positioning and competitiveness in the FMCG market, attracting New Age Consumers.
Bhutia, Basnett, Bhattarai, and Bhutia[21]	Explore and document availability and demand for herbal medicinal products in the Sikkim Himalaya region	Mini survey	Found a growing interest in immunity-boosting herbal remedies, indicating potential for growth in the herbal products market in Sikkim.

Discussion

The reviews provide valuable insights into consumer behavior regarding Ayurvedic products, with a specific emphasis on the factors that influence their adoption and preferences. The research encompasses diverse geographical regions within India and employs a range of research methodologies, such as quantitative surveys, qualitative investigations, and systematic reviews. In this discourse, we shall engage in an examination of the principal discoveries and ramifications derived from these evaluations within the framework of the subject matter, namely "Determinants Shaping Consumer Acceptance of Ayurvedic Merchandise."

1. Factors Affecting Consumer Adoption: Numerous factors that exert an influence on consumer adoption of Ayurvedic products have been identified through an analysis of various reviews. The afore-mentioned factors can be classified into three primary categories: factors related to the product, factors related to the consumer, and factors related to marketing.

a. **Factors Related to the Product:** Several studies, including Chopra and Baxi[5], Dhar and Dey[6], and Bhadauriya, Jadon, and Upadhyay[15], emphasize the significance of perceived purity, naturalness, safety, and absence of adverse effects in Ayurvedic products as key determinants influencing consumers' inclination towards these products. The COVID-19 pandemic has led to a heightened awareness among consumers regarding the health benefits of Ayurvedic products, resulting in an increased inclination towards their usage[22].

b. **Consumer-Related Factors:** Numerous scholarly investigations, including the works of Gawas (2011) and Venkataraman (2014), underscore the significance of demographic variables, such as age and gender, in shaping consumer preferences and attitudes towards Ayurvedic products. The adoption of Ayurvedic products is more prevalent among younger consumers, particularly those within the age range of 20 to 30 years. Furthermore, the adoption of Ayurvedic products is significantly influenced by regional variations in consumer behavior and consumer awareness[8].

Marketing-related factors have been found to have a substantial impact on consumer purchasing behavior towards Ayurvedic products, as demonstrated by the studies conducted by Bharathi and Mayya[7] and Kolhe *et al.*[17]. The rise in consumer awareness and adoption of Ayurvedic products can be attributed to the endorsements of spiritual leaders and the accessibility of these products on e-commerce platforms[19].

The COVID-19 pandemic has had a significant impact on various aspects of society. Multiple scholarly articles, including Sahni and Chandhoke (2016) and Katoch *et al.* (2018), have examined the influence of the COVID-19 pandemic on consumer attitudes and behaviors regarding Ayurvedic products. The global pandemic has prompted a heightened emphasis on health and immunity, leading to a surge in the demand for Ayurvedic medicines and herbal products, particularly those that possess immune-enhancing properties.

The topic of regional differences in consumer behavior towards Ayurvedic products in India is explored by Venkataraman (2012) and Pallathadka *et al.* (2010). The preferences for Ayurvedic products exhibit regional variations, which can be ascribed to cultural and traditional influences. In order to effectively penetrate diverse markets, businesses must customize their marketing strategies according to regional preferences[23].

Trust and awareness are crucial factors that greatly influence the acceptance and utilization of Ayurvedic products[1]. The reviews underscore the significance of cultivating consumer trust by means of proficient marketing and communication strategies. The endorsement of brands by spiritual leaders has been found to exert a favorable impact on consumers' perceptions and decision-making.

Two studies conducted by Nivetha *et al.*[9] and Kaur and Kochar[14] examine consumer preferences and attitudes towards herbal and Ayurvedic products. The attitudes of consumers are influenced by various factors, including their perception of quality, level of product knowledge, and the perceived health benefits associated with a product. It is imperative for marketers to prioritize the dissemination of knowledge to consumers regarding the advantageous attributes of Ayurvedic products, with the aim of exerting a constructive influence on their preferences.

6. Online Shopping and E-Pharmacies: Kaur and Kochar[14] discuss the rise of online shopping and the impact of e-commerce on consumer behavior. Online platforms have become popular for purchasing Ayurvedic products, especially during the COVID-19 pandemic[15]. The emergence of e-pharmacies has provided consumers with a convenient and secure option to obtain Ayurvedic medicines.

In summary, the aforementioned reviews offer significant perspectives on the determinants that impact the acceptance of Ayurvedic products among consumers in India. From product-related factors like purity and naturalness to consumer-related factors like age and regional differences, these factors collectively shape consumer behavior towards Ayurvedic products. The impact of the COVID-19 pandemic has further emphasized the importance of Ayurvedic products for boosting immunity and overall health. To capitalize on the growing interest in Ayurvedic products, businesses should tailor their marketing strategies, enhance consumer awareness, and build trust to meet the evolving preferences of consumers. Additionally, the rise of e-commerce and online shopping platforms presents opportunities for Ayurvedic product manufacturers to reach a broader consumer base and enhance their market presence.

Conclusion

The comprehensive analysis of factors impacting the acceptance of Ayurvedic products by consumers provides valuable insights into the ever-changing and intricate realm of consumer behavior in India. The ancient medical system known as Ayurveda has gained considerable attention and recognition on a local and global scale, particularly in relation to the COVID-19 pandemic. The reviews encompass a diverse array of studies conducted in various regions of India, utilizing a variety of research methodologies to investigate consumer preferences, attitudes, and purchasing behavior regarding Ayurvedic products.

The results of these reviews highlight the complex nature of consumer acceptance of Ayurvedic products, which is influenced by various factors related to the product itself, the consumer, and marketing strategies. The perceived qualities of purity, naturalness, and safety associated with Ayurvedic products play a crucial role in attracting consumers towards these holistic remedies. Demographic factors, such as age and gender, play a significant role in influencing consumer preferences, wherein younger consumers exhibit a greater inclination towards the adoption of Ayurvedic products. Moreover, the observed variations in consumer behavior across different regions underscore the importance of cultural factors in shaping individuals' preferences.

The COVID-19 pandemic has resulted in a heightened emphasis on health and immunity among consumers, resulting in a surge in the demand for Ayurvedic medicines and herbal products renowned for their immune-enhancing properties. The COVID-19 pandemic has additionally accelerated the implementation of electronic commerce platforms, whereby e-pharmacies have emerged as a convenient and secure channel for consumers to obtain Ayurvedic products.

The significance of marketing in shaping consumer behavior towards Ayurvedic products should not be underestimated. The endorsements of spiritual leaders and the implementation of aggressive marketing strategies have had a positive influence on consumer perceptions and purchasing behavior. The establishment of consumer trust and awareness plays a pivotal role in facilitating the acceptance and utilization of Ayurvedic products, as evidenced by the significance of effective marketing communication strategies.

The reviews collectively underscore the significance of comprehending consumer preferences, behavior, and regional disparities in order to develop focused marketing strategies. Manufacturers and marketers operating within the Ayurvedic industry have the opportunity to leverage these insights in order to align their product offerings with consumer expectations, thereby augmenting product popularity and stimulating market growth. By utilizing electronic commerce platforms and responding to consumer preferences for natural and secure products, enterprises can access the expanding market opportunities presented by Ayurvedic products.

In general, the reviews emphasize the enduring significance and prospective value of Ayurvedic products within contemporary society. Given the growing consumer demand for comprehensive and organic remedies to enhance their overall health and wellness, the Ayurvedic sector is poised for substantial and enduring expansion. In order to sustain this upward trend, enterprises must consistently adjust to evolving consumer preferences and expectations, all the while upholding the utmost levels of quality, genuineness, and effectiveness in their offerings.

The reviews provide valuable insights that can guide policymakers, marketers, and businesses in the Ayurvedic industry to innovate and align their strategies with the changing needs and preferences of consumers. The Ayurvedic product industry is undergoing significant changes due to the evolving healthcare landscape and shifting consumer behavior. This transformation has the potential to greatly impact the ability of Ayurvedic products to meet the demands of the modern world..

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भारत में मुद्रा योजना की प्रगति और समाज के विभिन्न वर्गों की सहभागिता का एक संक्षिप्त विश्लेषण

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सारांश

प्रधानमंत्री मुद्रा ऋण योजना का प्रमुख उद्देश्य एमएसएमई सेक्टर के विकास के साथ ही समाज के पिछड़े वर्गों, अनुसूचित जाति, अनु. जनजाति तथा महिलाओं को जो अपना स्वयं का व्यवसाय प्रारम्भ करना चाहते हैं, उन्हें बिना गारंटी के ऋण प्रदान कर उनके अंदर उद्यमिता का संवर्धन करना है। फर्म ब्यूटी पार्लर, छोटे उद्योग, सिलाई केन्द्र, फूड प्रोसेसिंग यूनिट तथा ट्यूशन सेंटर या अन्य ग्रामोद्योग आदि प्रारम्भ करने के लिए बिजनेस लोन के रूप में 50 हजार से 10 लाख रुपये तक का ऋण प्रदान किया जा रहा है। समय-समय पर प्रधानमंत्री मुद्रा योजना की समीक्षा कर इसके कवरेज को लगातार बढ़ाया जा रहा है। वित्तीय वर्ष 2016-17 से कृषि से जुड़ी गतिविधियों यथा- मत्स्य पालन, शहद हेतु मधुमक्खी पालन, मुर्गी पालन, पशुधन पालन, ग्रेडिंग, छटाईं, कृषि व्यवसायों के एकत्रीकरण, डेयरी, एग्रीक्लीनिक व एग्रीबिजनेस, खाद्य एवं कृषि प्रसंस्करण और इनको सशक्त करने वाली सेवायें जो लोगों की जीविका और आय को संवर्धित करती हैं, इन सभी को प्रधानमंत्री मुद्रा योजना में सम्मिलित कर लिया गया है। वर्ष 2015-16 में मुद्रा लोन के कुल खाताधारकों में महिला उद्यमियों की संख्या 79.2% थी जो 2016-17 में कम होकर 73.4% हो गयी और वर्ष 1018-19 में यह और घटकर 61.9% तक हो गयी। यद्यपि वर्ष 2019-20 से थोड़ा सकारात्मक सुधार हुआ है और यह सहभागिता 2020-21 और 2021-22 में बढ़ती हुई क्रमशः 65.64% और 71.43% हो गयी है जो महिला उद्यमिता के संवर्धन एवं सशक्तिकरण के लिए एक अच्छा संकेतक है। वर्ष 2021-22 में मुद्रा लोन की सबसे अधिक धनराशि स्वीकृत करने वाला देश का शीर्षस्थ राज्य पश्चिम बंगाल है जबकि विगत वर्ष 2020-21 में कर्नाटक शीर्ष पर था। उत्तर प्रदेश के प्रदर्शन में बहुत महत्वपूर्ण परिवर्तन आया है कि यह राज्य 2019-20 की भाँति वर्ष 2021-22 में पुनः दूसरे पायदान पर आ गया जो 2020-21 में तीसरे स्थान पर था। विगत लगभग 8 वर्षों (2015-16 से 2022-23) में मुद्रा लोन की मांग में 78.63% की वृद्धि हुई जबकि स्वीकृत व प्रदान किये गये मुद्रा ऋणों की मात्रा में क्रमशः 232% एवं 238% की वृद्धि हुई है। स्पष्ट है कि इस योजना से समाज के विकास से वंचित वर्गों विशेष रूप से महिलाओं, अन्य पिछड़ा वर्ग, अनुसूचित जातियों/अनुसूचित जनजातियों के अंदर उद्यमिता की भावना का विकास हो रहा है।

प्रस्तावना

भारत सरकार द्वारा उद्यमिता को गति एवं दिशा देने के लिए अनेक योजनाओं के संचालन के साथ ही कमजोर वर्ग के लोगों (गैर-कॉर्पोरेट, गैर-कृषि लघु/सूक्ष्म उद्यमों) छोटी विनिर्माण इकाईयों, दुकानदारी, फल व सब्जी विक्रेताओं, ट्रक और टैक्सी ड्राइवरों, बाद्य सेवा इकाईयों, मशीन आपरेटर तथा उत्पादकों को नियमित आय प्राप्ति हेतु प्रधानमंत्री मुद्रा योजना की शुरुआत 8 अप्रैल 2015 को की गई।

यह योजना एक बिजनेस लोन योजना है। मुद्रा का पूरा नाम माइक्रो यूनिट डेवलपमेंटरी फाइनेंस एजेंसी (MUDRA-Micro Units Development & Refinance Agency) है। मुद्रा योजना के दो प्रमुख उद्देश्य निम्नांकित हैं-

1- स्वरोजगार हेतु आसानी से ऋण प्रदान करना, तथा

2- छोटे उद्यमियों के माध्यम से आय व रोजगार सृजित करना।

मुद्रा योजना (PMMY) के तहत ऋणों को MUDRA Loan (मुद्रा ऋण) के रूप में वर्गीकृत किया जाता है। ये ऋण वाणिज्यिक बैंक, क्षेत्रीय ग्रामीण बैंक, लघु वित्त बैंक, सूक्ष्म वित्त संस्थाओं तथा गैर-बैंकिंग वित्तीय कंपनियों द्वारा प्रदान किये जाते हैं। केंद्र सरकार के लघु, सूक्ष्म एवं मध्यम उद्यम (MSME) मंत्रालय द्वारा चलाई जा रही मुद्रा लोन योजना का लक्ष्य देश में अधिक से अधिक उद्योग शुरू करना और पुराने उद्योगों को बढ़ावा देना है। इसीलिए मुद्रा लोन को तीन श्रेणियों में वर्गीकृत किया गया है।

- **शिशु लोन -** इस श्रेणी में लाभार्थी को 50 हजार तक का बिजनेस ऋण प्रदान किया जाता है।

* असिस्टेंट प्रोफेसर (अर्थशास्त्र), काशी नरेश राजकीय स्नातकोत्तर महाविद्यालय ज्ञानपुर, भदोही
(प्रस्तुत शोध प्रपत्र उच्च शिक्षा विभाग उ.प्र. शासन द्वारा प्रदत्त लघु शोध परियोजना का एक अंश है।)

- **किशोर लोन -** किशोर श्रेणी के अन्तर्गत कारोबारियों को 50 हजार से 5 लाख तक बिजनेस लोन (ऋण) प्रदान किया जाता है।
- **तरुण लोन-** तरुण लोन श्रेणी में कारोबारियों को 5 से 10 लाख तक का बिजनेस ऋण प्रदान किया जाता है।

मुद्रा लोन का लाभ हर किसी को मिल सकता है शर्त सिर्फ इतनी होती है कि मुद्रा लोन की रकम का उपयोग एमएसएमई बिजनेस के लिए करना होता है।

इस सरकारी लोन योजना में एमएसएमएमई कारोबारियों को आवश्यकता के अनुरूप 10 लाख रुपये तक का बिजनेस लोन, बिना कुछ गिरवी रखे मिलता है।

मुद्रा योजना में महिला आवेदकों को प्रमुखता के आधार पर मुद्रा लोन प्रदान किया जाता है।

पीएम मुद्रा लोन सरकारी बैंको, प्राइवेट बैंको क्षेत्रीय ग्रामीण बैंकों, सहकारी बैंको माइक्रो फाइनेंस संस्थानों व गैर बैंकिंग वित्तीय कंपनियों के माध्यम से प्राप्त होता है।

इस ऋण योजना के अंतर्गत कारोबार की प्रकृति व उससे जुड़े जोखिम के आधार पर अलग-अलग बैंकों में ब्याज दरें अलग-अलग हो सकती हैं।

मुद्रा लोन का प्रोसेस पूरा होने में दो सप्ताह का समय लगता है। मुद्रा लोन लेने के लिए ऑनलाइन व ऑफलाइन दोनों तरीके से आवेदन किया जा सकता हैं। मुद्रा कंपनी को 100% पूंजी का योगदान के साथ 'भारतीय लघु उद्योग विकास बैंक' (Small Industries Development Bank of India-SIDBI) के पूर्ण स्वामित्व वाली सहायक कंपनी के रूप में स्थापित किया गया है। वर्तमान में मुद्रा कंपनी की अधिकृत पूंजी 1000 करोड़ है और भुगतान की गई पूंजी (Paid Up Capital) 750 करोड़ है।

मुद्रा लोन की बेसिक पात्रता निम्न हैः

- मुद्रा लोन के लिए अप्लाई करने वाला कारोबारी की नागरिकता भारतीय हो।
- मुद्रा लोन का उपयोग गैर-कृषि कारोबार के लिए किया जाना हो।
- जिस भी कारोबार के लिए मुद्रा लोन लेना हो, वह कॉरपोरेट संस्थान नहीं होनी चाहिए।
- बिजनेसमैन के पास मुद्रा लोन का उपयोग करने का प्रोजेक्ट तैयार हो।

मुद्रा लोन इस तरह के बिजनेस को मिल सकता हैः

- प्रोपराइटरशिप फर्म
- पार्टनरशिप फर्म
- छोटी मैन्युफैक्चरिंग यूनिट
- सर्विस सेक्टर कंपनी
- दुकानदार
- फल-सब्जी विक्रेता
- ट्रक/कार ड्राईवर
- होटल मालिक
- रिपेयर शॉप
- मशीन ऑपरेटर
- छोटे उद्योग
- फूड प्रोसेसिंग यूनिट
- ग्रामीण एवं शहरी इलाके का कोई अन्य ग्रामोद्योग।

इसके अन्तर्गत समाज के पिछड़े वर्गों, अनुसूचित जाति, अनु. जनजाति तथा महिलाओं को जो अपना स्वयं का व्यवसाय प्रारम्भ करना चाहते हैं, उन्हें बिना गारंटी के ऋण प्रदान करके उनके अंदर उद्यमिता का संवर्धन करना है। फर्म ब्यूटी पार्लर, छोटे उद्योग, सिलाई केन्द्र, फूड प्रोसेसिंग यूनिट तथा ट्यूशन सेंटर या अन्य ग्रामोद्योग आदि प्रारम्भ करने के लिए बिजनेस लोन के रूप में 50 हजार से 10 लाख रुपये तक का ऋण प्रदान किया जाता है।

महिला उद्यमिता के संवर्धन में मुद्रा योजना की प्रासंगिकता

प्रधानमंत्री मुद्रा योजना के व्यापक प्रचार-प्रसार व प्रभावी क्रियान्वयन के द्वारा ग्रामीण विकास व महिला सशक्तिकरण के लक्ष्य को आसानी से प्राप्त किया जा सकता है। इस मुद्रा ऋण योजना के फलस्वरूप कई महत्वपूर्ण परिणाम अपेक्षित रूप से प्राप्त हो सकते है यथा-

(i) मुद्रा योजना से महिलाओं व समाज के पिछड़े समूहों में वित्तीय साक्षरता व वित्तीय समावेशन की अधिकाधिक पहुँच सुनिश्चित होगी।

(ii) मुद्रा योजना के प्रसार व जागरूकता से रोजगार में वृद्धि होगी और उनकी बढ़ी हुई आय स्तर के फलस्वरूप उनके जीवनशैली में भी बदलाव आयेगा।

(iii) उद्यमी महिलायें आर्थिक रूप से आत्मनिर्भर बनने की ओर अग्रसर होंगी।

(iv) मुद्रा योजना जैसे ऋण सुविधा की रियायती दर पर सहज प्राप्ति से लाभार्थियों में उद्यमिता की भावना तीव्र होगी।

(v) ग्रामीण क्षेत्रों में उद्यमिता के प्रसार के कारण स्थानीय स्तर पर ही विकास की दृष्टि से पिछड़े वर्ग विशेष रूप से महिलाएं रोजगार से लाभान्वित होगी।

(vi) उद्यमी महिलाएं व समाज के पिछड़े वर्ग अपनी आय, बचत, व्यय व निवेश के निर्णयन में आत्मनिर्भर होंगी।

(vii) उद्यमों में नियोजित महिलाएं अपने स्वास्थ्य के साथ ही परिवार के अन्य सदस्यों के स्वास्थ्य के प्रति भी जागरूक होगी।

शोध साहित्य की समीक्षा

मुद्रा योजना एक नई तरह की योजना है जिससे समाज के पिछड़े वर्ग के लोगों को उद्यम स्थापित करने हेतु मुद्रा ऋण प्रदान किया जा रहा है। इसका प्रमुख उद्देश्य स्थानीय लोगों को स्वावलम्बी बनाते हुए उन्हें विकास की मुख्य भाग में लाना है। मुद्रा योजना (PMMY) से समावेशी विकास तो सुनिश्चित होगा ही साथ ही उद्यमिता संवर्धन से MSME व विनिर्माण क्षेत्र को प्रोत्साहन भी मिलेगा। लघु उद्योगों के तीव्र प्रसार से अर्थव्यवस्था में विनिर्माण क्षेत्र सशक्त होगा तथा आत्म निर्भरता के लक्ष्य की प्राप्ति भी सुनिश्चित हो सकती है। अर्थात उद्यमिता संवर्द्धन के माध्यम से अर्थव्यवस्था में आय, रोजगार व कल्याण का प्रोत्साहित करने वाली नीतियाँ और ज्यादा सशक्त हो सकेंगी। मुद्रा योजना से सम्बन्धित कुछ महत्वपूर्ण अध्ययन निष्कर्ष निम्नलिखित हैं-

Mehar, L. (2014) अपने निष्कर्ष में यह तथ्य बताते हैं कि भारत में मोबाइल बैंकिंग, छोटे-छोटे बैंकिंग शाखाओं जैसे नवाचार से वित्तीय समावेशन विगत कुछ वर्षों में तीव्रता से बढ़ा है। इसी संदर्भ में राय, अनूप कुमार (Roy, Anup Kumar, 2016) का मत है कि लघु व्यवसाय आर्थिक विकास के आधार स्तम्भ होते हैं और विगत कुछ वर्षों में सरकार द्वारा इस दिशा में कई महत्वपूर्ण प्रयास शुरू किए गये हैं।

J. Venkatesh & R. Lavanya Kamari (2017) मुद्रा बैंक के अपने एक अध्ययन में इस महत्वपूर्ण तथ्य से अवगत कराते हैं कि यद्यपि यह योजना नव प्रवर्तन के माध्यम से एमएसएमई क्षेत्र के समग्र विकास हेतु प्रारम्भ की गयी थी तथापि यह लघु उद्योगों में संलग्न लोगों के कल्याण स्तर के वृद्धि में भी सहायक बन रही है जो सम्पूर्ण अर्थव्यवस्था को प्रगति हेतु सकारात्मक रूप से प्रभावित करेगा।

Verma S. (2015) अपने अध्ययन में यह उद्धृत करते हैं कि मुद्रा योजना न केवल एमएसएमई की वित्तीय समस्या को दूर करेगा अपितु बड़ी संख्या में युवा आबादी को नवप्रवर्तक (साहसी) बनने हेतु प्रेरित भी करेगा।

Rudrawar, M.A.A. &Uttarwar, V.R. (2016) का मानना है कि यदि प्रधानमंत्री मुद्रा योजना को बुनियादी स्तर से प्रभावी ढंग से लागू किया जाय तो यह गेमचेंजर की भाँति भारतीय अर्थव्यवस्था को समृद्ध करने वाला होगा। आने वाले कुछ वर्षों में मुद्रा योजना नव प्रवर्तन के विकास के साथ ही जीडीपी और रोजगारसृजन में निर्णायक भूमिका निभाएगा।

रूपा, आर. (2017) ने तमिलनाडु के एक अध्ययन में पाया कि मुद्रा योजना बहुत सफल हो रही है और इस योजना में लोन खातों की वृद्धि में सर्वाधिक योगदान सूक्ष्म वित्तीय संस्थानों (MFI) का है।

बंग्लादेश के एक अध्ययन (दास, संजय क्रांति-2012) से ज्ञात हुआ कि ग्रामीण बैंक से जुड़ी महिलाएं अपने परिवार में ज्यादा आर्थिक भूमिका का वहन करती है तथा ऋण सुविधा से उनका सशक्तीकरण भी होता है।

महाराष्ट्र व आन्ध्र प्रदेश में किए अध्ययन में (Schuler, S.R., Hashemi, S.M. & Rilley, A.P., 1994) यह उद्धृत करते हैं कि जिन परिवारों में महिलाएं आर्थिक रूप से सशक्त होती हैं, उनके बच्चों को ज्यादा बेहतर पौष्टिक आहार प्राप्त होता है। सिंह, एस. पाल (2008) के मतानुसार लघु ऋण कार्यक्रम निर्धनता उन्मूलन में एक महत्त्वपूर्ण हथियार है।

सेन (1997) के अनुसार सशक्तीकरण एक प्रक्रिया है जिसमें आर्थिक, शारीरिक व मानवीय संसाधनों पर नियंत्रण के साथ ही विश्वास मूल्यों व अभिवृत्ति में भी बदलाव होता है।

आन्ध्र प्रदेश के सर्वेक्षण निष्कर्ष में यह तथ्य प्राप्त हुआ कि किन्हीं उत्पादों के निर्माण कौशल से जुड़ी महिलाओं ने उन महिलाओं की तुलना में आय प्राप्ति शिक्षा व स्वास्थ्य सुविधा के साथ स्वतंत्रता का ज्यादा अनुभव किया जो जागरूक और उत्पादन कौशल योजनाओं से नहीं जुड़ी थी। नरसिम्हन शकुन्तला (1997)

अध्ययन के उद्देश्य एवं शोध प्रविधि

प्रस्तुत अध्ययन के प्रमुख उद्देश्य निम्न हैं-

(i) वर्ष 2015 से संचालित राष्ट्रीय और राज्यों के स्तर पर मुद्रा लोन योजना के प्रदर्शन का अवलोकन करना।

(ii) विगत 8 वर्षों में मुद्रा योजना के अन्तर्गत कुल खाताधारकों की संख्या, स्वीकृत तथा संवितरित धनराशि का विश्लेषण करना।

(iii) मुद्रा योजना में महिलाओं, पिछड़े वर्गों तथा अनु.जा./अनु. जनजाति की भागीदारी का भी अध्ययन करना।

प्रस्तुत शोधपत्र द्वितीयक आंकड़ों के विश्लेषण पर आधारित है। भारत सरकार द्वारा प्रारम्भ मुद्रा योजना में लोन हेतु खाताधारकों की संख्या, उनमें भी महिलाओं की भागीदारी कितनी है? शिशु लोन, किशोर लोन तथा तरुण लोन के अंतर्गत विगत लगभग 8 वर्षों में कितनी मुद्रा राशि स्वीकृत हुयी तथा संवितरित धनराशि की मात्रा कितनी है और उसका समाज व अर्थ व्यवस्था पर क्या प्रभाव पड़ा है। इसे ज्ञात करने के लिए द्वितीयक आंकड़ों के रूप में सरकार द्वारा उपलब्ध आंकड़ों, मुद्रा योजना की आधिकारिक वेबसाइट व अन्य प्रकाशित प्रतिवेदनों को आधार बनाकर विश्लेषण किया गया है।

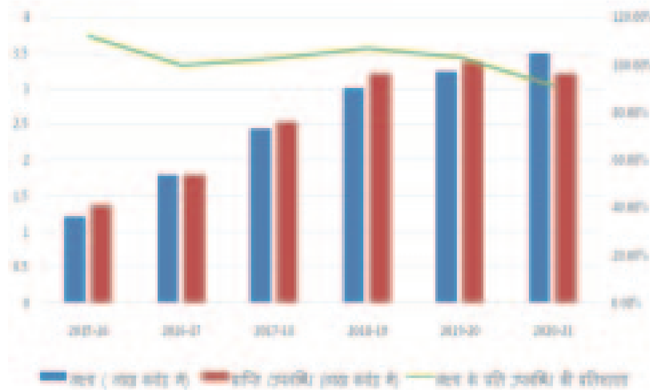
मुद्रा योजना की प्रगति का विश्लेषण : मुद्रा योजना के क्रियान्वयन काल से लेकर आज तक मुद्रा लोन के अंतर्गत वर्षवार ऋण धनराशि वितरण का क्या लक्ष्य था और उसके सापेक्ष कितने धनराशि का वितरण किया गया उसे समझने हेतु निम्न सारिणी से समझा जा सकता है। सारिणी से यह प्रदर्शित

है कि केवल वर्ष 2020-21 को छोड़कर अन्य सभी वर्षों में मुद्रा लोन का वितरण अपने लक्ष्य से ज्यादा ही रहा है, यह एक महत्वपूर्ण उपलब्धि है ।

सारिणी-1: मुद्रा योजना का लक्ष्य एवं उपलब्धि का विवरण

क्रमांक	वर्ष	लक्ष्य (लाख करोड़ में)	प्राप्ति/उपलब्धि (लाख करोड़ में)	लक्ष्य के प्रति उपलब्धि की प्रतिशतता
1	2015-16	1.22	1.37	112.30%
2	2016-17	1.8	1.8	100%
3	2017-18	2.44	2.53	103%
4	2018-19	3	3.21	107%
5	2019-20	3.25	3.37	103.60%
6	2020-21	3.5	3.21	91.71%

(*Source:* Six year of Pradhan Mantri Mudra Yojana, Annual Report : 2020-21, Page No-05)



सिडबी द्वारा प्रकाशित प्रधानमंत्री मुद्रा योजना के अंतर्गत उपरोक्त समयावधि में प्रधानमंत्री मुद्रा लोन खाताधारकों को स्वीकृत धनराशि का संस्थावार अवलोकन करें तो निम्न तथ्य प्राप्त होते हैं:

Category	लक्ष्य 2020-21 (रु. करोड़ में)	स्वीकृत धनराशि(2020-21) (रु. करोड़ में)	स्वीकृत धनराशि(2019-20) (रु. करोड़ में)	वृद्धि
Public Sector Banks (Incl. Regional Rural Banks)	128500	129915 (101%)	117729	10%
Private Sector Banks (Incl. Regional Foreign Banks)	91700	93613.20 (102%)	91780	2%
Small Finance Banks	29800	19646.68 (66%)	29501	33%
Micro Finance Institutions	59200	46601.40 (79%)	57967	20%
Non-Banking Finance Companies	40800	31983.17 (78%)	40518	21%
Total	350000	321759 (92%)	337495	5%

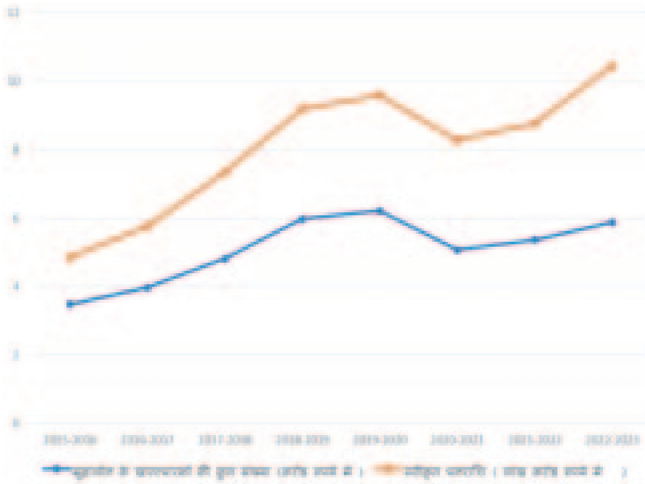
(*Source:* Six year of Pradhan Mantri Mudra Yojana, Annual Report: 2020-21, Page No- 05

सारिणी 2: राष्ट्रीय स्तर पर मुद्रा योजना के अन्तर्गत मुद्रा लोन खाता, स्वीकृत व संवितरित धनराशि की स्थिति

क्रमांक	वित्तीय वर्ष	प्रधानमंत्री मुद्रा लोन की स्वीकृत संख्या	स्वीकृत धनराशि(करोड़ रुपये में)	संवितरित धनराशि(करोड़ रुपये में)
1	2015-2016	34880924	137449.27	132954.73 (96.73%)
2	2016-2017	39701047	180528.54	175312.13 (97.11%)
3	2017-2018	481130593	253677.10	246437.40 (97.14%)
4	2018-2019	59870318	321722.97	311811.38 (96.91%)
5	2019-2020	62247606	337495.53	329715.03 (97.69%)
6	2020-2021	50735046	321759.25	311754.47 (96.89%)
7	2021-2022	53795526	339110.35	331402.20 (97.72%)
8	2022-2023	62310598	456537.98	450423.66 (98.66%)

(*Source:* www.mudra.org.in)

सारिणी के आँकड़ों से यह उद्धृत होता है कि वर्ष 2015-16 से 2022-23 के 7 वर्षों के अन्तर्गत देश भर में मुद्रा लोन खातों की कुल संख्या और इनके अन्तर्गत कुल स्वीकृत धनराशि की निरपेक्ष मात्रा लगातार बढ़ती हुई है और स्वीकृत मुद्रा लोन का लगभग 97% राशि संवितरित भी हुआ है। वर्षवार आंकड़ों को निम्न रेखाचित्र से आसानी से समझा जा सकता है:



सारणी-2 से स्पष्ट है कि इस योजना के अंतर्गत प्रारम्भ से लेकर आगामी वर्षों में स्वीकृत की जाने वाली लोन की संख्या तथा दी गयी ऋण की मात्रा भी लगातार बढ़ती हुई है। स्वीकृत मुद्रा लोन में संवितरण (व्यय) की प्रतिशतता भी लगभग 96-97% प्रति वर्ष रही है। अर्थात स्वीकृत की जाने वाली मुद्रा लोन की धनराशि लगभग पूर्णरूपेण व्यय हो रही है। वर्ष 2015-16 में इस योजना में कुल 3 करोड़ 48 लाख लोग मुद्रा लोन हेतु खाताधारक थे, पाँच वर्ष पश्चात (वर्ष 2020-21 में) इनकी संख्या बढ़कर 5 करोड़ 7 लाख पहुंच गयी। ऋणों की उपलब्ध करायी गयी मात्रा 3 लाख 21 हजार करोड़ रुपये थी। पुनश्च वित्तीय वर्ष 2021-22 और 2022-23 में मुद्रा लोन हेतु खाताधारकों की संख्या क्रमशः 5,37,95526 और 6,23,10598 हो गयी। अर्थात् विगत लगभग 8 वर्षों (2015-16 से 2022-23) में मुद्रा लोन की मांग में 78.63% की वृद्धि हुई जबकि स्वीकृत व प्रदान किये गये मुद्रा ऋणों की मात्रा में क्रमशः 232% एवं 238% की वृद्धि हुई है।

सारिणी-3a: भारत में कुल मुद्रा ऋण खाताधारकों की श्रेणीवार संख्या

प्रधानमंत्री मुद्रा योजना के अन्तर्गत अब तक लोन की जो भी मात्रा स्वीकृति हुई है, उसमें समाज के विभिन्न वर्गों की क्या सहभागिता है उसे निम्नलिखित सारिणी से समझा जा सकता है:

क्र. श्रेणी	वर्ष 2015-16	वर्ष 2016-17	वर्ष 2017-18	वर्ष 2018-19	वर्ष 2019-20	वर्ष 2020-21	वर्ष 2021-22
1 सामान्य	16479425	17200853	21906479	31735223	32497506	258646999	25994139
2 अनु. जाति (SC)	6114737	7135624	8506161	9452519	10281553	8398417	9364702
3 अनु.ज.जा.(ST)	1678346	1792502	2539307	3341329	3889696	3123282	3518084
4 अन्य पिछड़ा वर्ग(OBC)	10608416	13572068	15178646	15341247	15578851	13348648	14918601
5 कुल	34880924	39701047	48130519	59870318	62247606	50735046	53795526

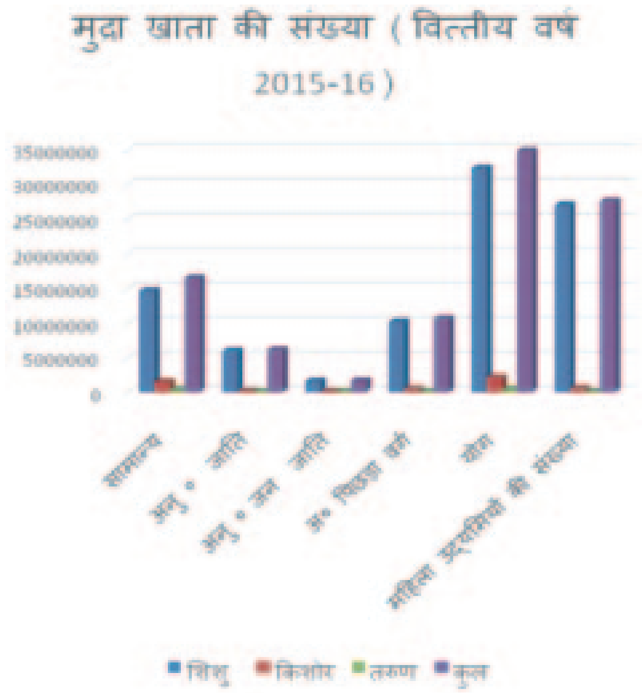
(स्रोत: www.mudra.org.in)

सारिणी 3b: मुद्रा योजना में ऋण प्राप्त करने वाले लाभार्थियों की श्रेणीवार स्थिति

	मुद्रा खाता की कुल संख्या(वित्तीय वर्ष 2021-22)				मुद्रा खाता की कुल संख्या(वित्तीय वर्ष 2015-16)			
श्रेणी	शिशु	किशोर	तरुण	कुल	शिशु	किशोर	तरुण	कुल
सामान्य	19185749	5977398	830992	25994139	14680840	1458346	340239	16479425
अनु. जाति	7858637	1480309	25756	3364702	5952482	143357	18898	6114732
अनु. जनजाति	2938831	562237	17016	3518084	1606484	62869	8993	1678346
अ. पिछड़ा वर्ग	11737937	3068262	112402	14918601	10161240	404889	42287	10608416
योग	41721154	11088206	986165	53795526	32401046	2069461	410417	34880924
महिला उद्यमियों की संख्या	30441921	7892778	94560	38429259	27103118	473536	51611	27628265

(स्रोत: www.mudra.org.in)

सारिणी-3a व 3b से स्पष्ट है कि प्रधानमंत्री मुद्रा योजना के अन्तर्गत प्रत्येक वर्ष मुद्रा लोन प्राप्त करने हेतु आवेदक खाताधारकों की संख्या लगातार बढ़ रही है। वर्ष 2015-16 के सापेक्ष वर्ष 2021-22 में कुल खाताधारकों की संख्या 3,48,80,924 से बढ़कर 5,37,95526 हो गयी। साथ ही साथ इनमें श्रेणीवार विभिन्न जातियों के आवेदकों की संख्या भी सापेक्षिक रूप से बढ़ती हुई है जिसे निम्न दण्डचित्रों से स्पष्ट रूप से समझा जा सकता है।



आकड़ों के अनुसार सामान्य श्रेणी, अनुसूचित जाति, अनु. जनजाति व अन्य पिछड़ा वर्ग खाताधारकों की संख्या में विगत पाँच वर्षों में क्रमशः 197 प्रतिशत, 168 प्रतिशत, 239 प्रतिशत व 147 प्रतिशत की वृद्धि हुई है। यह इस योजना की एक सकारात्मक उपलब्धि है कि अनुसूचित जनजाति के वर्गों में मुद्रा लोन योजना के प्रति रुझान अन्य वर्गों के सापेक्ष ज्यादा है।

प्रधानमंत्री मुद्रा योजना में महिला उद्यमियों की कितनी प्रतिभागिता रही या कुल मुद्रा लोन खाताधारकों में महिलाओं की प्रतिशतता कितनी रही है। इसके परीक्षण हेतु निम्न सारिणी-3 का अवलोकन आवश्यक है।

सारिणी-4: प्रधानमंत्री मुद्रा योजना में महिला उद्यमियों की सहभागिता की स्थिति

क्रमांक	वित्तीय वर्ष	मुद्रालोन के खाताधारकों की कुल संख्या	महिला उद्यमियों की कुल संख्या
1	2015-16	34880924	27628265 (79.2%)
2	2016-17	39701047	29146894 (73.47%)
3	2017-18	48130519	33558238 (69.7%)
4	2018-19	59870318	370 62562 (61.9%)
5	2019-20	62247606	39103349 (62.8%)
6	2020-21	50735046	33303604 (65.64%)
7	2021-22	53795526	38429259 (71.43%)

(स्रोतः www.mudra.org)

सारिणी-4 के आंकड़े स्पष्ट करते हैं कि राष्ट्रीय स्तर पर वर्ष 2015-16 से 2021-22 के मध्य विभिन्न वर्षों में मुद्रा योजना में महिला उद्यमियों की संख्या (वर्ष 2020-21 को छोडकर) निरपेक्ष रूप से प्रायः बढ़ती जा रही है परन्तु कुल खाताधारकों के सापेक्ष विश्लेषण में यह महत्वपूर्ण निष्कर्ष प्राप्त हो रहा है कि इन पाँच वर्षों में मुद्रा लोन खाताधारकों की कुल संख्या में महिला उद्यमियों की प्रतिशतता में तेजी से गिरावट भी आयी है। वर्ष 2015-16 में मुद्रालोन के कुल खाताधारकों में महिला उद्यमियों की संख्या 79.2 प्रतिशत थी जो 2016-17 में कम होकर 73.4 प्रतिशत हो गयी और वर्ष 2018-19 में यह और घटकर 61.9 प्रतिशत तक हो गयी। यद्यपि वर्ष 2019-20 से थोड़ा सकारात्मक सुधार हुआ है और यह सहभागिता 2020-21 और 2021-22 में बढ़ती हुई क्रमशः 65.64 और 71.43% हो गयी है जो महिला उद्यमिता के संवर्धन एवं सशक्तिकरण के लिए एक अच्छा संकेतक है।

भारत में वित्तीय वर्ष 2019-20, 2020-21 एवं 2022-23 (25 नवम्बर 2022 तक) के अन्तर्गत कुल मुद्रा खाताधारकों की संख्या एवं उनमें महिला उद्यमियों की सहभागिता की राज्यवार स्थिति का विश्लेषण करने पर एक व्यापक दृष्टिकोण निर्मित होता है। लोकसभा के पटल पर पूछे गए एक अतारांकित प्रश्न के जवाब में देश के अंदर विभिन्न राज्यों में प्रधानमंत्री मुद्रा योजना के अंतर्गत सृजित मुद्रालोन में महिला सहभागिता की स्थिति को निम्न सारिणी से समझा जा सकता है।

सारिणी-5: भारत में वित्तीय वर्ष 2019-20, 2020-21 एवं 2022-23 (25.11.2022 तक) के अन्तर्गत कुल मुद्रा खाताधारकों की संख्या एवं उनमें महिला उद्यमियों की सहभागिता की राज्यवार स्थिति

		FY 2019-20		FY 2020-21		FY 2021-22		FY 2022-23 (As on 25.11.2022)	
		Total	Women Entrepreneurs (Out of Total)	Total	Women Entrepreneurs (Out of Total)	Total	Women Entrepreneurs (Out of Total)	Total	Women Entrepreneurs (Out of Total)
S. No.	State/UT	No. of Loan A/Cs	No. of Loan A/Cs	No. of Loan A/Cs	No. of Loan A/Cs	No. of Loan A/Cs	No. of Loan A/Cs	No. of Loan A/Cs	No. of Loan A/Cs
1	Andaman & Nicobar Island	1733	312	5468	1459	1901	4	1915	479
2	Andhra Pradesh	844501	174094	1152152	435429	1117922	614391	666009	338092
3	Arunachal Pradesh	23288	684	6159	1888	5705	3596	8922	5163
4	Assam	1668347	779736	1189829	853482	682889	651561	129674	59189
5	Bihar	6712494	4197683	5306694	3262994	6678155	4705150	157376	2520963
6	UT of Chandigarh	24313	9288	20925	7243	14926	1763	10358	1444
7	Chhattisgarh	1261018	673430	1027266	633209	970396	729217	461421	327564
8	Dadra & Nagar Haveli and Daman Diu	3665	1979	4927	33109	4397	3532	1321	199
9	Delhi	568596	455907	330497	161462	194835	113585	116393	50347
10	Goa	39040	16825	37520	17931	35950	16610	20290	10880
11	Gujrat	2096393	1255370	1430956	914455	1590960	1036032	806868	489689
12	Haryana	1155917	763565	1005453	643639	1057963	593037	606015	337541
13	Himachal Pradesh	107865	41758	130494	40754	107556	26301	86370	21106
14	Jharkhand	1720485	1222813	1668281	1252260	1777882	1468060	1027249	83858
15	Karnataka	573127	3337300	4645196	3103875	4298481	2988512	2689198	1944461
16	Kerala	2176889	1422951	1586258	1105155	1620168	1166805	943562	538533
17	Lakshadweep	796	217	1799	506	725	130	794	289
18	Madhya Pradesh	3557948	2241666	3249158	2099143	3231804	2316849	1617429	1130365
19	Maharashtra	4769888	3478991	3754163	2957673	4158052	3589300	2539134	2105151
20	Manipur	90175	25579	69906	27806	74138	22323	18273	13053

21	Meghalaya	44416	16997	40478	28334	16892	12452	10188	4422
22	Mizoram	20435	6418	12716	7658	11396	8689	10958	7458
23	Nagaland	15082	10220	19787	14286	15191	10954	5967	2443
24	Odisha	3715335	2743233	3634998	2730228	3670907	2897689	1738418	1468835
25	Puducherry	139444	104096	108775	77157	131525	87320	62572	38509
26	Punjab	1281307	686067	1094143	582580	1109810	621930	622662	324867
27	Rajsthan	2994534	1793764	2481296	1653540	2667998	1770874	1356536	920454
28	Sikkim	19862	4999	15356	7641	11059	6827	4658	1687
29	Tamil Nadu	7117666	4312369	4947732	3036978	5625146	370452	3292228	2403110
30	Telangana	1435626	905309	66219	282466	533545	352999	225304	122107
31	Tripura	397094	243950	326855	208478	357304	286215	117484	75285
32	Uttar Pradesh	5861422	3280280	4738452	2673110	5787982	372650	3383847	2239655
33	Uttrakhand	301996	190621	301870	171327	333914	227311	228025	142008
34	West Bengal	6176529	4673653	5450920	4245652	5627231	4602264	2081435	1590812
35	Jammu & Kashmir	155153	29772	294501	58087	262645	63204	189333	47140
36	Ladakh	5602	1453	8477	2510	8176	2395	6059	1807
	TOTAL	62237981	39103349	50735046	33303604	53795526	38429259	28244245	20118947

(*Source:* As per data uploaded by Member Lending Institutions on Mudra Portal (Annexure as referred to in Part (b) of Lok Sabha Unstarred Que.No.734 for reply on 12th December 2022.)

उपरोक्त सारिणी से स्पष्ट है कि प्रधानमंत्री मुद्रा योजना के अंतर्गत वित्तीय वर्ष 2019-20 में राष्ट्रीय स्तर पर कुल खाता धारकों की संख्या 6,22,37,981 थी जिसमें महिलाओं की कुल सहभागिता 3,91,03,349 (62.83%) थी। वर्ष 2020-21 में यह प्रतिशतता 65.45% और 2021-22 में 71.4% हो गयी। 2022-23 में कुल मुद्रा खाताधारकों की संख्या 2,82,44,245 हो गयी जिसमें महिलाओं की प्रतिशतता बढ़कर 71.23% हो गयी।

यदि उत्तर प्रदेश के परिप्रेक्ष्य में देखें तो ज्ञात होता है कि वित्तीय वर्ष 2019-20 में प्रदेश में कुल मुद्रा लोन खाताधारकों की संख्या 58,61,42 (कुल राष्ट्रीय स्तर का 9.41%) थी जो वर्ष 2020-21 में 47,38,452, वर्ष 2021-22 में 57,87,982 तथा 2022-23 में 33,83,847 हो गयी थी। इन कुल मुद्रा खाताधारकों में उत्तर प्रदेश की महिलाओं की वर्ष 2019-20 से 2022-23 तक सहभागिता क्रमशः 55.96%, 56.41%, 64.38%, तथा 66.18% हो गयी है।

सारिणी-6: विगत तीन वर्षों में मुद्रा योजना के अन्तर्गत दस शीर्ष राज्यों का प्रदर्शन

क्र. सं.	राज्य	स्वीकृत धनराशि (रु.करोड़ में) वर्ष 2021-22	स्वीकृत धनराशि (रु.करोड़ में) वर्ष 2020-21	स्वीकृत धनराशि (रु.करोड़ में) वर्ष 2019-20
1	पश्चिम बंगाल	34893.2	29335.98	26790
2	उत्तर प्रदेश	32850.8	29231.35	30949
3	तमिलनाडु	32477.55	28967.97	35017
4	बिहार	32096.95	25589.31	27442
5	कर्नाटक	28695.24	30199.18	30188
6	महाराष्ट्र	25797.74	25208.63	27903
7	राजस्थान	18999.2	18571.38	19662
8	मध्यप्रदेश	18814.95	18474.24	19060
9	ओडिसा	16900	15328.63	15419
10	आंध्रप्रदेश	11829.82	12028.33	10439.93

(*Source:* Annual Report 2020-21 & 2021-22 from Mudra Portal)

उपरोक्त सारिणी से स्पष्ट है कि वर्ष 2021-22 में मुद्रालोन की सबसे अधिक धनराशि स्वीकृत करने वाला देश का शीर्षस्थ राज्य पश्चिम बंगाल है जबकि विगत वर्ष 2020-21 में कर्नाटक शीर्ष पर था। उत्तर प्रदेश के प्रदर्शन में बहुत महत्वपूर्ण परिवर्तन आया है कि यह राज्य 2019-20 की भाँति वर्ष 2021-22 में पुनः दूसरे पायदान पर आ गया जो 2020-21 में तीसरे स्थान पर था।

लोकसभा में एक प्रश्न के उत्तर में वित्त मंत्रालय के राज्यमंत्री डॉ.भगवत कराड़ द्वारा 6 फरवरी 2023 को अतारांकित प्रश्न संख्या-545 के उत्तर द्वारा यह भी स्पष्ट किया गया कि श्रम एवं रोजगार मंत्रालय द्वारा राष्ट्रीय स्तर पर PMMY के कारण सृजित रोजगार के सर्वे परिणाम बहुत सकारात्मक रहे। वर्ष 2015 से तीन वर्ष पश्चात 2018 में देश में कुल 1.12 करोड़ रोजगार सृजित हुआ। समय-समय पर प्रधानमंत्री मुद्रा योजना की समीक्षा कर इसके कवरेज को लगातार बढ़ाया जा रहा है। वित्तीय वर्ष 2016-17 से कृषि से जुड़ी गतिविधियों यथा- मत्स्य पालन, शहद हेतु मधुमक्खी पालन, मुर्गीपालन, पशुधन पालन, ग्रेडिंग, छटाईं, कृषि व्यवसाओं के एकत्रीकरण, डेयरी, एग्रीक्लीनिक व एग्रीबिजनेस, खाद्य एवं कृषि प्रसंस्करण (जिसमें फसल ऋण, नहरें, सिंचाई और कुंओं के माध्यम से भूमि सुधार सम्मिलित हैं) और इनको सशक्त करने वाली सेवाएँ जो लोगों की जीविका और आय को संवर्धित करती हैं, इन सभी को प्रधानमंत्री मुद्रा योजना (PMMY) में सम्मिलित कर लिया गया है ।

वित्तीय वर्ष 2017-18 से ट्रैक्टर और पावर टिलर (POWER TILLER) हेतु लोन की स्वीकृति को जिसकी कुल धनराशि 10 लाख से अधिक न हो, को PMMY के अंतर्गत शामिल कर लिया गया है। यही नहीं वित्तीय वर्ष 2018-19 और उसके बाद से वाणिज्यिक उद्देश्य से व्यक्तिगत रूप से दोपहिया वाहनों पर लोन स्वीकृति को भी इस योजना में सम्मिलित कर लिया गया है। मुद्रा योजना के 8वीं वर्षगांठ पर वित्तमंत्री निर्मला सीतारमण ने अपने सम्बोधन में बताया (दैनिक जागरण, प्रयागराज, 9 अप्रैल 2023 पृष्ठ-17) कि इस योजना से जमीनी स्तर पर बड़ी संख्या में रोजगार अवसर के सृजन में मदद मिली है। उन्होनें कहा कि मुद्रा योजना से वंचितों को फंड उपलब्ध कराया जा रहा है जो वित्तीय समावेशन का महत्वपूर्ण स्तम्भ है। मुद्रा योजना के अन्तर्गत कुल लोन खातों में 68% लोन खाते महिला उद्यमियों के हैं एवं 51% लोन खाते एससी-एसटी और ओबीसी श्रेणियों के उद्यमियों के हैं। ये आंकड़े इस बात को दर्शातें हैं कि देश के नवोदित उद्यमियों को आसानी से लोन की उपलब्धता से नवाचार और प्रति व्यक्ति आय में सतत वृद्धि हुई है।

निष्कर्ष

पीएम मुद्रा योजना के विगत आठ वर्षों का यदि सूक्ष्मता से आंकलन करें तो निष्कर्ष रूप में यह कहा जा सकता है कि मुद्रा योजना से देश भर में सूक्ष्म उद्यमियों की लोन तक पहुँच आसान हुयी है जिससे उन्हें अपने व्यवसाय को आरम्भ करने एवं विस्तार करने में मदद मिल रही है। इस योजना के अंतर्गत प्रारम्भ से लेकर आगामी वर्षों में स्वीकृत की जाने वाली लोन की संख्या तथा दी गयी ऋण की मात्रा भी लगातार बढ़ती हुई है। स्वीकृत मुद्रा लोन में संवितरण (व्यय) की प्रतिशतता भी लगभग 97% प्रतिवर्ष है। वर्ष 2015-16 में इस योजना में कुल 3 करोड़ 48 लाख लोग मुद्रा लोन हेतु खाताधारक थे, वर्ष 2020-21 में इनकी संख्या बढ़कर 5 करोड़ 7 लाख पहुंच गयी। पुनश्च वित्तीय वर्ष 2021-22 और 2022-23 में मुद्रालोन हेतु खाताधारकों की संख्या क्रमशः 5,37,95526 और 6,23,10598 हो गयी। अर्थात विगत लगभग 8 वर्षों (2015-16 से 2022-23) में मुद्रालोन की मांग में 78.63% की वृद्धि हुई जबकि स्वीकृत व प्रदान किये गये मुद्रा ऋणों की मात्रा में क्रमशः 232% एवं 238% की वृद्धि हुई है। स्पष्ट है कि इस योजना से समाज के विकास से वंचित वर्गों विशेष रूप से महिलाओं, अन्य पिछड़ा वर्ग एवं अनुसूचित जातियों/अनुसूचित जनजातियों के अंदर भी उद्यमिता की भावना का विकास हो रहा है। इस योजना से वित्तीय समावेशन का भी लक्ष्य पूर्ण हो रहा है और लाखों एमएसएमई औपचारिक अर्थव्यवस्था का हिस्सा बनते जा रहे हैं। मुद्रा योजना न केवल अर्थ व्यवस्था में रोजगार सृजन हेतु उपयोगी है अपितु इससे उद्यमिता को भी तीव्र प्रोत्साहन प्राप्त होगा जो कालान्तर में विनिर्माण क्षेत्र को सशक्त करेगा।

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Institutional Research Practices and Research Aspiration among Scholars

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Abstract

Good research culture is needed for quality research. The aspiration level of the research scholars and the institutional research practices play their role in building up a positive research environment. The research aspiration of the scholar can be measured in terms of interest, passion, career aspiration, and research-based competencies like analytical ability, self-expression, etc. Similarly, Institutional research practices can be measured in terms of the availability and accessibility of various tangible and intangible resources like library and web resources, competent faculty, collaborative efforts, the scope for research, vision and attitude of the head of the department, administrative support and quality of institutional delivery in terms of coursework, financial support etc. This paper makes an attempt to measure the level of research aspiration of the research scholars in the city of Patna and their perception towards the institutional support provided to them. The researcher has developed tools; Research Aspiration Scale (RAS) to measure the aspiration level of the research scholars and Institutional Professionalism Scale (IPS) to measure institutional research practices as perceived by research scholars. The paper also tries to explore the relationship between the two variables namely research aspiration of the research scholars and institutional professionalism based on research practices. The study reveals that 70.2% of the research scholars possess a average level of research aspiration. Similarly, 71.5% of the research scholars perceive that the institutional support provided to them was also at average level. This indicates that there is a need to give priority to the research culture in the institutions where research is being practiced. The result based on the relationship between Research Aspiration and Institutional Professionalism are positively correlated and thus influence each other significantly.

Introduction

Research in itself sounds to be a rigorous, continuous process, demanding not only financial investment but investment in terms of responsible and accountable human endeavor. For sustaining this long continuous process of research, sincerity, expertise, interest and vision are demanded on part of all those concerned and participating in research, be it the researcher, his/ her guide or supervisor or the institution involved. A rich research environment is needed to enhance quality research which involves an institutional professional outlook, active, knowledgeable and devoted faculty members and most importantly the high aspiration level of the research scholars. With this view in mind, research engagements of the institutions and the support provided for research act as a benchmark of accomplishment. Research skills refer to the ability to search for, locate, extract, organise, evaluate and use or present information that is relevant to a particular topic. The higher education institutions delivering the Ph.D. Courses are supposed to facilitate their scholars with certain basic facilities to support them in their research work. UGC in its draft on Minimum Standards and Procedures for Award of Ph.D. Degree, Regulations, 2022, has mentioned the availability of eligible research supervisors, required infrastructure, administrative support and research promotion facilities as the requirements to be fulfilled by Post Graduate Colleges. Availability of the latest books, journals and e-journals, computer facilities, Wi-Fi campus, etc. do help the researcher to gather information about his/her area of concern. The research supervisors lead the pathway and always act as a source of motivation. Seminars and Workshops on various research issues motivate and support research culture.

Related Literature Review

Best college reviews (2022) ranked universities based on research opportunities, centers, and funding.

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Atibuni D.Z. (2020) highlighted institutional resources, procedures, supervision, and communication as key for effective postgraduate research, noting gaps negatively affecting student engagement. Ajjawi *et al.* (2018) emphasized the importance of time, identity, and collaborative relationships in research productivity, alongside factors like strategy, resources, and collaboration. Institutional Professionalism ensures standards, learning, and ethics in a profession. Rehman (2018) viewed a robust research culture as vital for higher education's growth, requiring practical application and infrastructure improvement. Workshops and academic forums were suggested to promote research. Korir *et. al.* (2014) while investigating the effect of peer influence and school environment also established that school environment had a significant role to play in student's academic performance.The study by Linden *et al.* (2012) investigated how an introductory course influenced students' attitude towards research and their development of research knowledge and skills. The course was found to contribute positively to both aspects, with practical examples, authentic tasks, and group work being the most influential. Athens (2001) discussed challenges faced by faculty, proposing changes in academic systems, resources, and collaboration to enhance research productivity.

Significance of the Study: Research culture includes institutional practices, norms attitudes, values and research aspirations of the scholars. Research aspirations are reflections of research goals that an individual sets for himself/herself. It is important as it encourages and energizes the individual to complete his/her work in an appropriate manner. But studies show that this aspiration is directly influenced by the work and research culture of an institution. Today, it is essential to access an institution's status, especially those conducting research on their premises. The norms and guidelines are given to the higher educational institution by the UGC but still, we are far behind in promoting quality research work. Institutional research practices reflect the professional behaviour of higher educational institutes in terms of the institutional support provided to their research scholars. In this context, studying the researcher's aspiration level cannot be ignored. Both are major concerns and issues that need to be highlighted for better-quality research in India.

This paper attempts to address the crucial need to work on research at higher education institutions and create a conducive atmosphere regarding a research culture. Studying the level of research aspiration of the research scholars and their perception of the support provided by their affiliating institution can help to promote research integrity among institutions. Very few studies cover the relationship between Institutional Research Practices and Research Aspiration among scholars, therefore, the researcher tries to fill this gap by studying them together and opening a new path for understanding research in a better way.

Statement of the Problem

Institutional Research Practices and Research Aspiration among Scholars

Operational Definition

Institutional Research Practices: Institutional research practices referto the institutional support and institutional policies related to the research activities conducted in the institution. In this study, this variable is measured by a self-constructed Institutional Professionalism Scale (IPS) as perceived by the research scholars.

Research Aspiration: In this study research aspiration pertains to various dimensions like passion for learning, confidence for the future, career aspiration and ability of self-expression of the post-graduate students and research scholars. It is measured by a self-constructed and validated Research Aspiration Scale for Research Scholars (RAS).

Scholar: In this study, the research scholar pertains to all the students engaged in research activity. i.e., both doing their dissertation work and Ph.D.

Research Objectives

1. To study the level of research aspiration of the research scholars.
2. To study the perception of research scholars towards institutional research practices.
3. To study the relationship between research aspiration of the research scholars and their perception about the institutional research practices.

Null Hypothesis

There exists no significant relationship between research aspiration of the research scholars and their perception about the institutional research practices.

Methodology

Survey method was used to gather information for this study.

Sample

Random sampling method was used to collect the data. The respondents were the research scholars from the city of Patnabelonging to the three universities i.e. Patna University, Patliputra University and the Aryabhatta Knowledge University. Data was collected from 300 samples through offline and online mode but only 295 samples were analyzed.

Tool Used

1) A self-constructed and validated Institutional Professionalism Scale (IPS) on Perception of Research Scholars towards Institutional Research Practices.
2) A self-constructed and validated Research Aspiration Scale for Research Scholars (RAS)

Statistical Technique Used

The researcher has used Percentage Analysis and Pearson's Product Moment Co-efficient of Correlation.

Results and Discussion

Research Objective 1: To study the level of research aspiration of the research scholars.

Table 1. Percentage Analysis: Research Aspiration

Total Number of respondents (N)	295
Mean	108.00
Median	108.00
Mode	106
S.D.	10.407
Range	64
Minimum Score obtained	66
Maximum Score Obtained	130

It is inferred from Table 1 that the mean and median coincide. Mode is also very close to the mean and median. Also, 50% of the data lie on each side of the mean therefore, the data follows the Normal Probability Curve. Since there were 26 items on the scale, the scores could range from 26 to 130, but the scores of the respondents range from 66 to 130. On the basis of the above data, it can be interpreted that the lowest scorer has scored 66 points out of 130 which means that he or she has given average marks of 2.5 out of 5 to the items pertaining to research aspiration. The mean score is 108 out of a total score of 130 which is 83%. Thus, we can infer that research scholars usually possess a good level of research aspiration.

1.1: Level of Research Aspiration of Research Scholars

LOW		AVERAGE		HIGH		TOTAL	
Frequency	Percentage	Frequency	Percentage	Frequency	Percentage	Frequency	Percentage
42	14.2	207	70.2	46	15.6	295	100

Further, the researcher has classified the respondents into three broad categories and found that 70.2% of the sample possess an average level of research aspiration. 15.6% of the research scholars possess a high level of research aspiration whereas 14.2% of them possess a low level.

Research Objective 2: To study the perception of research scholars towards institutional research practices.

Table 2. Percentage Analysis: Perception of Research Scholars towards Institutional Research Practices

Total Number of respondents (N)	295
Mean	90.88
Median	92.00
Mode	93
S.D.	13.181
Range	79
Minimum Score Obtained	40
Maximum Score Obtained	119

It is inferred from Table 2 that the perception of the research scholars towards Institutional research practices of their institution follows the requirements of the Normal probability curve. Mean, median and mode are very close to each other. The mean for the data is calculated to be 90.88 and the standard deviation is 13.18. 25 percent of the scholars have scored below 84. Since there were 24 items in the questionnaire, the minimum scores that could be scored was 24 and maximum could go up to 120. But the minimum score obtained is 40 which is low i.e., on an average the respondent has given a score of 1.6 to the institutional support provided to him or her. However, it was observed that the score at 25 percentiles is 84 i.e., only 25% of the respondents have given an average score below 3.5 to the institutional support provided to them.

Table 2.1: Status of Institutional Research Practices in Patna

LOW		AVERAGE		HIGH		TOTAL	
Frequency	Percentage	Frequency	Percentage	Frequency	Percentage	Frequency	Percentage
43	14.6	211	71.5	41	13.9	295	100

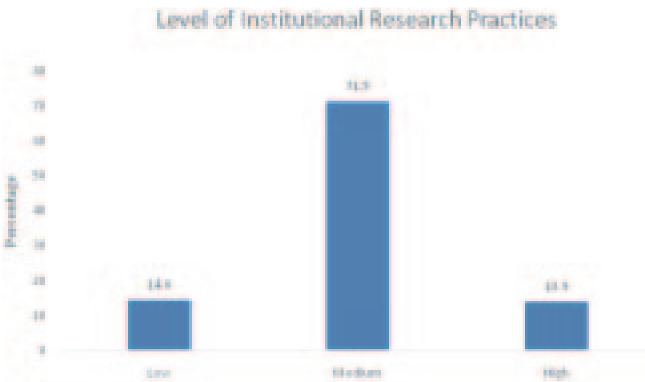

Fig. 2. Level of Institutional Research Practices in Patna

Table 2.1 shows that only 13.9% of the research scholars have perceived that their institutions can be rated high for the support and the professional demand expected out of them. 71.5% of the research scholars have rated their institutions to stand at a moderated scale as far as their professional support is concerned. 14.6% of the research scholars were not able to attain even a moderate level of support from their institution while doing their research work.

Research Objective 3: To study the relationship between Research Aspiration and Institutional Research Practices.

Null Hypothesis

There exists no significant relationship between research aspiration of the research scholars and their perception about the institutional research practices.

Table 3: Relationship between Research Aspiration and Institutional Research Practices

Variables	Mean	S.D.	Value of 'r'	Level of Significance	Remarks
Research Aspiration	108.00	10.407	0.286	0.00	Significant
Institutional Research Practices	90.88	13.181			

It is inferred from Table 3 that the null hypothesis is rejected as there exists a significant positive correlation (p=1%) between the research aspiration of the research scholars and the institutional research practices of the institution where the research activity is being carried out. This finding is supported by the findings of Bahsir and Kaur (2017) in their study on the Interrelation of Educational Aspiration with School Environment of Secondary School Students where they found a positive correlation between educational aspiration and school environment.We can thus interpret that better institutional research practices might enhance the aspiration level of the research scholars up to some level and vice-versa.

Conclusion

This research paper measures the aspiration level of the research scholars towards research and their perception of the institutional research practices available for their support. The data obtained lead to the conclusion that usually the research scholars possess an appreciable level of research aspiration. This conclusion is supported by the fact that students at the post-graduate level know that research is a rigorous activity and it is their interest and passion for research which stimulate them to take up such kind of an activity. The mean score for the perception of research scholars towards institutional research practices is 90.88 out of 120 which accounts to only 75% of the score. This means that there still exists a wide scope for improving upon the research practices available at higher levels of education. The research paper also makes an effort to study the relationship between institutional research practices and the aspiration level of the scholars pertaining to research. It has been explored that there exists a positive correlation between institutional research practices and the aspiration level of the research scholars. Thus, institutional research practices pertaining to availability and accessibility to resources, collaboration at different levels, qualification of staff and faculty, support for publication, quality of institutional delivery, attitude of the head of the department and scope for research do play their role in enhancing the aspiration level of the research scholars.

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Role of Artificial Intelligence in Human Resource Management: A SWOT Analysis

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Abstract

Artificial Intelligence technology is fast becoming the new normal in business organizations worldwide. In India, Artificial Intelligence is playing a very important role in transformingthe human resource practices thus enabling the organizations to work in a speedy and efficient way. AI offers HR professionals a range of tools and techniques that can streamline and optimize various processes, leading to enhanced efficiency and improved decision-making. This study sheds light on the role of artificial intelligence in human resource management starting from recruitment of employees in an organization till the performance appraisal of employees in the organization. This study also helps in identifying the strengths, weaknesses, opportunities and threats of Artificial Intelligence in human resource management. It focuses on the training and development process as well as the productivity of employees with the help of Artificial Intelligence in an organization. The study also helps in analyzing the performance of the employees as well as their engagement and retention. It should be kept in mind that Artificial Intelligence in no way is going to replace the Human Resource working in an organization, rather, Artificial Intelligence will work in collaboration with the Human Resource to enhance the speed and scale of work and to make the task easier.

Introduction

Artificial Intelligence is primarily a technological tool that aims to help us solve cognitive issues and enable machines to "think like humans." It refers to the development of computer systems that can perform tasks that typically require human intelligence, such as speech recognition, problem-solving, learning, and decision making. Its core components are High speed computation through complex machine algorithms and processing huge data volumes. Artificial Intelligence (AI) has emerged as a transformative technology across various industries, and Human Resource Management (HRM) is no exception. HRM plays a critical role in organizations by managing the most valuable asset: human capital. AI has revolutionized the way organizations manage their human capital, enabling HR professionals to make more informed decisions, streamline processes, and enhance overall efficiency. By leveraging AI-powered tools and techniques, HR departments can effectively address challenges, optimize talent management, and create a more productive and engaged workforce.

In this era of digital transformation, organizations are inundated with vast amounts of data related to employee performance, recruitment, employee engagement, training, and many other HR functions. Traditional methods of managing this data manually are very much time-consuming, error prone and limited in their ability to derive meaningful insights. This is where Artificial Intelligence steps in, offering advanced analytics, predictive modelling and automation capabilities to unlock the true potential of Human Resource Management. AI technologies, such as machine learning, natural language processing, and predictive analytics, have empowered HR professionals to streamline their operations, enhance employee experiences and achieve strategic organizational objectives. In the realm of recruitment, AI-powered systems can quickly analyse resumes, job applications and online profiles to identify qualified candidates based on predefined criteria. This not only speeds up the recruitment process but also helps eliminate biasness, leading to more diverse and inclusive hiring practices. Performance Management is another area where AI is making a significant impact. AI algorithms can analyse large sets of data to assess individual and team performance, identifying strengths and weaknesses, areas for improvement and skill gaps. This data-driven approach enables HR professionals to provide targeted training and development opportunities to employees, enhancing their overall performance and productivity. Additionally, AI-powered performance management systems can automate feedback processes, ensuring

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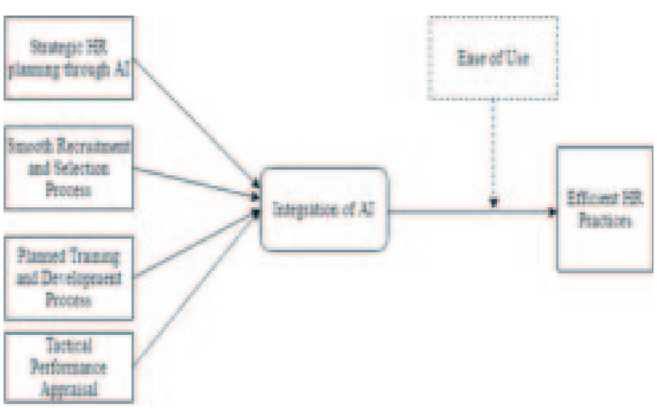
consistent and timely evaluations, thereby reducing the administrative burden on HR teams. AI also enables HR professionals to optimize employee engagement and retention strategies. With the help of AI, organizations can gain insights into employee sentiment, preferences and engagement levels as well as identify potential issues early on and implement proactive measures to improve employee satisfaction and well-being. AI-powered chatbots and virtual assistants can also provide instant support to employees, addressing their queries and providing personalized round the clock.Furthermore, AI has the potential to revolutionize talent development and succession planning within organizations. By analysing employee data, skills, and career paths, AI algorithms can identify high-potential individuals and recommend suitable development opportunities such as training programmes or mentorship initiatives. This proactive approach to talent development helps organizations nurture and retain their top performers, while also ensuring a smooth transition of leadership roles in future. It enables HR managers to identify the right person for the right job in the organization and predict attrition rates.

The role of Artificial Intelligence is multi-faceted and spans across various functions within the field of Human Resource Management. From recruitment and talent acquisition to employee engagement and performance appraisal, AI-powered tools are transforming the way HR departments operate. This study delves into the role of Artificial Intelligence in human resource management, exploring its applications, benefits and potential challenges. It presents a SWOT Analysis, thereby highlighting the Strengths, Weaknesses, Opportunities and Threats of Artificial Intelligence in Human Resource Management.We will examine how Artificial Intelligence is reshaping different aspects of Human Resource Management in today's rapidly evolving business environment, revolutionizing the way organizations manage their workforce and drive business success.



Overall, Artificial Intelligence presents immense opportunities for HR professionals to augment their capabilities and drive organizational success. By harnessing the power of AI technologies, HR departments can better meet the evolving needs of workforce, attract and retain top talent, and contribute to a more agile and efficient organization. However, while AI offers significant benefits to HR management, it also raises concerns around privacy, security, and ethics. Issues such as data privacy, algorithmic biases, and the impact on human jobs must be carefully managed. Organizations must strike a balance between leveraging AI technologies and safeguarding employee privacy rights. It is crucial to establish transparent and accountable AI systems that are built on ethical principles and comply with regulatory frameworks. As AI continues to evolve, it is essential for HR professionals to embrace this technology responsibly, ensuring that it aligns with the ethical standards and complements human judgement and empathy in creating a thriving workforce. HR professionals should aim at combining the power of AI with human expertise and empathy to create a harmonious and effective work environment.

Literature Review

1. Ahmed, (2018) analyzed the position of artificial intelligence inside the subject of human resource management. The study concluded that Lack of AI technology is empathy and human touch or a chance to select an applicant manually to learn about him or herself when interviewing, which clearly cannot be achieved at the moment when you rely on AI technology to do all the work for your business. AI sees the evidence, while people feel the emotion and in the near future, it will not change.
2. Ruby Merlin. P, (2018) explores the possibilities of how Artificial Intelligence transforms and facilitates Human Resource roles such as recruiting, recruitment, talent acquisition & retention by real-time scenarios, offers insights into the convergence with Case studies on Artificial Intelligence and Human Resource Management are identified, and the future impacts on the HR workforce are addressed.
3. Kulkarni & Che, (2019) this paper outlined how recruiting and expertise acquisition received significance inside the HRM field, additionally the advent approximately the modern-day equipment utilized by the IT experts for recruiting and describes

the Artificial Intelligence-based equipment which has begun out gambling an increasing number of critical roles. The research concluded that the brand-new AI powered equipment assists HR experts to become aware of and attain potential candidates quick and display screen them faster, thereby reducing the time of recruiting cycle, that's a bonus for each the organization in addition to the capacity candidate.

4. Praveen *et al.,* (2019) Survey reveal that recruiters invest more time between 40% and 60% on the recruiting of AI applicants will cut down on time. Today Companies use AI for 50% administrative purpose, while 24% of worker's state that AI will help minimize the amount of time. The value of using AI for administrative purposes should also be taken into account by senior workers of organizations Enhance strategic strategy.

5. Tiwari, (2020) researcher concluded that proper study and deployment of AI program should be carried out. In order to accomplish Prevent job cuts and confusion, organizations should ensure sufficient service awareness and expertise transfer to HR employees.

6. Pandey *et al.,* (2021) The goal of this paper was to comprehend factors such as innovativeness and how HR operations are used. HR professionals from several IT firms were selected for the study. The result of this investigation revealed a positive relationship between many criteria such as simplicity of use and innovativeness, indicating that AI has an impact on both.

Objectives

The objectives of the study are as follows:

1. To identify the role of Artificial Intelligence in Human Resource Management.
2. To determine the Strengths, Weaknesses, Opportunities and Threats (SWOT) of Artificial Intelligence in Human Resource Management.

Research Methodology

The purpose of this study is to identify the role of AI in HRM and SWOT analysis in the light of existing literature. The research design of this study is primarily descriptive and analytical in nature and the data used for research is Secondary which is collected from various Journals, Websites, Books, etc.

Role of Artificial Intelligence in Human Resource Management

Artificial Intelligence (AI) is playing a significant role in revolutionizing various aspects of Human Resource Management (HRM) by automating routine tasks, enhancing decision-making processes and improving overall efficiency. The role of AI in HRM is as follows:

1. **Recruitment and Selection:** AI can streamline the recruitment process by automating resume screening, identifying relevant candidates and conducting initial interviews. It can analyze resumes, job descriptions, and candidate profiles to match skills, qualifications and experience, saving time and effort for HR professionals. AI helps in creating a pool of applicants, thereby selecting the right candidate for the right job out of them.

2. **Employee Onboarding:** AI can help the HR professionals to design and automate their onboarding process so that it is more organized, efficient and personalized. Some of the onboarding processes that can be automated are Verifying documents, running an induction program, Scheduling initial meeting sessions for new employees, etc. With the help of AI-powered tools, the HR professionals can provide relevant information to new employees regarding the company policies and procedures, answer their queries and guide the employees through the initial stages of their employment. AI-powered onboarding tools can help streamline the process and improve the overall employee experience.

3. **Training and Development:** AI tools can be used to create training and development programs customized to every employee. AI can personalize learning experiences by recommending relevant training materials, courses, modules and resources based on employee's specific needs, skills and career goals. AI-powered simulations and virtual reality tools can enhance training experiences and facilitate skill development.

4. **Employee Engagement and Retention:** AI can analyze various data points, such as employee surveys, feedback, performance reviews, etc., to identify patterns and trends related to employee engagement and satisfaction. This information allows HR departments to proactively address issues and implement strategies to improve employee retention and well-being.

5. **Performance Assessment and Appraisal:**

Performance Assessment and Appraisal are critical aspects of Human Resource Management that help organizations evaluate employee performance, identify areas for improvement and provide feedback for development and reward purposes. AI plays a vital role in assessing the performance of the HR working in the organization by making data driven evaluations, providing continuous feedback, identifying the patterns and trends in performance, assist in creating personalized development plans for employees based on their performance and career aspirations, mitigating biasness in the assessment process and motivating them towards the accomplishment of the organizational goals.

6. **Remote Working:** Remote Working is a type of work arrangement in which an employee works from some place outside the office, such as home, or a co-working space. With the advent of AI, remote working has gained much prominence and has become a lot easier. Any person can work from any place by accessing software with the help of AI and machine learning. AI empowers remote workers by automating tasks, enhancing communication and collaboration, analyzing data, improving cybersecurity and supporting employee well-being. It enables the organizations to adapt to the challenges of remote working and maximize productivity and efficiency. During the COVID-19 pandemic, most of the organizations switched to remote working, i.e., work from home, keeping in mind the health and safety of their employees.

SWOT Analysis of AI in HRM

The SWOT analysis, a framework crafted by Albert Humphrey in the 1960s at the Stanford Research Institute, serves as a strategic tool in organizational planning and management. This method systematically assesses internal and external factors impacting a project or organization. By scrutinizing strengths, weaknesses, opportunities, and threats, it offers a structured approach to appraise influences on performance and guide strategic choices (Gürel & Tat, 2017).

Strengths

1. **Increases Productivity:** Artificial Intelligence has the potential to significantly increase productivity in Human Resource Management. By automating repetitive tasks, streamlining processes, and providing valuable insights, AI can enable HR professionals to focus on more strategic and value-added activities. For example, AI can enhance hiring efficiency by streamlining the screening and selection process, thus increasing the productivity of the organization (Merlin. P & Jayam, 2018).

2. **Talent Acquisition:** Talent Acquisition is a critical function within Human Resource Management that involves attracting, identifying and acquiring skilled individuals to meet the organization's workforce needs. AI has been increasingly integrated into talent acquisition process to streamline and enhance various aspects of recruitment through automated resume screening, candidate shortlisting, predictive analytics, online interviewing, mitigating biasness, onboarding, and many other such ways. This helps HR teams target candidates with the right skills and experience, thus increasing the efficiency of the recruitment process (Merlin. P & Jayam, 2018).

3. **Analysis, Prediction and Diagnosis:** AI can analyze large volumes of data to provide valuable insights and identify patterns. This includes analyzing employee performance data, engagement surveys, recruitment metrics, training outcomes, etc. AI algorithms can use historical data and machine learning techniques to predict future HR outcomes. These predictions can help HR professionals make more informed decisions. For example, AI can predict workforce demand and supply, employee turnover, etc., thus enabling the HR managers to take necessary measures. AI-powered tools can diagnose various HR-related problems by analyzing data with the help of surveys, feedback, social media, etc., thus providing quick and accurate responses to the employees (Kulkarni & Che, 2019).

4. **Performance Management and Feedback:** AI can facilitate performance management by automating the collection and analysis of performance data. It can identify performance trends, provide feedback to employees and generate insights for managers to support performance improvement initiatives. AI can also support continuous feedback mechanisms, enabling real-time performance tracking and coaching (Sanyaolu & Atsaboghena).

Weaknesses

1. **Resistance to change:** One potential weakness of integration of AI in HRM is resistance to change. Organizational cultures that are resistant to change may hinder the adoption and implementation of AI in HRM. The resistance can stem from various factors such as fear of job displacement, lack of understanding about AI capabilities and benefits, or concerns about data privacy

and security, etc. (Rathi, 2018)

2. **Lack of Human Touch:** The excessive use of AI in HRM has resulted in reduction of personal interactions, potentially impacting employee engagement and morale. Overreliance on technology has led to a decrease in emphasis on human interaction and human touch. HRM involves building relationships, trust and effective communication, which may be compromised if organizations become overly dependent on AI-based solutions (Khatri *et al.*, 2019).

3. **Skill Gap:** AI technology requires diverse set of skills including data analysis, machine learning and programming. HR professionals who have traditionally focused on people management may not possess these technical skills. On the other hand, data scientists and AI experts may lack the necessary understanding of HRM principles and practices. Bridging the skill gap is essential for effectively integrating AI into HRM processes (Rathi, 2018).

4. **Inaccurate decision making:** AI systems are only as good as the data they are trained on. If the data used to train the AI models is incomplete, outdated or inaccurate, it can lead to erroneous decision making. For instance, if a hiring algorithm is trained on a biased dataset, it may mistakenly reject qualified candidates from the represented groups (Khatri *et al.*, 2019).

Opportunities

1. **Automation of routine tasks:** AI can free up HR professionals' time by automating administrative tasks, allowing them to focus on more strategic and value-added activities. By leveraging AI technologies, HR departments can streamline administrative processes, enhance efficiency and allocate resources more strategically (Merlin, P. & Jayam, 2018).

2. **Continuous Learning and Development:** AI can personalize continuous learning and development programs based on individual employee needs and preferences. It can recommend relevant training materials, courses, etc. to enhance skills and knowledge. It can also provide real-time feedback and adaptive learning experiences (Rathi, 2018).

3. **Predictive Analytics:** AI algorithms can analyze historical data to predict future trends in employee performance, turnover and skill gaps, thus enabling proactive HR planning. Predictive Analytics can assist in identifying potential issues and making data-driven decisions to optimize HR strategies (Rathi, 2018).

4. **Enhanced employee experience and well-being:** AI-powered chatbots and virtual assistants can provide personalized support to employees, addressing their queries and concerns promptly. AI can monitor employee well-being by detecting signs of stress, burnout or other issues, allowing HR managers to intervene and offer appropriate support (Merlin, P. & Jayam, 2018).

Threats

1. **Privacy and Data Security:** AI in HRM relies on large amount of data, including personal and sensitive employee information which can be a major threat for the organization. Maintaining the privacy and security of this data is crucial to prevent breaches and unauthorized access (Rathi, 2018).

Job Displacement: With the advent of AI, the HR working in the organizations are at risk of losing their jobs. AI has the potential to automate certain HRM tasks, which could lead to job displacement for HR professionals. This can create job uncertainty and require HR professionals to adapt and acquire new skills (Khatri *et al.*, 2019).

3. **High cost of implementation:** The adoption of AI in HRM requires huge investment in technology, infrastructure, data management, training and development of employees. For organizations with limited budgets, the high cost of implementation may strain financial resources. The ongoing maintenance activity of AI also incurs huge cost to the organizations (Khatri *et al.*, 2019).

4. **Ethical Concerns:** Biasness and discrimination can inadvertently be introduced into AI systems, leading to unfair hiring practices or biased decision making, which in turn raises ethical concerns with regards to AI in HRM. AI algorithms used in HRM should be designed and implemented with fairness and ethical considerations. Mitigating these risks requires ongoing monitoring, auditing and adjustments to ensure ethical use of AI in HRM (Rathi, 2018).

Conclusion and Suggestions

The role of Artificial Intelligence in Human Resource Management has been transformative and continues to evolve, shaping the future of Human Resource Management. AI's integration into HR processes has resulted into numerous benefits including increased efficiency, accuracy and data-driven decision making. By automating repetitive tasks, AI has allowed HR professionals to focus on more strategic and value-based activities. AI-powered tools have proven effective in recruitment and talent acquisition, enabling organizations to identify top candidates faster, reduce biases, and improve diversity in the hiring process. Further, AI-driven analytics are capable of providing valuable insights into employee engagement, performance and satisfaction, facilitating better talent retention strategies and boosting overall productivity.

While AI has brought significant benefits to human resource management, it has also posed certain challenges in the form of data privacy and security, lack of appropriate infrastructure and skilled talent, job security, potential biases in algorithms, high maintenance cost, etc. These challenges need to be overcome at the earliest for AI to function properly and effectively. Some important suggestions in this regard are as follows:

- The privacy and security of personal and sensitive information of the employees in the organization is very crucial. Steps should be taken to prevent breach and unauthorized access of such data.
- Appropriate infrastructure should be created for AI to function effectively thus enhancing the speed and scale of work as well as reducing the maintenance cost.
- Proper training and skilling programs should be undertaken by the organizations in order to provide skilled talent as required for the functioning of AI-powered tools.
- AI algorithms should be designed and implemented with fairness and ethical considerations. There should not be any biasness or discrimination.
- AI framework of an organization should be flexible enough to upgrade itself and change according to the need.

As AI technology continues to advance, its role in Human Resource Management is likely to expand further. Embracing AI's potential and integrating it with human expertise can lead to a more agile and data-driven HR function, fostering a thriving and engaged workforce. With the help of AI, HR professionals can unlock new possibilities, drive organizational success and create a more efficient and engaging work environment for the employees. Artificial Intelligence in no way is going to replace the Human Resource working in an organization, rather it will work in collaboration with the Human Resource to enhance the speed and scale of the work and create an environment that fosters growth, innovation and employee well-being along with the fulfillment of organizational goals.

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Thriving in the 21st Century: A Comprehensive Review of Life Skills and Their Impact on Happiness and Well-being

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Abstract

In the dynamic landscape of the 21st century, individuals face multifaceted challenges that demand not only traditional knowledge and technical proficiency but also a diverse set of life skills. This comprehensive review delves into the intricate relationship between life skills and happiness and well-being in the contemporary era. It explores the importance of these skills in fostering not only personal fulfillment but also societal progress.

Introduction

The 21st century has ushered in an era of unprecedented change, characterized by rapid technological advancements, shifting societal norms, and complex global challenges. To thrive in this evolving landscape, individuals must equip themselves with a range of life skills that extend beyond the traditional academic curriculum. While academic knowledge and technical expertise remain essential, the ability to navigate the intricacies of modern life hinges on a broader set of competencies.

Life skills encompass a diverse array of abilities, including but not limited to communication, critical thinking, problem-solving, emotional intelligence, adaptability, and resilience. These skills serve as the cornerstone upon which individuals can build successful and fulfilling lives in an era characterized by uncertainty and constant change.

The purpose of this comprehensive review is to explore the intricate connection between life skills and happiness and well-being in the 21st century. We aim to shed light on the pivotal role that these skills play in helping individuals not only survive but thrive in an ever-evolving world. By synthesizing existing research and insights, we seek to provide a holistic understanding of how life skills influence the quality of life in the contemporary era.

Significance of Life skills and related to Happiness and well-being

Life skills refer to a set of abilities and competencies that enable individuals to effectively manage various aspects of their lives, including personal well-being, relationships, decision-making, and problem-solving. These skills are essential for adapting to and thriving in different situations and environments.

Life skills are profoundly significant as they provide individuals with the essential tools to thrive in a complex and ever-changing world. These skills encompass emotional intelligence, effective communication, problem-solving, and adaptability, among others, enabling individuals to navigate challenges, build meaningful relationships, and make informed decisions. Life skills not only enhance personal development but also contribute to the betterment of society by fostering responsible citizenship and active participation. Ultimately, they are the building blocks for a fulfilling and well-rounded life, promoting individual happiness and collective well-being.

Life skills are intrinsically linked to happiness and overall well-being, serving as the scaffolding upon which a fulfilling life is constructed. These competencies empower individuals to navigate the complexities of existence with emotional intelligence, resilience, and positive thinking. They facilitate the development of meaningful relationships through effective communication and empathy, creating a strong support network that enhances happiness. Moreover, life skills enable individuals to set and pursue goals, manage stress, and adapt to change, ensuring a sense of purpose and contentment. By promoting mental and emotional health, healthy lifestyles, and responsible decision-making, life skills lay the foundation for a life characterized by well-being and the pursuit of happiness.

Life skills are significant because they play a vital role in promoting happiness and overall well-being. These skills empower individuals to navigate the complexities

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of life effectively, manage stress, build positive relationships, and find fulfillment. Here's how life skills are closely related to happiness and well-being:

Emotional Regulation: Life skills related to emotional regulation, such as self-awareness and emotional expression, help individuals understand and manage their feelings. This ability to handle emotions contributes to emotional well-being and happiness.

Stress Management: Life skills that focus on stress management techniques, such as relaxation exercises and mindfulness, enable individuals to reduce the negative impact of stress on their mental and physical health, leading to greater well-being.

Positive Thinking: Cultivating a positive mindset and practicing optimism through life skills like positive affirmations and reframing negative thoughts can boost mood and overall life satisfaction.

Social Skills: Effective communication, empathy, and conflict resolution skills are essential for building and maintaining positive relationships. Strong social connections are a significant factor in overall well-being and happiness.

Self-Esteem and Confidence: Life skills that enhance self-esteem and self-confidence lead to a more positive self-image and a greater sense of self-worth, contributing to happiness and well-being.

Resilience: Resilience skills enable individuals to bounce back from adversity, cope with challenges, and maintain a sense of hope. Resilience is crucial for sustaining well-being during difficult times.

Goal Setting and Achievement: Setting and achieving meaningful goals provides a sense of purpose and accomplishment. The pursuit of these goals can lead to greater life satisfaction and happiness.

Financial Literacy: Understanding personal finances and managing money effectively can alleviate financial stress and promote financial well-being, which is intertwined with overall happiness.

Self-Care: Prioritizing self-care activities, such as relaxation, hobbies, and leisure, is essential for maintaining mental and emotional well-being.

Problem-Solving: Effective problem-solving skills empower individuals to address challenges and find solutions, reducing stress and enhancing overall well-being.

Assertiveness: Assertiveness skills enable individuals to communicate their needs and boundaries, leading to healthier relationships and increased self-esteem.

Life skills are not only practical for navigating life successfully but also serve as essential tools for enhancing happiness and well-being. These skills contribute to emotional and mental health, positive relationships, a sense of purpose, and the ability to adapt to life's ups and downs, ultimately leading to a more fulfilling and contented life.

Concept and relation of happiness and well-being

Happiness:

Happiness refers to a subjective emotional state characterized by feelings of joy, contentment, and satisfaction. It is a transient and emotional experience that can vary from moment to moment.

Happiness is often associated with positive emotions, such as pleasure, excitement, and gratitude. It can be influenced by external circumstances, events, and personal experiences.

While happiness is an important aspect of well-being, it is just one component, and it can be influenced by short-term factors like a good meal, a pleasant interaction, or a positive life event.

Well-being:

Well-being is a multifaceted concept that encompasses an individual's physical, emotional, social, and mental healthWell-being is a broader and more comprehensive concept that encompasses various dimensions of an individual's life. It represents a state of overall health, contentment, and fulfillment.

Well-being includes both subjective well-being (which includes happiness) and objective well-being, which encompasses factors like physical health, mental health, financial stability, and social connections.

Well-being is a more stable and enduring state compared to happiness. It reflects an individual's overall life satisfaction and their ability to cope with life's challenges and adversities

The relationship between happiness and well-being is complex. Happiness is often considered a component of well-being, but it is not the sole determinant of overall well-being. A person can experience moments of happiness even in difficult circumstances, and conversely, someone with a high level of overall well-being may not always be happy in every moment.

Factors that contribute to well-being include:

Physical health: Good health is a fundamental aspect of well-being as it enables individuals to enjoy life and pursue their goals.

Mental health: Emotional stability, resilience, and the ability to manage stress and negative emotions are crucial for overall well-being.

Social connections: Positive relationships and a supportive social network are important for well-being, as they provide emotional support and a sense of belonging.

Financial stability: Economic security and access to resources can contribute to overall well-being by reducing stress related to financial worries.

Personal growth and purpose: Having goals, a sense of purpose, and opportunities for personal development can enhance well-being.

Happiness is a component of well-being, but well-being is a broader and more enduring concept that takes into account various aspects of an individual's life, including physical health, mental health, social relationships, and personal fulfillment. Achieving a high level of well-being often involves cultivating happiness and addressing other dimensions of life simultaneously.

Promoting Happiness and Well-being

Promoting happiness and well-being involves a multifaceted approach that addresses various aspects of an individual's life. Firstly, fostering positive relationships and social connections is crucial. Cultivating meaningful friendships, spending quality time with loved ones, and engaging in activities that promote social bonding can significantly enhance well-being.

Secondly, prioritizing mental and emotional health is essential. This includes practices like mindfulness meditation, stress management techniques, and seeking professional help when needed. Building emotional resilience and learning to cope with life's challenges positively contribute to both happiness and well-being.

Physical health plays a vital role as well. Regular exercise, a balanced diet, and adequate sleep contribute to physical well-being, which in turn can boost one's mood and overall happiness.

Furthermore, nurturing positive relationships is vital. Schools and parents can create a supportive and inclusive environment where students feel safe to express themselves and build meaningful connections with peers, mentors, and family members.

Teaching mindfulness and emotional intelligence skills can help adolescents manage stress and emotions effectively. By equipping them with tools to navigate challenges, we empower them to develop resilience and cope with the ups and downs of adolescence.

Additionally, emphasizing physical well-being through regular exercise and a balanced diet promotes both physical and mental health, enhancing their overall sense of well-being.

Financial stability is another key component. Managing finances responsibly and setting achievable financial goals can reduce stress and anxiety, contributing to an individual's overall well-being.

Lastly, encouraging a growth mindset that embraces challenges and setbacks as opportunities for learning fosters a positive attitude towards personal development and achievement.

Promoting happiness and well-being involves a holistic approach that encompasses physical, emotional, social, and environmental factors. By focusing on these aspects and adopting healthy lifestyle habits, individuals and communities can cultivate greater happiness and overall well-being.

Promoting happiness and well-being involves nurturing several critical factors. Self-awareness is the foundation, as understanding our thoughts, feelings, and behaviors allows us to make positive changes in our lives. Mindfulness, the practice of being present and non-judgmental, enhances our ability to appreciate the moment, reducing stress and increasing contentment.

Positive relationships are fundamental; nurturing connections with friends and family provides emotional support, a sense of belonging, and shared joy. Building resilience helps us bounce back from adversity, fostering a more robust sense of well-being, while emotional intelligence empowers us to navigate complex social interactions and connect with others on a deeper level.

Enhancing coping mechanisms equips us to handle life's challenges effectively, reducing stress and anxiety. Finding a greater sense of purpose and meaning in our lives gives us direction and fulfillment, aligning our actions with our values. Combining these elements creates a holistic approach to promoting happiness and well-being, allowing us to lead more meaningful and satisfying lives.

Factors that contribute to Promoting happiness and well-being

Self-awareness: Life skills education has been shown to foster self-awareness, which is a critical component of happiness and well-being. Individuals who possess a deep understanding of their values, strengths, and weaknesses are better equipped to make decisions that align with their authentic selves. This alignment between actions and values can lead to a greater sense of fulfillment and contentment. Winarsunu *et al.* (2023). Life skills training: Can it increase self-esteem and reduce student anxiety. In this study, the researchers aimed to investigate the impact of self-esteem on anxiety levels in students, particularly in the context of life skills training, this research highlights the potential of life skills training to boost self-esteem and alleviate anxiety in students. Fostering self-esteem through training and interventions appears to be a valuable approach for enhancing the psychological well-being of students, particularly during times of stress and uncertainty.

Mindfulness: Mindfulness, the practice of being present and non-judgmental, has emerged as a powerful tool for enhancing happiness and well-being. Studies like the one by Zandi *et al.* (2021), This study aimed to investigate the effectiveness of mindfulness training as an intervention approach for promoting the mental health of female high school students. The findings of this study suggest that mindfulness training can be an effective intervention for enhancing coping strategies, reducing test anxiety, and promoting overall happiness.

Positive Relationships: The ability to establish and maintain positive relationships is pivotal for overall well-being and happiness. Effective communication skills, empathy, and building meaningful connections are components of life skills that contribute to positive relationships. Dhingra *et al.* (2017). The findings of this study, it can be concluded that the life skills of adolescents are influenced by various factors, with socio-economic status and the education level of parents being significant contributors life skills helps their children's overall development. Sahu *et al.* (2013) life skills shows positive relationship.

Resilience: Resilience, the capacity to adapt and rebound from challenges, plays a crucial role in maintaining happiness and well-being. Life skills education equips individuals with coping mechanisms, problem-solving abilities, and emotional regulation skills that enhance resilience. Sagone *et al.* (2017). This study examined the relationship between positive affect, resilience, and perceived self-efficacy in life skills in a sample of Italian adolescents The study highlights the importance of positive affect in adolescence and its role in enhancing self-efficacy and resilience. It also suggests the potential benefits of incorporating life skills education into adolescent programs to support their overall development and well-being. Elisabetta *et al.* (2020). This study provided strong support for the significance of perceived self-efficacy in acquiring life skills, particularly in terms of effectively surmounting adversities and managing challenging situations, both in academic settings and real-life scenarios. The study underscored that these life skills constitute the fundamental competencies individuals need to acquire during their developmental journey from childhood to adulthood. These skills play a pivotal role in fostering positive personal growth and, notably, in diminishing the emotional vulnerability that individuals may experience. In essence, the research emphasized that nurturing life skills and boosting self-efficacy is essential for enhancing resilience and emotional well-being across the lifespan.

Emotional Intelligence: Emotional intelligence, encompassing skills like self-awareness, empathy, and emotional regulation, is closely linked to well-being. Research by Shahbazi *et al.* (2018). This interventional case-control study aimed to assess the impact of problem-solving training on the enhancement of emotional intelligence the findings of this study suggest that providing problem-solving can effectively enhance their emotional intelligence.

Enhanced Coping Mechanisms: Life skills education equips individuals with effective coping mechanisms, which in turn contribute to greater happiness and well-being. The study by Sok *et al.* (2020) demonstrated that life skills education led to improved coping skills and emotional regulation, promoting resilience and well-being among college students. Mohammadzadeh *et al.* (2017). This study was to assess the impact of a life skills-based intervention program on the emotional well-being, self-esteem, and coping abilities the outcomes of this study hold significant implications for the initiation of a consistent andstructured life skills education.

Greater Sense of Purpose and Meaning: Seligman *et al.* (2019) found that life skills education led to improvements in goal setting and achievement, resulting in a greater sense of purpose and life satisfaction. A sense of purpose and meaning in life is strongly associated with overall well-being and happiness.

Nurturing Academic Achievement using Life skills

Nurturing academic achievement through the development of life skills is a powerful approach to preparing students for success. Life skills such as time management, organization, critical thinking, and effective communication not only contribute to academic excellence but also equip students with essential tools for navigating life beyond the classroom. Teaching students how to manage their time efficiently enables them to balance coursework and extracurricular activities effectively. Organizational skills help students keep track of assignments and deadlines, reducing stress and enhancing their academic performance. Critical thinking skills foster problem-solving abilities, enabling students to approach complex subjects with confidence. Effective communication skills not only improve classroom participation but also prepare students for future endeavors in the workforce. By integrating these life skills into the educational curriculum, we empower students not only to excel academically but also to thrive in all aspects of their lives.

Life skills education equips individuals with study skills, time management, and critical thinking abilities, contributing to academic success and subsequent well-being. Rai KK, Vandana.(2022) This study examined the relationship between students' academic achievement and two key factors: life skills and their attitude toward alcohol abuse. This study highlights the importance of considering life skills and attitudes toward alcohol abuse as influential factors in understanding and predicting students' academic achievement. The findings suggest that interventions and educational programs aimed at developing life skills and promoting a healthier attitude toward alcohol can potentially have a positive impact on students' academic outcomes.

The accumulating evidence points to the positive impact of life skills education on various facets of happiness and well-being. By nurturing self-awareness, promoting positive relationships, enhancing emotional intelligence, and fostering resilience, life skills education equips individuals with the tools to lead more fulfilling and satisfying lives. Incorporating life skills education into educational and workplace contexts can contribute to improved individual and societal well-being.

Role of Happiness and Well-being for Academic Achievement

Happiness and well-being play a significant role in academic achievement. When students are happy and experience a high level of well-being, they are more motivated, engaged, and focused in their learning. Positive emotions associated with happiness can enhance cognitive functions, including memory, problem-solving, and creativity. A sense of well-being, which includes physical and mental health, provides the energy and resilience needed to overcome academic challenges and stress. Moreover, happy and emotionally well-balanced students tend to have better relationships with peers and teachers, fostering a positive learning environment. In contrast, students who are stressed, anxious, or unhappy may struggle to concentrate, absorb information, and perform to their full potential.

Tabbodi *et al.* (2015). The relationship between happiness and academic achievementsthis study provide valuable insights into the relationship between happiness and academic achievement among students.

Leung *et al.* (2021). Predictors to happiness in primary students: Positive relationships or academic achievement .The research highlighted the importance of positive relationships, particularly parent-child and peer relationships, as key predictors of academic achievement. These findings underscore the significance of fostering supportive relationships within families and classrooms to promote both academic success and overall well-being among students.

Quinn *et al.* (2007, May). Happiness and academic achievement: This study adds valuable insight into the relationship between subjective well-being and academic success among fifth-grade students. Contrary to cross-sectional studies, this research sought to explore the direction of causality. The results revealed a reciprocal causation between well-being and academic performance. These findings emphasize the bidirectional nature of the relationship, suggesting that fostering well-being can potentially enhance academic achievement, and vice versa, in elementary school students. Therefore, promoting happiness and well-being in educational settings not only improves students' overall quality of life but also enhances their academic achievements.

Discussion

This review has delved into the profound relationship between life skills, happiness, uncovering a complex interplay that significantly influences individuals' overall well-being. The synthesis of various studies offers valuable insights into the effects of life skills education on interconnected dimensions.

Promoting Happiness and Well-being

The review has elucidated the role of Life skills in promoting happiness and well-being through various mechanisms. Self-awareness, mindfulness, and positive relationships emerged as crucial factors. Life skills education interventions contributed to a greater sense of purpose and meaning, as demonstrated by Seligman *et al*. (2019). Emotional intelligence, empathy, and adaptability. Here, we can discuss the implications of these findings and the importance of incorporating life skills education into educational and workplace contexts:

Self-Awareness: Self-awareness is foundational for making informed life choices that align with one's values and strengths. By fostering self-awareness, life skills education can help individuals make decisions that lead to a greater sense of fulfillment and contentment. This can be particularly important for young students who are in the process of discovering their identities and interests.

Mindfulness: Mindfulness training has been shown to improve coping strategies and reduce anxiety, contributing to overall happiness. Integrating mindfulness practices into school curricula or workplace wellness programs can help individuals manage stress and enhance their mental well-being.

Positive Relationships: Effective communication, empathy, and relationship-building skills are crucial for maintaining positive relationships. Life skills education can equip individuals with these essential skills, ultimately enhancing their social connections and emotional well-being.

Resilience: Resilience is a key factor in overcoming life's challenges and maintaining well-being. Life skills education provides individuals with the tools to develop resilience, such as problem-solving abilities and emotional regulation skills. This is especially valuable during times of adversity or uncertainty.

Emotional Intelligence: Emotional intelligence is closely linked to well-being, as it enables individuals to understand and manage their emotions effectively. The findings suggest that problem-solving training can enhance emotional intelligence, emphasizing the importance of incorporating such training in educational and workplace settings.

Coping Mechanisms: Improved coping skills and emotional regulation resulting from life skills education contribute to greater resilience and overall well-being. This can be particularly beneficial for college students who often face academic and personal challenges.

Sense of Purpose and Meaning: Life skills education can lead to a greater sense of purpose and life satisfaction. This is essential for overall well-being, as individuals who feel a sense of meaning in their lives tend to experience greater happiness.

Nurturing Academic Achievement: Academic success is not only important for future career prospects but also for one's self-esteem and overall well-being. Life skills education enhances study skills, time management, and critical thinking abilities, which are all essential for academic achievement.

The importance of life skills education in promoting various facets of happiness and well-being. By equipping individuals with the necessary skills to navigate life's challenges, make meaningful connections, and achieve their goals, life skills education plays a vital role in enhancing both individual and societal well-being. As such, it should be considered an integral part of educational and workplace programs aiming to foster personal and collective thriving.

Implication for Education and Suggestion

The implications for education are profound. To maximize the potential benefits of life skills education on happiness and well-being, educational institutions should consider integrating these skills into their curricula. This includes incorporating self-awareness practices, mindfulness training, relationship-building components, resilience development, emotional intelligence programs, goal-setting strategies, positive thinking techniques, and coping skills training. Such an educational approach not only enhances academic achievement but also equips students with the tools needed to thrive emotionally, socially, and personally in the complex and rapidly changing landscape of the 21st century. By prioritizing life skills education, schools and universities can prepare students for a more fulfilling and satisfying life, beyond traditional academic success. Goudas *et al.* (2006). The effectiveness of teaching a life skills program in a physical education contextthis study aimed to evaluate the efficacy of a life skills training program integrated into physical education lessons. The findings demonstrate the feasibility and effectiveness of implementing life skills training within the framework of school physical education programs, highlighting the potential benefits of this approach for student development.

Dhingra *et al.* (2017). The findings of this study suggest that adolescents' life skills are influenced by various factors, including their socioeconomic status and the educational background of their parents The study also highlights a significant correlation between parental education and adolescents' life skills levels In essence, the findings emphasize the importance of both socio-economic status and parental education in shaping adolescents' life skills and their ability to navigate the complexities of adolescence successfully.

The research findings on the positive impact of life skills education on happiness and well-being have several important implications for the field of education:

Curriculum Integration: Schools and educational institutions should consider integrating life skills education into their curriculum. This integration can be done at various grade levels to ensure that students acquire these essential skills early in their educational journey.

Teacher Training: Educators should receive training in delivering life skills education effectively. This includes understanding the principles of mindfulness, emotional intelligence, and resilience training, as well as how to teach these skills to students.

Holistic Education: Life skills education should be seen as part of a holistic approach to education. In addition to academic knowledge, schools should prioritize the development of emotional intelligence, coping mechanisms, and interpersonal skills to prepare students for success in all areas of life.

Mental Health Support: Recognizing the role of life skills in mental health, schools should provide adequate mental health support services. This includes counseling and guidance to help students navigate the challenges they may face.

Parental Involvement: Parents and caregivers should be informed about the importance of life skills education and encouraged to support its development at home. Parent-teacher partnerships can further enhance a child's well-rounded development.

Assessment and Evaluation: Educational institutions should develop assessment tools to measure the effectiveness of life skills education programs. This will help identify areas of improvement and refine the curriculum accordingly.

Life Skills Workshops and Training: Schools can organize workshops and training sessions for students, teachers, and parents to enhance their understanding and practice of life skills. These workshops can cover topics like mindfulness, effective communication, and problem-solving.

Promoting a Positive School Environment: Schools should aim to create a positive and inclusive environment that fosters the development of life skills. This includes addressing issues such as bullying and discrimination to ensure that students feel safe and supported.

Career and College Readiness: Life skills like time management, critical thinking, and goal setting are essential for career and college readiness. Educational institutions should integrate these skills into career guidance and counseling programs.

Lifelong Learning: Emphasize that life skills are not just for students but for lifelong learning and personal growth. Encourage adults to continue developing these skills throughout their lives.

Policy Support: Educational policymakers should recognize the value of life skills education and allocate resources and support for its implementation. This includes funding for training, curriculum development, and research in this area.

Societal Implications: Incorporating life skills education into educational and workplace contexts has broader societal implications. It can lead to a more emotionally intelligent and resilient workforce, which can positively impact workplace environments and productivity. Additionally, it can contribute to the overall well-being and mental health of communities and societies.

The implications of research on the positive impact of life skills education are far-reaching. They call for a reevaluation of educational priorities and a greater emphasis on holistic development. By integrating life skills education into the curriculum and providing the necessary support, schools can better prepare students for success and happiness in all aspects of their lives.

Conclusion

The body of research presented in this review underscores the profound influence of life skills happiness and well-being in the 21st century. By nurturing self-awareness, promoting positive relationships, enhancing emotional intelligence, and fostering resilience, life skills education equips individuals with essential tools for leading more fulfilling and satisfying lives.

Incorporating life skills into educational and workplace contexts holds significant promise for improving individual and societal well-being. Educational institutions should consider integrating life skills training into their curricula to empower students with the necessary competencies for success in both personal and professional realms. Likewise, employers can benefit from recognizing the value of life skills in fostering positive workplace environments and employee satisfaction.

As society continues to evolve, the cultivation of life skills becomes increasingly relevant. By investing in life skills education, we have the potential to create a more resilient, empathetic, and fulfilled global community, ultimately contributing to a happier and more harmonious world.

Recognizing the vital role of life skills in fostering happiness and well-being, educators, policymakers, and employers should consider the incorporation of life skills education into their programs and curricula. By doing so, we can better equip individuals to navigate the complexities of the 21st century and enhance their overall quality of life, both personally and collectively. The pursuit of happiness and well-being becomes not merely an aspiration but an attainable reality when supported by a robust foundation of life skills education.

The findings underscore the significance of integrating life skills education into educational and workplace contexts. Such integration not only benefits individuals but also has broader societal implications, leading to a more emotionally intelligent and resilient workforce and contributing to community and societal well-being. Consequently, life skills education should be considered a vital component of programs aimed at enhancing both individual and collective well-being.

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Security as an Issue in the Election Manifestos of the BJP and Congress: An Analysis of the Last Four National Elections

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Abstract

Providing security has been the most fundamental duty that a nation-state is supposed to impart. In electoral politics, the Election Manifesto is not only used as a menu for the electorates but also as a mirror to manifest the orientation, ideology, and focus of the concerned political party. This paper is an effort to analyse the extent and nature of security coverage in the Election Manifestos of the Bhartiya Janata Party (BJP) and Congress during the last four Lok Sabha elections held in the years 2004, 2009, 2014, and 2019. For this purpose, cross-sectional and longitudinal content analysis has been done. Security, in the paper, has been considered a comprehensive concept and thereby includes both traditional state-centric construction of security and a non-traditional individual-centric view on the same. Hence, apart from defence, issues like internal and human security have also been taken as reference points.

Introduction

Security is an ever-evolving, dynamic, and complex concept. It is perhaps the most important function that a nation-state is supposed to do, as the most foundational driver of the social contract is to provide freedom from fear. Hence, security has always been one of the key agendas of the party that include, *inter alia*, the issues such as defence modernization, eliminating cross-border terrorism, left-wing extremism, police reform and modernization, etc. One key issue of utmost importance for the BJP was to abolish 370A in Jammu and Kashmir and to create autonomous regional councils in Jammu and Ladakh. Restoration of peace and normalcy in the Northeastern states and expanding regional cooperation with South-East Asia are also important agendas. BJP reiterated their national security agendas in 2009 of taking stern steps against militants, cross-border or homegrown. The BJP promised to overhaul intelligence, create tougher laws, enhance naval security along India's 7,500 km coastline, and detect, detain, and deport illegal immigrants who have emerged as a major source of homegrown militant attacks.

National security and foreign policy are interdependent, particularly in a globalized world. The BJP also highlighted that fencing of the India-Bangladesh border will be speedily completed. Using diplomacy to isolate and stop cross-border militant attacks and support for separatist groups. Wage war against Maoist groups throughout the country. The BJP also wanted to introduce a National Identity Card for citizens. In their 2014 manifesto, the BJP promised rebooting and reorienting foreign policy. The BJP stated that they would revive the anti-terror mechanism dismantled by the Congress and strengthen of Civil Defence and Home Guards. The BJP promised to deal with cross-border terrorism, establish four dedicated defence universities, and implement one rank, one pension scheme. Special emphasis was given to improving connectivity in the Northeast region. Massive infrastructure development in the NE region and completing all pending fencing work along the India-Bangladesh and India-Myanmar border were on the agenda. BJP promised to deal with insurgency with a firm hand. Pursuing an agenda of equal and rapid development of all three regions of Jammu and Kashmir– Jammu, Kashmir and Ladakh was an important issue. At the same time, the return of Kashmiri Pandits to the land of their ancestors with full dignity and security was a priority.

BJP has emphasised on "zero-tolerance approach to terrorism." It has promised the modernization of armed forces, speeding up the purchases of outstanding defense-related equipment and weapons, and strengthening the strike capability of the armed forces. 'Make in India' in Defence to promote the production of defense equipment

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also finds mention in the manifesto. The BJP has also promised to modernise the Central and State police forces and expedite police reforms in States. Smart fencing and integrated check-posts along the borders, establishment of a national committee for strengthening maritime & coastal security, and development of economic and social infrastructure in the Left-Wing Extremism-affected areas are proposed in the manifesto. The BJP has also promised resettlement options for armed forces veterans, which will be planned three years before their retirement. One key issue is to draft a Uniform Civil Code for gender equality. On the other hand, Congress seems to be less vocal about this issue. It, on the contrary, seems to be more focused on the social security issues.

The next sections will try to make a cross-sectional and longitudinal comparison of the election manifestos of the BJP and Congress published during the Lok Sabha elections held in the years 2004, 2009, 2014 and 2019.

Defence & External Security

In its 2004 election manifesto, the BJP emphasised on Speedy implementation of all the ongoing programmes for modernisation, acquisition and capability enhancement; minimizing delays and procedural bottlenecks; achieving greater efficiency in defence spending; giving a further boost to indigenisation of defence production and encouragement to private sector participation; and making defence exports a thrust area (BJP 2004:19). In contrary, the Congress's 2004 election manifesto did not give elaborate attention to the Defence related issues, except 'eliminating the delays in defence modernisation'.

The BJP's 2009 election manifesto included scores of defence related issues including strengthening Indian Army, Air Force and Navy; expediting long-pending acquisition of military hardware; revisiting and resolving the pending issues of pay and privileges; tax exemptions from paying income tax on the salaries and perquisites of defense personnel, implementation of One Rank, One Pension; addressing the lingering shortage of defense personnel at all levels (BJP, 2009: 15). On the other hand, the Congress's 2009 election manifesto kept mum on the issue of defence, except briefly and ambiguously mentioning 'highest level of defence preparedness.'

Similarly, the BJP, in its 2014 election manifesto, elaborately discusses a plethora of defence-related issues that include armed force modernization; identification and addressing the growing defence force deficit, construction of a War Memorial; creation of National Maritime Authority; setting up of four defence universities; bolstering the Defence Research and Development Organisation (DRDO); promoting participation and investment from the private sector, particularly FDI in specific defence industries (BJP 2014: 38-39). Congress, on the other hand, was a bit more sensitive in terms of including defence-related issues in its 2014 election manifestos in comparison to its two earlier manifestos, notwithstanding covering a lesser number of issues than that of the BJP. Congress's 2014 election manifesto promised to focus on fast modernisation of the military; enhance our current industrial capabilities while developing new ways to increase military capability (Congress 2014: 46); and establish "National Commission for Ex-Servicemen (Congress 2014: 47).

The BJP's 2019 election manifesto was far more detailed in terms of giving space for national security and defence in its manifesto. India has more than 7500 kilometres of coastline and thereby maritime security is one of the most salient security concerns that India has been reckoning for the last few decades. In the BJP's Manifesto (2019: 11), coastal security was identified as one of the core security issues. Besides, the BJP's Manifesto gave space to the issues of the welfare of soldiers, infiltration, and make in India in Defence, etc. (BJP 2019: 11-13). On the other hand, the Congress's Manifesto (2019: 11-13) was generic in terms including security and defence-related issues. The major issues that have been included in Congress's Manifesto (2019: 25) were its focus on reversing the trend of declining defence spending and accelerating all modernization initiatives.

Internal and Non-traditional Security

The state's sovereignty is not only threatened by external threats but successfully enjoying its sovereignty by handling internal insecurity predicaments is cardinal for enjoying complete sovereignty by a nation-state. India is a diverse and huge country. Thereby the security issues at the domestic level in India are far more complicated than any other nation-state. Both the national parties have given enough space to the internal and non-traditional security concerns.

The BJP, in its Election Manifesto published in 2004, gave space to the issue of terrorism in its agenda. Zero tolerance against caste and communal violence was yet another issue that the BJP included in its Election Manifesto published during the 2004 Lok Sabha elections. The Left Wing Extremism and organised crime were also given space in its 2004 Lok Sabha elections Manifesto. In addition, the BJP also recognised that the enactment of consensus-based central laws would be its priority (BJP 2004: 19-20). On the Global Hunger Index, India's position has not been appreciable. Hence, the BJP also identified Food Security as a core issue in its 2004 Election Manifesto. The BJP also vowed to widen the social security network (BJP 2004: 30). The Congress, on the contrary, was far more ambiguous in terms of identifying and elaborating internal security issues. However, it, in its 2004 manifesto, highlights the importance of building a Public Distribution System (PDS) infrastructure in the backward district. The PDS, according to the Manifesto was planned to be run by the cooperative operated by women and ex-servicemen (INC 2004: 23). This is well well-known fact that despite India's food grain production has increased many folds, India has been ranked low on the Global Hunger Index. Hence, food security has been one of the most basic non-tradition security issues that India has been focusing on.

Many scholars like Hobsbawm believe that we are living in an era of globalisation, democracy and terrorism. Although India was one of the earliest victims of terrorism, terrorism became one of the global insecurity issues in the wake of the 9/11 incident. Hence, the political parties of India have been more sensitive towards including the issue of terrorism in their party manifestos. The BJP, in its 2009 Lok Sabha elections Manifesto, promised that within 100 days after coming into power, the BJP would review the anti-terror mechanism and will launch a massive programme to detect, detain and deport illegal immigrants. It would also give assent to the laws dealing with organized crime (BJP 2009: 11-12). Furthermore, the party also assured that it would set up a Digital Security Agency and will modernise the police forces. It further assured that it would modernise the police forces for the sake effectively handle various internal security challenges including terrorism. In addition, the party Manifesto (2009: 12) vowed to review border management to thwart the menace of illegal migration. Very similar to its 2004 Election Manifesto, the BJP, in its 2009 election manifesto, also promised to strengthen the coastal security architecture. To this end, the constitution of the National Maritime Authority was mooted as a significant move. It is worth mentioning here that the 2009 Election Manifesto was crafted in the backdrop of the Mumbai terror attack, and in the attack, the Pakistan-sponsored terrorists sneaked into India through the maritime domain. The BJP also vowed to commission special courts for terrorism (2009: 12). Insurgency has been identified as a major internal security threat for India. To address this threat, better inter-state coordination and real-time intelligence sharing for tackling insurgents were given special emphasis in the BJP's Election Manifesto (2009: 11-12). In its Manifesto (2009: 12-13), the BJP also promised to issue a National Identity Card to reinforce the internal security framework.

India is an energy deficit country; nuclear energy based on indigenous ore is one of the solutions to solve the deficit. The BJP, in its Manifesto (2009: 16), vowed that it would accelerate its indigenous thorium technology programme. It further assured that required steps would be taken for technologically advancing India's civil and military nuclear activities (2009: 16). This would not only provide a better energy security scenario for India but also help in keeping a credible minimum deterrent in place (2009: 17). The Congress, on the other hand, did not give enough space to issues like terrorism, insurgency and nuclear technology in its 2009 Election Manifesto.

Unlike its 2004 Election Manifesto, the BJP provided far more space to the issue of food security in its 2009 Election Manifesto. It promised that it would provide BPL families with 35 kg of rice or wheat each month for Rs 2 per kg as part of an upgraded and extended Antyodaya Anna Yojana (BJP 2019: 17). Furthermore, it vowed that additional money would also be provided to broaden, enlarge, and enhance the Public Distribution System's operation (BJP 2009: 17). In line with Sustainable Development Goal-1, the BJP also promised that no stone would be left unturned to prevent family to be trapped in poverty (BJP 2009: 17). To provide better food security network, setting up community kitchens was also on the agenda of the BJP in the 2009 elections (2009: 18). It further vowed to extend the reach of the current mid-day food programme (2009: 18). The BJP also promised that encouragement would be given to multiply cereal production (2009: 18). Congress, like its 2004 Election Manifesto, also promised scores of steps to assure food security. One of them was to maintain a sufficient level of food reserves. It also vowed to enact National Food Security Act, whereby for Rs. 3 per kg, 25 kg of rice or wheat every month (INC 2009: 13).

To ensure Energy Security, the BJP assured to spend a lot of money for creating sustainable non-fossil-based energy sources (BJP 2009: 18). It further promised that the generation of 120,000 MW of power would be assured over the next five years. To this end, hybrid technologies will be given focus (p.18). the Congress's

Election Manifesto (2009) did not give space to the issue of energy security.

In the 2014 Lok Sabha elections, the BJP came into power with a thumping majority and dethroned the Congress, which has been at the helm of affairs for the last ten years. In its 2014 election manifesto, the BJP yet again gave special emphasis on terrorism. Its Manifesto (2014: 37) identified terrorism, extremism and crime as major security threats for India, and explicitly mentioned that the BJP government would show zero tolerance against these threats. It further vowed that the party would ‘renew the counterterrorism system’ and ‘restructure the National Security Council’ (2014: 38). The BJP also assured autonomy to the intelligence agencies by providing them immunity against political influences (2014: 38). Congress, unlike its earlier manifestos, seems to be far more explicit and candid in including the internal security issues in its 2014 Election Manifesto. It assured that it would guarantee the highest level of protection against both external and internal threats for all Indians (INC 2014: 46). Furthermore, it vowed to take a clear stand against the threat of left-wing extremism (INC 2014: 46). This time, nuclear issue found a place in the Election Manifestos of both the parties. On the one hand, the BJP promised to unfold an independent Strategic Nuclear Programme (BJP 2014: 39), the Congress (2014: 27) expressed its intent to seek membership in the Nuclear Supplier Group.

The BJP's Election Manifesto (2014), however, was far more candid on the issue of food security, than that of its counterpart. The BJP Manifesto narrates that the party believes that National security depends on "universal food security" (BJP 2014: 15). The party claimed that to assure food security it would undertake many steps, including reviewing the PDS, addressing the issues of the under- and malnutrition, encourage the cereal production, transform the FCI, running community kitchen with the help of voluntary organizations (BJP 2014: 15-16). As mentioned above, energy security is cardinal for the growth and development of country. BJP, in its Election Manifesto (2014) promises to create a reasonable and thorough "National Energy Policy" (BJP 2014: 34). To this end, it also assures to develop a robust energy infrastructure (BJP 2018: 34). Congress, in its Election Manifesto (2014), also promises to enable the provision of affordable, reliable, and clean energy for everyone with emphasis on National Mission on Energy Efficiency, greater accessibility, Jawaharlal Nehru National Solar Mission, etc. (INC 2014: 38).

As far as social security is concerned, Congress seems to be far more explicit in its 2014 Election Manifesto than that of the BJP. The congress promised to enlarge the social security network for all labourers, be organised or unorganised (INC 2014: 19). To ensure social security network for the unorganised sector, implementation of The Unorganised Workers' Social Security Act, 2008 was on its agenda (INC 2014: 19)

Both the political parties became far more systematic and elaborate in their Election Manifestos published in the 2019 Lok Sabha elections in terms of articulating and giving space to the issues about national and internal security vis-a-vis their earlier Election Manifestos. However, the BJP turned out to be more clearer and specific in incorporating the security issues in its 2019 Election Manifesto than that of the Congress. The ‘zero-tolerance approach to terrorism’, combating ‘Left-Wing Extremism,’ and implementing the ‘Citizen Amendment Bill’ are the major issues that found a place in the BJP's 2019 Election Manifesto (BJP 2019:11-12). On the other hand, Congress, in its 2019 Election Manifesto, gave place to, (i). the issue of data security, cyber security, financial security, communication security (INC 2019: 26), (ii). Establishment of the the National Counter-Terrorism Centre and NATGRID, (iii). Targeting the menace of (a) terrorism, (b) infiltration of militants, (c) Maoism or Naxalism, and (d) caste or communal violence (INC 2019: 26), tacking the crimes against women, Scheduled Castes, Scheduled Tribes and minorities with heavy hands (INC 2019: 26), and strengthening the border guarding Force (INC 2019: 28).

BJP also assured to provide better water security with the help of the schemes like Jal Shakti for linking rivers, ‘Jal Jivan Mission’ by providing piped water to every household by 2024 and conservation of rural water (BJP 2019: 19). Congress also included many water security issues like using modern technology to harness the waters of the Brahmaputra (INC: 2019: 42), providing universal access to portable water (INC 2019: 50), Financial allocation for river cleaning (INC 2019: 51), and reintroduction of Nirmal Bharat Abhiyan (INC 2019: 51). Moreover, both the parties also enlisted many schemes and strategies to embolden food security scenario in the country. BJP (2019 33) assured to expand food security coverage by including the provision of subsidised sugar (at Rs. 13 per kg per family each month) and Congress (2019: 50) claimed to assure food security to all. Both parties also came up with elaborate provisions for assuring energy security. The BJP, in its 2019 Election

Manifesto, focussed on emboldening robust energy infrastructure, providing 24x7 electricity to all, and achieving the goal of 175 GW renewable energy by 2022 (BJP 2019: 22), while the Congress emphasised the issues like clean energy, rural electrification and solar energy (INC 2019: 14).

Conclusion

Based on the above-mentioned analysis, primarily content analysis, it is clear that national security defence and internal security issues have been given space in the Election Manifestos of both the national parties-the BJP and Congress. However, the cross-sectional analysis reveals that the BJP has been far more sensitive and accommodative than the Congress in terms of addressing the issues concerning various dimensions of security. Longitudinally speaking, however, both parties have been gradually becoming more elaborative and specific in underlining and highlighting the security issues in their Election Manifestos. Notwithstanding some overlapping content, the BJP and Congress differ in a big way in prioritising the security concerns in their manifestos. While the BJP has been more vocal about the issues like defence, terrorism, Left Wing Extremism, coastal security, nuclear deterrence, insurgency, and cross-border migration; Congress has been concerned about social security issues. Issues like water security, food security, and energy security have found a place in the Election Manifestos of both political parties, even though the magnitude and specifications differ year-to-year and party to party.

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बी.एड. प्रशिक्षण महाविद्यालयों में अध्ययरत पुरुष एवं महिला प्रशिक्षार्थियों के मध्य संवेगात्मक परिपक्वता का एक तुलनात्मक अध्ययन

*प्रीति सिंह

सारांश

प्रस्तुत अध्ययन में बी.एड. प्रशिक्षण महाविद्यालयों में अध्ययनरत पुरुष बी.एड. प्रशिक्षार्थी एवं महिला बी.एड. प्रशिक्षार्थी के मध्य संवेगात्मक परिपक्वता का तुलनात्मक अध्ययन किया गया है। संवेगात्मक परिपक्वता से तात्पर्य अपनी और दूसरों की भावनाओं को समझने और प्रबंधित करने की क्षमता से है। संवेगात्मक परिपक्वता का अर्थ है संतुलित व्यक्तित्व। एक शिक्षक का संवेगात्मक रूप से परिपक्व होना आवश्यक है। अध्ययन का उद्देश्य बी.एड. प्रशिक्षण महाविद्यालयों में अध्ययनरत पुरुष बी.एड. प्रशिक्षार्थी एवं महिला बी.एड. प्रशिक्षार्थी के मध्य संवेगात्मक परिपक्वता, एवं संवेगात्मक परिपक्वता के विभिन्न आयाम सांवेगिक स्थिरता, सांवेगिक प्रगति, सामाजिक समायोजन, व्यक्तित्व एकीकरण, और अनाश्रित को ज्ञात करना है। अध्ययन हेतु रायपुर जिले में स्थित बी.एड. प्रशिक्षण महाविद्यालयों में अध्ययरत 30 पुरुष बी.एड. प्रशिक्षार्थी एवं 30 महिला बी.एड. प्रशिक्षार्थी का चयन संभाव्य न्यादर्श से किया गया है। प्रदत्तों के संकलन हेतु डॉ. यशवीर सिंह एवं डॉ. महेश भार्गव द्वारा निर्मित संवेगात्मक परिपक्वता मापनी का प्रयोग किया गया है। प्रदत्तों का सांख्यिकीय विश्लेषण करने पर परिणाम प्राप्त हुआ कि पुरुष बी.एड. प्रशिक्षार्थी एवं महिला बी.एड. प्रशिक्षार्थी के मध्य संवेगात्मक परिपक्वता में सार्थक अंतर नहीं है। इसी प्रकार पुरुष बी.एड. प्रशिक्षार्थी एवं महिला बी.एड. प्रशिक्षार्थी के मध्य संवेगात्मक परिपक्वता के विभिन्न आयाम सांवेगिक स्थिरता, सांवेगिक प्रगति, सामाजिक समायोजन, व्यक्तित्व एकीकरण, अनाश्रित में भी सार्थक अंतर नहीं पाया गया है।

प्रस्तावना

संवेग आंतरिक भावों का बाह्य प्रकाशन है। भावों का तीव्र होना ही वास्तव में संवेग है। संवेग मानव जीवन के लिए महत्वपूर्ण है। संवेग व्यक्ति को समुचित विचार किए बिना कार्य करने को उत्तेजित करते हैं तथा उस उत्तेजना में व्यक्ति प्रशंसनीय एवं निंदनीय दोनों ही प्रकार के कार्य करता है। व्यक्ति अपने जीवन में समय-समय पर अनेक भावों का अनुभव करता है जैसे भय, क्रोध, प्रेम, घृणा, हर्ष, क्षोभ, दया, कामुकता आदि। संवेग के उदय होने पर व्यक्ति में आंतरिक शक्ति का संचार होता है तथा वह ऐसे कार्य को भी कर दिखाता है जो सामान्य परिस्थिति में संभव नहीं होता है। बालक में जन्म से ही कुछ न कुछ संवेग होते है। शैशवावस्था से संवेगात्मक विकास प्रांरभ हो जाता है जो कि प्रौढ़ावस्था तक चलता रहता है। संवेगात्मक विकास प्रौढ़ावस्था आंरभ होने तक पूर्ण हो चुका होता है। इस समय तक संवेगात्मक परिपक्वता आ जाती है। यह वह समय होता है जब व्यक्ति अपने संवेगों पर नियन्त्रण रखना सीख जाता है एवं अपने निर्णय विवेक के आधार पर लेना प्रांरभ कर देता है। समय, स्थान व अवसर को ध्यान में रखते हुए व्यक्ति उचित ढंग से संवेगों की अभिव्यक्ति करता है। इसे ही संवेगात्मक परिपक्वता कहा जाता है। इस प्रकार जो व्यक्ति अपने संवेगों पर उचित अंकुश रखते हुए उन्हें भली-भांति अभिव्यक्त कर सके उसे संवेगात्मक रूप से परिपक्व कहा जा सकता है।

संबंधित शोध अध्ययन

सुब्बारायण एवं विश्वनाथन (2011) ने कॉलेज के छात्रों की संवेगात्मक परिपक्वता पर एक अध्ययन करके निष्कर्ष निकाला कि कॉलेज के छात्रों की संवेगात्मक परिपक्वता बेहद अस्थिर होती है। लिंग, समुदाय और परिवार के प्रकार का कॉलेज के छात्रों की संवेगात्मक परिपक्वता में कोई भूमिका नहीं है। कॉलेज के छात्र जो अलग- अलग धर्मों के हैं, उनके संवेगात्मक परिपक्वता में महत्वपूर्ण अंतर है। सिंह, कौर एवं दुरेजा (2012) ने विश्वविद्यालय के छात्रों के बीच संवेगात्मक परिपक्वता का अध्ययन करके निष्कर्ष ज्ञात किया कि पुरुष खिलाड़ियों और महिला खिलाड़ियों के बीच भावनात्मक अस्थिरता, भावात्मक प्रतिगमन, सामाजिक कुसमायोजन, व्यक्तित्व विघटन, स्वतंत्रता की कमी, और संवेगात्मक परिपक्वता के संबंध में महत्वपूर्ण अंतर है। नुजहत (2013) ने भारत के कश्मीर विश्वविद्यालय में पुरुष और महिला दूरस्थ शिक्षार्थियों की संवेगात्मक परिपक्वता का तुलनात्मक अध्ययन करके बताया कि विश्वविद्यालय के पुरुष दूरस्थ शिक्षार्थियों एवं महिला दूरस्थ शिक्षार्थियों के संवेगात्मक परिपक्वता में कोई खास अंतर नहीं है एवं महिला दूरस्थ शिक्षार्थियों में पुरुष दूरस्थ शिक्षार्थियों की तुलना में संवेगात्मक अस्थिरता होती हैं। रानी एवं कुमारी (2014) ने डी.एड. विद्यार्थियों की संवेगात्मक परिपक्वता का उनके समायोजन के संबंध में एक

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अध्ययन किया। अध्ययन के परिणामों से ज्ञात किया कि छात्राएँ छात्रों की तुलना में संवेगात्मक रूप से अधिक परिपक्व होती हैं। विद्यार्थियों की संवेगात्मक परिपक्वता और समायोजन स्तर के बीच एक महत्वपूर्ण संबंध है। पेरूमल एवं राजगुरू (2015) ने बी.एड. छात्र शिक्षकों की संवेगात्मक परिपक्वता पर एक अध्ययन करके निष्कर्ष में कहा कि पुरुष एवं महिला छात्र शिक्षकों के बीच संवेगात्मक परिपक्वता में कोई सार्थक अंतर नहीं है। जितेन्द्र एवं मोना (2015) ने जनसांख्यिकीय चर के संबंध में कॉलेज के छात्रों के बीच संवेगात्मक परिपक्वता और चिंता पर एक अध्ययन कर निष्कर्ष निकाला कि लिंग और स्थानीयता के आधार पर कॉलेज के छात्रों के बीच संवेगात्मक परिपक्वता और चिंता में सार्थक अंतर है लेकिन शैक्षणिक स्ट्रीम के आधार पर कॉलेज के छात्रों के मध्य में संवेगात्मक परिपक्वता में कोई सार्थक अंतर नहीं है। कलाईसेल्वन एवं माहेश्वरी (2016) ने स्नातकोत्तर छात्रों के बीच संवेगात्मक परिपक्वता पर एक अध्ययन करके कहा कि 45.5 प्रतिशत उत्तरदाताओं में मध्यम स्तर की संवेगात्मक परिपक्वता है। छात्रों की संवेगात्मक परिपक्वता उनके विभाग एवं उनकी माताओं की शैक्षिक स्तर से काफी प्रभावित थी। ज्योति (2018) ने हिमाचल प्रदेश राज्य में छात्र अध्यापकों की संवेगात्मक परिपक्वता का अध्ययन करके परिणाम में कहा कि ग्रामीण और शहरी छात्र अध्यापकों के संवेगात्मक परिपक्वता में सार्थक अंतर है। सनवाल एवं अन्य (2023) ने गुजरात के कॉलेज छात्रों के मध्य संवेगात्मक परिपक्वता पर अध्ययन करके निष्कर्ष निकाला कि समग्र उत्तरदाताओं के बीच संवेगात्मक परिपक्वता के संबंध में लड़के और लड़कियों के मध्य सार्थक अंतर है।

अध्ययन का उद्देश्य

- पुरुष बी.एड. प्रशिक्षार्थी एवं महिला बी.एड. प्रशिक्षार्थी के संवेगात्मक परिपक्वता एवं संवेगात्मक परिपक्वता के विभिन्न आयाम सांवेगिक स्थिरता, सांवेगिक प्रगति, सामाजिक समायोजन, व्यक्तित्व एकीकरण, अनाश्रित को ज्ञात करना।

समस्या कथन : पुरुष बी.एड. प्रशिक्षार्थी एवं महिला बी.एड. प्रशिक्षार्थी के संवेगात्मक परिपक्वता का तुलनात्मक अध्ययन करना।

परिकल्पना

H_1 - पुरुष बी.एड. प्रशिक्षार्थी एवं महिला बी.एड. प्रशिक्षार्थी के संवेगात्मक परिपक्वता के मध्य सार्थक अंतर नहीं पाया जाएगा।

H_2 - पुरुष बी.एड. प्रशिक्षार्थी एवं महिला बी.एड. प्रशिक्षार्थी के संवेगात्मक परिपक्वता के प्रथम आयाम सांवेगिक स्थिरता के मध्य सार्थक अन्तर नहीं पाया जाएगा।

H_3 - पुरुष बी.एड. प्रशिक्षार्थी एवं महिला बी.एड. प्रशिक्षार्थी के संवेगात्मक परिपक्वता के द्वितीय आयाम सांवेगिक प्रगति के मध्य सार्थक अन्तर नहीं पाया जाएगा।

H_4 - पुरुष बी.एड. प्रशिक्षार्थी एवं महिला बी.एड. प्रशिक्षार्थी के संवेगात्मक परिपक्वता के तृतीय आयाम सामाजिक समायोजन के मध्य सार्थक अन्तर नहीं पाया जाएगा।

H_5 - पुरुष बी.एड. प्रशिक्षार्थी एवं महिला बी.एड. प्रशिक्षार्थी के संवेगात्मक परिपक्वता के चतुर्थ आयाम व्यक्तित्व एकीकरण के मध्य सार्थक अन्तर नहीं पाया जाएगा।

H_6 - पुरुष बी.एड. प्रशिक्षार्थी एवं महिला बी.एड. प्रशिक्षार्थी के संवेगात्मक परिपक्वता के पंचम आयाम अनाश्रित के मध्य सार्थक अन्तर नहीं पाया जाएगा।

परिसीमा - प्रस्तुत अध्ययन छत्तीसगढ़ राज्य के रायपुर जिले में स्थित बी.एड. प्रशिक्षण महाविद्यालयों में अध्ययनरत बी.एड. प्रशिक्षार्थियों के संवेगात्मक परिपक्वता के अध्ययन तक सीमित है।

शोध विधि - बी.एड. प्रशिक्षार्थियों के संवेगात्मक परिपक्वता का अध्ययन करने के लिए प्रस्तुत अध्ययन में सर्वेक्षण विधि का प्रयोग किया गया है।

न्यादर्श - अध्ययन हेतु रायपुर जिले में स्थित तीन बी.एड. प्रशिक्षण महाविद्यालयों से संभाव्य न्यादर्श विधि के अंतर्गत लॉटरी विधि के प्रयोग से 30 पुरुष बी.एड. प्रशिक्षार्थी एवं 30 महिला बी.एड. प्रशिक्षार्थी का चयन किया गया है।

शोध उपकरण - प्रस्तुत अध्ययन में संवेगात्मक परिपक्वता को ज्ञात करने हेतु प्रदत्तों का संकलन करने के लिए डॉ. यशवीर सिंह एवं डॉ. महेश भार्गव द्वारा निर्मित संवेगात्मक परिपक्वता मापनी का प्रयोग किया गया है।

सांख्यिकीय विश्लेषण - चरों से संबंधित प्रदत्तों का सांख्यिकीय विश्लेषण करने के लिए मध्यमान, प्रामाणिक विचलन एवं सार्थक अन्तर ज्ञात करने के लिए टी-परीक्षण का प्रयोग किया गया है।

प्रदत्तों का सांख्यिकीय विश्लेषण एवं परिणाम

H_1 - पुरुष बी.एड. प्रशिक्षार्थी एवं महिला बी.एड. प्रशिक्षार्थी के संवेगात्मक परिपक्वता के मध्य सार्थक अन्तर पाया जाएगा।

सारणी क्रमांक-01

क्रं.	तुलनात्मक समूह	प्रदत्तों की संख्या	मध्यमान	प्रमाणिक विचलन	टी-मूल्य
1.	पुरुष बी.एड. प्रशिक्षार्थी	30	87.16	20.16	0.32
2.	महिला बी.एड. प्रशिक्षार्थी	30	85.46	20.69	

df = 58 $p>0.32$ 0.01 सार्थकता स्तर पर अस्वीकृत

उपरोक्त सारणी से स्पष्ट है कि सांख्यिकीय विश्लेषण करने पर टी-मूल्य का मान 0.32 प्राप्त हुआ है जो 0.01 सार्थकता स्तर पर df =58 के मान 2.66 से कम है। इस प्रकार यह कहा जा सकता है कि पुरुष बी.एड. प्रशिक्षार्थी एवं महिला बी.एड. प्रशिक्षार्थी के संवेगात्मक परिपक्वता के मध्य सार्थक अन्तर नही पाया गया है। फलतः परिकल्पना H_1 अस्वीकृत होती है।

H_2 - पुरुष बी.एड. प्रशिक्षार्थी एवं महिला बी.एड. प्रशिक्षार्थी के संवेगात्मक परिपक्वता के प्रथम आयाम सांवेगिक स्थिरता के मध्य सार्थक अन्तर पाया जाएगा।

सारणी क्रमांक-02

क्रं.	तुलनात्मक समूह	प्रदत्तों की संख्या	मध्यमान	प्रमाणिक विचलन	टी-मूल्य
1.	पुरुष बी.एड. प्रशिक्षार्थी	30	19.73	7.50	0.108
2.	महिला बी.एड. प्रशिक्षार्थी	30	19.93	6.84	

df =58 p>0.108 0.01 सार्थकता स्तर पर अस्वीकृत

उपरोक्त सारणी से स्पष्ट है कि सांख्यिकीय विश्लेषण करने पर टी-मूल्य का मान 0.108 प्राप्त हुआ है जो 0.01 सार्थकता स्तर पर df =58 के मान 2.66 से कम है। इस प्रकार कहा जा सकता है कि पुरुष बी.एड. प्रशिक्षार्थी एवं महिला बी.एड. प्रशिक्षार्थी के संवेगात्मक परिपक्वता के प्रथम आयाम सांवेगिक स्थिरता के मध्य सार्थक अन्तर नहीं पाया गया है। फलतः परिकल्पना H_2 अस्वीकृत होती है।

H_3 - पुरुष बी.एड. प्रशिक्षार्थी एवं महिला बी.एड. प्रशिक्षार्थी के संवेगात्मक परिपक्वता के द्वितीय आयाम सांवेगिक प्रगति के मध्य सार्थक अन्तर पाया जाएगा।

सारणी क्रमांक-03

क्रं.	तुलनात्मक समूह	प्रदत्तों की संख्या	मध्यमान	प्रमाणिक विचलन	टी-मूल्य
1.	पुरुष बी.एड. प्रशिक्षार्थी	30	19.2	6.15	0.80
2.	महिला बी.एड. प्रशिक्षार्थी	30	20.43	5.62	

df =58 p>0.80 0.01 सार्थकता स्तर पर अस्वीकृत

उपरोक्त सारणी से स्पष्ट है कि सांख्यिकीय विश्लेषण करने पर टी-मूल्य का मान 0.80 प्राप्त हुआ है जो 0.01 सार्थकता स्तर पर df =58 के मान 2.66 से कम है। इस प्रकार यह कहा जा सकता है कि पुरुष बी.एड. प्रशिक्षार्थी एवं महिला बी.एड. प्रशिक्षार्थी के संवेगात्मक परिपक्वता के द्वितीय आयाम सांवेगिक प्रगति के मध्य सार्थक अन्तर नही पाया गया है। फलतः परिकल्पना H_3 अस्वीकृत होती है।

H_4 - पुरुष बी.एड. प्रशिक्षार्थी एवं महिला बी.एड. प्रशिक्षार्थी के संवेगात्मक परिपक्वता के तृतीय आयाम सामाजिक समायोजन के मध्य सार्थक अन्तर पाया जाएगा।

सारणी क्रमांक-04

क्रं.	तुलनात्मक समूह	प्रदत्तों की संख्या	मध्यमान	प्रमाणिक विचलन	टी-मूल्य
1.	पुरुष बी.एड. प्रशिक्षार्थी	30	18.16	5.21	0.8
2.	महिला बी.एड. प्रशिक्षार्थी	30	17.16	4.48	

df =58 p>0.8 0.01 सार्थकता स्तर पर अस्वीकृत

उपरोक्त सारणी से स्पष्ट है कि सांख्यिकीय विश्लेषण करने पर टी-मूल्य का मान 0.8 प्राप्त हुआ है जो 0.01 सार्थकता स्तर पर df = 58 के मान 2.66 से कम है। इस प्रकार यह कहा जा सकता है कि पुरुष बी.एड. प्रशिक्षार्थी एवं महिला बी.एड. प्रशिक्षार्थी के संवेगात्मक परिपक्वता के तृतीय आयाम सामाजिक समायोजन के मध्य सार्थक अंतर नहीं पाया गया है। फलतः परिकल्पना H_4 अस्वीकृत होती है।

H_5 - पुरुष बी.एड. प्रशिक्षार्थी एवं महिला बी.एड. प्रशिक्षार्थी के संवेगात्मक परिपक्वता के चतुर्थ आयाम व्यक्तित्व एकीकरण के मध्य सार्थक अन्तर पाया जाएगा।

सारणी क्रमांक-05

क्रं.	तुलनात्मक समूह	प्रदत्तों की संख्या	मध्यमान	प्रमाणिक विचलन	टी-मूल्य
1.	पुरुष बी.एड. प्रशिक्षार्थी	30	15.16	3.63	0.93
2.	महिला बी.एड. प्रशिक्षार्थी	30	14.1	5.01	

df = 58 p>0.93 0.01 सार्थकता स्तर पर अस्वीकृत

उपरोक्त सारणी से स्पष्ट है कि सांख्यिकीय विश्लेषण करने पर टी-मूल्य का मान 0.93 प्राप्त हुआ है जो 0.01 सार्थकता स्तर पर df = 58 के मान 2.66 से कम है। इस प्रकार कहा जा सकता है कि पुरुष बी.एड. प्रशिक्षार्थी एवं महिला बी.एड. प्रशिक्षार्थी के संवेगात्मक परिपक्वता के चतुर्थ आयाम व्यक्तित्व एकीकरण के मध्य सार्थक अंतर नही पाया गया है। फलतः परिकल्पना H_5 अस्वीकृत होती है।

H_6 - पुरुष बी.एड. प्रशिक्षार्थी एवं महिला बी.एड. प्रशिक्षार्थी के संवेगात्मक परिपक्वता के पंचम आयाम अनाश्रित के मध्य सार्थक अन्तर पाया जाएगा।

सारणी क्रमांक-06

क्रं.	तुलनात्मक समूह	प्रदत्तों की संख्या	मध्यमान	प्रमाणिक विचलन	टी-मूल्य
1.	पुरुष बी.एड. प्रशिक्षार्थी	30	14.9	6.67	0.70
2.	महिला बी.एड. प्रशिक्षार्थी	30	13.83	4.97	

df = 58 p>0.70 0.01 सार्थकता स्तर पर अस्वीकृत

उपरोक्त सारणी से स्पष्ट है कि सांख्यिकीय विश्लेषण करने पर टी-मूल्य का मान 0.70 प्राप्त हुआ है जो 0.01 सार्थकता स्तर पर df = 58 के मान 2.66 से कम है। इस प्रकार यह कहा जा सकता है कि पुरुष बी.एड. प्रशिक्षार्थी एवं महिला बी.एड. प्रशिक्षार्थी के संवेगात्मक परिपक्वता के पंचम आयाम अनाश्रित के मध्य सार्थक अन्तर नहीं पाया गया है। फलतः परिकल्पना H_6 अस्वीकृत होती है।

निष्कर्ष

प्रदत्तों के विश्लेषण से प्राप्त परिणामों से ज्ञात होता है कि पुरुष बी.एड. प्रशिक्षार्थी एवं महिला बी.एड. प्रशिक्षार्थी के मध्य संवेगात्मक परिपक्वता में सार्थक अंतर नहीं है। इससे पूर्व में हुए अध्ययन में जितेन्द्र एवं मोना (2015) ने भी बताया है कि शैक्षणिक स्ट्रीम के आधार पर कॉलेज के छात्रों के मध्य में संवेगात्मक परिपक्वता में कोई सार्थक अंतर नहीं है। कलाईसेल्वन एवं माहेश्वरी (2016) ने भी अपने अध्ययन में कहा है कि छात्रों की संवेगात्मक परिपक्वता उनके विभाग एवं उनकी माताओं की शैक्षिक स्तर से काफी प्रभावित थी। पुरुष बी.एड. प्रशिक्षार्थी एवं महिला बी.एड. प्रशिक्षार्थी के मध्य संवेगात्मक परिपक्वता के विभिन्न आयाम सांवेगिक स्थिरता, सांवेगिक प्रगति, सामाजिक समायोजन, व्यक्तित्व एकीकरण, अनाश्रित में भी सार्थक अंतर नहीं पाया गया है। इसका प्रमुख कारण बी.एड. में प्रशिक्षण प्राप्त करने वाले प्रशिक्षार्थी का स्नातक एवं परास्नातक उत्तीर्ण होना हो सकता है। इस स्तर तक शिक्षा प्राप्त करने वाले विद्यार्थी संवेगात्मक रूप से परिपक्व हो चुके होते हैं। वह भावनाओं और संवेगों के प्रवाह में न आकर उचित और अनुचित का निर्णय लेने में सक्षम होते हैं तथा बौद्धिक एवं मानसिक शक्तियों का उचित प्रयोग करने लगते हैं।

शैक्षिक अनुप्रयोग

शिक्षकों को अपने संवेगात्मक परिपक्वता का ज्ञान होना आवश्यक है ताकि वे छात्रों के संवेगात्मक विकास को समझ सकें। एक शिक्षक का संवेगात्मक रूप से परिपक्व होना आवश्यक है क्योंकि संवेगात्मक रूप से परिपक्व व्यक्ति अपने संवेगों को समय और स्थिति के अनुरूप ठीक प्रकार से व्यक्त करने में समर्थ होता है। शिक्षकों को शिक्षकीय कार्य के लिए नियुक्त करने से पहले उनके संवेगात्मक परिपक्वता का परीक्षण किया जाना चाहिए।

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Research Trends in Sustainable Marketing: A Bibliometric Analysis of the Literature between the Years 2001-2021, Using Biblioshiny Software

*Mohd Vaseem Mansoori, *Harsh Vardhan, **Dr. Deepak Kumar

Abstract

The objectives of this study are to identify and systematize Web of Science articles on Sustainable Marketing and to suggest future research opportunities. The bibliometrics and biblioshiny software packages have been utilized to analyze research articles in the disciplines of sustainable marketing published between 2001 and 2021 in the Web of Science core collection database. The findings indicate that: (1) Number of articles on sustainable marketing has ascended over the last 20 years. Using various keywords relevant to sustainable marketing, 978 papers from the research period were collected from the Web of Science database. It is separated into four phases according to the number of articles: a low-production exploration phase, a developmental sprout phase, an expansion of the promotion phase, and a high-yield active phase. (2) Sustainable marketing study spans 65 nations or regions. In order of research volume, the top five nations are the United States, China, the United Kingdom, Germany, and Australia. (3) Sustainable consumption, sustainability, green marketing, sustainable development, sustainable marketing, and consumer behavior are high-frequency keywords in the field of Sustainable marketing in recent years. The paper concludes by emphasizing that future research directions on sustainable marketing include the process, mechanism, and effects of sustainable marketing. The subject is moving toward several sustainable topics involving customer confidence, ethical consumption and buying intentions, and environmental and health concerns.

Introduction

Since the 1970s, marketing theory, and expertise have grown and improved. The marketing ideas are implemented in every exchange structure, connected with products, services, peoples, places, or concepts, and involved with individuals in both profit and non-profit organizations, governments, and non-government organizations (Achrol & Kotler, 2012).

In the ongoing evolution of marketing, sustainable marketing is a recent phenomenon. Environmental, green, and societal marketing are all concepts included in sustainable marketing. Researchers view them as more moral marketing strategies that help companies develop without depleting the environment and continue to meet the demands of both the present and the generations to come. In addition to addressing the demands of today's customers, sustainable marketing also considers future generations of consumers and the prospect of addressing their needs. Environmental problems, including global warming, greenhouse gas emissions, pollution, and the energy crisis, must be addressed by marketers today. Therefore, marketers must adopt a sustainable approach to defining marketing strategies and putting sustainable marketing practices into effect. Sustainable marketing challenges the conventional approach and basic assumptions of traditional marketing. Sustainable marketing involves innovative ways of helping deliver sustainable solutions like rethinking elements of consumption, rethinking approaches to markets, and changing the products and services we consume.

Data Sources and Research Methods

Data Sources

Identification, collection, classification, and consolidation of the available published information on the selected topic and associated areas are required to accomplish the research objectives utilizing bibliometric methods. To do this, an iterative cycle of selecting relevant search keywords, reviewing the literature, gathering and organizing the pertinent data, and performing additional

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analysis using pertinent bibliometric methods as advised by the current research must be followed. The data source for this article is the Web of Science core collection database. Nine hundred seventy-eight documents on sustainable marketing were found between 2001 and 2022. The document type is the article, and the search strategy includes the title, abstracts of articles, and author-supplied keywords. Four thousand one hundred fifty-six documents were found after being refined by period, research field, language, and document type.

Research Method

Professor Massimo Aria created the bibliometric software package in 2017 using the R programming language. It may be used for visual presentation and whole-process bibliometric analysis. It is also possible to do statistical analysis, data processing, the creation of co-occurrence matrices, co-citation analysis, coupling analysis, co-word analysis, and cluster analysis on articles from the Scopus and Web of Science databases. Bibliometrics conducts a full set of literature information analysis and the display of findings by combining the visualization capabilities of several scientific mapping tools.The bibliometric operating paradigm is composed of code commands, but biblioshiny uses the shiny package to capture the fundamental bibliometrics code to produce a web-based online data analysis platform. Users' information input intensity and usage threshold are significantly reduced by Biblioshiny's interactive online interface, which enables users to do pertinent bibliometric and visual analyses. In this study, the research status and trends in sustainable marketing are analyzed and visualized using the bibliometric and biblioshiny software packages. From the perspectives of yearly documents, research power (country, author, journal), research hotspots, and topics, this study discusses the fundamentals of sustainable marketing. Reviewing the current state of sustainable marketing research from various angles (historical citation, subject evolution, and coupling analyses) offers resources and recommendations for the next sustainable marketing research.

Figure 1. Data collection and analysis approach

The Result and Discussion

Publication by Year and by Category

A total of 978 research articles were published over a 20-year duration (figure 2). The first ten years, from 2001 to 2010, are shown to have contributed just 15.54 percent of all publications. However, the past ten years, from 2011 to 2021, are shown to be the most fruitful as they have produced 84.45% of all articles during the research period from 2001 to 2021. Figure 2 illustrates the exponential rise in publications in the field of sustainable marketing from 2009 (Y=5.8232e0.1526x, Y=total publications, x=time in years, r2=0.9162). Exponential regression is used to fit an exponential curve onto the data in Figure 2. The coefficient of determination, often known as r2, represents the exponential model's relative predictive ability. The relationship between Y (total publications) and x(time) explains 91.62 percent of the total variance in the number of publications, according to the value of r2 (0.9162). Therefore, it is anticipated that publications relating to sustainable marketing will increase by 91.62 percent over time. The number of documents surged significantly over the high-yield active period of 2009-2021, attaining a maximum of 133 in 2021.

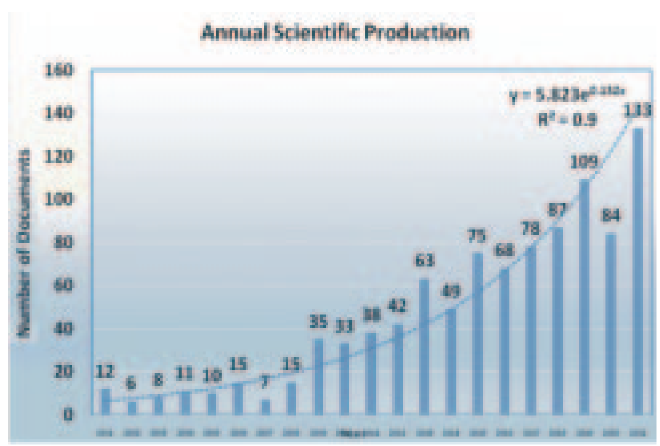

Figure 2. Sustainable Marketing research documents were published from 2001-2021

Table 1. Web of Science categories of journals

Web of Science Categories	Number	% of 978
Business	684	69.939
Management	340	34.765
Environmental Studies	239	24.438
Economics	231	23.620
Environmental Sciences	98	10.020
Ecology	60	6.135
Ethics	53	5.419
Energy Fuels	38	3.885
Operations Research Management Science	37	3.783
Psychology Applied	26	2.658

Ten WOS categories are used to categorize the 978 articles (Table 1). The category "Business" has the most representation, accounting for 684 framed papers, or 69.939% of the sample as a whole. "Management," which has 340 articles, is the second-largest category after "Environmental Studies," which has 239 articles. The absolute frequencies shown in Table 1's column "number" total more than 978, and the relative frequencies shown in the column "percent of 978" total more than 100% since it is required to take into account that the same item might be related to one or more categories.

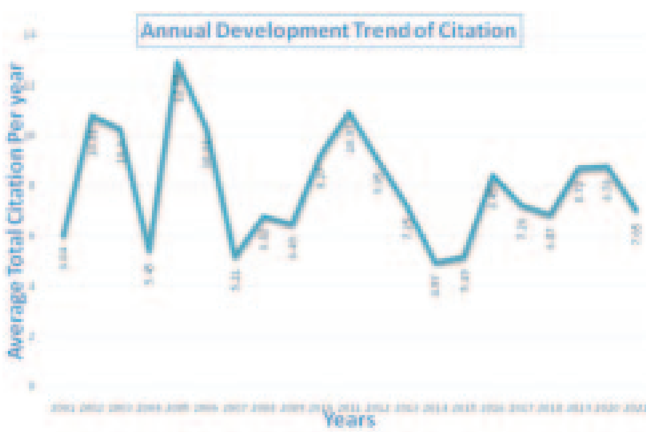

Figure 3. The number of annual Average Total Citation

Analysis of the Annual Development Tend of Citations

Figure 3 shows that the average citation per item peaked around 2002, 2003, 2005, 2006, 2010, 2011, and 2012, and an overall decline can be seen in 2014 and 2015. It can be seen from Figure 3 that rather than maintaining the same growth rate, the average citations per item in the field of sustainable marketing experienced several fluctuations. The research period with the highest number of cited papers was 2002, 2003, 2005, 2006, and 2011; the average citation per item reached a peak of 12.97 in 2002.

Productive Journals

The top journals on the subject of sustainable marketing are listed in Table 2. 8.92% of the total 952 articles were from the most produced journals. Table 2 shows that Ecological Economics, with the 32h-index, 5003 total citations, and 62 total papers published, was the top-ranked journal in sustainable marketing, and it was published in this area for the first time in the year 2002. It is further disclosed that the Journal of Business Research (31h-index) was the second-most prolific journal and started publishing on sustainable marketing in 2003. This journal published 53 articles concerning sustainable marketing with 3653 total citations. In terms of the number of publications, the Journal of Business Research further followed by Business Strategy and The Environment (85), International Journal of Consumer Studies (79), And Journal of Business Ethics (51), in that order. Out of the list of the most productive journals, the most recent journal published in the sustainable marketing area was Consumer Services. This journal started publishing in this area in 2016 and has published 22 articles so far with 1297 total citations.

Table 2. Top 10 productive journals in the field of green products

Journal	h_index	g_index	m_index	TC	TP	PY_start
Ecological Economics	32	62	1.52	5003	62	2002
Journal of Business Research	31	53	1.55	3653	53	2003
Business Strategy and The Environment	30	57	2.14	3444	85	2009
International Journal of Consumer Studies	28	50	1.75	2723	79	2007
Journal of Business Ethics	28	51	1.27	5179	51	2001
Energy Policy	24	35	1.09	3101	35	2001

Journal of Retailing And Consumer Services	14	22	2.00	1297	22	2016
Corporate Social Responsibility and Environmental Management	13	21	1.18	596	21	2012
Industrial Marketing Management	13	15	1.00	990	15	2010
Journal of Macromarketing	13	19	0.93	667	19	2009

(TC- Total Citations, TP- Total Publications, PY start- Publication Starting Year).

Analysis of Main Researcher

A total of 2209 writers contributed to the study article, of whom 1854 contributed one paper, 319 contributed two-three papers, 33 contributed four to seven papers, and three contributed eight to nine papers. According to the number of papers that have been published (Table 3), Chang Ch, Chen Ys, Jackson T, and Dangelico Rm are the top four authors, with nine articles followed by nine, eight, and seven, respectively. Chang Ch was ranked top in the number of documents in the area of sustainable marketing. In sustainable marketing, Chang Ch ranked first in the document number. Change Ch's h-index, g-index, and total citation values are 99 and 1469, respectively.

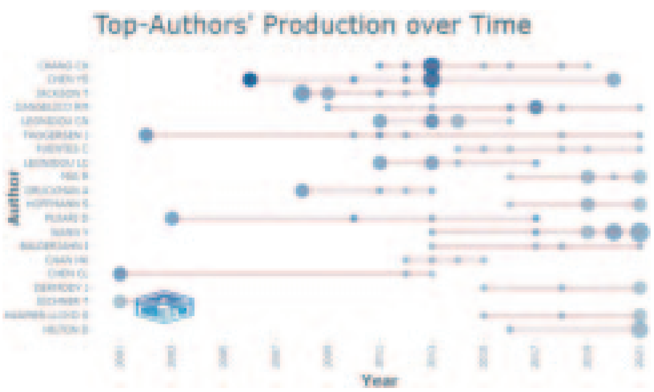

Figure 4. Authors' Production over time in the field of Sustainable Marketing

Table 3. Top 10 influential authors in the area of Sustainable Marketing

Author	h_ index	g_ index	m_ index	TC	TP	PY_ start
Chang CH	9	9	0.75	1469	9	2011
Chen YS	9	9	0.529	2937	9	2006
Jackson T	8	8	0.533	1033	8	2008
Dangelico RM	7	7	0.5	885	7	2009
Leonidou CN	7	7	0.583	750	7	2011
Thogersen J	7	7	0.333	1327	7	2002
Leonidou LC	6	6	0.5	612	6	2011
Druckman A	5	5	0.333	780	5	2008
Mai R	5	6	0.714	64	6	2016
Pujari D	5	5	0.25	1311	5	2003

(TC- Total Citations, TP- Total Publications, PY start- Publication Starting Year)

Figure 4 illustrates how the size of the circle infers the number of publications, while the circle's color infers the number of citations. Chang Ch began to write articles in 2011, with 2012 seeing the most publications and the greatest average amount of citations per document. For example, the Change Ch and Chen Ys paper from 2012 in the Management Decision Journal, "Enhance Green Purchase Intentions: The Roles of Green Perceived Value, Green Perceived Risk, and Green Trust," received 390 citations. This study aims to provide a novel paradigm to investigate the effects of perceived risk and perceived value on green purchasing intentions as well as to address the function of green trust as a mediator. This study utilizes four novel concepts-green perceived value, green perceived risk, green trust, and green buy intentions-to construct an integrated model to enhance green purchasing intentions. Using four innovative constructs-green perceived value, green perceived risk, green trust, and green purchase intentions-creates a distinctive study paradigm to increase green purchasing intentions. The empirical findings indicate that while green perceived risk would have a negative impact on both green trust and green purchasing intentions, the green perceived value would have a favorable impact on both.

Analysis of Keywords

The article's essence is summarized and refined at a high level in the keywords. The software program biblioshiny does data mining and statistical analysis of the high-frequency keywords of the research publications. The author's keywords that have a word frequency greater than or equal to 10 are chosen and represented as a Word TreeMap using the data mining and statistical analysis program biblioshiny (Figure 5). The figure shows that the most frequently appeared keywords involved in the field of sustainable marketing are sustainable consumption, sustainability, green marketing, sustainable development, sustainable marketing, and consumer behavior, accounting for 20%, 16%, 14%, 5%, 3%, and, 2% respectively.

Figure 5. Word Tree Map of high-frequency Authors' keywords in the area of Sustainable Marketing

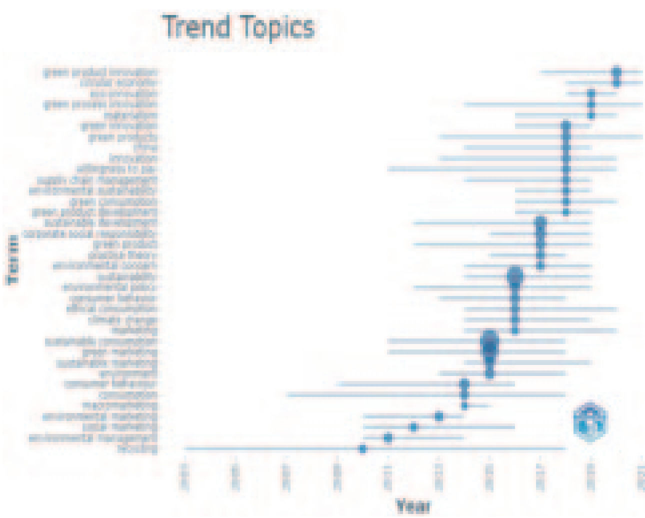

Figure 6. Trending topics based on Authors' Keywords in the area of Sustainable Marketing

It shows that sustainable marketing has been extensively studied in sustainable consumption, sustainable production, sustainable marketing, green products, eco-innovation, and ethical consumption. Different angles are taken into consideration while studying sustainability in the area of marketing. However, sustainability has three key aspects: social, economic, and environmental.

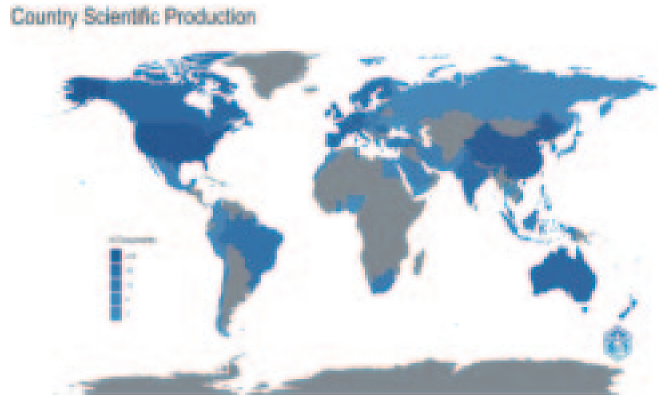

Figure 7. Country Scientific Production distribution in the area of Sustainable Marketing

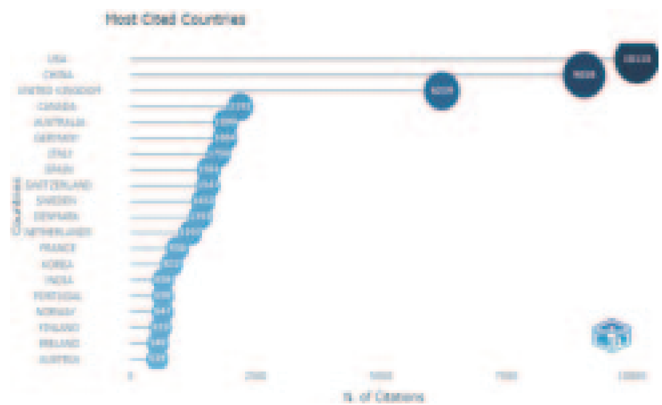

Figure 8. Top 20 most cited countries in the field of Sustainable Marketing

Analysis of Distribution Characteristics of Major Research Countries/Regions

In certain ways, the relevance and influence of a nation on sustainable marketing may be reflected in the papers published there. Between 2001 and 2021, publications were published from a total of 65 nations or regions. About 43.89 percent of all publications worldwide came from the USA, China, and the UK, indicating that these three nations are crucial to the development of sustainable marketing research. Figure 7 and Figure 8 shows that among the top 20 countries with the highest number of citations, three are Asian (China, India, Korea), and two are American (USA, Canada). Fourteen are European (UK, Germany, Italy, Spain, Switzerland, Sweden, Denmark, Netherlands, France, Portugal, Norway, Finland, Ireland, Austria), and one is Oceania (Australia). In descending order, the top five nations with the most papers are the United States (416), China (277), the United Kingdom (245), Germany (125), and Australia (82). Most paper articles are centered on developed nations like Europe and North America, demonstrating that developed nations are major players in Sustainable marketing research.

Limitation of Study

The search was restricted to the years 2001 through 2021, and the study research topic was limited to business, management, economics, and ethics. Consequently, not all publications on sustainable marketing available on the Web of Science were included in the search results. It is recommended that we use a variety of databases, such as Scopus and the Web of Science, to compare the findings of the forthcoming study. The use of bibliometric analysis with several data sources will aid in a more complete inquiry. Given that the area of study about sustainable marketing is expanding, it is essential to uncover new issues and trends related to this research topic to replicate or reproduce prior quantitative studies on the subject. However, future studies should develop a cutting-edge classification tool to better examine employment trends and developments. The biblioshiny software and bibliometrics were the sole tools employed in this study work. Therefore, dedicated VOS viewers and analytic tools may be employed in future research.

Conclusion

This study provided a quick overview of current developments in sustainable marketing research based on 978 publications from the Web of Science database. Over the past five years, publications have grown quickly, and this trend is expected to continue. We have discovered that many countries have a sizable number of publications and successful international collaborations. We also discussed several topics that are now the subject of research, including sustainability, green marketing, and consumer behavior related to sustainable development. We also discussed a few newly researched topics linked to sustainable marketing, such as sustainable consumption, eco-innovation, and green innovation, all of which may become well-liked research areas in the future.

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A Study on the Transmissions in Indian Monetary Policy

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Abstract

The Reserve Bank's ability to adjust the way its monetary policy settings affect inflation and economic activity is known as monetary policy transmission. The time and size of the economic impact are both subject to great unpredictability due to the complexity of this process. Transmission, to put it simply, happens when modifications to monetary policy have an impact on the economy's interest rates. Interest rate changes affect both inflation and economic activity. These two phases are described in this explanation along with some of the main ways that monetary policy has an impact on the Australian economy.

Introduction

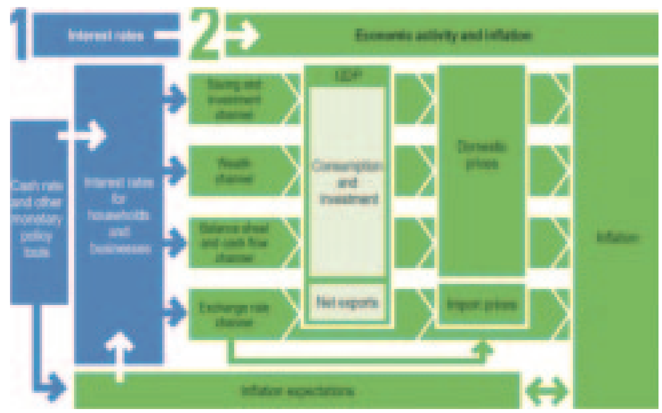
Monetary policy transmission is the method by which the central bank's policy action is carried out in order to accomplish the twin ultimate goals of inflation and growth. Customers must benefit from lower loan rates, for instance, if the RBI lowers its policy rates. The truth is that clients were not informed about monetary policy during the internal benchmark era.

A deliberate, long-term impact on the economy is required for monetary policy to be successful. A priori economic theory and some empirical evidence have both acknowledged that the three primary ways that monetary policy influences these final aims are through production, employment, and inflation. Prices or quantities on the financial market can be roughly categorised as monetary transmission mechanisms. The relative importance of each channel varies from economy to economy depending on a variety of factors including underlying structural characteristics, financial market development, available monetary policy instruments, fiscal stance, and degree of openness. Despite the fact that these channels are not mutually exclusive.

Changes in the Reserve Bank's monetary policy settings, also known as monetary policy transmission, have an effect on inflation and economic growth. Given the complexity of the process, it is difficult to predict when and how much it will affect the economy. To put it simply, the transmission can be divided into two sections.

1. Changes in monetary policy have an impact on interest rates in the economy.
2. Changes in interest rates have an impact on inflation and economic expansion.

This explanation details these two periods as well as some of the most important ways that monetary policy affects the Indian economy.



Source: Reserve Bank of Australia, Education

Stages of Monetary Policy transmission

The initial stage of transmission is focused on how adjustments to the settings of these tools impact the economy's interest rates. The market interest rate for overnight loans made between financial institutions is known as the "cash rate," and it significantly affects other interest rates, including those for personal and corporate deposits and loans. The longer-term interest rates in the economy are primarily impacted by the Reserve Bank's other monetary policy instruments.

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The economy's interest rates are guided by monetary policy, but it is not the sole determinant. Interest rates can also be influenced by other elements, including the state of the financial markets, shifts in the level of competition, and the risk involved with different forms of loans. The disparity between the cash rate and other interest rates consequently varies over time.

The transmission of short-term policy in India is significantly impacted by the repo rate. The repo rate is used to calculate the economy's interest rate (of the banking system). The financial health of the banking sector today determines how much a change in the repo rate can influence a corresponding adjustment in interest rates by banks. In this sense, India's banking system plays a crucial role in the dissemination of monetary policy. The two steps that make up the policy transmission mechanism are as follows: Key rates in the financial markets are transmitted from the policy rate. transmission through financial markets to end goals like output, employment, and inflation.

The impact of monetary policy changes on inflation and economic activity is the subject of the second stage of transmission. Consider how reduced interest rates for consumers and businesses impact the whole economy and inflation to illustrate this. (Demand and inflation respond inversely to rising interest rates.)

Aggregate Demand: Reduced interest rates encourage spending, which boosts the overall demand. However, it can take some time for the supply of products and services to adjust because it might need more personnel, resources, and infrastructure to generate them. As a result, prices first experience upward pressure since total demand initially outweighs total supply. As a result of firms raising their prices more swiftly in response to rising demand, inflation increases.

There is a lag between changes in monetary policy and their influence on economic activity and inflation because it takes time for people and companies to alter their behaviour. One to two years are thought to be necessary for monetary policy to have its greatest impact.However, because of varying economic conditions and changes in the economy's structure throughout time, these estimates are rife with uncertainty. Because of this, monetary policy's overall impacts and the amount of time it takes to have an impact on the economy are subject to change.

Inflation projection: How well monetary policy is conveyed is influenced by inflation expectations. Employees might want higher wage increases, for instance, to keep up with inflation, if they expect growing inflation. The quicker pay growth would cause inflation to soar.The central bank can aid in stabilising inflation expectations by setting an inflation target. Now that the economy is less uncertain, people and businesses should be more confidence when it comes to saving and investing.

Literature Review

Mishra and Montiel (2012) examine the data regarding the efficiency of currency transmission in developing nations. They draw the conclusion that monetary transmission appears to be inadequate in developing nations despite methodological problems inherent in the literature. According to Mishra *et al.* (2014), there are significant regional differences in how bank lending rates react to monetary policy shocks, with weaker transmission in developing nations.In-depth analysis of Indian monetary policy is provided by Mohan (2008), who also looks at reforms, the evolution of the framework, and tools for managing liquidity. A vector autoregression (VAR) model is used by Sengupta (2014) to look into the various routes of monetary transmission in India between 1993 and 2012. She finds that the Liquidity Adjustment Facility (LAFestablishment)'s in 2000 caused a structural break in transmission, with the bank lending channel continuing to be significant but the interest rate and asset price channels growing stronger as a result. Using a VAR model, Singh (2011) calculates the policy rate pass-through to various short- and long-term market interest rates from March 2001 to June 2012. Under deficit liquidity conditions, he discovers strong contemporaneous passthrough as well as large lag effects. This method has the issue of not clearly expressing the speed of transmission, which is a factor that policymakers must take into account when deciding on the policy rate, even though it assesses the impact of changes in the policy rate on other interest rates. Mohanty (2012) focuses on the interest rate channel, researching changes in policy rates all the way to how they affect output and inflation. He discovers that policy rate increases have a moderating impact on inflation with a latency of three quarters and a negative impact on production growth with a lag of two quarters after being estimated in a quarterly structural VAR model (eight to ten quarters). Bhaumik *et al.* (2011)

investigates how bank ownership affected banks' responses to monetary policy between 2000 and 2007. The authors estimate the change in loans in response to changes in PLR at the bank level using the average prime lending rate (PLR) of large banks as a proxy for the monetary policy rate. They find that during tight money periods, banks reduce loan supply in reaction to rises in PLR, and they argue that during tight money periods, the bank lending channel of monetary policy is likely to be more effective than during easy money years.However, because the authors use the prime lending rate of banks as an indicator of monetary policy, they implicitly assume that changes in monetary policy are fully and quickly passed through to bank lending rates. As a result, they overlook the possibility of a price response to monetary policy and instead concentrate on a quantity response.

Channels of Monetary Policy Transmission

Saving and Investment Channel

Economic activity is impacted by monetary policy because it alters the incentives for saving and investing. This channel frequently has an impact on corporate investment, housing investment, and consumer expenditure. 1) Lower interest rates on bank deposits lessen the incentive for households to save. However, households are more motivated to spend their money on products and services. 2) Lower loan interest rates may encourage households to borrow more money because repayments will be lower. Lower interest rates on loans hence increase demand for assets like real estate. 3) Lower interest rates could lead to an increase in company investment (on capital goods like new equipment or buildings). This is as a result of falling borrowing costs and rising demand for the products and services they offer.This makes it more likely that these initiatives will provide returns greater than the cost of borrowing, which supports moving forward with them. Businesses that borrow money to finance projects will be more directly impacted by this than those that rely on owner cash.

Cash Flow Channel

Interest rates are influenced by monetary policy, which in turn impacts how much cash is available for households and businesses to spend on goods and services. For people without access to financial resources, this is a crucial avenue (for example, those who have already borrowed up to the maximum that banks will provide). Because loan interest payments are reduced when lending rates are lowered, households and businesses have more money to spend on products and services. For households with variable-rate mortgages, for instance, a decline in interest rates reduces repayments, increasing their available income. Additionally, if interest rates decline, consumers and businesses receive less from deposits, which can lead them to reduce their expenditure. Despite the fact that these two impacts work in opposition to one another, a decrease in interest rates is anticipated to increase spending in the Indian economy through this route (with the first effect larger than the second).

Exchange Rate Channel

The exchange rate can significantly affect both economic activity and inflation in a small open economy like Australia. In sectors that are focused on exports or that compete with those that are imported, it is typically of more importance.

If the Reserve Bank lowers the cash rate, it signals a drop in Indian interest rates relative to those elsewhere in the globe (all else being equal). Lower interest rates lower investor returns on Indian assets (relative to other countries). Investors move their money to foreign assets as a result of lower returns, which decrease demand for Indian assets (as well as Indian Rupees) (and currencies). Foreign goods and services are often more expensive than those made in Australia when interest rates are lower (relative to the rest of the globe) and the currency rate is lower. Exports and domestic activity rise as a result of this. Because import prices increase when converted into Indian Rupees, a lower exchange rate also raises inflation.

Asset Prices and Wealth Channel

Wealth and asset values affect a person's borrowing capacity and economic spending. Consumption and investment are typically impacted by the wealth and asset price channels. Lower interest rates boost the demand for assets, which upholds asset values (including those for houses and stocks). One explanation is that future income has a higher current discounted value when interest rates are low.The equity (collateral) of an asset that banks can lend against increases as asset prices grow. This might make it simpler for people and companies to borrow money. People's wealth increases as asset prices rise. This could result in more consumption and housing investment since households typically spend a share of their wealth gains.The expectations channel is undoubtedly driven by the monetary authority's legitimacy.

Mechanism of Monetary Policy in India

The method by which a central bank's monetary policy signalssuch as the repo rateare transmitted to firms and people via the financial sector is known as the monetary transmission mechanism (MTM) or monetary transmission.

The repo rate is the RBI's most potent monetary policy signal, among many others. The overall interest rate in the economy changes along with changes in the repo rate. A decline in the repo rate affects the interest rates on bank loans, which promotes consumption and investment among businesses and households. Both consumption and investment are typically financed through bank loans. The repo rate channel is frequently referred to as the interest rate channel of monetary transmission since the repo rate causes changes in market interest rates.

Repo rate↓→ Interest rate↓→ Consumption, Investment↑→ Output↑→ Growth↑

The interest rate is the primary means by which monetary policy is transmitted. Similar channels include those for credit, asset prices, confidence, and so forth. The fact that central banks now routinely communicate in the form of guidelines intended to have specific consequences on the financial market is an intriguing recent development. Transmission of monetary policy in India

The transmission of policy in the Indian setting is significantly impacted by the repo rate. The anchor rate used to calculate the interest rate for the economy is the repo rate (of the banking system). Now, the financial health of the banking system determines how much a change in the repo rate can influence a matching adjustment in interest rates by banks. In this sense, the banking system plays a crucial role in the dissemination of monetary policy in India.

Significance of Monetary Policy Transmission

Monetary policy transmission has an impact on economic growth, prices, and other aspects of the economy. Bank lending rates and bond yields will rise as central banks raise the official interest rate. Central banks can influence the cost of borrowing for businesses and consumers by changing the official interest rate. Changes in the official interest rate affect the discount rates used to compute the present value of cash flows, which are used to estimate the value of securities.In the event that official interest rates were lowered, economic agents would anticipate higher lending as a consequence of reduced borrowing costs or rising asset prices as a result of lower discount rates and predictions of stronger growth. Changes in the official interest rate have an impact on exchange rates. All other things being equal, investing in a country becomes more desirable when its interest rates rise.

Challenges of Monetary Policy Transmission in India

Inflexible Funding Cost: Banks in India borrow money from the market primarily through the issuing of debentures and commercial papers, while customer deposits make up the great majority of their borrowings.The majority of these deposits are contracted at fixed rates; hence the cost of funds is often set.In addition, interest rates on small deposits remained high when measured against bank rates. Bank deposits have decreased as a result. Due to a lack of funds, banks have been unable to lend at reduced deposit rates.Banks won't be able to send monetary policy signals at the necessary speed and magnitude until and unless this problem is remedied.

Policy Rates are not linked to the market: Since the repo rate is controlled by the Monetary Policy Committee, it cannot be regarded as a rate set by the market. Regardless of the cost of lending money, banks must peg their lending rates to the repo rate.

High Level of Non-Performance Assets (NPA): The accumulation of significant NPAs has hurt bank profitability. Banks maintain the weighted average lending rate substantially higher than the marginal lending rate as a result.

Conclusion

Over the time, especially after the adoption of the external benchmark system, the Reserve Bank's attempts to enhance transmission to bank deposit and lending rates have begun to show results. The external benchmark system has encouraged banks to adjust their term and savings deposit rates, thereby broadening the scope of transmission across sectors that are not even linked to the external benchmark, as lending rates are frequently adjusted in line with the benchmark rates to protect their net interest margins. However, there are still a number of transmission barriers that must be removed right away.

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Comparative Study on Middle School Slow Learners and Their Social Adjustment on The Basis of Gender

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Abstract

Education is the manifestation already in man. There are situations in the Education System where the child is not getting opportunities to display him/her. There are advanced learners who are identified based on their performances in the class as well as in class tests and there are slow learners whose performances are below the average. Behaviour in different situations of the Slow Learners' can be studied to know the area and scope of their improvement. The objective of the present study is to identify the Slow Learners' of the middle School Level, find the social adjustment of these learners' and compare them on the basis of Gender. The sample of the data consists of 1200 middle school students from class 6th to class 8th. The scales were developed by the Researcher to identify the different categories of learners and Social Adjustment.

Introduction

It happens many times that students in regular classes fail to understand the subject, such students need extra attention in the form of remedial classes (Jimenex *et al.,* 2016). Similarly, there are exceptional advance students who need proper direction to channelize their energy (Dunn, 1963). If the categories of learners are known, then a gap between what a student knows in class and what he is expected to know can be identified (Melton, 2014). Identifying the categories of learners especially slow learners help to raise the confidence among them and helps to remove the weaknesses, a good strategy meant for slow learners helps to enhance their skills with respect the process of learning (Hartini *et al.,* 2017). Identification of slow learners and implementation of some strategies on them remove the fear of study from them and vis-à-vis efforts are made to bring slow learners and advance learners at an equal level. Slow learns can act as a creative and innovative if proper attention is given on them (Malik *et al.,* 2012).

Various strategies to identify weak students in class includes asking oral question during the classroom, through the marks obtained by them, by checking the home assignments of these students or according to their results.

Literature Review on Slow Learners and Social Adjustment

Slow Learners

Chauhan S. (2011) mentioned in his paper that still in the present scenario are not trained enough to deal with the slow learners. A need of Special Educational Programmes for advanced and slow learners. Vasudevan (2017) discussed in his paper about the need of special education, factors responsible for poor performance and suggested different ways to tutor such children.Curtis and Shaver (1980) in his book discussed about the contemporary problems which are there in teaching slow learners. Also they have discussed about various educational programs which can be included. Kaur *et al.* (2015) through this paper highlighted that how one can use technology of Data Mining in the field of Education and can find Slow Learners. The technology can also be used for future projects in education.

Social Adjustment

Weissman (1975) developed a scale for the social adjustment which was done on psychiatric patients. Spivack and Shure (1974) researched on Social Adjustment of Young children through the approach to solving real-life problems. Cavell (1990) investigated on the variables Social Adjustment, Social Performance and Social Skills and also the implications for finding the social

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competence were discussed by the researchers. Crick and Kenneth (1994) investigated the social information-processing mechanism in the social adjustment of children. Parker *et al.* (2022) worked on School Socioeconomic status and social adjustment in children.

Objectives

a. To identify Slow Learners among Middle School Learners.

b. To find the significant differences in Slow Learners based on Gender.

c. To identify the Social Adjustment of Slow Learners.

d. To find the significant differences in Slow Learners' Social Adjustment based on Gender.

Operational Definition of Variables

1. ***Slow Learners'*** are the Students with low mental ability but not disabled are known as slow learners. They are mentally challenged students and not physically challenged ones. It consists of the following dimensions: (a) Concentration (b) Retention (c) Logic Reasoning and General Knowledge (d) Language (e) Social Issues and (f) Motor Skills.

2. ***Social Adjustment:*** Social adjustment is the skill of adjusting with everyone in the society. It is possible through gaining social maturity. It consists of the below mentioned dimensions (a) Self-adjustment (b) Companionship (c) Family, Sibling and Home Interaction (d) Escape Defense Mechanism (e) Social Class and (f) Extended Family.

3. ***Middle School Learners*** refers to those students who are in their 6th grade to 8th grade.

Analysis of Results and Findings

Objective 1: Identification of Slow Learners'

Table 1: Correlation Matrix of Categories of Learners' Score and Its Dimensions

Dimensions	Concentration	Retention	Logic Reasoning and General Knowledge	Language	Social Issues	Motor Skills	Total
Concentration	1.000	0.494**	0.318**	0.420**	0.305**	0.543**	0.791**
Retention		1.000	0.235**	0.490**	0.267**	0.434**	0.710**
Logic Reasoning and General Knowledge			1.000	0.322**	0.370**	0.331**	0.605**
Language				1.000	0.265**	0.441**	0.680**
Social Issues					1.000	0.312**	0.597**
Motor Skills						1.000	0.738**
Total							1

**Significant at 0.01; Correlated Uniqueness

Table 1 reveals inter-correlations for the total score of categories of Learners' and its dimensions. Each dimension is significantly correlated with the Total Score significant at 0.01. The correlated relationship of first dimension (Concentration) and Total score is 0.791, second dimension (retention) and total score is 0.710, third dimension (Logic Reasoning and General Knowledge) and Total Score is 0.605, fourth dimension (Language) and Total Score is 0.680, Fifth dimension (Social Issues) and total score is 0.597 and sixth dimension (Motor Skills) and Total Score is 0.738. Dimension-wise scanning of these inter-correlations points out that a moderate level of correlation exists between all the factors. All dimensions are correlated significantly with each other. It can be said that the dimensions are distinct from each other and at the same time, are also related to the categories of Learners'.

Table 2: Identificationof Slow Learners

Category	Obtained Score	z-value	Number of Students
Slow Learners	Below 15	Below -0.43	353
Moderate Learners	16 - 20	-0.43 to 0.50	455
Quick Learners	20 and Above	0.50 and Above	392
		Total	1200

Figure 1: Categories of Learning

Figure 1 depicts different categories of students according to their learning ability. The data is collected using the scale of Identification of Slow Learners, the responses of the recipients were divided into three categories viz. Slow Learners, Moderate Learners and Quick Learners. Out of 1200 students at Middle School, 353 students belong to the category of Slow Learners, 455 Students belong to the category of Moderate Learners and 392 students belong to the category of Quick Learners.

The research by Kaur *et al.* (2015) predicted the students' performance as well as slow learners among them through classification technique by Data Mining.

Dibia and Ajoku (2018) found that there are slow learners in mainstream classrooms at the lower basic education levels. According to them if a teacher identified that a child is a slow learner, proper evaluation should be done to identify the weaknesses of the child. Various techniques which can help teachers to enhance slow learning behaviour are also suggested in the paper.

Table 3: Mean scores of Different categories of Learners

Categories of Learners	N	Mean	Standard Deviation	F-Value	p-value
Slow Learners	353	10.55	2.84	3342.32	0.00 < 0.05*
Moderate Learners	455	17.60	1.69		
Quick Learners	392	23.10	1.67		

* Significant at 0.05

It can be seen from the above Table that the Mean values are lowest for Slow Learners (10.55) and Highest for Quick Learners (23.1). The Standard Deviation is highest for Slow learners (2.84) and Lowest for Quick Learners (1.67). Statistically significant difference was found in all the three categories of Learners at 5% level of Significance. The obtained F Value of the data is 3342.32 ($p<0.05$). It can be seen from the data above the SD value of Slow learner is highest which shows that there are major variations within the category of Slow Learner.

Objective 2: To classify the Middle School Slow Learners and its dimensions on the basis Gender

Table 4: Mean score values of Slow Learners and its Dimensions on the basis of Gender

Dimensions	Male(N=172)	Female(N=182)	t-value	Obtained p-value	p-value
CL1: Concentration	2.23	2.10	4.49	0.035	< 0.05*
CL2: Retention	1.25	1.21	1.71	0.191	> 0.05
CL3: Logic Reasoning and General Knowledge	2.17	2.25	0.04	0.843	> 0.05
CL4: Language	0.99	0.87	5.34	0.021	< 0.05*
CL5: Social Issues	2.64	2.57	0.60	0.438	> 0.05
CL6: Motor Skills	1.53	1.31	0.34	0.558	> 0.05
Total	10.81	10.31	2.03	0.083	> 0.05

The above table reflect the Mean score values of Slow Learners along with its six dimensions viz. Concentration, Retention, Logic Reasoning and General Knowledge, Language, Social Issues and Motor Skills. No significant difference is found on the Total Score of Slow Learners on the basis of Gender. For the analysis done of the Dimensions of Slow Learners, a significant difference was found in the two dimensions viz. Retention and Language. The obtained t-value for these two dimensions Concentration and Language are 4.49 ($p < 0.05$) and 0.021 ($p < 0.05$) where the other dimensions are not statistically significant. Under both the above dimensions male students are having more scores compared to the female students.

The analysis depicts that male slow learner are having better concentration and language as compared to girl learners i.e. it supports the societal condition of our country that male students are being prioritized by their parents and more focussed gives to male students as compared to girl.

According to the Researcher Logic Reasoning and General Knowledge are high in girl slow learners while proves that the skill which are caused by oneself can't be changed.

Further the analysis states that Social issues and Motor skills are better in male slow learners as compared to female students, because male students have the family and society preference, so they get better opportunity in social issues and motor-skills.

Guruvaiah (2020) found in her research, no significant difference in Academic Achievement Motivation of Slow Learners on the basis of Gender. Similar results were found by Rana and Sangwan (2017) on 4-6 years old Slow learners' children.

For the dimension of Retention, no significant difference was found in Gender by Ajai and Imoko (2015) in their study related to Mathematics Achievement and Retention scores.

As far as dimension of language of students is concerned, Shakouri and Saligheh (2012) found in their research that from social perspective, there is no doubt that different genders have diverse tendency toward participation in public by using the language skills.

Objective 3: To study the level of Social Adjustment of Middle School Slow Learner

Table 5: Correlation Matrix of Social Adjustment and Its Dimensions

Dimensions of Social Adjustment	Extended Family	Family Siblings and Home Interaction	Social Class	Self-Psychology	Escape/Defence Mechanism	Total
Extended Family	1.000	0.736**	0.363**	0.561**	0.682**	0.894**
Family Siblings and Home Interaction		1.000	0.485**	0.505**	0.610**	0.891**
Social Class			1.000	0.345**	0.325**	0.617**
Self-Psychology				1.000	0.662**	0.712**
Escape/Defence Mechanism					1.000	0.786**
TOTAL						1.000

**Significant at 0.01

Correlated Uniqueness

Table 5 reveals inter-correlations for the total score of Social Adjustment and its dimensions. Each dimension is significantly correlated with the Total Score significant at 0.01. The correlated relationship of first dimension (Extended Family) and Total score is 0.894, second dimension (Family Siblings and Home Interaction) and total score is 0.891, third dimension (Social Class) and Total Score is 0.617, fourth dimension (Self-Psychology) and Total Score is 0.712 and Fifth dimension (Escape/Defence Mechanism) and total score is 0.786. Dimension-wise scanning of these inter-correlations points out that a moderate level of correlation exists between all the factors. All dimensions are correlated significantly with each other. It can be said that the dimensions are distinct from each other and at the same time, are also related to the Social Adjustment.

Table 6: Mean Scores of Social Adjustment on the basis of Categories of Learners

Categories of Learners	N	Mean	Standard Deviation	F Value	p-value
Slow Learners	353	115.82	26.94	118.54	0.00 < 0.05*
Moderate Learners	455	122.27	33.30		
Quick Learners	392	149.96	36.57		

* Significant at 0.05

Table 6 presents the scores of Social Adjustment of Middle School Students under different categories of Learners. It can be seen from the above table that there is a statistically significant difference found in the scores of Socail Adjustment under three categories viz. Slow Learners, Moderate Learners and Quick Learners. The obtained F-value is 118.54 ($p<0.05$) through ANOVA at 5% level of Significance.

Objective 4: To evaluate the Social Adjustment and its dimensions of Middle School Slow Learners on the basis of Gender

Table 7: Mean Score of Social Adjustment of Middle School Slow Learner on the basis of Gender

Dimensions	Male	Female	t-value	Obtained p-value	p-value
SA1: Extended Family	39.32	35.59	2.190	0.140	> 0.05
SA2: Family Siblings and Home Interaction	28.59	25.03	0.656	0.418	> 0.05
SA3: Social Class	19.44	18.66	0.460	0.498	> 0.05
SA4: Self-Psychology	17.25	15.84	1.46	0.228	> 0.05
SA5: Escape/Defence Mechanism	16.71	15.53	0.373	0.542	> 0.05
Total	121.30	110.66	0.19	0.663	> 0.05

From the above table it can be revealed that there is no significant difference in Social Adjustment of Middle School Slow Learners on the basis of Gender. All the obtained p-values for the Total Score of Social Adjustment of Slow Learners and the five dimensions of Social Adjustment are above 0.05. It can be observed from the above that thought there is no statistical significant difference in the Social Adjustment score of Middle School Slow Learners on the basis of Gender, but under all the dimensions and in total score the male students score higher then female students. This shows that male slow learner students of middle are more socially adjusted compared to female slow learner students at middle school.

Mishra (2020) found no significant difference in Social Adjustment of Male-Female students, but still the mean value of male students was higher than that of female students. Statistically significant differences were found in Social Adjustment on the basis of Gender and Male students of Secondary School are found to be more adjusted then the female students (Bhagat, 2016).

Researcher finding support the general though process of encouraging the male learners' right from the family members and in society. The society still provide the more privilege to male children.

Findings

Correlation Matrix of the categories of Learners' score and its dimensions were found where all the dimensions were correlated significantly with each other. All the dimensions are distinct from each other and are related also.No significant difference was found in the slow learners' on the basis of Gender. The score of Male slow learner student was found to be significant in the dimensions of Concentration and Language. Correlation Matrix of Social Adjustment and its dimension were found where all the dimensions were correlated significantly with each other. All the dimensions are distinct from each other and are related also.No significant difference was found in the Social Adjustment of slow learners' and on its dimensions based on Gender.

Conclusion

It can be concluded that there are different categories of learners at Middle School Level. Slow Learners, Moderate Learners and Advanced Learners. Identification of learners' is important to make the decisions in the class regarding the improvement of the performance of the students. Slow learner students once identified, various remedies can be applied on them which included arranging separate classes for them, help them through personal attention on difficult topics, conducting easy class tests to motivate them, explanation of topics with practical examples, explaining the topics from basics, etc. Social Adjustment of Slow learners' also need to be studied to help them to overcome the problems they face in their regular life.

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Socio-Cultural Perspective of Education among Gujjars of Jammu and Kashmir: A Study of Rajouri District

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Abstract

Gujjar community is the third-largest community in the Union Territory of Jammu and Kashmir which constituted 11.9% of the entire population of J&K (Census 2011). Studies reveal that the social status of these indigenous people in the Rajouri district is changing slowly and gradually but not to a very satisfactory level. Socially, Gujjars are following old traditions, rituals, and customs. The majority of them hold superstitious beliefs, which obstruct them to transform and uplift their society towards modern education. Apart from this Poverty, lack of Awareness, corruption and lack of accountability, negative teacher attitude, and illiteracy are responsible factors creating hindrance to achieve their goal. This study has adopted the qualitative method. The purposive sampling technique was used to select the sample of 30 gujjar pastoralist students, 10 parents and10 teachers. The constant comparative method was used to analyse the data. The emerged themes for the socio-cultural perspectives of education among Gujjars are "native values", "attitude towards education", "community involvement", "the role of family", "demographic", "academic aspiration", "diffusion process".

Introduction

Jammu & Kashmir (J&K) is India's only UT with a predominantly Muslim population. According to the 2011 Census, Islam is practised by about 68.3% of the state's inhabitants, while Hinduism is practised by 28.4%, and the rest of the minorities practise Sikhism (1.9%), Buddhism (0.9%), and Christianity (0.3%). A multitude of tribal clans have been established in Jammu and Kashmir, and they have been found in all regions of Union Territory. Various tribes occupy Jammu, Kashmir, and Ladakh region, contributing to both the Union Territories' unique and distinctive ethnic culture. In both the Union territories of J&K and Ladakh, the Scheduled Tribes account for 11.9 percent of the total population. The twelve tribes of Jammu and Kashmir are the Gujjars, Bakarwals, Balti, Beda, Bot, Brokpa, Changpa, Garra, Mon, Purigpa, Gaddi, and Sippis, with a population of 7,63,806, among all these 12 tribes Gujjars are the most populous tribe with 69% population of J&K. The origin of the word " Gujjars" has many connotations. One of them is that the word Gujjar is derived from two Sanskrit words: "Gur" which means "enemy" and "Jar" which means "destroyer" (Sanskrit dictionary "Shakabada" p.1181) and Guggars in this context refers to the: Destroyer of the enemy community. Another connotation is the word "Gauchar" which means the person who grazes cows, however, it is not supported by any solid evidence. According to Jammu and Kashmir's tribal research and culture foundation, the word "Gujjar" comes from a Central Asian Turkic language and they are settled in different areas of Jammu and Kashmir. According to G.S. Ghurye, a well-known sociologist, the word Gujjar comes from their main occupation, which is cattle raising. According to Majumdar, a tribe is a collection of families or groups of families who share a common name, speak the same language, and live in similar manners and who are sharing their language which is known as 'Gojari'. According to the Vatsayan, tribes have their common terrain, language, culture, sense of belonging, and ties in blood relations. Keeping in view the nature and structure of tribal society, it is very pertinent to understand their socio-cultural perspectives.

Socio-cultural perspectives are larger-scale dynamics within societies and cultures that influence an individual's attitudes, behaviours, and feelings. Language, law, aesthetics, religion, values, attitudes, social organizations, family, community, and a person's role or status are examples of sociocultural factors. These difficulties might become highly crucial for every nation because it must aim its promotions based on the socio-cultural aspects in education at hand because an individual cannot be considered in isolation from their social and historical context therefore it is necessary to look at the society and its development in the field of education at a

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given period of time. The education of tribal Children is intrinsically linked to their social, cultural, economic, and geographical conditions and they are facing many issues and challenges at the elementary level of schooling because the social, cultural, economic, and geographical conditions do not allow them to attend the traditional schools (Iqbal & Misra, 2021). Keeping in view these concerns in education the present paper is an attempt to examine the Socio-Cultural Perspective of Education among the Gujjar community in Rajouri District of Jammu and Kashmir. It is based on both primary and secondary sources of data.

Socio-Cultural Theorists and seminal psychologist Lev Vygotsky emphasized that parents, caregivers, peers, and the culture at large were responsible for the development of higher-order functions. In this context, the present study of the socio-cultural perspective of education among Gujjars of Jammu and Kashmir is taken to further discuss, analyze and elaborate how the socio-cultural perspective is a silhouette to understand the Gujjar community.

Profile and Cultural Identity of The Gujjars of J&K

To understand the cultural identity and distinctive characteristics of tribal clans of Jammu & Kashmir, we must explore them categorically one by one. There are 12 tribes in Jammu and Kashmir, Gujjar, Bakarwal, Balti, Beda, Bot, Brokpa, changpa, Garra, Mon, Parigpa, Gaddi, Sippiamong them Gujjars constitute 69.1 percent total scheduled tribes population of Jammu and Kashmir. The Gujjars are a well-known pastoral semi-nomadic people. They got their name from Gujarat, where they came from before moving to Jammu and Kashmir. They are spread over the Rajouri, Poonch, Srinagar, Anantnag, Pulwama, Doda, Kishtwar, Jammu, and all other parts of the Union Territory of Jammu and Kashmir. The location where they reside and travel in search of pasturage has a chilly environment with low humidity, low rainfall, thin trees, and medium to heavy snowfall throughout the winter. The Pir Panjal and Himalayan hills surround the area, which is hilly. The language of Gujjar is Gojri.

Review of The Related Literature

The study "Educational attainment and social awareness of Gujjar and Bakkarwal boys of Srinagar district- A comparison between hostellers and non-hostellers" by Baba, A.R. (1992) revealed that boys in hostels obtained a higher percentage of marks than those who did not. The hostel group showed a much greater degree of health and hygiene knowledge than the non-hostel groups. J. Rahi (2011) uncovered the beginnings of the Gujjar tribe, their tribal identity, and the Gujjar community's history in a systematic manner. The author also examined Gujjar political empowerment in J&K. Mitra (2008) explored the status of women among India's scheduled tribes, and concluded that tribal women are less educated than other women and that gender equality among tribal communities is a complicated phenomenon. Umer (2011) found in his study, which was conducted on five tribal villages in Anantnag district, that the government, volunteer groups, NGOs, social reformers, and social scientists have all been concerned about the development of India's tribal people. However, we are still no closer to discovering a solution after six decades. Things appear to be even more tangled than they were previously. Many schemes have been planned and implemented, but none have met their objectives. Tribal life has deteriorated in the majority of the cases. Suri, K. (2014) observed that the seasonal educational schools for the nomadic people in Jammu and Kashmir are in bad condition and lack sufficient infrastructure, that stationary is not delivered on time, and that the seasonal school students do not have access to mid-day meals. She also mentioned in her study that one of the main causes of indigenous children's scholastic under-achievement is poverty. However, it is very difficult to find good literature on the socio-cultural perspective of education among the Gujjar community of Jammu and Kashmir. The Sarva Shiksha Abhiyan's J and K appraisal report (2010), in particular, examines the UT's progress over the last few years. Out-of-school children, children with special needs, gender inequities, and data errors have been mentioned in the evaluation report as sources of concern. In terms of out-of-school children, the report states that the "State does not have any mechanism to identify out-of-school children; this reflects an urgent need to conduct a new household survey." Out-of-school children's coverage and mainstreaming is a major issue that requires quick attention. Children from nomadic tribes (Gujjar and Bakkarwal) are most likely to suffer difficulties in their educational pursuits. Given that the state's most recent SSA assessment still highlights certain fundamental flaws, as stated above, it's reasonable to assume that the most pressing issues affecting universalization of elementary education in the Union Territory have not yet received the attention they require.

Objectives

1. To study the Socio-Cultural Perspective of Education among Gujjars of Rajouri District.

2. To give some suggestions and recommendations for the development of Gujjar community with reference to School Curriculum.

Methodology

For the present study both primary as well as secondary data sources are used. The focused group discussion, interview and interaction with community members, parents, teachers, and students have been done to collect the primary data. Secondary data is collected from relevant books, journals, government offices, census of India reports 2001 and 2011.

Sample

The researcher has collected the data of 30 Gujjar pastoralists students of Rajouri District. This study also constituted the sample of 10 parents and 10 teachers. The 2 Focus Group Discussions was also conducted. Purposive sampling technique was used to select the Rajouri district for the present study

Tools

As per the need of the study, the researcher used semi structured interview which is based on the existing reviews of related studies.

Data Analysis Procedure

The researcher used constant comparative analysis to categorize that data collected through interviews and focus group discussion.

Results & Discussions

Table 1. Block wise Gujjar Population of Rajouri District

S.No	Block	% GujjarPopulation
1	Rajouri	45.30
2	Manjakote	36.30
3	Nowshera	14.80
4	Kalakote	33.50
5	Budhal	52.50
6	Darhal	41.20
7	Sunderbani	6.90
	Rajouri District	20 percent

Source: Kumar, 2018

The population distribution data in table-1 shows that the Block Budhal of Rajouri district having 52.50% of Gujjar population which is having highest number of population as compare to other blocks of Rajouri District. Most of the Gujjars residing in Block Budhal which is located near Peer Panchaal Region a hilly area where these people practicing their livelihood activities.

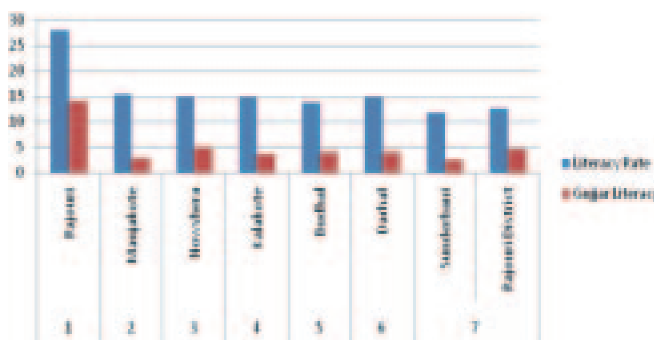
Table 2. LiteracyRate of Gujjars Blockwise in Rajouri District

S.No	Block	Literacy Rate	Gujjar Literacy
1	Rajouri	28.1	14.1
2	Manjakote	15.7	2.9
3	Nowshera	15.2	5.3
4	Kalakote	15.0	3.7
5	Budhal	14.0	4.1
6	Darhal	15.0	4.2
7	Sunderbani	12.0	2.7
	Rajouri District	12.8	4.7

Source: Kumar, 2018

The data in table-2 reveals that the literacy rate of Gujjars in Rajouri district is 4.7 which is very less thanthe Union Territory's average as shown in the following figure.

Fig. 3. Literacy Rate of Gujjars Blockwise in Rajouri District



The cultural heritage of the Gujjars is extensive. Their culture differs from that of other communities in terms of traditions, customs, rituals, dressing styles, and art and craft, however, this varies from place to place within the community. They have their language, Gojri, which is descended from Indo-Aryan. Gujjars are generally vegetarians, and their favorite dishes include "Maki, Bajra ki Roti," Ganhar, Sarssoon ko Sag, Lassi, Kalari, Karan, and others. Gujjars dress differently than the rest of the population. They always wore their traditional clothing. It is also observed and analyzed that Gujjars are more passionate about their traditional heritage and cultural endowments, these distinctive cultural identities make them fearful in accepting amalgamating with other cultures which have been observed as one of the major challenges in the advancement of the Gujjar community. The Gujjar community is a much-closed society and they accept the traditional way of living and education most favourable for their society. However, a clear Fieldale distinction has been observed that most of the educated parents are having attraction towards the modern system of education. Keeping in view the mobility nature of tribal communities, the mobile school was opened for them and the majority of the parents prefer to send their wards to mobile schools. Mobile schools are those formal and flexible institutions that allow for the mobility of students and teachers specifically designed to fulfill the needs of the Gujjar and Bakarwal migrant communities of Jammu and Kashmir.

The study also engaged with the stakeholders' school-going children, out-of-school children, teachers, and community members to elicit their observations and opinions towards education.

Factors that are interconnected elements that constrain and hinder children's engagement in schooling in a variety of ways based on what we've learned so far in this process of inquiry and reflection. In this context, the following observations have been found during the present study.

The major themes emerged from the data which are as follows:

Socio-Cultural Perspective of Education among Gujjars

Native Values

During the interviews and Focus Group Discussion with Gujjar pastoralists it was found that the curriculum does not respect their diversity and Gojri language. Sometime Gujjars pastoralists find themselves hesitant in speaking in front of the teachers because of the language barrier. They feel more comfortable when someone talk in their own language at the school premise. However they express that most of teachers prefer English and Hindi language in the classroom. They do not respect their local language.

Attitude towards Education

During the interviews and FGD, it was found the Gujjars Pastoralists parents are not having any have positive attitude towards education and they feel that whatever education they are getting is enough. They do not having any educational aspiration also. They find that cattle rearing are the main profession, and in that profession there is no need of education. Education is secondary for them. The immediate earning, breed and butter is most important and they involve their wards in domestic work especially cattle rearing. The parents believe that even the teachers are not doing their duties as per the principle of teaching profession in schools and their children education socialization is neglected in the schools.

One of the parent said that *"teacher ko poochne wala koi nhi hai, humhare baccho pai dhyan nhi diya jata hai".*

Aspiration of Students

The interview with the Gujjar Pastoralists students in Rajouri District reveal that they have future career goals like Doctors, Teachers, Layer etc. They have big dreams in their eyes but due to prevalent of traditional culture like early marriage etcand livelihood relying on domestic work and bad socio economic conditions immensely influences the educational aspiration of Gujjar students.

As tohiba, one of the tribal students in Rajouri district admitted openly: *"mai likh padh kar doctor bna chathi hu but jo mere ghar ke halat hai wo muhje mere dreams pura krne se rokte hai".*

As nisar, one of the tribal students in Rajouri district stated that: *"jo hmara cattle rearing ka paisaa hai, or sume mai apne parents ko support krnai lga or mere parents nai meri shaddhi 20 saal ki umr mai kra di".*

Nature of Diffusion Process

During the Interviews with Gujjars pastoralists it was reveal that *Seasonal mobility is another reason which is absolving the Gujjars community from achieving the goal of education.*

Impact of Family

During the interviews and focus group discussion, with Gujjar Pastoralist students it was reveal that most of their parents are illiterate and their family indulged them in the domestic work. The support of families for the education has been very less and need to bring awareness programmes for the same.

One of the interviewee said that *"ghar ki halat ko dekhte hwe hum pdai nhi ker pate hai kyunki humara parivaar bhot gareeb hai or school ka kherchaa nhi cha pata".*

One of the responded replies that *"garmiyo mai hmare dhera dohk mai chalai jatai hai, mal maweshiyo ko leke jiske wje se humara school 6 months ke liye choot jata hai".*

Impact of Govt program

During the interviews with Gujjars pastoralist, it was found that, now the initiative has been taken by govt and somewhat changes are being witnessed in the education sector. However there is lot of efforts need to be done.

One of the interviewee admitted that *"Humare liye Government ne mobile schools open krwae thai, lekin wo functional nhi hai".*

Another responded stated that *"Mid-day meal properly humhe nhi milti hai or koi aesi scholarship nhi di jatti hai jise hum apne education ko continue ker ske".*

Schools Adaptability

During the interviews and observation it was found that long distance of the school, lack of roads and bridges, lack of enough schools in their vicinity forces tribal students hinders their studies in half way. The lack of hostel facilities also contribute in their stopping studies after primary education, due to distant institutions requiring tedious travel through forests and hills.

Community involvement

During the interviews and FGD with teachers, it was found that parents are not having academic participation in the school activities like PTM. They do not have any academic interaction with teachers regarding the educational progress of their wards.

Demographic impact

During the interviews and FGD, it was reveal that Gujjars students revealed that they face barriers to full access to school due to the topographical state of the area and the need to relocate for seasonal migration.

Language

During the interview with Gujjars students it was mentioned that as a group we suffer from having one language at home and another at school. We are not able to follow the curriculum; and sometime faced language barrier in Interaction with the teachers and classmates which alienating us with each other and failing to understand what is being taught. It was also mentioned that they are demanding inclusion of Gojri as a compulsory subject in the school curriculum

One of the Gujjars tribal students stated that *"hum chahtai hai schools level pai gojari subject padaya jaye taki, hum subject ko acche se samaj paye".*

Recommendations

Based on the analysis and observation of the present study following recommendations have been Suggested for School Curriculum:

- Curriculum must be based on tribal, cultural propensity.
- Tribal cultural heritage must be embedded.
- As Gujjar and Bakarwals are closed communities so the curriculum for these tribals' students must focus upon understanding the self and others, once beliefs, values, emotions, need, and aspirations.
- Subjects should be included in the school curriculum like the History and development of Gujjar communities, Culture of tribal
- Keeping in view the native language of Gujjars that is 'Gojri' should be taught and included in the mainstream formal education system at the national level, it will create awareness among the tribal Gujjars and also bridge the gap of education among tribals.
- Pace Setting Schools in the line of Navodaya Vidyalyas especially for tribal students giving due place to Gujjar Community.
- It is necessary to pursue the construction of research centres of excellence in diverse areas of local relevance, which should be associated with existing universities and institutions of national significance.
- Provision of more agricultural resources, Milk Dairy, Cattle Farming plants should be opened for these indigenous people so that they can get benefitted from these resources for their professional, socio-economic, and Socio-cultural development.
- To expand the number of institutions and the teacher-to-student ratio.
- Infrastructure should be expanded in order to improve education.
- Quality education should be ensured.

Apart from these all cultural laws should be explained to children honestly and scientifically, and policymakers should address community quality if there is to be an improvement in student accomplishment, because a child's community has a significant impact on the child's learning. Efforts should not be focused solely on the individual child, but also on the community, because a child's experience outside of the classroom will boost teaching and learning in the classroom. There is a need to raise the issue of children's education with their parents and the Gujjar community in which they live. Not only do parents need to think more deeply about their children's education, but there also has to be a more structured form of mobilization and participation among parents and community members. While this may aid in the mobilization of parents and local indigenous communities, we must also consider the possibilities of impacting family-related factors like poverty. The above all concerns need serious attention. Working closely with and mobilizing local communities, will eventually serve to create demand for transparency and improved performance by teachers, officials, and others. In other words, the more 'public' education becomes, the better; encouraging investigative media reporting on critical issues affecting children's participation towards education.

Conclusion

Finally, it can be concluded that the Gujjars' majority population is mostly involved in cultural activities as evidenced by their social structure. It also recognises that Scheduled Tribes are, in some ways, repositories of indigenous knowledge and wisdom. Results of the present study indicated that Gujjars are more connected and linked with their traditional occupational activities and as compare to the other scheduled tribe communities of J&K, Gujjars have a low literacy rate and they are more deprived or negligible towards education which needs to be addressed. Despite that the population's engagement in secondary and tertiary education has been limited due to a lack of educational awareness and modernization. The disparities in stakeholders such as parents, children, teachers, and state representative's views on education are enough to indicate that much rethinking is required in terms of beliefs, attitudes, and actions for educating children. These disparities and varied viewpoints provide fertile ground for parents, community members, teachers, children, and the state to work toward convergence and shared understanding. Only by working together will we be able to overcome the limits and hurdles listed below:

- Family related factors like poverty.
- School related factors like inadequate infrastructure and lack of trained teachers
- Governance factors like corruption and lack of accountability
- Geographical factors like seasonal migration towards hilly areas for their livelihood practices which do not allow the Gujjar community to continue their children's education.

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A Study of the effect of Digital Advertising on Consumer Perception towards buying the products

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Abstract

With increasing internet literacy, the prospects of online marketing are on the rise. Each and every netizen is a potential consumer in the cyber space. Since there is clutter of brands online, the most important thing while advertising their brand for marketer is to understand what the consumer wants and needs in this competitive scenario and how to gain the attention of customer and influence buying. Customer buying behaviours are influenced by different factors such as culture, social class, references group, family, income level, age, gender etc. In today's digital world, advertisers have seized the opportunity to use online data about consumers to personalize and target advertisements. Such data is captured from websites visited, articles read, and videos watched, as well as everything searched for within a search engine. This phenomenon is called online behavioural advertising. This study attempts to investigate the effectiveness of online advertisements and effect of internet advertisements on consumers buying behaviour. The study also examines the respondents' views on online advertisements. A questionnaire was prepared after conducting a relevant literature review and research survey was conducted online. The study assessed the buying decisions of consumers based on the primary qualitative data. The findings of the study showed that the internet advertisements with all the characteristics including in-formativeness, interactivity, irritation and entertainment effects the consumer buying behaviour.

Introduction

Advertising could be a promotional activity for selling a goods. within the contemporary world of production and distribution, advertising is a robust tool within the selling machinery. Completely different producers manufacture similar styles of merchandise. They face the competition within the market. Each producer is attempting to form demand for his product. Advertising helps the manufacturer to extend his sales or maintain his market. It's solely through correct advertising that a brand-new product may be introduced within the market.

Advertising is that the suggests that of informing additionally as influencing the overall public to shop for product or services through visual or oral messages. A product or serviceis publicized to make awareness within the minds of potential consumers. A number of the unremarkably used media for advertising are T.V., radio, newspapers, magazines, bill-boards, net etc.

Advertising plays a big role in today's extremely competitive world. Ehether or not it's brands, companies, personalities or perhaps voluntary or non-secular organizations, all of them use some variety of advertising so as to be ready to communicate with the target market. As a result of economic relaxation and therefore the dynamical social trends, advertising trade has shown rising within the recent past.

Advertising, the techniques and practices accustomed bring merchandise, services, opinions, or causes to public notice for the aim of persuading the general public to retort in an exceedingly bound means toward what's publicized. Most advertising involves promoting an honest that's available, however similar ways square measure accustomed encourage folks to drive safely, to support numerous charities, or to vote for political candidates, among several different examples. In several countries advertising is that the most significant supply of financial gain for the media (e.g., newspapers, magazines, or tv stations) through that it's conducted. Within the non-communist world advertising has become an oversized and necessary industry.

The great growth of business within the nineteenth

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century was among the expansion of Associate in Nursing advertising industry; it had been that century, primarily within the u.s., that saw the institution of advertising agencies. The primary agencies were, in essence, brokers for area in newspapers. However, by the first twentieth century agencies became concerned in manufacturing the advertising message itself, as well as copy and design, and by the Twenties agencies had acquire being that would arrange and execute complete advertising campaigns, from initial analysis to repeat preparation to placement in varied media.

Advertising developed in an exceedingly kind of media may be the foremost basic was the newspaper, giving advertisers massive circulations, an audience set on the brink of the advertiser's place of business, and therefore the chance to change their advertisements on a frequent and regular basis. Magazines, the opposite chief print medium, is also of general interest or they will be aimed toward specific audiences (such as individuals fascinated by out of doors sports or computers or literature) and supply the makers of merchandise of specific interest to such individuals the prospect to create contact with their presumably customers. Several national magazines publish regional editions, allowing a lot of selective targeting of advertisements. In Western industrial nations tv and radio became the foremost pervasive media. Though in some countries radio and tv area unit state-run and settle for no advertising, in others advertiser's area unit ready to get short-spots of your time, typically a second or less in period. Advertising spots area unit broadcast between or throughout regular programs, at moments typically such that by the advertiser and typically left up to the broadcaster. For advertisers the foremost necessary facts a couple of given tv or radio program area unit the scale and composition of its audience. The scale of the audience determines the number of cash the broadcaster will charge associate advertiser, and therefore the composition of the audience determines the advertiser's selection on once a precise message, directed at aprecise phase of the general public, ought to be run. The opposite advertising media embody junk, which might build an extremely careful and personalized appeal; out of doors billboards and posters; transit advertising, which might reach the voluminous users of mass-transit systems; and miscellaneous media, together with dealer displays and promotional things like matchbooks or calendars.

In the twenty first century, with an intensely competitive client market, advertisers progressively used digital technology to decision larger attention to merchandise. In 2009, for instance, the world's initial video advertisements to be embedded in a very print publication appeared in recreation weekly magazine. The skinny powered screen constituted within the page may store up to forty minutes of video via chip technology and mechanically began to play once the reader opened the page.

For a billboard to be effective, its production and placement should be supported a data of the general public and a talented use of the media. Advertising agencies serve to orchestrate advanced campaigns whose ways of media use area unit supported analysis into shopper behavior and demographic analysis of the market space. A method can mix creativeness within the production of the advertising messages with smart planning and placement, in order that the messages area unit seen by, and can have an impression on, the folks the publicized most needs to handle. Given a set budget, advertisers face a basic choice: they'll have their message seen or detected by many of us fewer times, or by fewer folks repeatedly. This and different strategic selections area unit created in lightweight of tests of the effectiveness of advertising campaigns.

There is no dispute over the ability of advertising to tell shoppers of what merchandise ar offered. In an exceedingly free-market economy effective advertising is important to a company's survival, for unless shoppers fathom a company's product, they're unlikely to shop for it. In criticism of advertising, it's been argued that the patron should obtain the price of advertising within the type of higher costs for product; against now it's argued that advertising permits goods to be mass marketed, thereby transferal costs down. It's been argued that the price of major advertising campaigns is such few companies will afford them, so serving to these companies to dominate the market; on the opposite hand,whereas smaller companies might not be ready to contend with larger ones at a national level, advertising at the native level or on-line permits them to carry their own. Finally, it's been argued that advertisers exercise AN undue influence over the regular contents of the media they employ–the editorial stance of a newspaper or the topic of a program. In response it's been discovered that such influence is counteracted, a minimum of within the case of financially sturdy media companies, by the advertiser's reliance on the media to convey a message; any compromise of the integrity of a media firm may lead to a smaller audience for the advertising.

Online Advertising

Source: https://ads.google.com/GoogleAds

The history and evolution of advertising industry

An advertising company may be a doubtless terribly eminent and pleasant business, however provided that done properly. Advertising promotion is older than most of the people assume, and here may be a temporary history of advertising corporations.

There square measure four terribly authoritative inventions that have formed the media and therefore the advertising trade–the machine, radio, tv and also the net. The machine created the wide dissemination of knowledge with words on paper doable, chiefly advertisements in newspapers and magazines. Merchandising material had to be created and advertising agencies were born.

The first agency, Volney B. Palmer, was opened in Philadelphia in 1841 .By 1861 there have been twenty advertising agencies in big apple town alone. Among them was J. director Thompson, nowadays the oldest Yankee agency in continuous existence. Radio became an advert medium within the Twenties.

For the primary time, advertising may well be detected, not simply seen. Soap operas, music, and serial adventures inhabited the new medium, and as radios appeared in just about each point America, sales of merchandise publicized on the air soared. Advertisers hurried to jot down infectious advertising jingles, associate kind that also has its place within the advertising repertoire of nowadays.

Then tv modified everything. Though TV was made-up within the Twenties, it did not become a mass business medium till the Fifties once the costs of tv sets began to approach affordability. Print and radio had to require a back seat as a result of, for the primary time, commercials were broadcast with sight, sound and motion.

The impact of the television on the advertising trade and therefore the manner merchandise was oversubscribed was exceptional. Advertising agencies not solely had to be told a way to turn out these mini movies in units of thirty and sixty seconds, they'd to be told to effectively section the audience and deliver the proper advertising to the proper cluster of shoppers.

Cable tv was following nice innovation, giving a bigger style of channels with a lot of specific program offerings. That allowed advertisers to narrowcast. Before the appearance of cable tv, the networks tried to achieve demographics by airing at totally different times throughout the printed amount. Soap operas were broadcast throughout the day to achieve girls, news within the evening to achieve associate older audience.

Cable tv, on the opposite hand, brought with it channels like MTV that catered to young music lovers, ESPN, for (typically) male sports fans, and therefore the Food Network, for people that love preparation (or a minimum of like to watch others cook). These new advertising channels were pleasant for advertisers World Health Organization needed to focus on bound audiences with specific interests, the less therefore for the networks World Health Organization saw their share of ad revenue lessen.

Advertising could be a promoting maneuver involving paying for area to market a product, service, or cause. The particular promotional messages area unit referred to as advertisements, or ads for brief. The goal of advertising is to achieve individuals possibly to be willing to get a company's merchandise or services and stimulate them to shop for.

The advertising business is formed of firms that publicize, agencies that make the advertisements, media that carries the ads, and a number of individuals like copy editors, visualizers, complete managers, researchers, inventive heads and designers World Health Organization take it the walk to the client or receiver. An organization that must advertise itself Associate in Nursing/or its product hires an ad agency. The corporate briefs the agency on the complete, its imaging, the ideals and values behind it, the target segments and then on.

The agencies convert the ideas and ideas to form the visuals, text, layouts and themes to speak with the user.

Features of Advertising

The features of advertising are as follows:

1. **It's a paid style of communication:** Advertisements seem in newspapers, magazines, tv or cinema screens as a result of the advertiser has purchased some area or time to speak info to the potential customers.
2. **It's a non-personal presentation of message:** There is no face-to-face contact with the purchasers. That's why, it's delineated as non-personal accomplishment. it's a non-personal style of presenting merchandise and promoting concepts and it supports personal commercialism. It simplifies the task of sales-force by making awareness within the minds of potential customers.
3. **The aim of advertising is to push plan concerning the merchandise and services of a business:** It is directed towards increasing the sale of the merchandise and services of a business unit.
4. **Advertisement is issued by an identified sponsor:** The identity of the business person issues the advertising should be disclosed. Non-disclosure of the name of the sponsor in info could cause distortion, deception and manipulation. Advertising ought to disclose the sources of opinions and ideas it presents.

If you want to form the advertising effective, invariably keep in mind to incorporate it from the research time. Research can facilitate to spot the niche phase of the population to that the merchandise or service should be targeted from an oversized population. It'll conjointly determine why the niche phase would elect the merchandise or service. This info can function a tenet for the preparation of advertising campaigns.

Once the niche segments are known and therefore the determination of what forms of advertising are used is completed, then the advertising management focuses on making the specifics for the cause. If it's a radio campaign, which kind of ads would be used, if it's a print campaign, what write ups and ads are used, and if it's a tv campaign, what kind of commercials are used.

There may also be a combination and match advertising within which radio would possibly supplement tv advertising so on. It's vital that through advertising management the image is sent that everyone the methods complement one another. It mustn't look to public that the radio advertising is that specialize in one thing else whereas tv on one thing else. The full method within the finish ought to profit the merchandise or service.

The role of individuals planning the cause is crucial to its success. They need been trained by seasoned professionals United Nations agency offer the coaching within the specific field. Planning Associate in Nursing cause is not any tiny a task and to grasp the buyer behavior from the information collected from research may be a vital side of the campaign.

A whole heap of ability Associate in Nursing inspiration is needed to launch an adequate cause. Additionally, the management skills get play once the work should be done keeping the large image in mind. It'd be fruitful for the corporate if the cause lasts spill the time period of a product or service, reach the correct customers, and generate the specified revenue.

Literature Review

Advertising could be a selling plan of action involving paying for area to push a product, service, or cause. The particular promotional messages area unit known as advertisements, or ads for brief. The goal of advertising is to succeed in folks possibly to be willing to procure a company's merchandise or services and stimulate them to shop for.

Finding Your Ideal Customers

When attempting to zero in on the kinds of individuals United Nations agency are a lot of probably to wish or want your product or services, and be willing to deal hard-earned money for it, you may explore demographic characteristics, such as:

- Gender
- Age
- Education level
- Income level
- Zipcode

By a lot of exactly process United Nations agency your target client is, you'll be able to higher select advertising vehicles which will reach a lot of your target customers for fewer cash. Sure, you'll be able to get a rich ad within the Wall Street Journal, for instance, however if your best customers board the western Bean Town suburbs, you'll be able to get ads in native papers there for much less.

The end user of this product is chain store wherever the appliance is hosted on the net and therefore the administrator maintains the info. The appliance that is deployed at the client info, the main points of the things are brought forward from the info for the client read supported the choice through the menu and the database of all the product are updated at the top of every dealing. Information entry into the application will be done through numerous screens designed for numerous levels of users. Once the approved personnel feed the relevant information into the system, several reports can be generated as per the safety.

Objectives of the Study

1. To resolve the satisfaction level of the client for on-line purchase.
2. To recognize the particular reasons that customers purchase on-line looking.
3. To resolve the consumers' satisfaction level for services provided by the online shopping.
4. Makes company to additional concerning current trend and needs.

Scope of the Study

1. To recognize their complete loyalty.
2. To understand that purchase sort folks like most.
3. To resolve the explanation for purchasing product.
4. To resolve the worth, vary that folks like most.
5. To recognize that options they admire in their product.

Where to Advertise

Traditional advertising retailers embody newspapers, magazines, TV and radio stations. Today, however, advertisements square measure placed nearly every place and any place, including:

- Roadside billboards
- Sides of buildings
- Websites
- Electronic newsletters
- Print newsletters
- Inside bills
- Product packaging
- Restaurant placemats
- Event bulletins
- Store windows
- The sides of cars and trucks
- Subway automobile walls
- Airport kiosks
- Sporting arenas
- YouTube videos

Creating Effective Ads

Advertising messages themselves area unit designed to influence a personal to shop for a company's product or services. Even in business-to-business transactions, people ought to 1st be convinced to decide on one product over another. To accomplish this, ads have 5 main components:

- **Headline-** this is often the key attention-getting message. –Got milk? –may be an excellent headline. Or Wendy's recent, –Where's the beef?
- **Subhead-** Some ad headlines want clarification, very similar to a book's subtitle.
- **Body copy-** The meat of the advertising message happens within the main section wherever the merchandise or service's options and advantages area unit highlighted.
- **Image-** Unless you're advertising on the radio, as well as a product pic, or image illustrating a key profit is essential.
- **Call-to-action -** At the top of the ad you would like to ask the patron to require a step towards doing business with you, like business a fee variety, visiting an internet site, texting a particular variety, or propulsion into the drive-thru window.

While advertising is that the solely thanks to guarantee that your message are going to be seen or detected, it's overpriced by comparison to alternative promoting ways. For that reason, it's a lot of popular massive firms and types than tiny businesses.

Consumer Buying Behaviour

The Behavior Reading

By scrutinizing the method of customers undergoing the ultimate getting call, the marketers will acknowledge, categorize, and reach their specific target selling areas, that provides them a foothold to find wherever and the way exactly to advertise, and most conspicuously, to whom to focus on advertising. Thus, by meticulously grouping, analyzing, storing, and utilizing the behavior pattern of customers, their structural and behavioral characteristics, physiological and temperamental peculiarities, and alternative idiosyncrasies that drive them to form selections, and by utilizing their past behavior, they will properly predict the long run important behavior.

Buying activities

The shopping for behavior is that the most complicated combination of culture, temperament, socio-economic standing, geography, and exposure to varied circumstances. just in case an instantaneous question is asked to shoppers relating to their shopping for tendencies and habits, they forever prove inadequate to explain attributable to many influences that cultivate their shopping for choices that go a lot of on the far side the management of shoppers, and even their recollection and recognition. Most of the time, the shoppers fail to totally comprehend however, why, and what very influences them, and what internal, psychological, and external factors induce them to form specific getting choices, by choosing a particular product, like what they ordinarily do.

Consumer buying trends and behavior

The most vital client shopping for behavior study. He analyzed the impact generated by the previous shopping for expertise and also the decision-making behavior whereas buying recent foods, specifically mussels. He structured the equation model therefore on acknowledge the link between the previous shopping for expertise, traditional habits whereas taking the buyer shopping for call. His findings indicated that the non-public habits at the side of the previous experiences of customers definitely have associate degree absolute impact on the buying choices of customers whereas giving the instance of recent mussels buying.

He any discovered that the merchandise image generates a stimulating impact on the buyer buying choices and he any emphasized with sure counseled to produce a superb product image to perpetually improve its attractiveness, encourage, and induce individuals therefore on attract the customers toward buying.

They conducted another study to gauge the influence the patron picks the packaging method for FMCG–fast-paced commodity. The target was to assess the packaging impact of the method of decision-making shoppers of low-income in retail retailers. A selected survey methodology was used thus on hit the ultimate objective. This distinct survey was conducted within the Centerville city Hyper Star edifice, wherever 260 respondents participated. The analysis findings indicated that the shoppers of low-income derived further preferences concerning the premium packaging as a result of, the packaging can be more used once the merchandise gets consumed, although the findings indicated associate degree insubstantial relationship between the whole expertise and products packaging. But it absolutely was established from the analysis findings that the shoppers of low-income had a lot of whole expertise as they'd many times purchased premium whole product whereas evaluating their overall expertise once shopping for the cheaper vary of name product.

The 5 section Methodology utilized in the buyer decision-making procedure has been wide accepted. Customers offered completely different tendencies and inclinations toward the five-phase definitions, all of them showed a typical read, because, they delineated the phases in an exceedingly similar manner. As specified the five-phase shopper, creating selections and processes elaborate as mentioned below:

1. Problems that require recognition
2. Searching for Information
3. Evaluation of any alternatives
4. Making buying decisions
5. After purchase analysis.

They any expressed that there's a desire for the popularity to occur as a result of several circumstances and factors like skilled work and conditions, personal life and its surroundings, and therefore the style of living, that after ends up in the event of intentions and concepts to buy.

Post purchasing decision

Eventually, the post-purchasing selections involve many experiences relating to the buyer approach, thinking strategies, outlook, attitude, and opinions relating to the ultimate purchases. Even supposing the importance and worth of each part don't seem to be extensively highlighted by many authors, they au fate that this could be may be the foremost vital phases within the procedure of client deciding, as a result of it directly impacts and significantly affects the acquisition stages of shoppers of the similar or same product and repair, by getting within the future, from a similar provider.

The mode of advertising and client shopping for strategies square measure reticulate to grasp the suitable product to get and therefore the fundamentals of ad that generate sizable impact on each shopping for call individuals build and therefore the traditional procedure through that the buyer behave and take the choice, that is imperative within the initial stages of developments in advertising and promoting communication styles.

Data Analysis & Interpretation

Data Analysis

The Indian advertising trade has evolved from being a small-scaled business to a full-fledged trade. The advertising trade is projected to be the second quickest growing advertising market in Asia when China it's calculable that by 2018, the share of ad pay in India's Gross Domestic Product (GDP) are going to be around zero. 45%

The Indian government has given tremendous support to the advertising and selling trade. Advertising expenditure is probably going to extend within the money sector, driven by bank of Bharat (RBI) policies that might end in a lot of favorable business surroundings. Also, planned licenses for brand spanking new banks and higher market sentiments render the advertising and selling trade in Bharat a fertile house.

Print contributes a big portion to the entire advertising revenue, accounting for nearly 41.2%, whereas TV contributes 38.2%, and digital contributes 11% of the entire revenue. Outdoor, Radio and Cinema compose the balance 10%.

- Flipkart, India's largest e-commerce market place, has re-entered the non-public label business by launching sensible get, with a read to spice up earnings and fill gaps in its product choice.

- The Indian Railways is functioning on a replacement advertising policy aimed toward putting in one hundred, 000 huge digital screens at a pair of, 175 railway stations across the country, that is predicted generate Rs eleven,770 crore.

- Snapdeal.com, one among India's largest and quick growing e-commerce corporations, has non heritable Targeting Mantra (Insightful Pvt. Ltd), that could be a Gurugram-based selling and personalization services company, as a part of its commit to enhance the expertise for its customers.

- As firms explore for higher productivity and increasing efficiencies in an exceedingly powerful market atmosphere, research firm Nielsen has launched its initial client neurobiology research laboratory in Asian country at its city headquarters. The neurobiology research laboratory can augment the company's analysis capabilities in packaging and analysis, rising their effectiveness.

- Tata Motors has appointed noted participant Lionel Messi because the world whole ambassador for Tata cars and utility vehicles globally, with associate degree aim to faucet the youth market and expand visibility and presence of Tata Motors in newer markets.

- Advertising agency J music director Thompson has launched its world digital agency network 'Mirum' in India which is able to give services like strategy and consulting services, campaigns and content, expertise and platforms, analytics and innovation and merchandise development, with the target to extend non-traditional media revenues to 40-45% from 35% presently.

- DDB gesture cluster has planned to launch _ Track DDB', a whole that addresses the data- led world of promoting communications, which can offer services like inventive, information and digital analytics, information selling, CRM, digital and mobile selling in India.

- All Bharat Radio (AIR) has appointed_releaseMyAd' as a virtual agency to let advertisers book ads for all of AIR's station on-line.

- Google is prepared to assist Asian nation implement Prime Minister adult male Narendra Modi's "Digital India" initiative, and also the government includes a well setout conceive to realize it, aforesaid Google's Chief net Evangelist adult male Vinton G. Cerf. Digital Asian nation is Rs one. 13 trillion government initiative that seeks to remodel the country into a connected economy, attract investment in physics producing, and make various jobs and support trade.

- As corporations search for higher productivity and increasing efficiencies during a robust market surroundings, research firm Nielsen has launched its 1st shopper neurobiology laboratory in India at its Mumbai headquarters. The neurobiology laboratory can augment the company's analysis capabilities in packaging and analysis, rising their effectiveness.

Data Collection

Primary data

Questionaries

Secondarydata

- Book
- Television
- Websites
- Online survey

Data Analysis

Descriptive Statistics

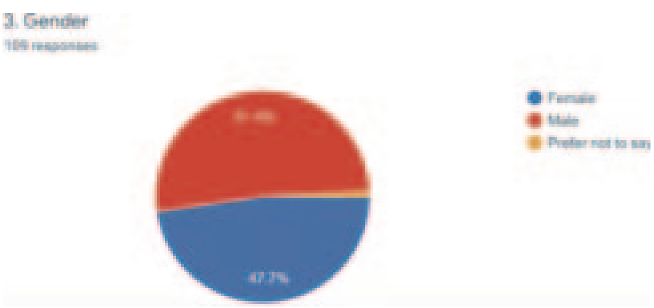
The analys is for this study is based on 109 respondents. Among them, 51.4% were male respondent and 47.7% female respondent. Interm of gender, among the 109 respondents who participated in the survey.

Your Name?

City/State

Gender

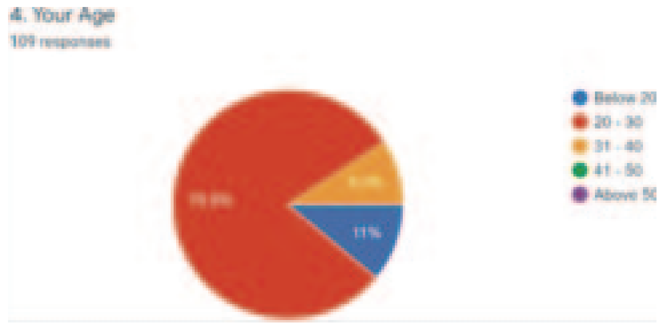
S.No	No of Respondent	%of Respondent
1. Female	52	47.7%
2. Male	56	51.4%
3. Prefer not to say	01	0.9%



We have surveyed on 109 respondents. Among them 47.7% Female and rest 51.4% Male.

Your Age

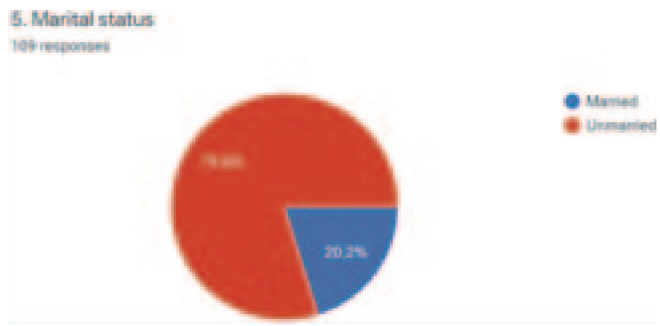
S.No	No of respondent	% of respondent
1. Below 20	12	11%
2. 20-30	87	79.8%
3. 31-40	10	09.2%
4. 41-50	-	-
5. Above 50	-	-



According to age survey 11% of respondents below 20,79.8% of respondents below 20-30 & 09.2% are 31-40.

Marital Status

S.No	No of respondent	% of respondent
1. Married	22	20.2%
2. Unmarried	87	79.8%



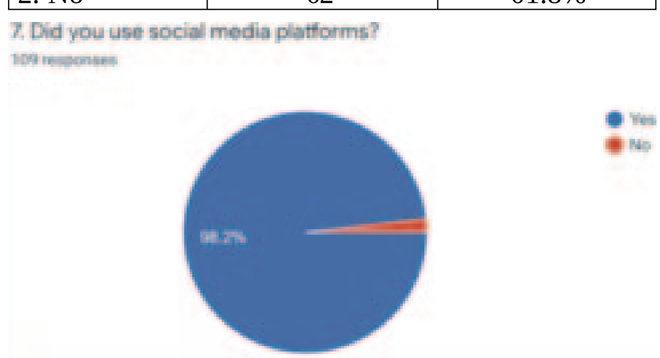
What is your current occupation?

S.No	No of respondent	% of respondent
1. Student	47	43.1%
2. Employed	25	22.9%
3. Self-employed	24	22%
4. Retired	-	-
5. Other	13	11.9%

According to occupation 43.1% students, 22.9% employed, 22% self-employed and 11.9% others.

Did you use social media?

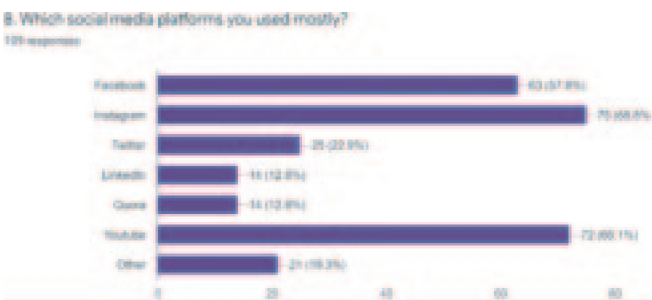
S.No	No of respondent	% of respondent
1. Yes	107	98.2%
2. No	02	01.8%



According to 98.2% respondents use social media and 01.8% not used.

Which social media platforms you used mostly?

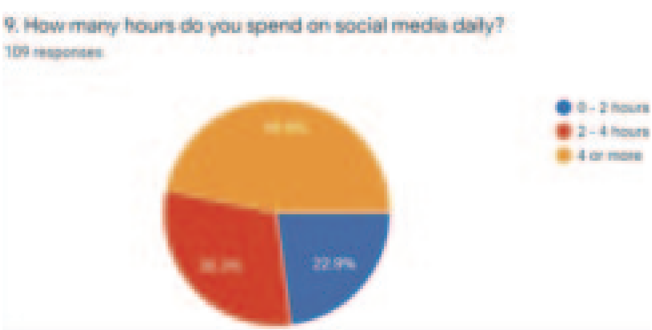
S.No	No of respondent	% of respondent
1. Facebook	63	57.8%
2. Instagram	75	68.8%
3. Twitter	25	22.9%
4. LinkedIn	14	12.8%
5. Quora	14	12.8%
6. YouTube	72	66.1%
7. Other	21	19.3%



According to respondents 57.8% use Facebook, 68.8% Instagram, 22.9% Twitter, 12.8% LinkedIn, 12.8% Quora, 66.1% YouTube and 19.3% use other platforms.

How many hours do you spend on social media daily?

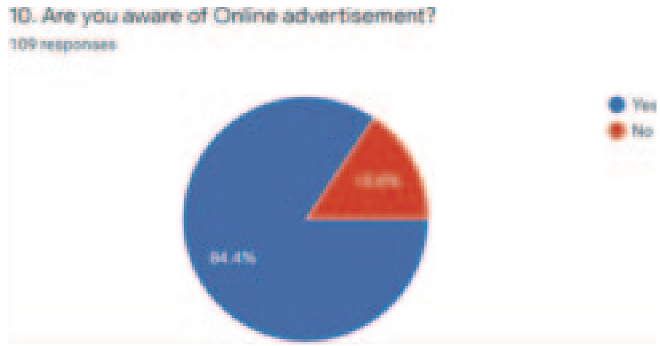
S.No	No of respondent	% of respondent
1. 0-2 hours	25	22.9%
2. 2-4 hours	33	30.3%
3. 4 or more	51	46.8%



Are you aware of Online advertisement?

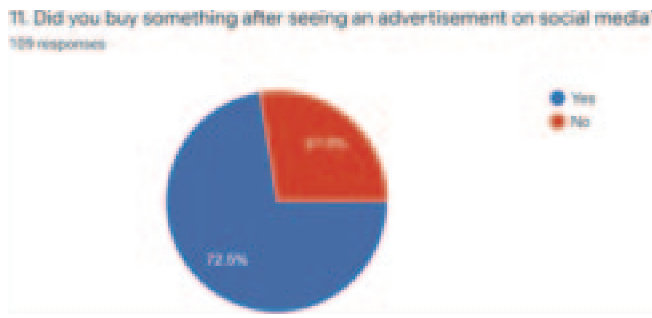
S.No	No of respondent	% of respondent
1. Yes	92	84.4%
2. No	17	15.6%

According to survey 84.4% respondents aware of online advertisement and 15.6% are not aware.



Did you buy something after seeing an advertisement on social media?

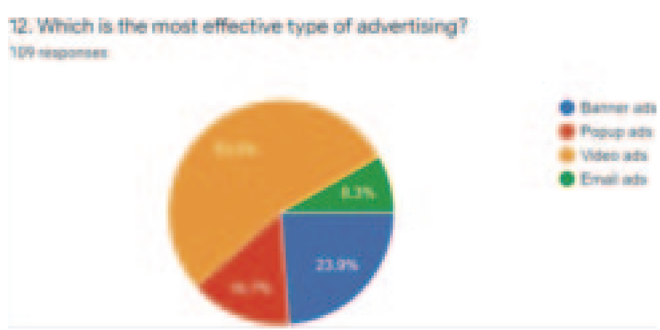
S.No	No of respondent	% of respondent
1. Yes	79	72.5%
2. No	30	27.5%



According to survey 72.5% respondents buy something after seeing an advertisement and 27.5% not influence by advertisement.

Which is the most effective type of advertising?

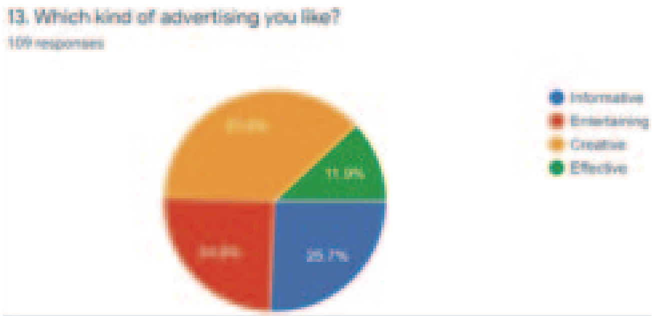
S.No	No of respondent	% of respondent
1. Banner ads	26	23.9%
2. Popup ads	16	14.7%
3. Video ads	58	53.2%
4. Email ads	09	08.3%



Effective type of advertisement 23.9% Effected by banner ads, 14.7% popup ads, 53.2% video ads and 08.3% email ads.

Which kind of advertising you like?

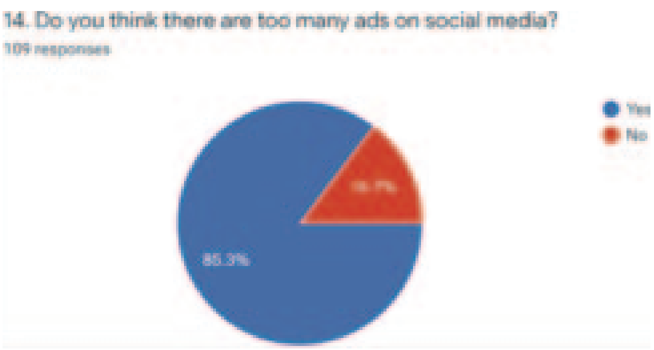
S.No	No of respondent	% of respondent
1. Informative	28	25.7%
2. Entertaining	27	25.8%
3. Creative	41	37.6%
4. Effective	13	11.9%



According to survey 25.7% like informative advertisement, 25.8% entertaining, 37.6% creative and 11.9% effective advertisement.

Do you think there are too many ads on social media?

S.No	No of respondent	% of respondent
1. Yes	93	85.3%
2. No	16	14.7%



According to survey 85.3% viewers think too many ads on social media and 14.7% are not.

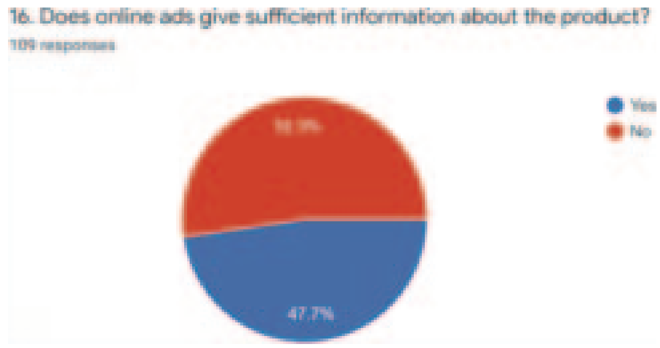
Does advertisements influence your purchasing decision?

S.No	No of respondent	% of respondent
1. Yes	80	73.4%
2. No	29	26.6%

According to survey 73.4% respondents' advertisements influence there purchasing decision and 26.6% are not influenced by them.

Does online ads give sufficient information about the product?

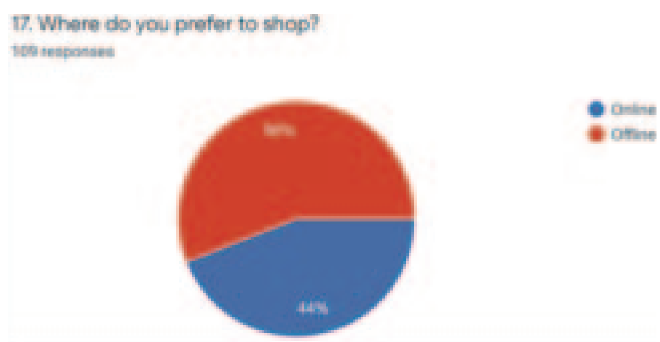
S.No	No of respondent	% of respondent
1. Yes	52	47.7%
2. No	57	52.3%



According to survey 47.7% people said advertisements give sufficient information about the product and 52.3% said no.

Where do you prefer to shop?

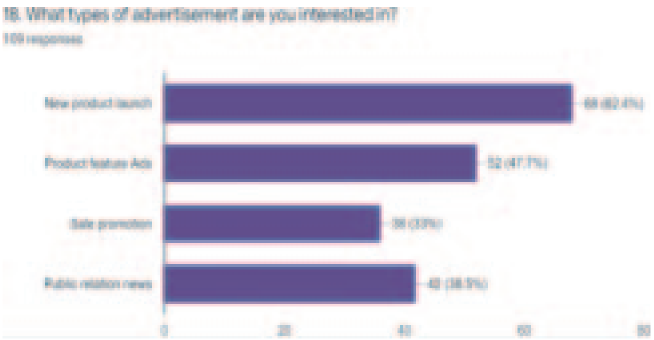
S.No	No of respondent	% of respondent
1. Online	61	56%
2. Offline	48	44%



56% people prefer to shop online and 44% prefer offline shopping.

What types of advertisement are you interested in?

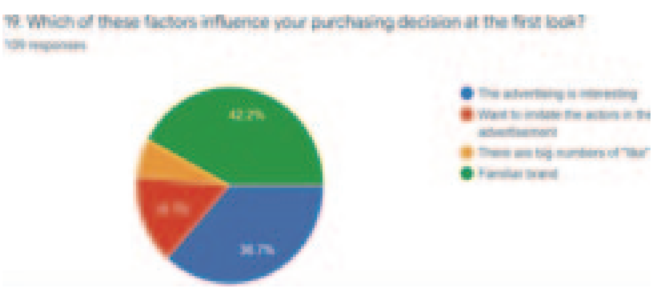
S.No	No of respondent	% of respondent
1. New product launch	68	62.4%
2. Product features ads	52	47.7%
3. Sale promotion	36	33%
4. Public relation news	42	38.5%



People are interested in type of advertisement 62.4% new product launch, 47.7% product features, 33% sale promotion and 38.5% public relation news.

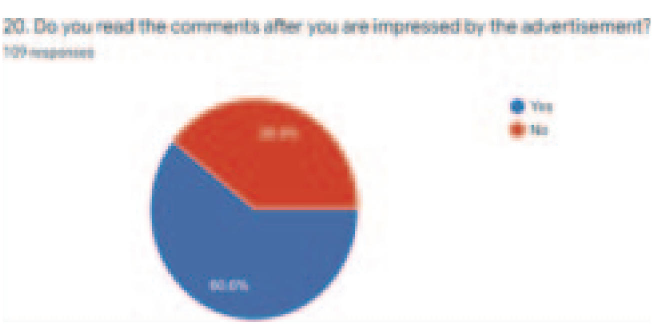
Which of these factors influence your purchasing decision at the first look?

S.No	No of respondent	% of respondent
1. The advertising is interesting	40	36.7%
2. Want to imitate the actors in advertisement	16	14.7%
3. There are big numbers of like	07	06.4%
4. Familiar brand	46	42.2%



Do you read the comments after you are impressed by the advertisement?

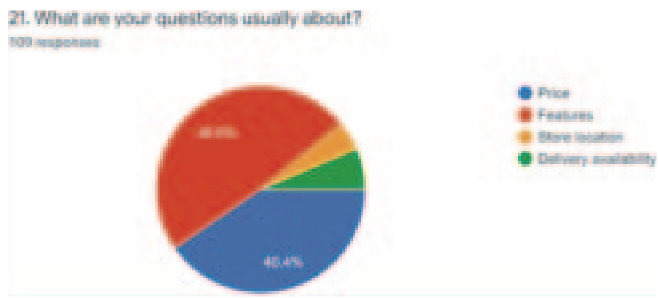
S.No	No of respondent	% of respondent
1. Yes	66	60.6%
2. No	43	39.4%



According to survey 60.6% people read comments after impressed by advertisements and 39.4% people not.

What are your questions usually about?

S.No	No of respondent	% of respondent
1. Price	44	40.4%
2. Features	53	48.6%
3. Store location	05	04.6%
4. Delivery availability	07	06.4%



40.4% people wants to know about the price of the products, 48.6% features, 4.6% want to know store location and 6.4% delivery location.

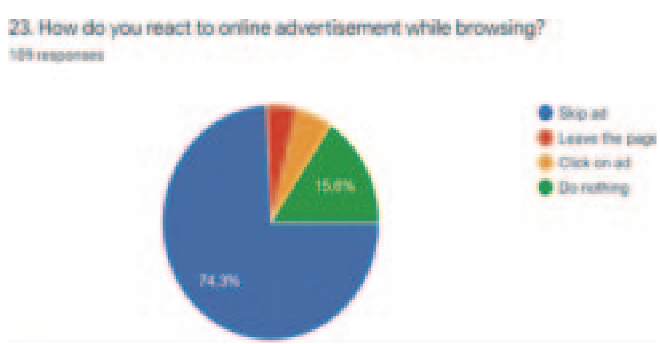
From your point of view, what can online advertisement be improved to help you in reaching decision?

Ans:-

How do you react to online advertisement while browsing?

S.No	No of respondent	% of respondent
1. Skipad	81	74.3%
2. Leave thepage	05	04.6%
3. Clickon ad	06	05.5%
4. Do nothing	17	15.6%

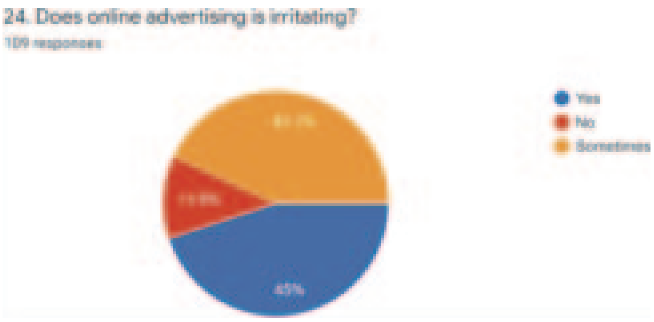
According to survey 74.3% people like to skip ads, 4.6% leave the page, 5.5% click on ad and 15.6% people do nothing.



Does online advertising is irritating?

S.No	No of respondent	% of respondent
1. Yes	49	45%
2. No	13	11.9%
3. Sometimes	47	43.1%

According to respondents 45% people said online advertising is irritating,11.9% not agree with that and 43.1% said sometimes ads irritated them.



What do you expect from an online advertisement?

Conclusion

This analys is was as tudyon the impact of publicity on consumer buying behavior. For this purpose, four freelance variables, recreationin publicity, Familiarity of publicity, Social Imaging in publicity and publicity disbursal were thought-about. based mostly on the analysis it will be over that publicity has important impact on client shopping for behavior. This study may be useful for marketers to know what triggers a consumer's intention to get. They will confirm that part in advertising is most effective and that has relatively lower impact. Though this analysis will build important contribution to literature except for future study qualitative knowledge may be used. Qualitative knowledge can give any insight into the connection among these variables.

For factors that affect consumers while shopping online, and that affect satisfaction, they consider that convenience, and trust are the most important variables, the next which are important for them are prices and quality of products. Those variables are the most essential ones for consumers when they decide to shop online. Also, according to results, if there is a good consumers previous experience, if consumer is satisfied with products and services, and if there is risk at minimum level than he will buy more in the future, which means he will be loyal. Web design and delivery time are not important for consumers while doing online shopping purchases. Online shopping is getting popularity in the young generation such as students and professionals. Students usually prefer to buy goods from its original source and they mostly prefer online shopping. When a consumer to make purchases online to buy something, he or she is affected by assorted factors. The main Influencing factors have been identified as, price, confidence, security, convenience, time, after sale service and discounted deals. The price factor exists because the prices are often lower through online shopping as compared with physical purchases in the market. Buy online can be of great benefit to the consumer in terms of convenience, saving time and money.

Limitations of the Study: Although the target of the study is met, however still there are some limitations of the current study.

1. Firstly, the study conducted is restricted to on-line shoppers of urban center.
2. Secondly, the ranges of variables hand-picked for the current study are few in number.
3. Finally, the results are subject to common limitation of accuracy of response.
4. Most of the consumers have experienced online shopping.
5. The preferred product of online shopping is travelling tickets and clothing remains the least preferred choice of online shoppers.
6. Among the payment option, Payment on delivery through case in the safest choice of payment, while credit card is next preferred choice, online bank transfer is least preference choice.
7. Most of the consumers who have experienced online shopping are very satisfied.

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Infrastructure Facilities Available in the Primary Schools of Ahmedabad

*Dr. Jyoti Rupinkumar Raval, **Dr. Yesha M. Bhatt

Abstract

The quality of infrastructural facilities in primary schools plays a pivotal role in shaping the educational environment and fostering an effective learning experience. The Government of India has time and again set the parameters to strengthen the base of the Indian education system by providing a variety of schemes for primary schools. This study aims to comprehensively analyze the range and impact of infrastructural resources available in primary schools located in Ahmedabad. By examining various dimensions such as building facilities, classroom amenities, technological integration, sports equipment, and sanitation facilities, the research assesses the availability of all these facilities along with the overall well-being of the primary school setting. To achieve this goal, the study will adopt a quantitative analysis and survey method through a checklist. The data will be collected from almost forty schools of Ahmedabad with a convenient sampling method. The findings highlight the status of well-equipped classrooms, advanced technological resources, and hygienic amenities in promoting a conducive learning atmosphere. The implications of this research offer valuable insights for policymakers, educators, and stakeholders to prioritize and invest in the development and maintenance of robust infrastructural facilities, ultimately fostering an enriched and holistic educational experience for young learners.

Introduction

Gujarat stands as a pivotal hub for various industries and is widely recognized as one of the nation's most industrialized states. Hosting a diverse range of industries, Gujarat also boasts some of the country's esteemed educational institutions. The state's education department places particular emphasis on enhancing elementary education, implementing initiatives such as the district primary education program, which mandates free primary education for all students up to a specified age limit and aims to reduce dropout rates in Gujarat schools.

Primary schools play a foundational role in introducing children to the academic realm, requiring essential facilities and infrastructural support for students to adapt and thrive in such educational environments. To address this need, the Government of Gujarat has introduced several schemes for the education sector in the 2023-24 budget, allocating a substantial amount of 43,651 crore rupees. Among these schemes is the P M Poshan Yojana, a Centrally Sponsored Scheme known as the 'National Programme of Nutritional Support to Primary Education (NP-NSPE)' launched on August 15, 1995. This initiative aims to boost enrollment, attendance, and retention while simultaneously improving the nutritional status of children.

Furthermore, Gujarat has implemented various schemes such as Swachch Bharat Swachch Vidhyalaya (Clean India Clean Schools - 2014), Gyan Saptah in 2014, which involves cleaning school campuses by groups of students. The Swa-Shikshan initiative allows students to run classrooms and teach in schools, while Samullas includes morning rallies against intoxicants and tree plantation activities. Other events like fancy dress competitions, patriotic group songs, mono-acting, and drawing competitions are part of the initiative, along with Sanman, which involves the felicitation of retired teachers in schools by teachers, village members, school management committee representatives, and trustees. These are several activities which can help students to grow in society with moral values and with basic discipline.

Table 1: Literacy rate in Gujarat and India

No.	Year	Gujarat	India
1	1951	21.81	18.33
2	1961	31.47	28.30
3	1971	36.95	34.45
4	1981	44.92	43.57
5	1991	61.29	52.21
6	2001	69.14	64.84
7	2011	78.00	73.00

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In 1951, Gujarat had a literacy rate of 21.81%, while India's overall literacy rate stood at 18.33%. By 1961, there was an improvement in both Gujarat and India's literacy rates, reaching 31.47% for Gujarat and 28.30% for India. In 1971 and 1981, the literacy rates continued to rise, The upward trend persisted in 1981 too. Notably, in 1991, there was a significant leap in literacy rates, with Gujarat reaching 61.29%, surpassing India's overall rate of 52.21%. The positive trajectory continued into the 2001 census. (Socio-Economic Review, 2021; Socio-Economic Review, 2022; Socio-Economic Review, 2023)

By the 2011 census, both Gujarat and India experienced further improvements, with Gujarat reaching a literacy rate of 78.03%, exceeding India's overall rate of 69.30%. This indicates a consistent and commendable growth in literacy rates in both Gujarat and the country as a whole over the years. This shows the efforts of the government and the contribution of stakeholders in Gujarat. The literacy rate is increasing continuously and a good learning environment is needed. For enhancing the learning environment, along with a good teaching staff, infrastructural facilities are also needed. With good infrastructure, teachers can teach with all their capacities and students can learn in a better way.

Table 2: Number of Institutions in Primary Education in Ahmedabad

Year	Government	Local Bodies	Aided/ Unaided	Total	Exclusively for girls
2019-20	419	818	1770	3007	64
2020-21	389	788	1750	2927	59
2021-22	378	781	1751	2910	51

As per the reports of Socio-Economic Review from 2019 to 2023, in Ahmedabad, there are 378 total number of government primary schools. There were a total 419 number of primary schools in 2019-20, and it has decreased in 2020-21 (389) and is decreasing even more in the current year. In these government schools there are several facilities being provided by the government and based on those facilities this study has been conducted.

Infrastructure Facilities in Educational Institutions

In primary government schools, essential infrastructure is indispensable to ensure a conducive learning environment. The necessity of each facility is underscored by the following provisions: sturdy and well-constructed buildings, well-maintained classrooms, hygienic and accessible toilets, reliable drinking water facilities, spacious playgrounds for recreational activities, secure boundary walls for safety, fully equipped classrooms, well-maintained staff rooms, functional chemistry labs, extensive libraries, dedicated prayer rooms, and comprehensive sanitation facilities. Each of these components plays a crucial role in fostering a holistic and effective educational experience for students in primary government schools. (DeshGujarat, 2014)

Objectives of the study

1. To study the infrastructural facilities of primary schools in Ahmedabad
2. To examine the sanitation facilities of primary schools in Ahmedabad
3. To examine the classroom facilities of primary schools in Ahmedabad
4. To examine the Mid-Day Meal, Kitchen garden and kitchen facilities available in the primary schools in Ahmedabad
5. To examine the teaching staff related facilities available in the primary schools in Ahmedabad

Sources

The primary data is collected from the principles and teachers of primary schools in Ahmedabad district through a checklist. The secondary data is collected from the District Census Handbook of Ahmedabad, Census of India 2011, and Socio-economic review 2022-2023 Gujarat State. (Socio-Economic Review, 2023)

Research Methodology

This study employed quantitative data collection through a checklist. The sample selection was carried out through a convenient sampling method and the primary schools of Ahmedabad district were selected as the study samples. First a checklist was prepared, then it was sent for the piloting study, after getting approval, the checklist was shared to the principals and teachers of primary schools.

To conduct the quantitative analysis of the checklist data, the statistical package of the social science (SPSS) software was integrated. Percentage and frequency were calculated to provide comprehensive data. After getting the data, a comprehensive analysis was done.

Availability of Infrastructure Facilities in Schools-Survey results

To check the availability of the infrastructural facilities in the primary schools of Ahmedabad district, the checklist was prepared comprising five different divisions: building facility, classroom facilities, mid-day meal facilities, facility for teachers and hygiene-related facilities. In this research teachers and principals from forty primary schools of Ahmedabad have participated. All teachers have mentioned the facilities their primary school contains.

Table 3: Designation

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Principal	8	12.7	12.7	12.7
	Permanent Teacher	52	82.5	82.5	95.2
	Assistant Teacher	1	1.6	1.6	96.8
	Temporary Teacher/Gyan Sahayk/ Pravasi Shikshak	1	1.6	1.6	98.4
	CRC	1	1.6	1.6	100.0
	Total	63	100.0	100.0	

As per table number 6.1 it can be observed that among the respondents, more than 80 percent are the permanent teachers from different primary schools in Ahmedabad districts. Along with this, a total of eight principals have participated in the survey.

Table 4: Building facilities

No.	Building facilities	No		Yes		Total
		Frequency	Percentage	Frequency	Percentage	
1	The entire building of our school is concrete	5	7.9	58	92.1	63
2	Half of our school building is paved	55	87.3	8	12.7	63
3	The principal office building is concrete	21	33.3	42	66.7	63
4	Each office building is paved	37	58.7	26	41.3	63
5	Each classroom building is concrete	11	17.5	52	82.5	63
6	The kitchen building is paved	17	27	46	73	63
7	Our school has a prayer room.	40	63.5	23	36.5	63
8	Our school has a computer lab facility.	18	28.6	45	71.4	63
9	Our school has a laboratory facility.	29	46	34	54	63
10	Our school has a library facility.	22	34.9	41	65.1	63

The first question was collecting the data of the building facilities available in the primary schools. This question was having thirty-one options, the first from that was about the entire building of the school. As this represents the safety of the school teachers and school children's. As per the table number 6.2, it can be observed that only five teachers have mentioned that their schools do not have concrete buildings, and more than 90 percent of the buildings of schools are concrete. This is the basic, necessary and ultimate facility needed to teachers as well as students. Next question was asked to get the information about the school buildings which are concrete but at partial level. Only eight teachers have mentioned that their schools have partially constructed buildings, other schools have paved buildings. More than 65 percent of the teachers replied that their schools contain concrete buildings of the principal office, but a notable number of schools, almost twenty-one teachers, said that their schools do not have paved buildings of the principal office. In the next answers, it can be seen that, more than 50 percent of the teachers indicated that their schools do not have all the buildings in paved condition. While asking about the classroom buildings, more than 80 percent of the teachers mentioned that they have paved classroom buildings.

The sixth question was about the building of the kitchen. More than 70 percent of teachers said their schools have kitchens in paved condition, but a significant number of teachers, almost seventeen, said they do not have kitchens in good condition. The next option was about a prayer room, and surprisingly, only 36 percent of teachers replied that their schools have a prayer room, others do not have that. While asking about the computer lab facility, more than 70 percent of the teachers have mentioned their schools have computer labs. In the next option, more than half of the school teachers replied affirmatively that they have laboratory facilities. In option number ten, a noticeable number of teachers (22) have mentioned that they do not have library facilities. Library is the need of students and school administration should take care of this (Magaki *et al.*, 2022). In primary schools, students learn to read and write, for this reason, story books, comic books, and other children's literature is necessary to make them available for students. (Ruhyana *et al.*, 2019)

It is worth noticing here that among 63, 18 teachers have mentioned that their schools do not have computer lab facilities, this is disappointing. India is continuously moving towards the growth in the information technology sector and if the school children of current era will not get enough access to technology then it will be problematic to create a youth who can help the country to progress. The second important part is the facility of the laboratory, as at primary level, basic science experiments are needed to showcase to school children to make them aware about the functioning of science. These science and technology facilities are a must for all primary schools and in this survey, it can be observed that a noticeable amount of schools do not have these facilities. The third major facility is the library, and 22 teachers have mentioned that their schools do not have library facilities. This is a matter of concern as reading is the necessary part of basic and primary education. If there is a delay in the facilities of science and technology, it can be managed, but if there is a delay in the facility of library, and reading resources, that is a serious problem. Schools should understand the importance of reading and books in the life of primary school children. As it helps in learning another language and expression skills. (Elpina *et al.*, 2021)

Table 5: Building facilities

No.	Q.1 Building facilities	No		Yes		Total
		Frequency	Percentage	Frequency	Percentage	
11	Our school has books on various subjects.	15	23.8	48	76.2	63
12	Our school has the facility of Encyclopedia, Proverb, Dictionary and Spelling Books.	16	25.4	47	74.6	63
13	An issue register of books is maintained in our school.	3	4.8	60	95.2	63
14	Our school has a sports ground.	29	46	34	54	63
15	Our school has sufficient sports facilities.	23	36.5	40	63.5	63
16	Our school has a drinking water facility.	8	12.7	55	87.3	63
17	Purifier facility for drinking water is available in our school.	28	44.4	35	55.6	63
18	Our school has parking facilities	26	41.3	37	58.7	63
19	Our school has a stand for students' bicycles	53	84.1	10	15.9	63
20	Our school has a garden.	37	58.7	26	41.3	63

As mentioned in table number 6.3, the first option contained the availability of books on various subjects in the school. More than 75 percent of the school teachers have mentioned that they have the books of different subjects. The next question was about the availability of encyclopedias, proverbs, dictionaries and spelling books for students, and it is worth noticing that almost 74 percent of the school teachers have these facilities available in their schools. To maintain books and other library facilities, it is necessary to maintain an issue register which can help teachers and students both. While asking about this, more than 95 percent of the school teachers mentioned that they keep issue registers to keep books in order and reachable to students on time. In the question regarding sports ground, nearly half of the school teachers have mentioned they do not have the sports ground which is a disappointing factor. In all the policies by the government for school children, they have mentioned the need for basic physical education and for outdoor games under the guidance of a physical training teacher. For the overall growth of the students, sports activities on ground are needed. The next question was connected with the previous one, as it was having an inquiry about the sports facilities, and more than half of the schools (63.5) mentioned that they have this facility.

In building related facilities, the next question was regarding the drinking water facility and almost 90 percent of the schools mentioned that they have drinking water facility for the students, but further when asked about the pure water facility, among 87 percent, only 55 percent of the schools mentioned that they have pure water facility which requires a special focus. Almost 50 percent of the schools mentioned that they have parking facilities, but only 15 percent mentioned that they have bicycle stands for students. While asking about the garden, less than 50 mentioned that they have a garden.

While asking about the building facilities, the noteworthy remarks were regarding the availability of sports ground and equipment facilities. As per the table it catches the attention that 29 teachers have mentioned that their schools do not have sports grounds and 23 teachers have said that their schools do not have enough sports equipment facilities. As per the NEP 1986 and NEP 2020, physical education is also one of the concerns of the government and through several physical activities, students can maintain their health. In the initial years of growth, sports activities can help students. Sports equipment is also necessary as Gujarat has hosted the 2022 National Games of India and Khelmahakumbh is also an important part of the state. Another important facility missing in the schools is the water purifier as 28 teachers have mentioned that their schools do not have a purifier facility. The facility of drinking water is necessary but pure drinking water is also necessary.

Table 6: Building facilities

No.	Q.1 Building facilities	No		Yes		Total
		Frequency	Percentage	Frequency	Percentage	
21	Eco club is active in our school	13	20.6	50	79.4	63
22	A kitchen garden has been created in our school.	39	61.9	24	38.1	63
23	In our school, students take care of trees and plants.	8	12.7	55	87.3	63
24	Our school has a medical room/first aid facility.	18	28.6	45	71.4	63
25	Our school has an electricity facility.	8	12.7	55	87.3	63
26	Our school has tube lights in every classroom.	7	11.1	56	88.9	63
27	Every classroom in our school has fans on.	0	0	63	100	63
28	Our school has adequate ramps.	9	14.3	54	85.7	63
29	Our school has necessary physical facilities for disabled students.	22	34.9	41	65.1	63
30	Our school has a solar panel facility.	60	95.2	3	4.8	63
31	Our school has fire safety facility	7	11.1	56	88.9	63

In the last few questions, teachers were asked about the eco club, kitchen garden, fire safety and solar panel facilities available in the schools. While asking about the eco club facility, almost 80 percent of the teachers mentioned that they have an active eco club in their school and 87 percent teachers mentioned that their students take care of trees and plants. More than 70 percent of the school teachers have mentioned that they have medical room facilities for the emergency. Almost 90 percent of schools have electricity facilities but the remaining 10 percent is worth noticing, as in this era, electricity in the government schools should not be an issue to face. A connected question with that was the facility of tube lights, and almost 90 percent of the schools have tube lights and 100 mentioned that they have fans in working condition in all classrooms. The next question was regarding the facilities for disabled students and 85 percent of the schools mentioned that they have ramps and 65 mentioned that they contain other necessary facilities for disabled students. The last two questions were regarding the solar panel and fire safety facility. As only 3 schools have solar panel facilities which is not necessary but it is good that these schools have solar panels. Almost 90 percent of schools mentioned that they have fire safety in their schools.

The noticeable response in table number 6.4 is the eco club facility in the schools as it is commendable that nearly 80 percent of the teachers have said their schools actively run eco club and organize various activities under it. Along with this, nearly 90 percent of the teachers said that their students take care of the trees in the schools. The next worth noticing facilities are for the physically challenged students, that maximum schools have the facility of ramps and other things. These infrastructural facilities can be useful for such differently able students. Solar panel facilities are not compulsory for the schools but it is worth noticing that 3 teachers have mentioned that they have the facility of solar panels in their schools.

Table 7: Classroom facilties

No.	Classroom facilities	No		Yes		Total
		Frequency	Percentage	Frequency	Percentage	
1	Our school has enough classrooms.	0	0	63	100	63
2	Our school has a sufficient blackboard facility.	6	9.5	57	90.5	63
3	Our school has sufficient benches.	30	47.6	33	52.4	63
4	Our school has a projector facility.	12	19.05	51	80.05	63
5	Our school has a screen/curtain.	35	55.6	28	44.4	63
6	Our school has the facility of SmartClass.	13	20.6	50	79.4	63
7	Our school has the facility of audio-visuals.	16	25.4	47	74.6	63
8	Our school has a geography subject related map facility	20	31.7	43	68.3	63
9	Our school classrooms are air-lit.	7	11.1	56	88.9	63

The second criteria was about the facilities available in the classrooms. It contained nine options. In the first option, when asked about the enough classrooms in the school, all teachers have confirmed that their schools have enough classrooms. It can be observed that almost 90 percent of the schools have sufficient blackboard facilities. It should be noted that nearly 50 percent of the schools do not have sufficient benches. Proper and comfortable sitting arrangements are necessary on the side of students for learning purposes. 95 percent of the schools have mentioned that they have projector facilities, which is a good number, as internet and technology is a necessary part of the learning environment in the current era. If from the basic education, students would get habituated to this, their learning habits would enhance. When asked about screens, smart classrooms (28%), and audio-visuals (74%) schools have mentioned respectively that less than half (44.4%) of the schools have screens, nearly 80 percent of the schools have smart class which is worth noticing, and almost 75 percent of the schools have audio-visual facility.

Technology related facilities are necessary part of primary education as the 21st century skills could get developed through the use of information and communication technology. Lastly, this question contained two more options regarding the facility of map and environment of the classroom with the specification of air circulation and natural light, and schools have mentioned that 68 percent of them have maps in their classrooms and nearly 90 percent mentioned that they have good conditioned classrooms with natural environment.

Table 8: Meals and snacks facility

No.	School meals and snacks	No		Yes		Total
		Frequency	Percentage	Frequency	Percentage	
1	Our school has a kitchen	11	17.5	52	82.5	63
2	Our school has enough cooking utensils	13	20.6	50	79.4	63
3	Our school has adequate cooking facilities	17	27	46	73	63
4	Our school has a mid-day meal facility	2	1.6	61	98.4	63
5	Our school has a facility for sitting arrangements for mid-day meal	16	25.4	47	74.6	63

The third question was about the facility of mid-day meals and snacks for students. This contained the five different options, the first one was related to the availability of a kitchen, and more than 80 percent of the schools have confirmed that they have a kitchen in their school. If the kitchen is available then the facilities in the kitchen are also necessary. The next option was related to the utensils of the kitchen, nearly 50 percent of the schools have confirmed that they have kitchen utensils for cooking purposes. Along with utensils, cooking facilities are also important, as exact 73 percent of the schools have said they have adequate cooking facilities. The next option was about the mid-day meal facility which is a part of central government scheme PM Poshan Yojana and almost 99 percent of the schools have the facility of it as it is a government scheme and compulsory for all schools. The last option was for the sitting facility or shed for the students while they have their lunch/mid-day meal, and almost 75 percent of the schools have mentioned that they have this facility.

It can be clearly observed that for facilities of meals and snacks almost all the schools have good conditions and students are getting several benefits related to food and nutritions. Government has launched several schemes to maintain the health of the primary school children, as till the age of fourteen, several nutrition portions are necessary. Mid-day meal scheme and Gujarat Poshan Abhiyan contains a proper measured nutritional menu and activities which can help students in their years of growth.

Table 9: Facilities for teachers

No.	Q.4 Facilities for Teachers	No		Yes		Total
		Frequency	Percentage	Frequency	Percentage	
1	Our school has a staff room facility for teachers.	47	74.6	16	25.4	63
2	Our school has table and chair facilities for teachers.	8	12.7	55	87.3	63
3	Our school has cupboards/lockers for teachers	21	33.3	42	66.7	63
4	Our school has toilets for teachers	20	31.7	43	68.3	63
5	Our school has the facility of a common room for teachers	51	81	12	19	63

The fourth question was regarding the facilities on the side of teachers in primary schools. This question contained five options. The first option was about the staff room facility for teachers, and surprisingly only 25 percent of the schools contain the staffroom facility for teachers. For the preparation of teaching topics and working during non-teaching hours, a staffroom is important for the teachers, that creates a space for teachers to sit together and plan their schedule.but, almost 75 percent of the schools do not have staff room facilities for teachers. The second option was about the table and chair facility for the comfortable sitting for teachers, and almost 90 percent of the schools have that facility. The third option was regarding the lockers and cupboard facilities for teachers to put their personal stuffs and school supplies into; it is noticeable that still more than 30 percent of the schools do not contain this facility and teachers have to carry their academic and personal belongings to their homes. The fourth option was regarding the separate washroom facilities for teachers and students. Nearly 70 percent of the teachers have mentioned that they have this facility regarding the sanitization. The last option was regarding the common room for teachers which is a space for teachers in the school which can be utilized for resting, communication and personal use. It can be observed that more than 80 percent of the teachers mentioned that they do not have common room in their schools.

On the part of teachers, schools have minimal level of facilities, just providing tables and chairs to teachers is not enough, they must have a proper separate sitting for example staffroom and a common room facility. Most of the teachers do not have lockers, which is again problematic as primary teachers have to maintain several registers, documents of students and test-papers of students, all this stuff is necessary to handle with safety, regularly moving these things from school to another place is problematic and tedious. Schools should take care of these things and provide such facilities to teachers, as their comfort is also necessary to enhance the learning environment of the school.

Table 10: Hygine related facility

No.	Q.5 Facilities related to hygiene in the school.	No		Yes		Total
		Frequency	Percentage	Frequency	Percentage	
1	Our school has separate toilet facilities for male and female students.	5	7.9	58	92.1	63
2	Our school has a sanitation facility.	1	1.6	62	98.4	63
3	Rainwater harvesting facility is available in our school	44	69.8	19	30.2	63

The last question was regarding the hygiene facilities in the school. This question contained three options, as the first was regarding the separate toilet facilities for male and female students in the school. More than 90 percent of the teachers have mentioned that there are separate toilets. The second option was regarding the cleanliness and sanitation facility in the school, and almost 100 percent of the teachers have mentioned that they have cleanliness in their schools. The last option was about the rainwater harvesting facility in their school and almost 70 percent of the teachers denied that they do not have this facility in their school, but it is worth noting that more than 30 percent of the teachers mentioned that they have this facility.

Conclusion

In conclusion, this study critically analyzes the facilities available in the government primary schools of Ahmedabad district, by meticulously analyzing various dimensions like building facilities to sanitation facilities. The research provides a comprehensive overview of the existing resources in the primary schools. The study mentions the initiatives by the government of Gujarat and how government primary schools are implementing those facilities, along with the schools which lack these facilities. The use of quantitative analysis and surveys, involving 40 schools through a convenient sampling method, enhances the reliability and applicability of the findings.

The positive outcomes of the well-equipped classrooms and resources with the hygiene amenities underscore the potential impact of investing in robust infrastructural facilities. These findings can help policymakers, stakeholders and educators to get an idea of how the government is providing facilities and how those facilities are being implemented. Ultimately, this research advocates for a holistic approach to education, recognizing that the quality of infrastructural facilities is integral to fostering a positive and effective learning experience in primary schools.

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भारत में स्नातक स्तर पर जनसंख्या शिक्षा की आवश्यकता

*डॉ. श्रुति रंजना मिश्रा

सारांश

स्नातक स्तर पर शिक्षा ग्रहण कर रहे युवा विद्यार्थियों में जनसंख्या शिक्षा की जानकारी व्यापक रूप से दी जानी चाहिए। यह शिक्षा के साथ-साथ एक विकसित विचार है जो आने वाले भविष्य को परिवर्तन की दिशा में ले जाता है। यह एक चेतनामूलक शिक्षा है जो विद्यार्थियों में जनसंख्या के प्रति चेतना को जागृत करती है। जनसंख्या शिक्षा एक विषय के साथ-साथ एक शैक्षिक कार्यक्रम भी है जिसमें स्व से समष्टि तक का अध्ययन किया जाता है। जनसंख्या शिक्षा के द्वारा जनसंख्या की प्रक्रिया को समझने तथा इसका मूल्यांकन करने में सहायता प्राप्त होती है। जनसंख्या वृद्धि की भयावहता से बचने के लिए यह एक ऐसा माध्यम है जो निदान का मार्ग प्रस्तुत करेगा। यह सामान्य शिक्षा के समानांतर चलने वाली प्रक्रिया है क्योंकि सामान्य शिक्षा और जनसंख्या शिक्षा दोनों का ही लक्ष्य राष्ट्र का विकास है। जनसंख्या शिक्षा की सफलता के लिए आवश्यक है कि इस विषय पर निरंतर शोध कार्य, संगोष्ठी, फिल्म, नाटक और महिला विकास के कार्यक्रमों से इसे जोड़ दिया जाये तथा युवा विद्यार्थियों में यह एक अनिवार्य विषय के रूप में हों। इस विषय में शोध की बहुत अधिक संभावनाएँ हैं अतः इसे पाठ्यक्रम में एक स्वतंत्र विषय के रूप में विकसित किया जाना चाहिए। यद्यपि इस विषय से संबंधित साहित्य के अध्ययन से ज्ञात होता है कि इस पर निरंतर अध्ययन तथा शोध हो रहा है लेकिन ग्रामीण क्षेत्रों में जनसंख्या शिक्षा के प्रति युवा विद्यार्थियों को और अधिक सकारात्मक तथा मुखर बनाने की आवश्यकता है जिससे कि युवा विद्यार्थियों के साथ-साथ उनके माता पिता भी इस विषय के प्रति गंभीर हो सकें।

प्रस्तावना

हम सभी जानते हैं कि बढ़ती जनसंख्या की भयावह स्थिति आज संपूर्ण विश्व के लिए विध्वंस के रूप में सामने खड़ी है जो दिन-प्रतिदिन मनुष्यता, सौहार्द तथा मानवता के पतन का कारण बनी हुई है। यह एक विश्वव्यापी समस्या है लेकिन इसका सर्वाधिक प्रभाव भारत और चीन में दिखाई देता है। आज भारत पुनः विश्वगुरु बनने की राह पर है तथा अपनी प्रगति, संस्कृति और भावी नीति से संपूर्ण विश्व का मार्गदर्शन कर रहा है। भारत के विकास की यशगाथा का शंखनाद संपूर्ण विश्व में हो रहा है। आज भारत तकनीकी, विज्ञान, दर्शन, चिकित्सा, अंतरिक्ष विज्ञान, युद्धनीति एवं अपनी कूटनीति के द्वारा विश्व के सभी प्रमुख देशों को प्रभावित कर रहा है। विश्व का प्रत्येक देश भारत के साथ व्यापार, संस्कृति, कला आदि के द्वारा संबंध जोड़ना चाहता है। शताब्दियों से हम जिस समुन्नत राष्ट्र की कल्पना करते थे वह अब परिलक्षित होने लगा है लेकिन भारत की इस प्रगति में कुछ बाधाएँ भी हैं जिनमें से एक प्रमुख बाधा भारत की विशाल जनसंख्या है। यदि भारत की इस बढ़ती जनसंख्या पर अंकुश नहीं लगा तो धीरे-धीरे भूमि, भोजन, वस्त्र, शिक्षा, रोजगार के स्रोत सीमित हो जाएँगे तथा हम आपस में ही लड़ कर समाप्त हो जाएँगे। इसका प्रमुख कारण यह है कि जनसंख्या में जिस तेजी से वृद्धि हो रही है उसमें प्रत्येक व्यक्ति के लिए उन्नति के साधन प्राप्त नहीं हो सकते। हमारे देश में अधिक जनसंख्या के कारण कई दशकों से हम विकासशील ही हैं। विकसित से विकासशील होने के लिए अनिवार्य है कि देश के प्रत्येक व्यक्ति के लिए पर्याप्त संसाधन हों। यह तभी हो सकता है जब हमारी जनसंख्या उपलब्ध संसाधनों के सापेक्ष ही रहे। जनसंख्या पर नियंत्रण के लिए आवश्यक है कि हम बढ़ती जनसंख्या के दुष्परिणामों को देश के युवा विद्यार्थियों के समक्ष रखें जिससे कि वह सजग हो सके। इसके लिए आवश्यक है कि भाषा, विज्ञान, दर्शन तथा गणित आदि विषयों के साथ-साथ जनसंख्या शिक्षा भी एक अनिवार्य विषय के रूप में विद्यालय और महाविद्यालयों में प्रदान की जाये।

हम सभी जानते हैं कि बढ़ती जनसंख्या की चुनौती के कारण ही भारत में आज जनसंख्या नियंत्रण बिल की माँग होने लगी है जिसके अन्तर्गत यह नियम बनाने की माँग की जा रही है की भारत में "Two Child Policy" को अपनाया जाये। यद्यपि यह बिल अभी कानून के रूप में पारित नहीं हुआ है लेकिन इससे बढ़ती जनसंख्या के गंभीर परिणामों को विराम देने के रूप में प्रस्तावित किया गया है। किसी भी राष्ट्र की प्रगति के लिए वही परिवर्तन सुखांत होता है जो वहाँ के रहने वाले निवासियों की सहमति से होता है। इसलिए यदि हम वास्तव में भारत की जनसंख्या पर नियंत्रण चाहते हैं तो हमें जनसंख्या शिक्षा को

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अनिवार्य विषय के रूप में लाना होगा जिससे कि देश के नागरिक उसे स्वतः स्वीकार करें। आज जनसंख्या शिक्षा के प्रसार की आवश्यकता नये संदर्भों में भी है। हमारे देश का भौगोलिक क्षेत्र सीमित है, अन्न उत्पादन का क्षेत्र सीमित है यदि हम बढ़ती जनसंख्या को रोकने में सफल नहीं हुए तो प्रगति के नाम पर बढ़ता हुआ यह कंक्रीट का जंगल हमारी संस्कृति, विविधता एवं कला आदि को धीरे-धीरे नष्ट करता चला जाएगा। संस्कार, संस्कृति, बोली, भाषा, कला, विरासत का गुणगान करती हमारी वीर भोग्या वसुंधरा जनसंख्या के भार से अपनी नैसिर्गकता को खो देगी। ऐसे में जनसंख्या शिक्षा ही एक ऐसा प्रभावी विकल्प है जो युवा पीढ़ी को अपने देश की संप्रभुता को अक्षुण्य रखने के लिए विचार करने पर प्रेरित कर सकती है। जनसंख्या शिक्षा के द्वारा ही मनुष्य ज्ञान, संवेदना, व्यवहार को समय के अनुसार परिवर्तित कर सकता है।

शोध का मुख्य उद्देश्य

माल्थस नामक विद्वान का कथन है- जनसंख्या का विकास रेखागणितीय ढंग से ही होता है अर्थात् यदि पहली पीढ़ी में दो व्यक्ति हैं तो दूसरी पीढ़ी में वे 6 तथा तीसरी पीढ़ी में 18 तथा चौथी पीढ़ी तक वे 54 आदि-आदि होते जाते हैं।

इस प्रकार जनसंख्या का घनत्व दिन-प्रतिदिन बढ़ता जा रहा है परन्तु 'आय के साधन' वही हैं जो पहले थे अतः जनसंख्या शिक्षा के द्वारा जनसंख्या सीमित करने की जागृति करना अति आवश्यक है।

जनसंख्या शिक्षा का उद्देश्य आज के बालक को कल का जिम्मेदार माता-पिता बनाने का अवसर प्रदान करना है। अपने परिवार, समाज, राष्ट्र के प्रति प्रत्येक नागरिक के कुछ कर्तव्य भी हैं। जनसंख्या शिक्षा इन सामाजिक, पारिवारिक व राष्ट्रीय कर्तव्यों की जानकारी देने का माध्यम है। शिक्षा की सार्थकता भी यही है कि विद्यार्थी का सर्वांगीण विकास हो। अध्यापक, अभिभावक तथा समाज के त्रिकोण से घिरा हुआ बालक ही शिक्षा का केन्द्र है। अध्यापक व अभिभावक मिलकर चाहते हैं कि विद्यार्थी समाज की आवश्यकताओं के अनुरूप बने। वास्तव में शिक्षा का यही मूल आधार है। जनसंख्या शिक्षा इसलिए भी आवश्यक है कि इसके द्वारा बालकों में यह धारणा बनायी जा सकती है कि जीवन के स्तर को ऊंचा रखने के लिए परिवार का सीमित होना आवश्यक है। हम जनसंख्या वृद्धि से व्यक्ति, परिवार, समाज, राष्ट्र एवं संस्कृति पर पड़ने वाले वाले दुष्प्रभाव से भी परिचित हैं। विद्यार्थियों को छात्र जीवन से ही सीमित परिवार की उपयोगिता तथा आवश्यकता के बारे में जाग्रत होना चाहिए।

बौद्धिक तथा शैक्षिक-दृष्टि से भी जनसंख्या शिक्षा का अध्ययन आवश्यक है। जनसंख्या शिक्षा के द्वारा व्यक्ति अपने सम्बन्ध में अध्ययन करके भौतिक तथा अन्य वातावरण पर अपने प्रभावों और परिणामों को ज्ञात कर सकता है। इसलिये समाज विज्ञान, भौतिक विज्ञान या अन्य विज्ञानों के समान जनसंख्या-शिक्षा भी शिक्षा का महत्वपूर्ण अंग होनी चाहिए। वास्तव में जनसंख्या-शिक्षा मानव का अपने पर्यावरण के सम्बन्ध में अध्ययन ही है। अतः इसे एक स्वतंत्र तथा महत्वपूर्ण विषय के रूप में शिक्षा-व्यवस्था में सम्मिलित किया जाना उचित होगा।

जनसंख्या शिक्षा पर शोध की आवश्यकता

जनसंख्या शिक्षा का सम्बन्ध ऐसी शिक्षा से है, जिसमें जनसंख्या के आकार, संरचना, लिंगानुपात, विवाह आदि विषयों पर मानव संसाधन में सुधार किया जाता है। जनसंख्या शिक्षा का सीधा सम्बन्ध जनजीवन के आर्थिक व सामाजिक जीवन से है। शिक्षा ही व्यक्ति का समुन्नत विकास करती है तथा मानव के विकास में महत्वपूर्ण भूमिका निभाती है। जन से जन मिलकर जन समुदाय का जब आकार निरन्तर बढ़ता है तो उसे जनसंख्या कहते है। किसी भी राष्ट्र की जनसंख्या राष्ट्र के साधनों व नागरिक जीवन स्तर के कल्याण पर आधारित होती है। आज भारत की जनवृद्धि के संदर्भ में 'डॉ.एलवर्ट ऐजेन्ट ग्यारेगी' के विचार उनकी गम्भीरता को स्पष्ट करते हैं। वे कहते हैं- आज जिस गति से सन्तानोत्पत्ति हो रही है यदि यही गति जारी रही तो मनुष्य एक-दूसरे की हत्या कर परस्पर एक-दूसरे का भक्षण करना चाहेगा। अगर किसी की हत्या करना पाप है तब सन्तान के पालन-पोषण की सुव्यवस्था किये बिना उसे जन्म देना हत्या से भी बड़ा पाप है। जन-कल्याण के लिए शिक्षा प्रथम आवश्यकता है। अतः जनसंख्या शिक्षा, मानव शक्ति व संसाधन से सम्बन्धित होती है। इस शिक्षा में आकार, जनसंख्या के संरचना व नियंत्रण का ज्ञान कराया जाता है। अतः जनसंख्या वृद्धि को रोकने का उत्तरदायित्व शिक्षा पर है। इसलिए जनसंख्या शिक्षा का व्यापक प्रबन्ध करना चाहिये।

स्नातक स्तर पर भारत में जनसंख्या शिक्षा की आवश्यकता के महत्वपूर्ण कारण हैं-

1. **जनसंख्या की तीव्र वृद्धि या जनसंख्या विस्फोट :** भारत में जनसंख्या की वृद्धि तीव्र गति से हो रही है। आज हमने विज्ञान के विकास के साथ मृत्यु दर को तो कम कर दिया है, किन्तु जन्म दर पर कोई विशेष नियन्त्रण नहीं हो रहा है जिसके परिणामस्वरूप जनसंख्या में तीव्र गति से वृद्धि और खाद्य पदार्थों का उत्पादन न होने के कारण हमें जनसंख्या विस्फोट की स्थिति का सामना करना पड़ रहा है। इसके लिए जनसंख्या शिक्षा की अति आवश्यकता है।
2. **राष्ट्रीय परिवार नियोजन कार्यक्रम पर जनसंख्या एवं जनसंचार के प्रयासों का प्रभाव :** आज विकसित देशों ने

अपने देश के विकास की आवश्यकता को देखते हुये अनुभव किया है कि हमारा परिवार नियोजन कार्यक्रम सफल हो। इस कार्यक्रम को राष्ट्रीय कार्यक्रम का रूप दिया गया है। इसके प्रसार हेतु फिल्म, पोस्टर, पेन्टिंग आदि के द्वारा इस नीति को सफल बनाने के प्रयास भी सफल रहे हैं । हमारे देश में भी परिवार नियोजन कार्यक्रम को राष्ट्रीय कार्यक्रम व नीति के रूप में अपनाया गया है। इसके लिये किये गये प्रयासों का प्रभाव शिक्षा पर भी पड़ा है और अब जनसंख्या शिक्षा एक राष्ट्रीय आवश्यकता बन गयी है।

3. **विकसित देशों की जनसंख्या की आयु संरचना :** विकसित देशों में आयु-संरचना के अनुसार इसकी आवश्यकता को समझा गया। विकसित देशों में आयु-संरचना के अध्ययन से पता चलता है कि 21वीं शताब्दी में युवा आयु वर्ग का सबसे अधिक जनसंख्या का प्रतिशत हो जायेगा। अतः आवश्यक है कि इस आयु-वर्ग के अन्दर होने वाली जनसंख्या विकास को नियन्त्रित किया जाये। इसके लिये जनसंख्या शिक्षा बहुत उपयोगी सिद्ध हो सकेगी।

4. **आगे की पीढ़ी के लिये जनसंख्या शिक्षा कार्यक्रम के प्रावधान की आवश्यकता :** बढ़ती हुई जनसंख्या विस्फोट की समस्या के समाधान के लिए आगे आने वाली पीढ़ी को सजग करने के लिये जनसंख्या शिक्षा की अति आवश्यकता है। जनसंख्या शिक्षा प्रेरणात्मक रूप से युवा-पीढ़ी को छोटे परिवार की भावना को स्वीकार करने के लिये प्रेरित कर सकती है।

5. **नागरिकता एवं प्रभावशाली वर्तमान जीवन-शैली की तैयारी के लिये जनसंख्या शिक्षा :** वर्तमान समय में जनसंख्या के तीव्र विकास से जो समस्याएं उत्पन्न हुई हैं वे नागरिकों के जीवन स्तर को प्रभावित कर उन्हें उन सुविधाओं से वंचित रखती हैं, जो जीवनयापन के लिए अति आवश्यक हैं। इन समस्याओं के समाधान के लिए युवा-पीढ़ी को उचित ढंग से जनसंख्या शिक्षा प्रदान की जानी चाहिये ताकि वे अपनी सुरक्षा एवं आवश्यकताओं को पूरा करते हुये प्रभावशाली जीवन शैली अपना सकें।

जनसंख्या शिक्षा की आवश्यकता पर शोध का महत्व

प्रारम्भ में तो जनसंख्या शिक्षा को परिवार नियोजन और यौन शिक्षा से सम्बन्धित ही माना गया था परन्तु अब जनसंख्या शिक्षा को जीवन सुखी बनाने तथा उन्नत बनाने की शिक्षा के रूप में मान्य किया जाता है। यही कारण है कि जनसंख्या शिक्षा की आज के समय में महती आवश्यकता है। वर्तमान शिक्षा में इसके महत्व के निम्न कारण हैंः

1. वस्तुतः जनसंख्या शिक्षा का प्रमुख लक्ष्य जीवन का मूल दर्शन पुनर्जाग्रत करना है जिसके अध्ययन से न केवल अनवरत जनसंख्या वृद्धि को ही रोकना है तथा मानव-जीवन से सम्बन्धित उन सभी पहलुओं को भी सम्मिलित करना है जिनका सम्बन्ध सम्पूर्ण मानवीय अस्तित्व एवं उनके कार्यों से, बाह्य परिवेश व्यक्तिगत तथा पारिवारिक सम्बन्धों से है। (श्रीमती वाडिया, अध्यक्ष, परिवार नियोजन संस्था मुम्बई)
2. संसार की पृष्ठभूमि में भारत की जनसंख्या वृद्धि दर तथा संगठन सहित जनसंख्या जनांकिकी की आधारभूत समझ युवा पीढ़ी में विकसित करना।
3. जीवन-स्तर को उच्च बनाने तथा आर्थिक-सामाजिक विकास करने के साथ-साथ स्वास्थ्य, शिक्षा, आवास, भोजन तथा जीवन की अन्य सुविधाओं को जुटाने हेतु वर्तमान जनसंख्या के संगठन महत्व को समझाना।
4. तीव्र जनसंख्या वृद्धि की हानियों से परिचित कराना।
5. राष्ट्र एवं विश्व के कल्याण के लिए उत्तरदायित्व की भावनाओं तथा परिवर्तित प्रवृत्तियों का विकास करना।
6. जनसंख्या शिक्षा के प्रति लोगों का विश्वास उत्पन्न करना।
7. सीमित जनसंख्या तथा विकास कार्यक्रमों के सम्बन्धों और लाभों से परिचित कराना।
8. राष्ट्र एवं विश्व के कल्याण के लिए उत्तरदायित्व की भावनाओं तथा परिवर्तित प्रवृत्तियों का विकास करना।
9. यह प्रतीत कराना कि परिवार नियन्त्रित हो सकता है। बच्चों का पैदा होना भाग्य पर निर्भर नहीं है।
10. जनसंख्या वृद्धि में माँ और बच्चे के स्वास्थ्य पर पड़ने वाले कुप्रभावों से परिचित कराना।

जनसंख्या शिक्षा के लक्ष्यों की प्राप्ति करके युवा विद्यार्थियों को जो भविष्य के नागरिक हैं, इस योग्य बनाया जा सकेगा कि वे समाज में उत्तरदायित्व पूर्ण जीवन जी सकेंगे तथा अपने परिवार को सीमित रखने तथा उचित निर्णय लेने में समर्थ होंगे। युवा विद्यार्थियों में जनसंख्या के प्रति उचित दृष्टिकोण भी विकसित होगा जिससे देश और सम्पूर्ण विश्व का कल्याण संभव हो सकेगा और जन-जन की वाणी से यह शुभेच्छा निकलेगी-

सर्वेः भवन्तु सुखिनः सर्वे सन्तु निरामयाः।
सर्वेः भद्राणि पश्यन्तुः मा कश्चिद् दुःखभाग्भवेत्।।

निष्कर्ष

स्नातक स्तरीय महाविद्यालयों के विद्यार्थियों में जनसंख्या शिक्षा की उपयोगिता का अध्ययन करने पर निष्कर्ष के रूप में ज्ञात होता है कि वर्तमान परिस्थितियों में जनसंख्या शिक्षा एक अनिवार्य विषय के रूप में सामने आया तथा सभी युवा विद्यार्थियों

में इसे जानने की उत्सुकता है। आज के समय में जब विश्व एक ग्लोबल विलेज के रूप में हमारे सामने है। ऑनलाइन शिक्षा के कारण ग्रामीण एवं शहर के विद्यार्थियों के चिंतन तथा मानसिक एवं वैचारिक स्तर में बहुत अंतर नहीं है। ऐसे में बढ़ती हुई जनसंख्या से सभी चिन्तित हैं तथा इसको रोकने के लिये सकारात्मक दृष्टि रखते हैं।

यद्यपि समाज में पुरुष वर्ग को अपने विचारों को अभिव्यक्त करने की स्वतंत्रता महिला वर्ग से अधिक है पर जनसंख्या शिक्षा के प्रति दोनों के विचार सहज है, दोनों ही समाज को सही रूप से चलाने के लिये जनसंख्या शिक्षा को आवश्यक मानते हैं। युवा विद्यार्थियों के साथ-साथ उनके अभिभावकों की स्थिति का अध्ययन करने पर ज्ञात होता है कि भले अभिभावक शिक्षित हों या अशिक्षित लेकिन सभी अपने बच्चों को शिक्षा दिलाने के लिए प्रयत्नशील हैं तथा जनसंख्या शिक्षा को भी शिक्षा की एक महत्वपूर्ण कड़ी मानते हैं। अतः कहा जा सकता है कि अधिकांश छात्र-छात्रायें इस बात से सहमत हैं कि कॉलेजों में जनसंख्या शिक्षा को एक विषय के रूप में पढ़ाया जाना चाहिये। इससे विद्यार्थियों में सकारात्मक मनोवृत्ति का विकास होगा तथा अस्वस्थ सूचनायें उन्हें प्रभावित नहीं करेंगी।

विभिन्न स्नातक स्तरीय महाविद्यालयों में जनसंख्या शिक्षा के प्रति छात्र एवं छात्रओं की मनोवृत्ति का अध्ययन करने के उपरान्त यह बात स्पष्ट होती है कि प्रत्येक विद्यार्थी चाहे वह स्नातक ग्रामीण/शहरी छात्र हो या स्नातक ग्रामीण/शहरी छात्रायें सभी जनसंख्या शिक्षा के प्रति सकारात्मक मनोवृत्ति रखते हैं तथा इसे वे प्रत्येक (विद्यार्थियों, युवाओं, स्त्रियों, बच्चों) को देने के पक्ष में है।

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Augmented Reality: Reshaping Teacher Education

*Dr. Kavita Rani

Abstract

The set-up of 21st century educational institutions is embracing technology to compete in the fast-changing world. The infusion of education with technology powers up the learning conditions. Teachers play an important role in deciding how different technologies can be used in the classroom and how well these technologies help improve the performance of students. As technology is evolving continuously, the gap between digital natives and digital immigrants is also increasing. This gap is clearly visible in the present classroom, where students as digital natives and teachers as digital immigrants are working together. In this time of transformation of education with technology, it is a must for teachers to update themselves with the latest strategies of teaching that are more advanced than the traditional methods. Augmented reality is being considered as one of the means of revamping the teaching strategies in the classroom. Therefore, it is necessary for teacher educators to know these kinds of developing technologies so that they can equip future teachers with the latest technological skills. This paper focuses on the need, challenges, and prospects of augmented reality in teacher education.

Introduction

Rapid technological innovations are affecting each and every aspect of human life. In the 21st century, educational institutions are also embracing technology to compete in this fast-changing world. Infusions of education with technology power up the learning conditions. Many of the latest technologies are so effective that they are helpful in meeting the needs of a diverse population of present-generation learners who are digital natives. These learners are presumed to be technology savvy by birth. Bruce and Levin (2003) suggested that technological tools can help these students by encouraging healthy communication, inquiry-based learning, and supporting their self-expression. These learners require teachers who are technologically competent and use the proper technical tools in the classroom. But most of the teachers are digital immigrants who face some difficulty using advanced technology in education. But now it is a necessity for educators to involve their learners in the teaching and learning process by implementing different approaches to pedagogy as well as technology. Prensky (2013) recommended that "teachers search for and use powerful uses of technology-things young people couldn't ever do before". Besides, knowledge of technological tools is vital to teaching various subjects like science, as it permits the students to perceive things and experiences that would otherwise not be possible to understand because of various reasons like distance, speed, size and location (NRC, 1996). Today's classrooms are having students who are directly in to technology that is image-rich. Oblinger and Oblinger (2005) studied that digital-age teenagers employ an average of 3.1 hours per day watching television and 3.5 hours with digital media. Several studies support that in today's classrooms students prefer methods of teaching which includes some visual presentations (Mayer & Gallini, 1990; Powell & Kusuma-Powell, 2011). Peeck J. (1993) found that using visual images during teaching involves the students, supports making complex texts simple, and increases their attention span too. Burmark (2002) stated, "It's time for teachers to take advantage of the way kids entertain themselves today, to employ those same media and the thinking habits they foster for the betterment of student learning." AR is an emerging technology that transmutes the natural environment into a simulated 3-D environment in the form of virtual images and sounds. It enables the students to discover conceptions that are otherwise not possible to perceive with the bare eye, so it makes the invisible visible.

Augmented Reality in Education

In recent years, digital media has come up with innovative means of living and interaction. Augmented reality reforms the experiences of people in all fields because of advancements in the use of technology. According to the Johnson, L., Adams, S., and Cummins, M., NMC Horizon Report (2012), augmented reality has the capability to transform the process of education. It is

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in alignment with the constructivism theory of learning, which shifts the focus of learning from teacher to learner, where learners learn and construct new knowledge based on their prior experiences. AR encourages the students to use an inquiry-based approach where they can create meaning and understand complex concepts in a better way. With the advent of technology with AR, various automated educational applications are being designed that enhance the effectiveness of the teaching and learning process at all educational levels. It combines the physical world with the virtual one to increase interactivity Becker, S.A. (2018). Bacca, J. *et al.* (2014) found that the application of AR in education can enhance learning motivation, effectiveness, and the overall process of learning. Several studies have noticed that usage of AR in teaching learning process has been steadily increasing from 2013 to 2017, so it is one of the technologies with highest growth in education (Arcos, C., 2016) and it has been used at all the levels of education either it is ECCE (Early childhood care and education) or primary level and secondary school education (Koutromanos, G. *et al.*, 2015) or at university level (Scrivner, O *et al.*, 2016) including the students with special needs (Akçayir, M.; Akçayir, G. (2017) because of its potential to extend varied learning opportunities with several benefits in the teaching learning process such as experiences of realistic learning, improves the performance of students by developing their concentration on particular topic that increases their motivation to get new knowledge and develop a positive attitude towards learning 21st century skills like communication, critical thinking and problem solving. AR makes complex topics fun, and students learn them in an easy way through various devices of virtual reality where they can interconnect with things in a simulated environment to acquire better knowledge about them, such as during digital tours to a zoo or any museum that is far away from their real space. They can learn by enjoying themselves and feeling as if they are present there in that moment. In this way, augmented reality is drawing the attention of educators to use it in different areas of education.

The need for augmented reality in Teacher Education

As a consequence of the evolution of technology, the gap between digital natives and digital immigrants is increasing. In the classrooms where both digital natives and digital immigrants are working together, this phenomenon is observed. Digital immigrants are not so comfortable with the technology, but to teach the digital natives' skills, they must learn the digital skills. According to several studies, today's learners are not being taught properly as per their needs because most of the teachers are not using 21st century teaching methods. The lives of students in this digital age revolve around computers, tablets, and smartphones. They are used to get instant and unconstrained information, believe in multitasking, play with dynamic graphics, and learn in a nonlinear way. Therefore, teacher education institutes are required to train budding teachers by instilling the competencies to use the latest pedagogical approaches in alignment with the skills required of 21st century students. Hakkinen *et al.* (2017) reported that teacher education can be an effective means to initiate long-term transformation and help in the incorporation of 21stcentury skills in day-to-day school practices. Teacher trainees are required to get constant assistance in developing their 21st century skills so that they can confidently use these skills in their teaching in the future (Urbani *et al.*, 2017). So many aspects, like the curriculum, pre-service teaching, and other field experiences, are very important to take into account while designing teacher training programs. A number of studies support that today's learners prefer that style of teaching, which includes visual presentations (Mayer & Gallini 1990; Prensky, 2001; Burmark, 2002; Powell & Kusuma-Powell, 2011). Teaching with visual presentations in the classroom involves the student, increases their attention span, and supports making complex and difficult things simple and easy (Peeck, 1993). Burmark (2002) stated, "It's time for teachers to take advantage of the way kids entertain themselves today, to employ those same media and the thinking habits they foster for the betterment of student learning." The role of preservice teachers is very important in the education system, as they have to be well equipped and prepared to teach the students in the future. Augmented reality in today's era has been widely used to make the teaching process more interesting and engaging. Hence, they must know how to use it in the construction of teaching and learning material. It is necessary for teachers to incorporate these kinds of 21st century technological skills into their pedagogical practices (Fraillon, 2014). That is why the use of augmented reality is given very much importance in teacher education.

Challenges of Augmented Reality in Teacher Education

The time to come for education will boast of augmented reality, and it will be the future of teaching and learning. It equips future teachers with updated knowledge of technology, which will help them teach in real classrooms. However, incorporating it into their teaching practices presents numerous challenges. Some key challenges faced by teacher education institutions in adopting this new approach are:

Absence of vision

In this evolving era of technology, educational institutions have also been trying to keep up with the times. To meet the demand, they are trying to adapt to the latest technology as well as embrace it in their day-to-day lives (Toh, Y., 2016). But while having a deeper look, it is realised that, after putting their best foot forward, they are still lacking. Why? The reason is that neither the institutions are prepared nor do they have sufficient plans to implement, maintain, and support the initiative to integrate diversified technology into their systems. These educational institutions lack a clear vision for adapting to this innovative technology. For example, to practice AR or VR in the classroom, a visionary mentor is required.

Economical Insufficiency

To assimilate the latest technology, a huge amount of money is required, whereas all the institutions related to education are not ready to pay for it (Wu, H.-K., Lee, S. W.-Y., Chang, H.-Y., & Liang, J.-C. 2013). Many of the institutions are not that financially strong. In fact, they fail to maintain the latest technology due to the huge amount of budget required. This cost covers the hardware, the software, and the training of the operators to become efficient. The technology remains expensive as it needs maintenance and upgrades from time to time, and it remains difficult for a number of institutions.

Unwillingness of administrators

It is generally found that the administrators of the institutions belong to the older generation, and they lack knowledge and information regarding the potential that technology today carries. This is the reason they do not support and encourage the implementation of new technologies in institutions. As well, the expenses involved in setting up the technology for its maintenance are quite huge, which demotivates the administrators from bringing the upgraded technology into the classroom.

Lack of technological devices and training

The question arises: how many teachers have access to computers or laptops? (Cubillo, J., Martín, S., Castro, M., Diaz, G., Colmenar, A., & Boticki, I., 2014). In fact, some of the teachers lack access to smart phones. With the advent of advanced technological tools in the educational field, new methods of teaching are popping up. To come up to that level, teachers need proper training for the technology and how to implement it in the classroom along with the students. Above all, the teachers need to have the willingness to accept it as well. All the teachers are not tech-savvy, and after being trained, it is not for sure that they would enjoy teaching using it.

Impoverished Infrastructure

For any advancement, infrastructure plays a vital role. It is the same case with the involvement of technology in classrooms. The institutions need to have a complete hardware system, strong-bandwidth Wi-Fi, updated content and software, and many more things like that (Scrivner, O., 2016). Moreover, it needs to be accessible to the staff and the students. Additionally, a proper learning environment is required not only for the teachers but also for the students. Although many institutions fall short of meeting the requirements raised, either due to a lack of infrastructure or a lack of availability of funds,

Technophobic Teachers

Acceptability has always been a cause of success or failure for any idea. The same is the case with the adaptation of technology in educational institutions (Ibáñez, M.B., & Delgado-Kloos, C., 2018). For adaptation, acceptance is required among the mentors, receptors, and society. Consequentially, a lack of receptiveness of teachers towards technology hinders the progress of the institutions.

Fear of the Ill-Effects of Technology Among Parents

These days, all the parents have concerns over the increasing screen time among the young ones. As the increased interaction with technology has a worse impact on the health of the students, this is a matter of concern for everyone. This thought process has strapped the institutions from adopting or implementing any technological tools; it does not matter how helpful or effective they are.

Difficulty in Planning the Course of Instruction

Since then, the teachers have been totally dependent on the physical textbooks and completing the work in a conventional way. So, the major barrier to the implementation of augmented reality in the educational process is the traditional syllabus or curriculum. Traditional education system believers find it very challenging as well as difficult to incorporate technology into the classroom via curriculum.

In this competitive world, no institution wants to be left out, especially when it comes to the acceptance of the need of the time, which is definitely technology, as this is the era of smart work. It goes un-denied that all educational institutions are trying to incorporate the latest innovations and embrace them in their routine operations. But many of the institutions lack preparedness. They just fund the projects without having a clear vision of the implementation and use of technology they are going to have in the future. All initiatives are rendered fruitless unless there is a strong vision, regardless of the proficiency of the technology to make a difference. It is absolutely true for the acceptance of AR or VR into the system.

Prospects of AR in Teacher Education

To prepare global citizens, we have to think about the change in the education system, and the way to change education is through teacher education only. because teachers with knowledge and competencies regarding 21st century skills will only be able to fulfil the objectives of the teaching and learning process. So, there is a need to understand the pedagogies that are relevant to the needs of the present generation of students. There are various pedagogical approaches that help in developing higher-order thinking skills among them. Augmented reality-based pedagogies depend on the principles and approaches of constructivism, connectionism, situational cognition, independent learning, physical cognition, and many more. Augmented reality makes teachers wonder about psychological aspects, instructional designs, and other abstract concepts.

During the teacher training courses, the trainee teachers were also supposed to go through some fixed amount of teacher's training as well as practice teaching in a hypothetical classroom system known as MICRO teaching. In both situations, the trainees still could not experience the real problems associated with classroom teaching. The teacher still feels inexperienced when it comes to teaching in the classroom. The best solution for this is AR. With the use of augmented reality, teachers can teach their pupils how to animate various educational contents, such as maps and diagrams, explain with illustrations from books, and demonstrate various things that are otherwise dangerous or unavailable in real time. AR's limitless capabilities enable the students to understand concepts that are abstract. As we all know, AR technology empowers a teacher (with its nature of being quite interactive and experiential) to accelerate the experience of the students in the classroom by enhancing their learning for new skills, inspiring their minds, and getting the students excited about exploring new academic interests. Augmented reality (AR) has the quality of enhancing the multi-sensory experience (audio, video, and picture), which a teacher can learn to use in their future practices, especially with language learners.

In the present scenario, the focus of the education system in India is more on producing graduates than skilled human resources. This is basically because of a lack of practical knowledge and the quality of instructions, where attention is given to date assimilation without proper understanding. In such a situation, the use of augmented reality in teacher education will help increase the quality of the education system. Augmented reality will help the teacher of each and every subject, whether it is language, science, social science, mathematics, and so on, to make their teaching more fun and interesting because now technology is not only confined to a single teacher who is teaching ICT as a subject.

Conclusion

In a nutshell, augmented reality has a broader perspective on teaching and learning due to its self-motivated nature. When teachers are equipped with this kind of technological innovation, they can expand the limits and push the creativity of the students. AR's limitless capabilities enable the students to understand concepts that are abstract. As we all know, AR technology empowers a teacher, with its nature of being quite interactive and experiential, to accelerate the experience of the students in the classroom by enhancing their learning for new skills, inspiring their minds, and getting the students excited about exploring new academic interests. Augmented reality (AR) has the quality of enhancing the multi-sensory experience (audio, video, and picture), which a teacher can learn to use in their future practices in their real classrooms.

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Food and Nutritional Security through Millets

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Abstract

Millets are a nutritional crop that is less water-intensive. Millets are an excellent source of minerals as well as nutritious food. Millets have been the food of the traditional Indian way of life. The best practices have also been forgotten in the struggle to be cutting edge and in the hustle and bustle of life. There have also been inconsistencies in the method of growing food grains, preparing food, and eating food, along with the very intense lifestyle as well as the glare of Chinese, fast food. Potatoes, sugar, wheat flour and rice have started making most of the food. As a result, along with blood pressure, sugar, heart diseases, etc., calcium, blood, and protein deficiency has also started in the body. As long as millets were a part of the diet, all these diseases used to occur in very less quantity. In view of the importance of coarse grains,The International Year of Millets has been designated for 2023. With an estimated 41% global production share, India is one of the top millets producers in the world. Recognizing the huge potential of millets, which also coincides with the Sustainable Development Goals (SDGs) of the United Nations, the Government of India has accorded priority to millets with Shree Anna.

In the presented research paper, an attempt has been made that how the general public along with the farmers of the country can be benefited by adopting coarse grains (millets) in the food plate and the concept of healthy India-healthy world can be realized. How millets can play their role in generating livelihood opportunities, increasing farmers' income and ensuring food and nutritional security.

Introduction

Millets are the oldest grain in the world. The main diet of the people of India was only coarse grains. Fat grains were about to disappear from the plates of food in India and the world that the Government of India has taken a special initiative regarding this. Taking a lead role, the Government of India had declared the year 2018 as the National Year of Millets with an aim to generate more production and demand. In the year 2018, Bajra was also made a brand under the name of "Nutri Cereal". With the special efforts of the Government of India, the United Nations General Assembly has declared 2023 as the International Year of Millets (IYM). On the occasion of International Millet Year 2023, various programs and events are also planned for the production and demand of coarse grains including millet. In the G-20 summit too, the promotion of millet has been made an integral part of the diet. The International Millet Warp initiative can also be seen as a form of global acceptance. The Government of Indiaintends to transform IYM 2023 into a "people's movement" and make India the "Global Hub of Millets."

The term "millet crop" refers to crops of coarse grains like *Jowar, Bajra, Ragi, Sawan, Kangni, Cheena, Kodo, Kutki,* and *Kuttu.* It is an important crop of semi-arid tropical regions. It is produced in the developing countries of Asia and Africa, especially in India, Mali, Nigeria and Niger. Developing countries account for 97% of the world's total coarse cereals production. Due to the COVID-19 epidemic, everyone has become very conscious about their health and food habits.

Review of Literature

Extensive literature highlights the nutritional richness of millets, which are naturally endowed with high levels of essential nutrients including dietary fiber, protein, vitamins, and minerals. Several studies have underscored the adaptability of millets to various agro-climatic conditions, making them resilient in the face of climate change-induced uncertainties. Some available reviews are as under:

Nagaraj, N *et al.* (2013)[1] claims that sorghum and pearl millet are still vital components of the dryland economy and are grown in rainfed circumstances in arid and semi-arid areas of India.

Finnis, E. (2012)[2] noted that shopping locations mean that people who are not a part of the millet-marketing scheme are also unlikely to purchase or consume them, except possibly on the infrequent occasions when they

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might find themselves in town.

Sood, S. *et al.* (2019)[3] proposed systematic characterization of the finger millet germplasm and wild species for various nutritional and additional traits for their application in breeding programmes, fundamental and strategic research to determine the genetic mechanisms underpinning improved crop input use efficiency, appropriate crop management techniques, post-harvest added value, and identification of novel genes for abiotic stress tolerance and nutritional traits.

Choudhury, P. R., & Sindhi, S. (2017)[4] claimed that decision-makers and extension agents have been prevented from comprehending small farm ecosystems in a whole by small farmers' growing marginalisation and limited voice. They are severely impacted by the neglect and undervaluation of their ecosystems, but droughts also cause them to fall deeper into a cycle of poverty that forces them to work for low wages to support global development.

Jeeva, J.C. *et al.* (2019)[5] claims that finger millet has been a staple crop for millions of farm households in arid and semiarid regions of India and is a highly nutritious source of food for the country's poor rural communities.

After the instance reviews of the literature, we can say that existing literature underscores the manifold benefits of millets in advancing food and nutritional security. This review highlighting the need for a comprehensive analysis of millets' potential to transform food systems and improve the health and well-being of communities worldwide.

Objectives of the Research

Objectives of the research paper is to investigate the role of millets in enhancing food and nutritional security on both local and global scales. The main objective of the paper encompasses a comprehensive exploration of various aspects related to millets and their potential contributions to food security and improved nutrition. Some objectives are as under:

- To assessment of Nutritional Valueof different millet varieties.
- To evaluate the economic viability of millet cultivation for smallholder farmers.
- To investigate the historical and cultural significance of millets in different regions.
- To examine existing policies and interventions that promote millet cultivation and consumption.

Importance of the Study

In context of addressing global challenges related to food security, nutrition, and sustainability. This study aims to contribute valuable insights that can inform policies, practices, and interventions, fostering positive changes in agricultural systems, dietary patterns, and overall human well-being. Millets' capacity to thrive in challenging environments can provide insights into creating more resilient agricultural systems that are less susceptible to climate-related shocks. Millet cultivation is often associated with smallholder farming communities. The economic viability and income-generation potential of millets can offer guidance on how to improve the livelihoods of these farmers, contributing to rural development and poverty alleviation.

Thus, we can say that it tackles critical issues such as malnutrition, climate change resilience, agricultural sustainability, and cultural heritage preservation.

Millets and Environment

Millets are the main sources of food for humans, fodder for animals and raw materials for industries. Coarse cereals are the most preferred crop in areas of low and average rainfall. These crops grow under semi-arid climate, where other crops do not grow properly. Along with coarse grains, crops of marginal and small farmers, it is also called super food, because nutrients are relatively high in them. Coarse grains are grown in extreme climate, less water and without chemical fertilizers and medicines. Less resources and less money is spent in growing it. Due to non-use of chemical fertilizers and medicines and due to minimum exploitation of underground water, the environment also remained healthy. The production of coarse grains and their use in food keeps the health and environment of all animals including humans healthy. The Bundelkhand region of Uttar Pradesh and the plains of the south-west are suitable for the cultivation of coarse cereals.

International Year of Nutritious Cereals 2023

After playing an important role in declaring the year 2023 as the International Year of Nutritious Cereals, the Government of India is now very active in the production of coarse cereals. Although there are 13 varieties of millet in the world, but for the International Nutritious Cereal Year 2023, eight cereals - Bajra, Ragi, Kutki, Samwa, Jowar, Kangni, Chena and Kodo have been included. In the budget presented on February 1, 2023, a special scheme has been made by naming coarse grains as Shri Anna. The Government of India aims to make the International Year of Nutritious Cereals a 'people's movement', and establish India as the 'Global Hub of Millets'. Each millet has its own importance. As millet is loaded with calcium, millet has potassium and phosphorus, and millet has fiber while kodo is rich in iron. About 97% of the world's total coarse grain production is in the developing countries. In the table presented below, we can see the area and production of millets.

Table-1: Production of Millets in the World

GLOBAL OUTLOOK OF MILLETS

Millets Area and Production Region-wise (2019)

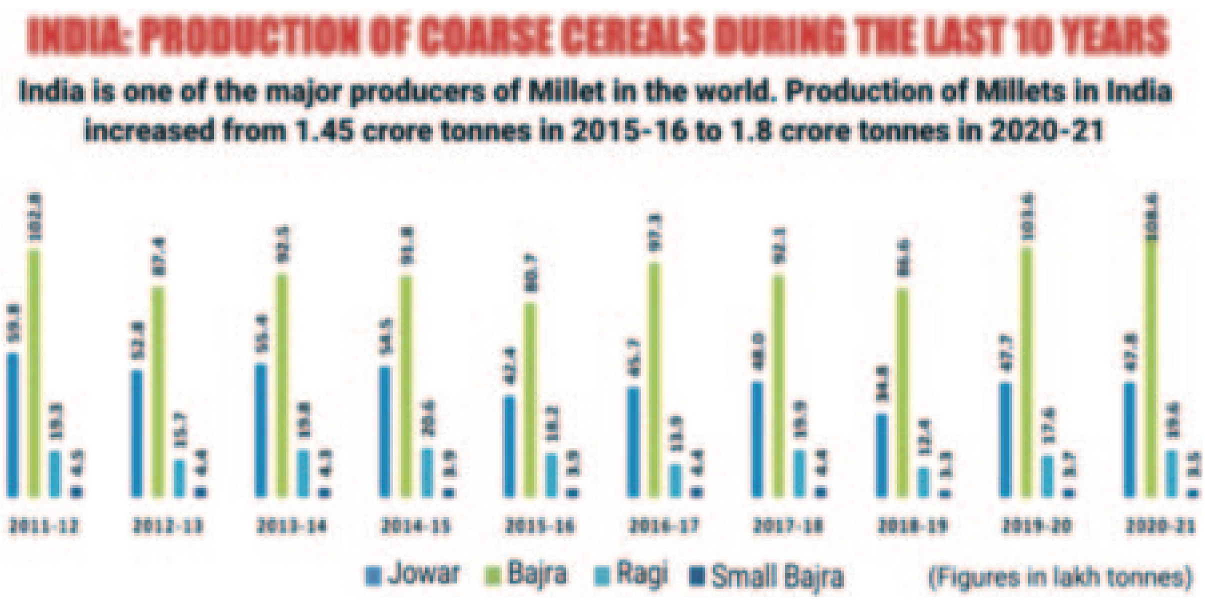
AREA	AREA (Lakh Hectares)	Production (Lakh Tonnes)
Africa	489	423
America	53	193
Asia	162	215
Europe	8	20
Australia and New Zealand	6	12
India	138	[illegible]
World	718	863

- India produces ~170 Lakh tonnes (80% of Asia and 20% of global production)
- Global average yield: 1229 kg/ha, India (1239 kg/ha)

Source : PIB, New Delhi, 2023

Millet production and consumption

Currently grown in more than 130 countries and considered a traditional food for more than half a billion people all over Asia and Africa, millet, is one of the ancient crops grown in India, and its proof is also found in the Indus Valley Civilization. Bajra is primarily a kharif crop, requiring less water and agricultural inputs as compared to other similar cereals. Millets have enormous potential to generate livelihoods, increase farmers' income, and ensure food security. The Indian government has created its action plan while taking the lead. 2018 was designated as the National Year for Millets by the government in an effort to increase both supply and demand. Dietary fiber-rich millet aids in blood pressure and sugar level regulation. Even though understanding of millets' health advantages has increased since the post-Covid, there is still much to be done.In the production of coarse cereals in the last ten years, we can see the production of millet and its consumption in the following picture:



Source: New India News, Central Bureau of Communications, New Delhi, Year 03 Issue 15 February 2023

Shri Anna

For the promotion of production and consumption of coarse grains, the "Shri Anna" scheme has been announced in the budget presented on February 1. In the era of marketing, common people have gone away from the consumption of coarse grains. Single crop farming got a boost and paddy and wheat have come to play a major role in this. As a result, both the proportion of coarse cereals in the cultivated land and their yield have gone on decreasing. The urban people left the dishes made of coarse grains out of the kitchen considering them to be rustic food. Due to this change over time, one of the reasons for malnutrition and lifestyle related problems is the neglect of coarse grains. In the era of growing demand for vegetarian foods, millets are a great option. Their cultivation is also economical, in which much care is not required. Millets have been continuously neglected during the era of Green Revolution and wheat rice. The situation has become such that the share of cereals, which used to have about 40% share in our food grain production, has been reduced to less than 10%. By the way, Asia and Africa are the major production and consumption centers of coarse grains. India, Sudan and Nigeria are their major producers. About 40% of the production of coarse cereals in the world is still in India.

Nutritious Cereals and Health

The main reason for the increase in the demand for coarse grains is the importance of nutrients and being healthy in them. As millet is rich in Vitamin E, it protects the body tissues from injuries. Millet controls the cholesterol level, which keeps the heart healthy. Millet is also useful in the prevention of diabetes. Weight is controlled by drinking barley water. Considered good for kidney health. Sorghum is widely used in animal feed, but a variety of it is found in plenty of potassium, phosphorus, calcium and iron. To increase blood or to strengthen the immune system to stay away from diseases, tide is very useful. Tide-Protects the cells of the body, reduces the risk of colon cancer and heart disease. Ragi- helps in the development of bones, it is also effective in anemia. Kangni or Tangoon - Strengthens the bones with the abundance of calcium and prevents osteoporosis. Kodo- helps in strengthening the nervous system. Sawan is rich in iron. Helps in blood circulation. Katuki- Very beneficial for the heart, helps in controlling the level of sugar in the blood. The coarse grain, which was clumsily banished from the food plate as being fit for cattle feed, has found its value today in smart avatars of Ragi Biscuit, Oatmeal Porridge and Millet Muesli. Gym trainers and nutritionists are now explaining these things in a new way to those who consider coarse grains as the food of the poor because they are rich in nutrients. That's why the government is encouraging the production and consumption of coarse grains. The nutritional value of millets can be seen in the following table two.

Table-2

NUTRITIONAL VALUE OF MILLETS

(In 100 Gm Edible Portion)

Cereals	Proteins (gm)	Fats (gm)	Carbs. (gm)	Energy (kg)	Calcium (mg)	Iron (mg)
Jowar	10.4	3.1	70.7	349	25	5.4
Bajra	11.8	4.8	67.0	361	42	11.0
Ragi	7.7	1.5	72.6	328	350	3.9
Kodo	9.8	1.6	66.6	353	35	1.7
Kutki	8.7	5.3	75.7	340	0.02	2.8
Sanwa	6.93	2.0	80.4	333	23.2	6.9
Foxtail Millet	10.3	3.1	69.9	349	30.1	3.7

Source - PIB, New Delhi

Increase in income from millet

The cultivation of millets can increase the income of the resource-poor farmers. An increase in income requires the co-ordination of technologies, marketing systems, input supplies, credit, and policies. To double the income of farmers, there are possibilities of earning more income through value addition and processing of coarse grains. Presenting coarse grains as healthy food and creating demand for their value-added products will boost their production and consumption and will have a positive effect on increasing farmers' income.Crops of coarse grains can be utilised in the processing of food and also have a bright future as an export good. To promote the sale of coarse cereals by the government, the support of marketing capacity is very necessary. Coarse grain-producing states in India are mainly, Uttar Pradesh Rajasthan, Puducherry, Maharashtra, Madhya Pradesh, Karnataka, Puducherry, Haryana, and Punjab etc. Where farmers can be empowered economically by using new technologies.

Promotion of Millets for Cultivation

Despite being climate-adaptable to millets, their cultivation has declined due to a lack of institutional support as compared to rice and wheat. Keeping in view the importance of the development process of coarse grains, some of the major suggestions are:

- Cultivation of coarse cereals, especially jowar and bajra, being highly labor intensive, the cost of labor is high. Therefore, a machine that works jointly for harvesting and threshing should be constructed and used.
- Export of Indian coarse grains should be encouraged through Farmer Producer Organizations (FPOs) in targeted domestic markets as well as in international markets.
- Development and use of productive varieties according to the soil will also give encouraging results.
- Capacity building through research and support for scientific cultivation of coarse cereals crops through partnership system.
- Promoting processing and value-addition and ensuring demand growth and supply in the market through group system like farmer producer organizations and self-help groups.
- Repurchase system with minimum support price, crop insurance, mid-day meal and public distribution system should be included.

- Policy assistance should be provided for primary processing and godowns after harvesting.
- There is a need to strengthen the skills for entrepreneurship development on coarse grain based products keeping rural and urban people at the center.
- The government should alter its policies to lower the cost of products made from millet and coarse cereals.

Conclusion

Cultivation of coarse grains is highly beneficial for the poor farmers of the country as it does not require costly chemical fertilizers and pesticides.Entrepreneurs are required to produce convenience foods made from millet that are popular with urban customers. Goods and Services Tax should be minimum on processing of coarse grains.Currently, millet that is packaged is subject to a 5% goods and services tax, whereas processed millet products like noodles are subject to an 18% tax, which raises the price of the item. If millet consumption is to be promoted then tax exemption should be given. The income of coarse grain-producing farmers can be increased only by setting up a processing industry. To increase the production of coarse grains, the government should further increase their minimum support price. Along with the government, the general public and organizations should also make innovative experiments to take Shree Anna to every household, only then health benefits and the objectives of the Global Nutrition Year can be achieved by nourishing coarse grains.

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Locus of Control among Government Teachers

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Abstract

The main aim of this research was to measure the locus of control of the teachers in order to determine the degree of their externality or internality of locus of control. A 25 item Locus of Control questionnaire (Madhu Gupta and Indu Nain, 2016) was used to measure locus of control. Sample of (N=40) teachers were selected Government Hindi Medium and Swami Atmanad Government English Medium School of Durg District, Chhattisgarh. In this study t-test was used for statistical analysis. Findings of the study revealed that the Teachers of English medium Atmanand school were found to have significantly better locus of control than Hindi medium school Teachers of English medium Atmanand school were found to have significantly better External locus of control than Hindi medium school and Teachers of Hindi medium school were found to have significantly better Internal locus of control than English medium Atmanand school.

Introduction

Rotter (1966) defined Locus of Control as a 'personality traits referring to a person's stable beliefs about personal efficacy'. Internal locus of control refers to the tendency to perceive the lives outcomes as a result of own's action and to be under own's control. External Locus of control refers to the tendency to perceive the lives outcomes because of chance factors or powerful others.

Locus of control is defined as an individual's own belief, power, or force and control that influences any positive or negative situation occurring during his/her life. It is believed that locus of control is related to what reinforcement has happened throughout the individual's life, namely the results, prizes, success, and failures. These attributions not only refer to chance, fate, and powerful people out of one's control but also refer to the results of one's own attitude. Locus of control of a teacher is responsible for not only their success but also for the success of their students.

Hooda & Annu (2020) revealed that Teachers with an external locus of control (ELOC) are at a high risk of feeling helpless, grief, stressed, and anxious. Internal locus of control (ILOC), on the other hand, helps a teacher to feel stress-free, cheerful, and in charge of their actions. The internal-external locus of control of a teacher does indeed have a considerable effect on the overall performance.

When individuals believe that they have very little control over what happens to them, they are considered to have an external locus of control; on the other hand, individuals with an internal locus of control believe that they have control over what happens to them (Adeyemi-Bello, 2005). People with an internal locus of control believe that they can influence their environment and that their actions affect what happens to them; but people with an external locus of control believe that they have little control over their environment and that what happens to them is due to random events or other people's activities (Licata, Strawser & Welker, 1986). "Internal and external locus of control plays a crucial role for an individual to retain the efficacy and utility of learning performance," according to Mali (2013).

Statement of the problem : Locus of Control among Government teachers.

Objectives of the Study

1. To study the Locus of Control of Government teachers of Hindi medium and Swami Atmanand school.
2. To study the significant difference in the Internal Locus of Control of Government teachers of Hindi medium and Swami Atmanand school.
3. To study the significant difference between the External Locus of Control of Government teachers of Hindi medium and Swami Atmanand school.

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Hypotheses

1. There will be no significant difference between the Locus of Control of Government teachers of Hindi medium and Swami Atmanand school.
2. There will be no significant difference between the Internal Locus of Control of Government teachers of Hindi medium and Swami Atmanand school.
3. There will be no significant difference between External Locus of Control of Government teachers of Hindi medium and Swami Atmanand school.

Review of Related Literature

The internal locus of control (faith in own abilities) contributes ninety percent in determining the success and performance of a teacher. The rest ten percent is determined by an external locus of control (faith in outer factors) Hooda and Annu (2020). The locus of control and job satisfaction was significantly correlated with each other. Male teachers with high job satisfaction always had better locus of control. In case of low job satisfaction locus of control was independent from sex difference (Mahajan and Kaur, 2012). In another study, the result showed that mern had internal locus of control and women scored high on external locus of control Zaidi and Mohsin (2013). Mali (2013) observed that employees with ILOC showed better accomplishment and satisfaction in their occupation. The findings corroborated Ganji's (2013) findings that LOC and job satisfaction of male and female instructors were substantially associated. Melekeowei (2015) found a link between secondary school teachers' locus of control and their instructional efficacy. Teachers with ELOC were also shown to have a higher level of conflict in their duties at school (Gupta and Nain, 2016). Ahluwalia and Preet (2016) revealed that the teachers had internal locus of control and their effort and activities to their work totally controlled by internal locus of control. External factors such as luck, fate & chance had no effect upon the teachers’ work performance.

Proposed Methodology

1. Population: The present study is concerned with the teachers of government Hindi medium schools and government English medium Atmananad school of Durg District, Chhattisgarh.

2. Sample Size: 20 teachers are taken as samples from government Hindi medium schools and 20 teachers are taken as samples from government English medium Atmananad school.

3. Sampling Method: Sampling is done through Random Sampling Method.

Statistical Analysis: The Data is analysed through t-test.

Tools Descriptions : Teachers’ Locus of Control is measured by using the standardised tool made by Madhu Gupta and Indu Nain (This scale consists of 25 items divided into two dimensions–I. Teacher's Internal Locus of Control, II. Teacher's External Locus of Control. It was administered on 400 Teachers of School and Colleges.)

Research Design: Present study is Inferential in nature.

Delimitation of the Study: Present study is delimited with teachers of government Hindi medium schools and government English medium Atmananad school of Durg District, Chhattisgarh.

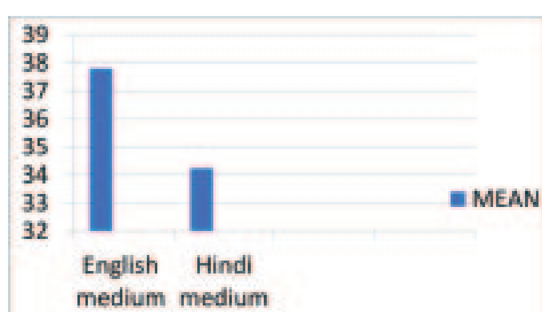
Results and Discussion

The current research focused on the level of locus of control of the teachers of government Hindi medium schools and government English medium Atmananad school of Durg District, Chhattisgarh.

This study is tried to find out, if Locus of Control has different levels in both levels of teachers. A sample selected comprised of 20 teachers from government Hindi medium schools and 20 teachers selected from the Government Atmanand English Medium School. To measure locus of control a 29 item Locus of Control questionnaire is (Madhu Gupta and Indu Nain 2016) used. Locus of control is linked with self-efficacy, if self-sefficacy is high then an individual has high internal locus of control and low efficacy responsible to develop external locus of control.

Table 1: External Locus of Control

Medium	df	N	Mean	SD	t-value	p-value
English Medium	38	20	37.80	4.67	2.10	0.42
Hidi Medium		20	34.25	6.05		



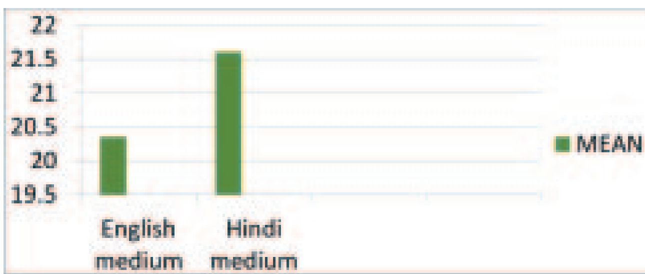
Interpretation: From the table no.1, it can be seen that calculated t-value is 2.10 which is significant at 0.05 level of significance with degree of freedom=38. It reflects that the mean score of External Locus of Control of English medium and Hindi medium school teachers differ significantly thus the null hypothesis that there will be no significant difference between external Teachers' Locus of Control of Government teachers of Hindi medium and Swami Atmanand school is rejected.

Further the mean score of External Locus of Control of teachers of English medium Atmanand school is 37.80 which is significantly higher than those of Hindi medium teachers whose mean scores is 34.25.

Teachers of English medium Atmanand school were found to have significantly better External locus of control than Hindi medium school.

Table 2: Internal Locus of Control

Medium	df	N	Mean	SD	t-value	p-value
English Medium	38	20	20.35	4.35	0.95	0.35
Hidi Medium		20	21.60	3.95		



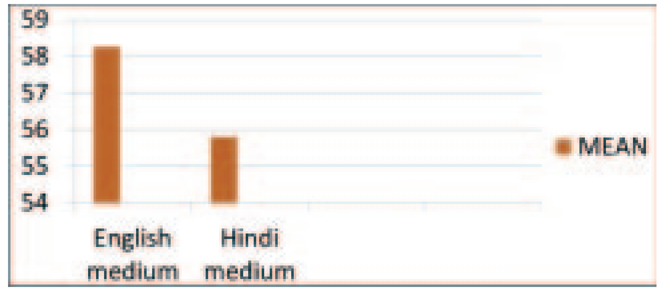
Interpretation: From the table no. 2, it can be seen that the calculated t-value is 0.95 which is not significant at 0.05 level of significance with degree of freedom = 38. It reflects that the mean score of Internal Locus of Control of English medium and Hindi medium school teachers differ significantly thus the null hypothesis that there will be no significant difference between internal Teachers' Locus of Control of Government teachers of Hindi medium and Swami Atmanand school is not rejected.

Further the mean score of internal Locus of Control of teachers of Hindi medium school is 21.60 which is significantly higher than those of English medium Atmanand school teachers whose mean scores is 20.35.

Teachers of Hindi medium school were found to have significantly better Internal locus of control than English medium Atmanand school.

Table 3: Total Locus of Control

Medium	df	N	Mean	SD	t-value	p-value
English Medium	38	20	58.25	4.74	1.17	.125
Hidi Medium		20	55.80	8.08		



Interpretation: From the table no. 3, it can be seen that the calculated t-value is 1.17 which is not significant at 0.05 level of significance with degree of freedom=38. It reflects that the mean score of Total Locus of Control of English medium and Hindi medium school teachers differ significantly thus the null hypothesis that there will be no significant difference between Teachers' Locus of Control of Government teachers of Hindi medium and Swami Atmanand school is not rejected.

Further the mean score of Locus of Control of teachers of English medium Atmanand school is 58.25 which is significantly higher than those of Hindi medium teachers whose mean scores is 55.80.

Teachers of English medium Atmanand school were found to have significantly better locus of control than Hindi medium school.

Conclusion

Current research was carried out to explore the level of Locus of Control of Government schools teachers, with the sample of 40-40 teachers from each school. In this research, t-test were used for statistical analysis. Current study concluded that the Teachers of English medium Atmanand school were found to have significantly better locus of control than Hindi medium school Teachers of English medium Atmanand school were found to have significantly better External locus of control than Hindi medium school and Teachers of Hindi medium school were found to have significantly better Internal locus of control than English medium Atmanand school.

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Activity-Based Intervention for Improving Attentiveness & Motor-Coordination among ADHD Children

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Abstract

Deficits in motor performance and attentiveness have been associated as symptoms of ADHD that affect a person's daily routine activities. Inattention hinders the person's concentration on a particular task which affects the performance of the person in any work, and poor motor coordination causes a person to have trouble in walking, sitting, moving etc. However, studies suggested that lack of attentiveness and poor motor coordination can be treated with effective interventions. This study aims to explore the improvements in motor coordination and attentiveness of ADHD after exposure to Activity-Based Interventions (Lazy-Eight Exercise, Playdough Mats, Therapy Ball activity and Music Therapy). The ADHD children's data was collected from their teachers and parents. Nineteen participants (7- teachers; 12- mothers) participated in the study. The researcher collected the data through a semi-structured interview consisting of three questions. The results indicated that more than half of the participants stated that there was a positive improvement in children's attention and motor coordination after the intervention. Furthermore, the study found that participants had a positive attitude toward activity-based interventions consisting of activities such as lazy-eight exercises, playdough mat activity, therapy ball exercises, and music therapy.

Introduction

ADHD is one of the most common childhood psychiatric disorders, characterized by the persistence of inattentiveness, hyperactivity, and impulsivity. The prevalence of ADHD is approximate 5% to 7.5% worldwide (Polanczyk *et al.*, 2014). Due to inattention, hyperactivity and impulsivity children face problems in their daily life activities (APA, 2013). They have trouble with cognitive, affective and psychomotor abilities, & due to psychosocial and functional impairment in children, ADHD is also regarded as a life time disability (Thapar *et al.*, 2013). Studies shows that due to functional and psychosocial impairment, children with ADHD have a higher risk of stress, anxiety disorders and depression (Pondé & Friere, 2007). They also face trouble with fine motor skills, due to which they are unable to hold things properly, and this negatively affect their daily routine activities such as brushing their teeth, getting dressed, packing a bag, filling a glass of water etc. The trouble with fine motor skills also affects students' handwriting, as they are unable to hold their pens, and pencils which is a major cause of poor academic performance (Posner *et al.*, 2020). There are many stimulant medicines that can be used to treat the core symptoms of ADHD, but unfortunately thesemedicines have various side-effect such as stomach upset, headache, vomiting and loss of appetite (Skot *et al.*, 2020). Thus, because of more side effects of medication, most psychotherapists, researchers, and doctors recommend using behavioural and activity-based interventions that can effectively reduce the core symptoms of ADHD with no adverse side effects (Sun *et al.*, 2022). Classroom-based activities are promising approaches to effectively improve attention, motor-performance, and develop self-regulated skills (Paul *et al.*, 2011). Physical activitiesare useful technique for improving attention that helps to enhance the ability of motor coordination skills, it increases blood flow and reduces the hyperactive nature (Basso & Suzuki, 2017). Physical activity-based interventions can help individuals to cope with their stress levels, relieve their anxiety, depression, improve mental health and self-esteem (Zang, 2019).

Parents are most concerned about their child's behavioural, educational and emotional difficulties (Sayal, Ford, & Goodman, 2010). No one knows about a child's overall behavioural problems better than their parents; they also know their child's strengths and weaknesses. Parental considerations are essential for finding possible solutions and treating the core symptoms of ADHD (APA, 2000). Parents and teachers can provide valuable information about the child, and whenever a psychiatrist or psychologist treats a child, they always prioritize the

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opinion of both the parent and the teacher.They also confirm from caregivers (parents, guardian & teachers) a significant improvement among children's symptoms after treatment (Salmon *et al.*, 2019). According to NICE, 2009 (National Institute for Health and Clinical Excellence) healthcare providers, doctors and researchers should always seek the opinion of the caregiver about the child and include their opinion into their treatment process. The information provided by the child's caregivers are essential for the psychiatrist or doctors and researchers; to know about the effectiveness of any therapy session, activity-based interventions and other treatments. Thus, it is essential to know about the caregivers' views to ascertain changes and outcomes after the treatment (Moldavsky *et al.*, 2013). We get detailed information about the child from the teacher and the parents as they are well aware of the changes in the child's behaviour after the intervention. Thus, in this study, the researcher took the opinions of mothers and teachers about changes in children's attention and motor-coordination after the intervention.

The current study focused on improving attention and motor coordination skills in children with ADHD through activity-based interventions. The findings of this study are based on the data collected from the teachers and mothers about improvements in their child's attention and motor-coordination after the activity-based intervention. The purpose of this paper is to answer the following questions: (a) Do children with ADHD show any improvement in attention after being exposed activity-based intervention? (b) Do children with ADHD show improvement in their motor-coordination skills after being exposed to activity-based intervention.

Method

In the study, the researcher used a pre-experimental method using a single group to study the improvement in children's attention and motor coordination after the intervention. In the experimental method, you test an idea to determine its effect on the dependent variable (Creswell, 2014). In this study, researcher examined the effectiveness of activity-based intervention on students' attentiveness and motor-coordination through feedback from teachers and mothers.

Operational Definitions

a) **Activity-Based Intervention:** Activity-based intervention is a child-centred approach used to address the special needs of children by providing learning opportunities, needs, and interest-based activities to achieve the goal (Macey, 2007). In the present study, activity-based interventions include activities such as lazy-eight exercises, playdough mats, therapy ball exercises and music therapy, these activities are used to improve the attention and motor-co-ordination of students with ADHD.

b) **Attentiveness:** Attentiveness means maintaining focus or concentration, not getting distracted and focusing on one task at a time. Children with inattentions have difficulty sustaining attention, following instructions, and listening carefully (Sroubek *et al.*, 2013). In the current study, attentiveness refers to the ability of children with ADHD to focus and not be distracted by external stimuli.

c) **Motor-coordination:** Motor coordination refers to the ability to coordinate muscle activation in a sequence that preserves posture, quality of certain movements and to perform tasks in a rapid, precise and controlled manner (Cech & Donna, 2012). It is the functional approach in which the brain, nervous system and muscles work together to perform a specific function (Mokobane *et al.*, 2019). In the current study, motor coordination is the ability to hold things, draw pictures, make art out of clay, sit, walk and crawl properly among students with ADHD.

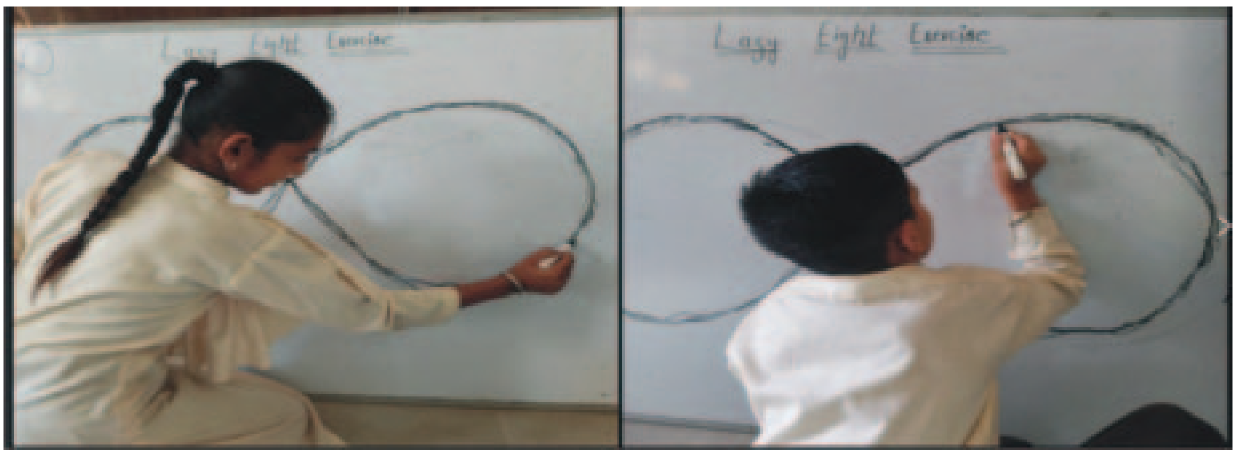
Participants

The sample consisted of children with ADHD aged between 7-14 years, selected from a Ashraya Special School, Una district of Himachal Pradesh, India. All the students with ADHD were medically examined by a psychiatrist or psychologist. Children with ADHD were selected using the criteria such as; age group– 7 to 14 years, Average IQ (Intelligent Quotient) level. The ADHD children with comorbid autism, hearing impairment, and subtypes of Down syndrome were excluded from the study. Thus, the researcher selected 12 students with ADHD who met the inclusion criteria.

Description of the intervention

The physical activity-based intervention consists of four activities; Lazy Eight exercise, play-dough mat activity, therapy ball exercise and music therapy. In these activities; the teachergave proper guidance, support and instruction to complete each activity and the student has to follow all the instructions given by the teacher.The first activity the teacher usedwas the lazy-eight exercise; It is a program that helps to improve eye-hand coordination, focus and balance that assists a person to improve their daily lifestyle. This exercise is very practical in nature requiring only a whiteboard, black marker and duster. In this exercise; Children with ADHD have to make a lazy eight figure, three times with the right hand and three times with the left hand.Another activity used by teacher was the playdough mat, this is a very creative and interesting activity; in which the teacher gives coloured clay to the students and the student makes something creative out of the coloured clay. The next activity was the therapy ball; in which the teacher instructs the student to do some exercise using a therapy ball. The last activity used by the teacher was music therapy, Music helps a person stay calm and improve physical and mental health (Zang *et al.*, 2017). In music therapy; a person listens to specific classical and folk music; He sings songs and dances. Which helps the individual to improve motor coordination and listening skills by listening to the composition (Jacob *et al.*, 2021).The details of the intervention are as follows;

1. **Lazy-Eight Exercise:** In this exercise; first, the teacher shows the figure of lazy eight on the paper and instructs the students to draw the shape of lazy eight on the whiteboard with the help of a marker. Students make the figure eight three times with the right hand and three times with the left hand as shown in picture 1. Each student completed this activity one by one in 10-15 minutes and this activity was completed by all twelve students in two hours.



Picture 1: Students engaged in Lazy Eight Exercise

2. **Play dough mats activity:** Firstly, the participant is given colourful clay with yellow, white, blue, pink, red and green colours by the teacher. The teacher asks the student to make anything they want with the use of colourful clay. Students make trees, houses, flowers and different alphabets with the help of clay, as shown in picture 2. After completing the activity, the teacher asks each student about his clay art. The teacher gave two hours to the students to complete this activity, in which students made different things out of clay, and then they told the teacher their ideas about the objects they made with the help of clay.

Picture 2: Students engage in Playdough Mats Activity

3. **Therapy Ball Exercise:** In this exercise; First, the teacher shows the students a therapy ball. The teacher instructs the student to lie on top of the ball with the weight of his stomach, then asks them to move the ball back and forth. Students repeat this process five times. The student lies on the top of the ball and moves back and forth, as shown in picture 3. It took two hours to complete this activity, in which she gave each student a therapy session.

Picture 3: Students engage in Therapy Ball Exercise

4. **Music Therapy:** In this therapy, the participants are exposed to a wireless Bluetooth speaker. Firstly, the teacher plays and sings Pahari Folk Music and encourages the students to join her. The teacher teaches some simple steps and moves of traditional Pahari songs (Nati SirmourWaliye) and instructs the students to follow her moves and enjoy the song. Students follow the moves and steps of the teacher and enjoy the whole process as shown in picture 4. This activity was completed in two hours, in which a break of 5 minutes was given after every 15 minutes. This activity helps the students to reduce their stress and improve listening skills and motor coordination (Jacob *et al.*, 2021).

Picture 4: Student engaged in Music Therapy

Data Collection

The data was collected from the parents of ADHD children and their teachers who were teaching them presently. In this study, the investigator used a semi-structured Interview consisting of three questions concerning attentiveness and motor-coordination of students with ADHD. The question included in this semi-structured interview are as follows: (1) Do You feel that your child has shown some improvement in focusing on their work after the intervention? (2) After the intervention, has your child started to ignore any distractors while doing a task? (3) Is your child constantly improving his/her motor activities? In order to collect detailed information with regard to the questions; the researcher added some questions such as 'Can you give me more information and 'Anything else you want to add?' asked as a part of semi-structured interview.The researcher contacted teachers and mothers of 12 students with ADHD who were willing to participate and give their interview during their convenient times. To keep the participant's identities confidential, teachers coded as T_1, T_2, and T_3… T_7 and mothers as M_1, M_2, M_3 .... M_{12}. Data collection was done through telephonic interviews with the participants and each interview lasted for 15-20 min; The interview began with the consent that the interviewee would freely give their opinion without any hindrance.The interview was recorded through informal note-taking by the investigator.

Results

1. **Effect of Activity-based interventionon attentiveness of ADHD children:** The data was collected from teachers and mothers of ADHD children after the ADHD children had undergone the activity-based intervention. Seven teachers and twelve mothers gave their responses according to their observation regarding attentiveness of children with ADHD. The researcher asked two questions related to students' attention both to teachers and mothers i.e.

   a) Do you feel that your child has shown some improvement in focusing on their work after the intervention?

   b) After the intervention, has your child started to ignore any distractors while doing a task?

Each question was asked to both teachers and parents separately. The qualitative data collected using interview schedule was analysed separately and are presented as follows

Research Question 1: Do you feel that your child has shown some improvement in focusing on their work after the intervention?

The data was collected from those teachers who taught ADHD children. Each teacher who taught ADHD children are, Teacher T_1 taught three students, Teacher T_2 taught two students, T_3 & T_4 taught two students each and T_5, T_6, T_7 taught one student each. According to the responses given by teachers, out of twelve students, seven students have positive improvement on their focusing skill and four students perform better than earlier to focus on their work after been exposed to activity-based intervention. The analysis if data is shown in table no. 1.

Do you feel that your child has shown some improvement in focusing on their work after the intervention?

Table no. 1 Teacher's responseon improvement in attentiveness of ADHD children

Students / Teachers	S_1	S_2	S_3	S_4	S_5	S_6	S_7	S_8	S_9	S_{10}	S_{11}	S_{12}
T_1	Yes	Yes	Better than earlier									
T_2				Better than earlier	Only when task is in-terested							
T_3						Yes	Yes					
T_4								Yes	Better than earlier			
T_5										Better than earlier		
T_6											Yes	
T_7												Yes

(T- Teachers, S- Students)

According to the responses obtained, it was found that teacher (T_1) stated that out of his three students (S_1, S_2, S_3), two students (S_1, S_2) improved their attentiveness and one student (S_3) performed better in their attentiveness than earlier. The teacher (T_2) responded that his/her one student (S_4) performed better than earlier and the second student (S_5) focus on his/her work only when the task is interesting. The teacher (T_3) who taught two students (S_6 and S_7) responded that both students improved their attentiveness after been exposed to activity-based intervention. The teacher (T_4) who taught two students responded that one student improved their attentiveness and the other performed better in their attentiveness than earlier. Teachers (T_5, T_6, T_7) who taught one student each responded that one student was performing better in attentiveness than earlier and the other two students have improved their attentiveness after being exposed to activity-based intervention.

When the researcher asks the teachers to add something else to their responses as a part of semi-structure interview. Then teachers elaborate on their responses and highlight how the ADHD student's overall behaviour has changed after giving the intervention and students are learning better from activities that are also improving their performance levels.

"I have a child in my class who is struggling with ADHD, unable to sit still in her seat, unable to focus on her work due to inattention, but when you taught her through different activities, I noticed that her whole behaviour has changed a lot. Now she is concentrating on her work very well and doing it in a better way. Her performance has also improved after the intervention" (T_4).

"They are more interested in learning from activities, they do not get up from their seats until they have completed the activity" (T_6).

The Mothers of ADHD children expressed their views about the effectiveness of the intervention. According to the responses given by 12 mothers, 41.66% mothers stated that their child has positively improved his/her concentration after exposing to Activity-Based Intervention and 33.33% of the mothers respond that their child's performance has improved and was better than earlier. The analysis of data is shown in figure no. 1

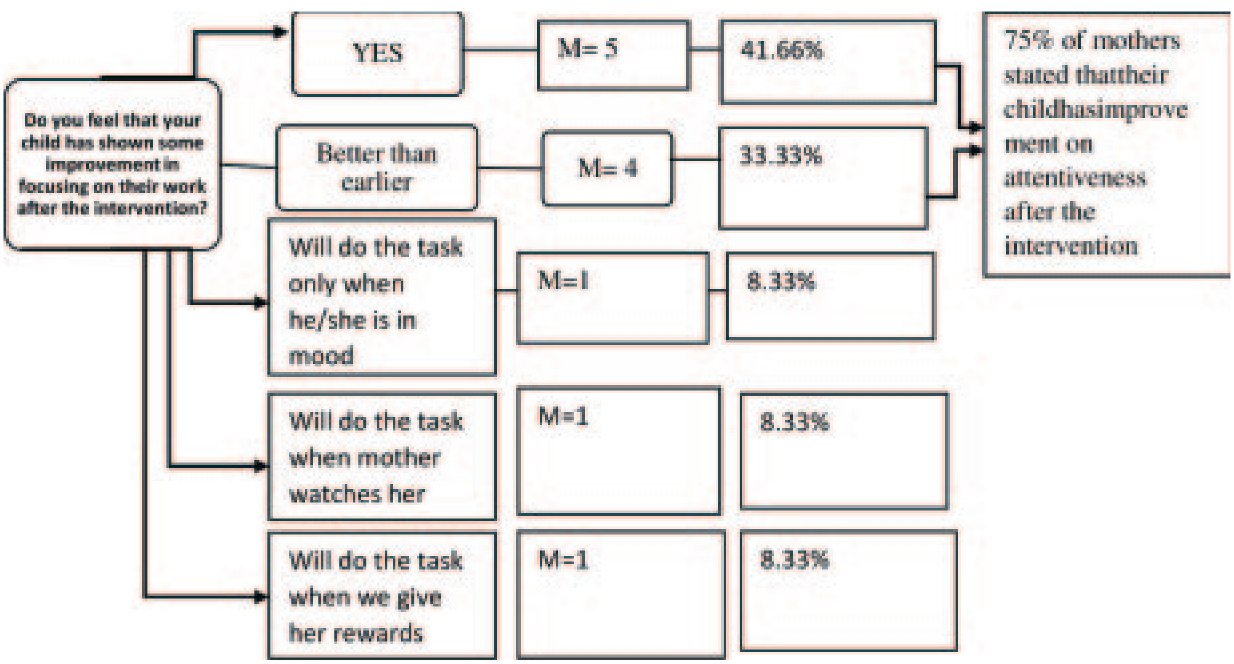


Figure No. 1: Mother's responses to improve attentiveness among children with ADHD

From the responses obtained from the mothers of the ADHD children, it was found that five mothers stated that their child has improved their attentiveness and four mothers responded that their children have better attentiveness than earlier. One mother stated that her child focuses on her work only when she is in a mood and a mother of a child gave responses that her child concentrates on her work only when the mother looks at her child's performance. One mother stated that when she gave any reward to her child only then her child concentrates on his work.

During the interview, some of the mothers responded that their child has improved their attentiveness after being exposed to the activity-based intervention. The mothers of the children say that now their child is doing his/her daily routine activities without any help and remains in his/her seat while working. Mothers expressed their feelings which is given as follows:

"Earlier, when I used to ask my child to sit and do homework, she could not sit for more than five minutes. But when I gave coloured clay to my child and asked her to make English letters. I was very surprised and happy to see her sitting for a long time and making letters as well as speaking aloud" (M_4).

"Now it takes less effort to make my child sit for his studies" (M_9).

"I saw that now she does her routine work more carefully" (M_{11}).

Research Question 2: After the intervention, has your child started to ignore any distractors while doing a task?

According to the teacher's responses, out of twelve students, eight students have ignored the external stimuli or distractor while doing their work and two students are able to ignore the distractor than earlier after been exposed to activity-based intervention. The analysis if data is shown in table no. 2.

Table no. 2 Teacher responses on distractions among ADHD students

After the intervention, has your child started to ignore any distractors while doing a task?

Students Teachers	S_1	S_2	S_3	S_4	S_5	S_6	S_7	S_8	S_9	S_{10}	S_{11}	S_{12}
T_1	Better than earlier	Yes	Yes									
T_2				Yes	Yes							
T_3						No	Yes					
T_4								Yes	Yes			
T_5										Better than earlier		
T_6											Yes	
T_7												No

(T- Teachers, S- Students)

According to the responses given by the teachers, it was analysed that teacher (T_1) stated that out of his three students (S_1, S_2, S_3), two students (S_2, S_3) ignored external stimuli or distractors while doing their work and one student (S_1) gave less attention on any external distractor than earlier. The teacher (T_2) taught two students (S_4 & S_5) and both ignore external stimuli or distractors while doing their work. The teacher (T_3) taught two students (S_6 & S_7) and stated that one student (S_6) easily being distracted by external stimuli and another student (S_7) ignore distractors while doing the work. The teacher (T_4) taught two students and both ignored external stimuli while doing their work. Teachers (T_5, T_6, T_7) taught one student each responded that one student (S_{10}) gave less attention to any distractor than earlier, one student (S_{11}) ignored distractors while doing his work and another student (S_{12}) was easily distracted by external stimuli.

Teachers share their observations on the effectiveness of useful interventions to improve children's attention, saying that students are now calmer and are ignoring unnecessary things as much as possible.

"I noticed that, whenever he makes anything out of coloured clay, he ignores everything, it makes him more attentive and calmer" (T_3).

"Now she does her classroom work without wasting time and doesn't care what is happening around her" (T_6).

As per the responses given by the mothers of the students More than half of mothers have a positive opinion on physical activity-based interventions. A total of four mothers believe that their child ignore distractor while doing any task and five out of twelve mothers said that after the intervention their child showed better improvement than before, the responses are mentioned below:

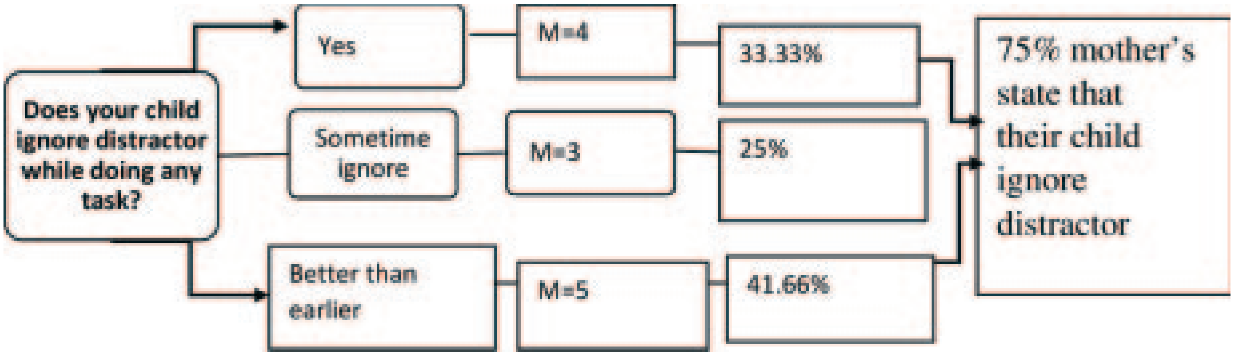


Figure no. 2: Mothers responses to improve attentiveness among ADHD students

According to the responses given by mothers of the children, it was analysed that four mothers stated that their child has ignored the distractor while doing their work and five ofmothers responded that after the intervention now their child ignores any distractor or stimuli than earlier.

The researcher asks the questions to add something or explain their ideas as a part of a semi-structured interview. Mothers reported that their child no longer pays attention to unnecessary things and happily engages in useful activities such as sports, drawing, dancing, etc. Mother's respective opinion is given below.

"I feel that earlier my child used to do his homework less and unnecessary talk more, but now his handwriting better than earlier and he beginning to understand the concepts too. So, he pays less attention to the distracting things" (M_1).

"I saw that my daughter had solved all her puzzles and asked me to buy a new one. It given me a lot of pride and joy. Now she ignores unnecessary things to buy as she had demanded earlier" (M_8).

"His attention is only on the food while eating, at that time he does not pay attention to things here and there" (M_{12}).

2. Activity-based intervention for motor coordination of ADHD children

In this regard, the researcher collected the data from seven teachers and twelve mothers of ADHD children. Teachers and mothers of ADHD children gave their feedback on the improvement in motor-coordination of ADHD children based on their observation. The researcher asked the question related to motor coordination of the students i.e.

Research Question 3: Is your child constantly improving his/her motor activities after the intervention?

According to answers given by teachers of students with ADHD. More than half of the teachers said that the child had consistently improved their motor-performance after the intervention; Table no. 3 shown the answers of teachers:

Is your child constantly improving his/her motor activities after the intervention?

Table no. 3: Teachers Responsesto improve the motor-coordination among ADHD

Students Teachers	S_1	S_2	S_3	S_4	S_5	S_6	S_7	S_8	S_9	S_{10}	S_{11}	S_{12}
T_1	Yes	Yes	No									
T_2				Better than earlier	Yes							
T_3						No	Yes					
T_4								Yes	Yes			
T_5										Better than earlier		
T_6											Yes	
T_7												Better than earlier

(T- Teachers, S- Students)

According to the responses of the teachers, it was analysed that teacher (T_1) stated that out of his three students (S_1, S_2, S_3), two students (S_1, S_2) improved their motor-coordination after being exposed to the activity-based intervention and third student (S_3) continue facing trouble with her daily based activities related to motor-coordination. The teacher (T_2) responded that her first student (S_4) performed better in his motor activities than earlier and the second student (S_5) improved her motor-coordination ability after being exposed to the activity-based intervention. The teacher (T_3) taught two students (S_6 and S_7) of which her first student (S_6) experienced trouble with her motor activities and the other (S_7) improved his motor-coordination after being exposed to the activity-based intervention. The teacher (T_4) taught two students (S_8 & S_9) of which thefirst did not improve motor-coordination and the other did well. Teachers (T_5, T_6, T_7) taught one student each, and as per their responses, student (S_{11}) improved his motor-coordination and the other two performed better on their motor-coordination activities than earlier.

Teachers stated that the children have improved their writing skills after being exposed to the intervention because they hold the pencil properly. Apart from this, now the child gets on the bus holding his essential things like a bag, tiffin and water bottle and gets off the bus.

"I noticed that my child improved his handwriting by holding his pencil properly" (T_2).

"Earlier I used to hold her bag, bottle, tiffin and then she used to get on and off the bus, but I am happy to see that now she gets on and off the bus on her own with her things" (T_7).

According to the responses given by the mothers, 6 out of 12 mothers believed that their child performed better in their motor-coordination than earlier and 4 mothers stated that their childimproved their motor-coordination after being given activity-based intervention as shown in the figure no. 3 below.

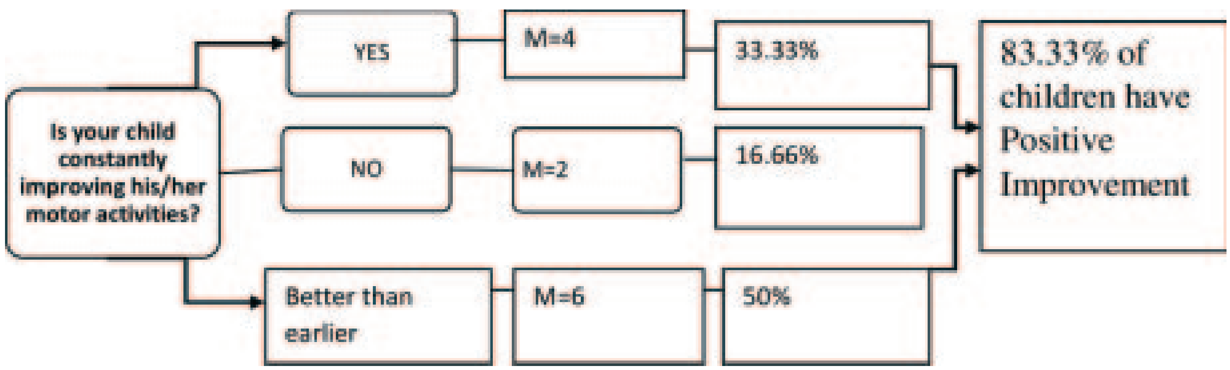


Figure no. 3: Mothers Responses to improve the motor-coordination among ADHD

Mothers responded to the improvements in motor-coordination, four out of twelve mothers stated that their children improved in daily based activities related to motor-coordination and six mothers responded that their children performed better in their motor-coordination than earlier.

When the researcher asks to add something like how much they improved and in which activities the child performed better than earlier. Then Mothers said that the child climbs up and down the stairs without any assistance and carefully grabs things like food, clothes and notebooks etc. The child does his work without any assistance such as filling the water bottle, tying the shoelaces etc.

"My child is now single-handedly doing his morning activities like getting ready for school, packing his food, filling his water bottle and tying his shoe laces. Seeing him, I feel that my child will gradually do everything that I had not thought before" (M_1).

"He picks up his things like clothes, a glass full of milk or water, and food carefully without wasting it" (M_5).

"I feel very happy when I see my child going up and down the stairs without my help. Now I decided that I would give her regular therapy sessions (music therapy and therapy balls)" (M_{12}).

Conclusion

Teachers and mothers of ADHD children play an important role in addressing educational and behavioural changes among their students. In this paper, the researcher used an activity-based intervention that includes four activities for children with ADHD, such as the lazy-eight exercise, playdough mat activity, therapy ball exercise, and music therapy. After using these activities, the researcher has collected data from the teachers and mothers of the child about improvement in attention and motor coordination. The finding of this study showed that ADHD children improved their attention and motor coordination through activity-based intervention and they show effective improvement in their performance level. The teachers and mothers state that after the activity-based intervention their students performing better than earlier. Teachers and mothers of the students want to continue these activity-based interventions for improving their child's attention and motor function.

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A Bibliometric Analysis on Online Impulsive Buying Behaviour- A Review of last 15 years

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Abstract

Purpose: Due to the pandemic, consumers have shifted to online buyingstupendously and this has increased the possibility of online impulsive buying. This whole scenario has given birth to a new buzz word online impulsive buying which is profitable for the seller and enjoyment for the buyer. Consumers are becoming more elegant and vigilant in their shopping styles; they have moved from conventional to the newly accepted online shopping style. As per the literature, India is one of the quickest developing economies in Asia Pacific area, and the online business is growing manifold each year.

Methodology: In order to analyze the existing literature, SCOPUS database has been used. In the preliminary search, 191 research papers were found from 2007 to 2022 out of which 97 were selected and further analyzed. For data analysis bibliometric software called VOS Viewer is used.

Findings: The review shows that majority of the researches followed Stimulus-Organism-Response Model.The findings showthe factors affecting online impulsive buying, influence of website attributes in online impulsive buying and theinfluence of customer experiences, reviews and recommendations.

Originality: This bibliometric paper compiles the trends and factors influencing online impulsive buying behaviour and give the world a new eyesight to explore this IT supported website stimuli. Therefore, this study would help E-retailers and marketers to change consumers' thought process and enrich their knowledge for better customer engagements to attract more impulsive purchase revenue. Also, academicians and researchers may utilize the findings of this phenomenon for further understanding.

Introduction

Impulsive buying is an unplanned and an immediate urge to buy a specific product or service which gives instant gratification to the consumer (Bashar *et al.,* 2021). It is an immediate, abrupt and a hedonically complicated behaviour. As Weinberg and Gottwald (1982) state, the concept of impulsive buying includes purchases with high emotional activation, low cognitive control and a largely reactive behaviour. It is also called as recreational shopping which is done without long-term planning. Something finished at home or buying a gift for someone is not impulsive buying, it has to be unplanned and spontaneous. This term came from consumer buying habits which came in the year 1945 and in 1962 Hawkins Stern, an economist in US identified the types of impulsive buying. This theory gives the audience a new perspective to study consumers buying habits compared to our old traditional theories. A survey of the US shows that an American consumer buys 80 percent goods at spur of the moment while shopping online (Johnson, 2018). So, the marketers today need to smartly build in some ideas with the help of technology to encourage impulsive buying by the target customers.

E-shopping has become the new normal and is one of the most preferred platforms for shopping among consumers. Moreover, majority of the online shopping expenditure is a result of online impulsive shopping. Due to increase in the usage of internet, unplanned buying has become a part of every consumer's daily life. The success of this online shopping is due to the convenience of shopping in just a click, ease of shopping 24x7, no limited operating hours and an affordable internet connection. This makes it a bigger hit than the conventional buying.

Desires, environmental stimuli, social interactions erode a person's individual stamina of self-control which leads to impulsive buying. Online platforms weaken the consumers self-control capabilities and makes way for unplanned purchases. This results inover consumption which negatively impactsour natural resources and society's well-being and also has a detrimental effect on environment in long run (Wang *et al.,* 2022).

Due to the increasing purchasing power of the consumers, irrational shopping has increased. According

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to Vernon T. Clover, impulsive buying significantly affects the sales without which sellers cannot sustain easily. So, he said, sellers should attract customers by placing impulsive products straight in front of their eyes or at places where they cannot miss to see. Therefore, impulsive buying is a boom for sellers as it increases their revenue substantially.

Exploring the factors that actually create an urge among customers are very interesting and enlightening to study. These factors have a major effect on consumers' decision-making process. Consumers' impulsive behaviour, the motivation behind a particular purchase, and lack of self-control, all these subjects are worth studying for future online policy makers. Online impulsive buying behaviour gets affected by various intrinsic and extrinsic factors (Verma & Singh, 2019). Extrinsic factors include the marketing factors, such as website design, shopping environment, website quality, navigation easiness, payment ease, etc. (Abdelsalam *et al.*, 2020; Febrilia & Warokka, 2021; Iyer *et al.*, 2020; Zulfiqar *et al.*, 2018). There is a comparatively greater number of researches on extrinsic factors than on intrinsic factors. So, a major gap to fulfil in this area of research is to study the intrinsic factors. Intrinsic factors are consumer centric which study the consumer's inner voice and motivation to buy a product or service. Keeping in mind, all these parameters, this research analysis answers the following research questions:

RQ1. What are the research trends on this topic

RQ2. What research methodology has been used over the years

RQ3. Which journals, articles contribute majorly towards impulsive buying behaviour

RQ4. How many papers are published annually on this topic

RQ5. Country-wise contribution to this topic.

Therefore, this study would help E-retailers and marketers to change consumers' thought process and enrich their knowledgeon online impulsive buying through these unique techniques.

Objectives

1) To identify and analyze the key research patterns and trends in previous studies on online impulsive buying behavior.
2) To examine and evaluate the different theoretical perspectives that have been utilized in studying online impulsive buying behavior.
3) To identify and evaluate the determinants of online impulsive buying behavior as identified in previous research.
4) To identify and address the existing research gaps in the field of online impulsive buying behavior.
5) To provide suggestions for future research directions and potential areas of exploration in the study of online impulsive buying behavior based on the identified research gaps.

Research Methodology

In order to collect the existing literature, SCOPUS database has been used to search articles in the field of online impulsive buying behaviour. The following keywords have been used to bring out the most relevant papers in this context -

TITLE-ABS-KEY

((impulsive AND buying AND behaviour) OR (impulsive*) OR {unplanned shopping} OR {urge to buy} OR {spontaneous buying} OR {sudden shopping} OR {uncontrollable shopping} OR (instant AND urge AND to AND buy) OR {online instinctive buying} OR {emotional buying} OR {passionate shopping} AND (e- AND impulsive AND buying) OR {e-commerce} OR {e- website} OR {e- shopping} OR {internet impulsive buying} AND (shopping) OR {buying} OR (factors AND affecting AND impulsive AND buying AND behaviour) OR (intrinsic AND extrinsic AND factors))

Inclusions and Exclusions

In the preliminary search, 191 research papers were found out of which 97 were selected randomly and further analyzed.

Inclusion criteria

- Articles selected between 2007 to 2022
- Only English language papers were selected
- Papers having online impulsive buying as the major theme
- Papers having theories, implications, intrinsic and extrinsic factors of impulsive buying behaviour in its content
- Research papers include review papers, empirical papers, articles in full context

Exclusion criteria

- Incomplete articles

- Researches which do not include online impulsive buying behaviour
- Articles published other than English language
- Papers not included in the specified time frame
- Compulsive buying behaviour not included as it is an addictive symptom.

Discussion

In this particular section, data analysis and discussions are presented through a bibliometric software called VOS Viewer. VOS stands for 'visualization of similarities. As the name suggests, it tells the reader about the similarities between the keywords and authors. A bibliometric paper offers a broad overview on a topic from its evolution to the current development through cluster diagrams. The following section shows the reader the trends of authors, journals, countries, subject area on online impulsive buying.

1. *Yearly Publications*

The yearly trend of publications on online impulsive buying behaviour was studied from 2007-2022. The last 15 years data has been analyzed. Figure 1 shows that there has been steady growth in research interest on online impulsive shopping. This rapid speed of researches on this topic is also due to the rapid increase in the usage of Internet and social media platforms.

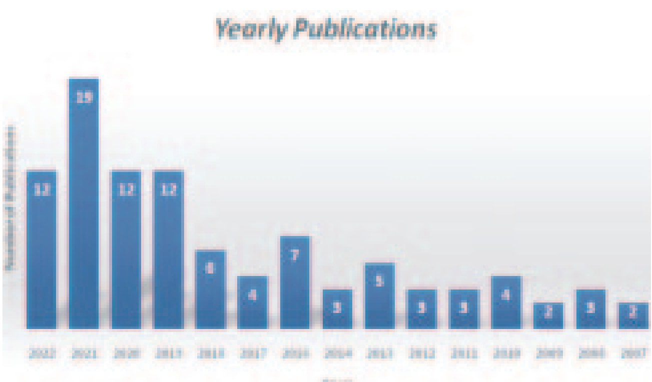

Figure 1 shows year wise publication

2. *Country-wise Publications*

China and US are the top leading countries to contribute research papers in this area followed by India, Indonesia and Taiwan. European countries are seen less in studying this phenomenon of online impulsive buying compared to western countries. After looking at the names of the authors of the most cited papers,also it is indicated that China is the leading country to produce the maximum number of papers in this field.

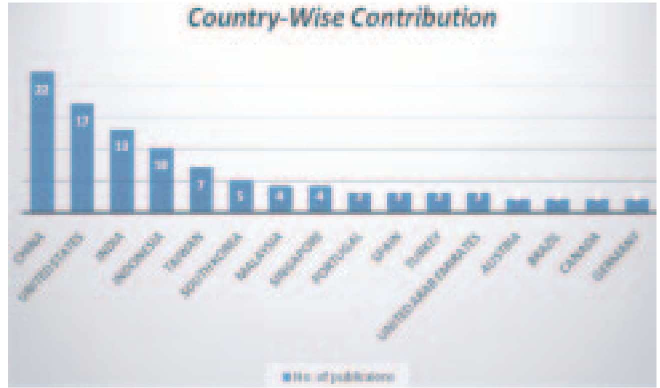

Figure 2 shows country wise contribution

3. *Most Contributing Institutions*

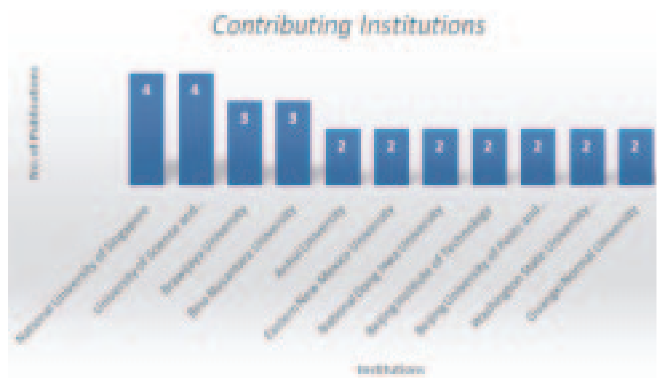

Figure 3 shows contributing institutions

National university of Singapore, University of Science and Technology of Chinaare the most contributing Universities followed by Brawijaya and Bina Nusantra University of Indonesia.

4. *Most Influential Journals*

Figure 4 shows the Journal's contribution

The top contributing journals in this field of impulsive buying behaviourare Journal of Retailing and Consumer Services, Asia Pacific journal of Marketing and Logistics, International Journal of Information Management, International Journal of Innovative Technology and Exploring Engineering and Journal of Global Fashion Marketing.

5. *Most Contributing Author*

Figure 5 shows author's contribution

Akram Umair is the most prolific author in this field with h-index as 16 which means he has minimum 16 number of papers with 16 citations. He has total 125 cited documents with1011 citations. Next is Zubair Akram with 622 citations and h-index as 15. Rest all other authors have contributed two papers in this particular field.

6. *Most Contributing Subject Area*

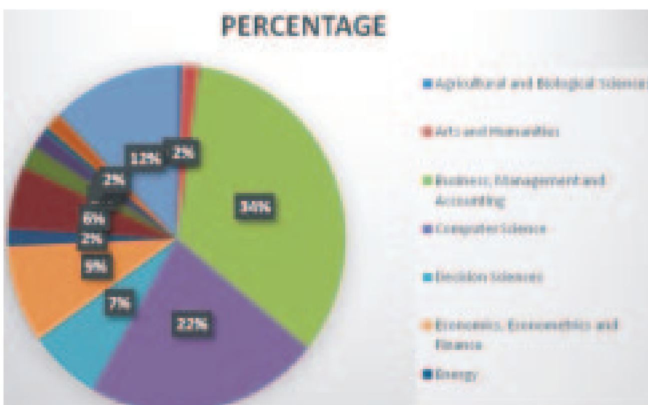

Figure 6 shows the percentage of contribution from subject area

The main contribution on impulsive buying comes from Business, Management and Accounting subject which published 63 papers followed by Computer Science and Economics, Econometrics and Finance papers.

Bibliometric analysis is done by various tools and techniques, one of the techniques is science mapping which consist of five types of analysis-Citation analysis, Co-citation analysis, bibliographic coupling, Co-word analysis and Co-authorship analysis. Science Mapping mainly tells the reader about the relationship between the research elements. Further the analysis of vos-viewer software is as follows:

1. *Citation Anaylsis*

This is the basic technique to examine the most influential publication among other publications in that particular field. It works on the assumption that there lies an intellectual link between various publications when one publication cites the other (Donthu, Kumar, Mukherjee, Pandey & Lim, 2021). The figure below shows "The influence of website characteristics on a consumer's urge to buy impulsively" by Parboteeah d.v. *et al.*, 2009 is the highly cited paper with 463 citations. The next in the list is Xiang l. (2016) with 215 citations and floh a. (2013) with 191 citations. Here the minimum number of citations of a document is taken to be 21.

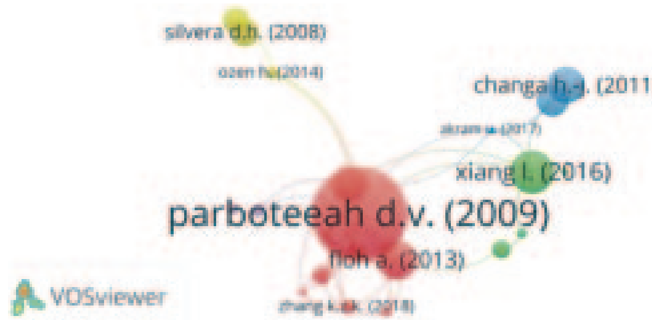

Figure 7 showing the citation analysis of Vos Viewer

2. *Bibliograpghic Coupling Analysis*

In order to get broad spectrum of themes along with the clusters, bibliographic coupling has to be performed to find the major developments happening in the particular field. The author used Vos viewer software to visualize the same. The bibliographic analysis concentrates on the division of publications into thematic clusters based on shared references, and is best used within a specific time frame (Donthu, Kumar, Mukherjee, Pandey & Lim, 2021).Various themes have been identified from these clusters and given appropriate colors and numbers to distinguish based on the keywords.

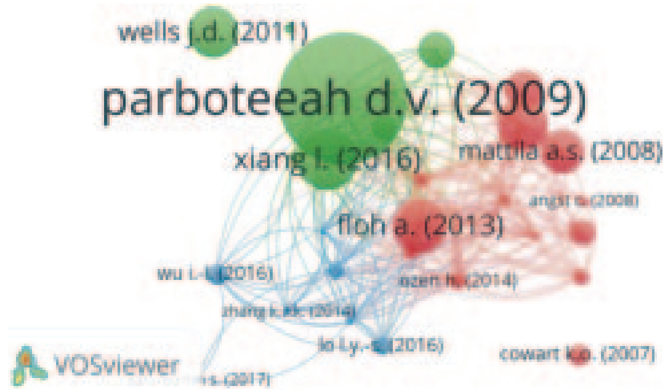

Figure 8 showing bibliographic coupling from Vos viewer

Table 1 showing the author's contribution

Clusters	Featured Keywords	Themes
Cluster 1 RED	Atmospheric cues, Store environment, personal, social and environmental influences, Hedonic motivation, SOR model	Factors affecting online impulsive buying
Cluster 2 GREEN	Website characteristics, website quality, virtual layout, social commerce, para-social interaction, system design	Influence of Website attributes in online impulsive buying
Cluster 3 BLUE	Online reviews, online social interaction, web skills, website trust and belief, source credibilty, perceived quality, need for touch, peer recommendation	Influence of customer experiences, reviews and E-WOM

Cluster 1 (Red) comprises of 14 itemswhich include researches focusing on general factors affecting online impulsive buying. The keywords include-atmospheric cues, Store environment, personal, social and environmental influences, Hedonic motivation. It shows that this is the key area in this research field according to number of items this cluster comprises. (Floh & Madlberger, 2013) and (Mattila A.S., 2008) are the two leading papers in this cluster. Chang *et al.* (2011) studied the hedonic factors which playsa dominant role in motivating a person to buy impulsively. In majority of these researches SOR (stimulus-organism-response), model has been used for analysis.

Cluster 2 (green) comprises of 8 items which studies the influence of website characteristics in online impulsive buying. The most commonly used words include website characteristics, website quality, virtual layout, social commerce, para-social interaction and system design. Parboteeah *et al.* (2009), Wells *et al.* (2011) and Xiang *et al.* (2016) are the main contributors in this area of website quality and designing. In recent times, due to the increase in the usage of social commerce the role of para social factor has been on the top for promotions by the sellers. Para social interaction, a new born word, is like a direct communication between a celebrity, influencer with their audience that instigates their followers to buy the products they are using or promoting. Para social factors, website quality positively induce a customer to buy impulsively. They are the most engaging factors which makes way from browsing to buying.

Cluster 3 (blue) includes 7 items which shows the importance of customer experiences, online reviews and online social interactions as determinants to buy impulsively. Major keywords include Online reviews, web skills, website trust and belief, source credibilty, perceived quality, need for touch, peer recommendation, and motivational factors. The generation y and z are the people who majorly rely on their friend recommendations to buy any product. Social media sites like facebook and instagrams are the main trigger sites for them to buy impulsively. This cluster comprises of all new researches between 2016-2018, and is therefore an upcomping area to be explored in future.

Conclusion and Limitations

This study examined 97 academic literature from scopus database for the time period 2007-2022. The results of the analysis include three main themes:

1. Factors affecting online impulsive buying
2. Influence of Website attributes in online impulsive buying
3. Influence of customer experiences, reviews and recommendations.

The paper reveals the yearly publications, influential authors, key subject area, important journals, most cited papers and bibliographic coupling themes. With the development of internet, online impulsive shopping is the newly emerging market for buyers as wel as sellers. According to the themes studied intrinsic factors, hedonic motivation are less explored varaibles. Website content, live streaming, parasocial content all these are new brewing terms to be explored. Therefore, the trends of impulsive shopping have shifted from traditional to contemporary ways. Store factors/external factors have been extensively studied, now is the time to explore inner factors/intrinsic motivating factors.

The study suffers various limitation like the articles have been selected from scopus database only which limits our scope and generalisation of the study. Bibliographic software also suffers various conceptual limitaions which further affects the validity of this study.

Future research directions

After doing the bibliographic content analysis, some future scope could be identified which the future researchers can explore. To start with, the author has felt the need to study cross cultural dimensions which is the basis for a customer's mood and behaviour to shop across various continents/ geographical boundries. To be precise, Indian culture itself is quite diverse to study and to know the impulsive buying behaviour of the customers. Next is the E-WOM, which needs to be studied and used for making customers inquisitive to know and buy the product. Further, the power of social commerce should not be underestimated. Social interactions and celebrity influencers are playing big role these days. Its like a golden tool to influence impulsiveness in audience by sellers which should surely be studied in future. Lastly, intrinsic factors are the most important urging factors to change a customer's mind and push him to action of buying instatntly.

Conflict of Interest : On behalf of all authors, the corresponding author states that there is no conflict of interest.

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सृजनशील एवं असृजनशील विद्यार्थियों में इंटरनेट जागरूकता का तुलनात्मक अध्ययन

*डॉ. अनिल कुमार पाण्डा, **किरन मौर्य

सारांश

प्रस्तुत अध्ययन "सृजनशील एवं असृजनशील विद्यार्थियों में इंटरनेट जागरूकता का तुलनात्मक अध्ययन" लिया गया है। प्रस्तुत शोधपत्र के शोध उद्देश्य के रूप में माध्यमिक विद्यालयों के छात्र-छात्राओं में सृजनशील एवं असृजनशीलता का अध्ययन करना एवं इंटरनेट जागरूकता का अध्ययन करना है। वर्तमान अध्ययन की शोध में सर्वेक्षण विधि का प्रयोग किया गया है। न्यायदर्श के अंतर्गत कानपुर नगर के माध्यमिक विद्यालय के 100 विद्यार्थियों को शोध कार्य हेतु चुना गया। निष्कर्ष के रूप में पाया गया कि सृजनशील छात्र तथा छात्राओं में इंटरनेट जागरूकता के मध्य सार्थक अंतर पाया गया है। अतः परिकल्पना संख्या 1 अस्वीकार की जाती है। असृजनशील छात्र तथा छात्राओं में इंटरनेट जागरूकता के मध्य सार्थक अंतर पाया गया है। अतः परिकल्पना संख्या 2 अस्वीकार की जाती है। सृजनशील तथा असृजनशील छात्रों में इंटरनेट जागरूकता के मध्य सार्थक अंतर पाया गया है। अतः परिकल्पना संख्या 3 स्वीकार की जाती है। सृजनशील तथा असृजनशील छात्राओं में इंटरनेट जागरूकता के मध्य सार्थक अंतर नहीं पाया गया है। अतः परिकल्पना संख्या 4 स्वीकार की जाती है। सृजनशील छात्रों तथा असृजनशील छात्राओं में इंटरनेट जागरूकता के मध्य सार्थक अंतर पाया गया है। अतः परिकल्पना संख्या 5 अस्वीकार की जाती है। सृजनशील छात्राओं तथा असृजनशील छात्रों में इंटरनेट जागरूकता के मध्य सार्थक अंतर पाया गया है। अतः परिकल्पना संख्या 6 अस्वीकार की जाती है।

प्रस्तावना

शिक्षा मानव के जीवन में उस प्रकाश के समान है, जो उसे आजीवन सही दिशा की ओर प्रेरित होने के लिए प्रकाशित करती रहती है। आज शिक्षा के माध्यम से जनजीवन में नई-नई तकनीकों का समावेश होता जा रहा है जिसके माध्यम से बड़ों से लेकर बच्चों तक विभिन्न तकनीकों का प्रयोग सुलभ हो रहा है। इसके साथ ही उनके ज्ञान में बढ़ोतरी हो रही है, जिसके फलस्वरूप वह अपने जीवन के प्रत्येक क्षेत्र में उन्नति की ओर अग्रसरित हो रहे हैं। व्यक्ति की सृजनात्मकता विज्ञान के क्षेत्र में नई दिशाओं में अपना योगदान सुलभ करा रही है और यह योगदान अधिक सृजनात्मक होगा तभी उसका प्रभाव व्यापक रूप से पड़ेगा। सृजनशील व्यक्तियों में गलतियों को सहन करने की क्षमता अधिक होती है उन्हें गलतियों से भय नहीं लगता। उनके द्वारा समाधान के लिए जो विधि प्रयोग की जाती है वह बहुत अधिक विस्तृत होती है जिसके कारण कभी-कभी इन्हें गंभीर समस्या का सामना भी करना पड़ जाता है। यह किसी भी समस्या का समाधान अनुकूलता व प्रतिकूलता आदि को ध्यान में रखकर करते हैं। इनमें प्रतिकूल वस्तुओं को सहन करने की क्षमता पाई जाती है।

इनमें प्रतिकूल वस्तुओं को सहन करने की क्षमता पाई जाती है। सृजनात्मक व्यक्ति अपनी सृजन क्षमता से नए विचारों, आविष्कारों, तकनीकी के विकास, पुराने यंत्रों में परिवर्तन एवं पुराने विचारों की तार्किक विवेचना, सिद्धांतों के समर्थन, नई खोजों या सिद्धांतों के विकास से स्वयं, समाज, राष्ट्र एवं पूरे विश्व को सुख-सुविधाएं एवं लाभ पहुंचाता रहा है।

आज का दौर डिजिटल प्लेटफॉर्म का है, जहां पर विद्यार्थी अपनी दिनचर्या का अहम हिस्सा उस पर गुजारता है जिससे बच्चों की सृजनात्मकता पर सोशल नेटवर्किंग, व्हाट्सएप, फेसबुक, ट्विटर का प्रभाव पड़ता है। वर्तमान परिदृश्य में छोटी से छोटी जानकारी के लिए बच्चे इंटरनेट के उपयोग पर बल देते हैं और अपनी समस्या का समाधान इसकी मदद से कर लेते हैं। कुछ नया लीक से हटकर करने का प्रयास नहीं करते हैं। इंटरनेट के प्रति जागरूकता उसकी सृजनात्मकता पर किस प्रकार का प्रभाव डाल रही है। यह जानने के लिए सृजनशील तथा असृजनशील विद्यार्थियों का चुनाव समस्या हेतु किया गया है।

आवश्यकता

वर्तमान समय में तीव्र गति से हो रहे वैज्ञानिक, औद्योगिक तथा तकनीकी विकास तथा आधुनिकीकरण ने मानव जीवन को इतना जटिल तथा समस्याग्रस्त बना दिया है, कि इन समस्याओं

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के समाधान हेतु जीवन के हर पहलू में सृजनशीलता की आवश्यकता महसूस की जा रही है। आज के समस्याग्रस्त जटिल समाज में जहाँ हर क्षेत्र में एक-दूसरे से आगे बढ़ने की होड़ मची है, वहीं सृजनशील व्यक्तियों की अत्यंत मांग है। जहां सोशल नेटवर्क पूरे विश्व में अपना पैर पसार रहा है। आम जीवन में इसकी विभिन्न शब्दावलियाँ उतनी ही खास होती जा रही है। सृजनशील तथा असृजनशील विद्यार्थियों में इंटरनेट जागरूकता का स्तर क्या है। उनमें इंटरनेट के माध्यम से ज्ञान अर्जित व ग्रहण करने की उत्सुकता का स्तर क्या है। वह अपने ज्ञान का विस्तार करने में इसकी कितनी सीमा तक मदद लेते हैं। जो बच्चे सृजनशील हैं तथा जो बच्चे असृजनशील हैं, उनमें इंटरनेट जागरूकता का स्तर क्या है।

संबंधित साहित्य का सर्वेक्षण

निम्नलिखित शोधार्थियों ने सृजनात्मकता व इंटरनेट जागरूकता से संबंधित कार्य किए हैं जिसमें निम्न प्रमुख हैं- नारायण, शिव (2020), कुमार, सुरेंद्र (2018), द्विवेदी, पूजा (2021), कुमारी, सुमन (2019), जैन, अमिता (2019), नरूका, संतोष (2018) आदि।

प्रमुख पदों की संक्रियात्मक परिभाषा

माध्यमिक विद्यालय : उत्तर प्रदेश राज्य की माध्यमिक शिक्षा परिषद द्वारा माध्यमिक विद्यालय के अंतर्गत माध्यमिक कक्षा 9 व 10 तथा उच्च माध्यमिक कक्षा 11 व 12 आता है।

सृजनशील और असृजनशील विद्यार्थी : सृजनात्मकता से अभिप्राय रचना संबंधी योग्यता, नवीन उत्पाद की रचना करना। यह किसी कार्य को कुछ नए ढंग से करने के लिए प्रेरित करती है। सृजनात्मकता, व्यक्ति द्वारा किसी जटिल समस्या का विद्वतापूर्ण समाधान करने की योग्यता है, जो अपने में निहित विभिन्न विशेषताओं समस्या के प्रति सजगता, गतिशील वैचारिकता, लचीलापन, मौलिकता, जिज्ञासा, नवीनता हेतु परिवर्तन की आकांक्षा के माध्यम से रचनात्मकता उत्पन्न करती है। उपकरण के माध्यम से सृजनशील व असृजनशील विद्यार्थियों की पहचान की गई।

इंटरनेट जागरूकता : इंटरनेट परिचालन में व्यवहित शब्दों की अवधारणा या ज्ञान की सजगता ही इंटरनेट जागरूकता है।

शोध के उद्देश्य : माध्यमिक स्तर के सृजनशील और असृजनशील छात्र-छात्राओं में इंटरनेट जागरूकता का अध्ययन।

शोध अध्ययन की परिकल्पना

1. सृजनशील छात्र तथा छात्राओं में इंटरनेट जागरूकता में सार्थक अंतर नहीं है।
2. असृजनशील छात्र तथा छात्राओं में इंटरनेट जागरूकता में सार्थक अंतर नहीं है।
3. सृजनशील तथा असृजनशील छात्रों में इंटरनेट जागरूकता में सार्थक अंतर नहीं है।
4. सृजनशील छात्राओं तथा असृजनशील छात्राओं में इंटरनेट जागरूकता में सार्थक अंतर नहीं है।
5. सृजनशील छात्रों तथा असृजनशील छात्राओं में इंटरनेट जागरूकता में सार्थक अंतर नहीं है।
6. सृजनशील छात्राओं तथा असृजनशील छात्रों में इंटरनेट जागरूकता में सार्थक अंतर नहीं है।

शोध अध्ययन की विधि : प्रस्तुत लघु शोध में सर्वेक्षण विधि का प्रयोग किया गया है।

न्यादर्श : कानपुर नगर को चार जोन में बांटकर प्रत्येक जोन के 4-4 विद्यालयों से उद्देश्यपूर्ण विधि द्वारा विद्यार्थियों को चुना गया। कुल 100 विद्यार्थियों को शोध कार्य हेतु चुना गया।

शोध के चर

स्वतंत्र चर : सृजनशील विद्यार्थी, असृजनशील विद्यार्थी

आश्रित चर : इंटरनेट जागरूकता

उपकरण : सृजनशील और असृजनशील के मापन हेतु शोधार्थिनी ने बीके पासी के द्वारा निर्मित पासी टेस्ट आफ क्रिएटिविटी टेस्ट का प्रयोग किया गया। इंटरनेट जागरूकता के मापन हेतु शोधार्थी द्वारा स्वनिर्मित इंटरनेट जागरूकता परीक्षण का प्रयोग किया गया।

शोध की परिसीमा

1. प्रस्तुत शोध में कानपुर नगर को लिया गया है।

2. शोध में माध्यमिक स्तर के अन्तर्गत कक्षा 10 के ही विद्यार्थियों को सम्मिलित किया गया है।

3. शोध में केवल सृजनशील और असृजनशील विद्यार्थियों को लिया गया है।

परिकल्पनाओं का विश्लेषण एवं व्याख्या

सृजनशील छात्र तथा छात्राओं में इंटरनेट जागरूकता का मध्यमान, मानक विचलन एवं क्रांतिक मूल्य का विश्लेषण एवं व्याख्या।

सारणी संख्या-1

कुल विद्यार्थी	संख्या	मध्यमान	मानक विचलन	स्वतंत्राश संख्या	क्रांतिक मूल्य
सृजनशील छात्र	20	54.5	11.2	38	2.102*
सृजनशील छात्राएं	20	62.3	12.3		

* - Significant at 0.05 level

व्याख्या : तालिका से स्पष्ट है कि कुल सृजनशील छात्रों की इंटरनेट जागरूकता का मध्यमान व मानक विचलन क्रमशः 54.5, 11.2 प्राप्त हुआ है। जबकि कुल सृजनशील छात्राओं की इंटरनेट जागरूकता का मध्यमान व मानक विचलन क्रमशः 62.3 व 12.3 प्राप्त हुआ है। स्वतंत्राश संख्या 38 पर क्रांतिक मूल्य का मान 2.10 है। प्राप्त क्रांतिक मूल्य का मान सार्थकता के एक स्तर (0.05) से अधिक है। जो इंटरनेट जागरूकता के संबंध में सृजनशील छात्र-छात्राओं के मध्य सार्थक अंतर को दर्शाता है। अतः परिकल्पना संख्या 1 अस्वीकार की जाती है।

असृजनशील छात्र तथा छात्राओं में इंटरनेट का मध्यमान, मानक विचलन एवं क्रांतिक मूल्य का विश्लेषण एवं व्याख्या।

सारणी संख्या-2

कुल विद्यार्थी	संख्या	मध्यमान	मानक विचलन	स्वतंत्राश संख्या	क्रांतिक मूल्य
असृजनशील छात्र	30	50.9	9.43	58	3.97**
असृजनशील छात्राएं	30	61.9	11.53		

**- Significant at 0.05 level & 0.01

व्याख्या : तालिका से स्पष्ट है कि कुछ असृजनशील छात्रों की इंटरनेट जागरूकता का मध्यमान व मानक विचलन क्रमशः 50.9 एवं 9.43 प्राप्त हुआ है, जबकि कुल असृजनशील छात्राएं जिनकी इंटरनेट जागरूकता का मध्यमान व मानक विचलन क्रमशः 61.9 एवं 11.53 प्राप्त हुआ है। स्वतंत्राश संख्या 58 पर क्रांतिक मूल्य का मान सार्थकता के दोनों स्तरों से अधिक है जो इंटरनेट जागरूकता के संबंध में असृजनशील छात्र छात्राओं के मध्य सार्थक अंतर को दर्शाता है, अतः परिकल्पना संख्या-2 अस्वीकार की जाती है।

सृजनशील तथा असृजनशील छात्रों में इंटरनेट जागरूकता का मध्यमान, मानक विचलन एवं क्रांतिक मूल्य का विश्लेषण एवं व्याख्या

सारणी संख्या-3

कुल विद्यार्थी	संख्या	मध्यमान	मानक विचलन	स्वतंत्राश संख्या	क्रांतिक मूल्य
सृजनशील छात्र	20	54.5	11.2	48	1.18^NS
असृजनशील छात्राएं	30	50.9	9.43		

NS - Not Significant

व्याख्या : तालिका में स्पष्ट है कि कुल सृजनशील छात्रों की इंटरनेट जागरूकता का मध्यमान व मानक विचलन क्रमशः 54.5 वह 11.2 प्राप्त हुआ है जबकि कुल असृजनशील छात्राओं की इंटरनेट जागरूकता का मध्यमान व मानक विचलन क्रमशः 50.9 व 9.46 प्राप्त हुआ है। स्वतंत्राश संख्या 48 पर क्रांतिक मूल्य का मान सार्थकता के दोनों स्तरों से कम है जो इंटरनेट जागरूकता के संबंध में सृजनशील छात्र तथा असृजनशील छात्र के मध्य सार्थक अंतर को नहीं दर्शाता है अतः परिकल्पना संख्या-3 स्वीकार की जाती है।

सृजनशील छात्राओं तथा असृजनशील छात्राओं में इंटरनेट जागरूकता का मध्यमान, मानक विचलन एवं क्रांतिक मूल्य का विश्लेषण एवं व्याख्या

सारणी संख्या-4

कुल विद्यार्थी	संख्या	मध्यमान	मानक विचलन	स्वतंत्राश संख्या	क्रांतिक मूल्य
सृजनशील छात्राएं	20	62.3	12.3	48	0.115^NS
असृजनशील छात्राएं	30	61.3	11.53		

NS - Not Significant

व्याख्या : तालिका से स्पष्ट है कि कुल सृजनशील छात्राओं की इंटरनेट जागरूकता का मध्यमान व मानक विचलन क्रमशः 62.3 व 12.3 प्राप्त हुआ है जबकि कुल सृजनशील छात्राओं की इंटरनेट जागरूकता का मध्यमान हुआ मानक विचलन क्रमशः 61.9 ओवर 11.53 प्राप्त हुआ है। स्वतंत्राश संख्या 48 पर क्रांतिक मूल्य का मान सार्थकता के दोनों स्तरों के मानो से कम है जो इंटरनेट जागरूकता के संबंध में सृजनशील छात्राओं तथा असृजनशील छात्राओं के मध्य सार्थक अंतर को नहीं दर्शाता है। अतः परिकल्पना संख्या 4 स्वीकार की जाती है।

सृजनशील छात्रों तथा असृजनशील छात्राओं में इंटरनेट जागरूकता का मध्यमान, मानक विचलन एवं क्रांतिक मूल्य का विश्लेषण एवं व्याख्या

सारणी संख्या-5

कुल विद्यार्थी	संख्या	मध्यमान	मानक विचलन	स्वतंत्राश संख्या	क्रांतिक मूल्य
सृजनशील छात्र	20	54.5	11.20	48	2.26*
असृजनशील छात्राएं	30	61.9	11.53		

* - Significant at 0.05 level

व्याख्या : तालिका से स्पष्ट है कि कुल सृजनशील छात्रों की इंटरनेट जागरूकता का मध्यमान व मानक विचलन क्रमशः 54.5 हुआ 11.20 प्राप्त हुआ है जबकि कुल सृजनशील छात्राओं की इंटरनेट जागरूकता का मध्यमान हुआ मानक विचलन क्रमशः 61.9 व 11.3 प्राप्त हुआ है। स्वतंत्राश संख्या 48 पर क्रांतिक मान सार्थकता के एक स्तर 0.05 से अधिक है जो इंटरनेट जागरूकता के सृजनशील छात्रों व असृजनशील छात्राओं के मध्य सार्थक

अंतर को दर्शाता है अतः परिकल्पना संख्या 5 अस्वीकार की जाती है।

सृजनशील छात्राओं तथा असृजनशील छात्रों में इंटरनेट जागरूकता का मध्यमान, मानक विचलन एवं क्रांतिक मूल्य का विश्लेषण एवं व्याख्या

सारणी संख्या-6

कुल विद्यार्थी	संख्या	मध्यमान	मानक विचलन	स्वतंत्राश संख्या	क्रांतिक मूल्य
सृजनशील छात्राएं	20	62.3	12.3	48	3.51**
असृजनशील छात्र	30	50.9	9.43		

** - Significant at 0.05 level & 0.01

व्याख्या : तालिका से स्पष्ट है कि सृजनशील छात्राओं की इंटरनेट जागरूकता का मध्यमान तथा मानक विचलन क्रमशः 62.3 व 12.3 प्राप्त हुआ है। जबकि असृजनशील छात्राओं की इंटरनेट जागरूकता का मध्यमान तथा मानक विचलन क्रमशः 50.9 व 9.46 प्राप्त हुआ है। स्वतंत्राश संख्या 48 पर क्रांतिक मान सार्थकता के दोनों स्तरों से अधिक है। जोकि इंटरनेट जागरूकता के संबंध में सृजनशील छात्राओं तथा असृजनशील छात्रों के मध्य सार्थक अंतर को दर्शाता है। अतः परिकल्पना संख्या 6 अस्वीकार की जाती है।

शोध निष्कर्ष

1. सृजनशील छात्र तथा छात्राओं में इंटरनेट जागरूकता के मध्य सार्थक अंतर पाया गया है।
2. असृजनशील छात्र तथा छात्राओं में इंटरनेट जागरूकता के मध्य सार्थक अंतर पाया गया है।
3. सृजनशील तथा असृजनशील छात्रों में इंटरनेट जागरूकता के मध्य सार्थक अंतर पाया गया है।
4. सृजनशील तथा असृजनशील छात्राओं में इंटरनेट जागरूकता के मध्य सार्थक अंतर नहीं पाया गया है।
5. सृजनशील छात्रों तथा असृजनशील छात्राओं में इंटरनेट जागरूकता के मध्य सार्थक अंतर पाया गया है।
6. सृजनशील छात्राओं तथा असृजनशील छात्रों में इंटरनेट जागरूकता के मध्य सार्थक अंतर पाया गया है।

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Advancements and Trends in Queueing Theory

*Dr. Shubhra Katara

Abstract

Queuing theory is the study of waiting in queues, which is useful in solving problems in human life. Queuing models help improve service quality and increase customer satisfaction. In this article, a literature review describes the historical evolution and recent events in the search queue, highlighting key research findings and key conclusions.

The review begins by exploring early applications of queuing theory, such as Erlang's formula. Further Matrix analysis methods introduced by Marcel Neuts expand the analytical capabilities of queuing systems, allowing them to solve calculations. Evolutionary processes, which provide an alternative approach to systems analysis, have also received attention. Important results in these areas are discussed. The literature review also includes multi-class queuing systems, functional analysis of communication in queues, and applications of queuing theory in healthcare and transportation.

In summary, queuing theory data shows its enduring importance and adaptability across different countries. Recent advances in analytical techniques and statistical methods have expanded their scope and use in complex systems.

Introduction

The review of literature in this chapter focuses on trends and advancements in queueing theory. Queueing theory plays a crucial role in analyzing complex systems found in computer systems, communication networks, manufacturing systems, healthcare, transportation, and more. Various mathematical techniques have been developed to study traffic processes and performance evaluation in queueing networks. This review highlights key areas of research and notable contributions in the field.

For nearly a century, mathematicians have dedicated their studies to the phenomenon of queues. One of the early practical applications of queueing theory was in telephone exchanges, as demonstrated by Erlang's loss formula. However, it wasn't until around 35 years ago that computer scientists recognized the potential of single queues and queue networks as performance models for computer systems. Over time, these systems have undergone significant advancements, surpassing the limitations of queueing networks in terms of their complexity and scope.

During the late 1960s, the application of queueing theory began in the modeling of time-sharing computer systems. More specifically, single queues were used to analyze the distribution policies for central processing units (CPUs).

The examination of these individual queues resulted in a new comprehension that encompasses qualitative and quantitative elements regarding the design of operating systems and disk management systems. Nevertheless, these models of single queues proved overly limiting in accurately depicting systems composed of interconnected computing devices, as the concept of computers underwent a transformation. Later developments in queueing theory shifted their focus towards investigating the interaction between service centers or queues, which ultimately gave rise to the concept of queueing networks. During that era, contemporary computers could be perceived as a collection of loosely connected hardware components, wherein weekly interacting jobs or transactions circulated. The effectiveness of queueing theory as a performance modeling paradigm hinged on this particular perspective of computers. However, modern computer and communication systems do not seamlessly align with this model. Queueing networks persist as a valuable performance modeling paradigm under certain circumstances.

a) Recent trend in Queueing theory

(i) 'Queueing Networks' : The advancement of computer systems and computer networks has made it necessary to develop mathematical techniques for studying their traffic processes. The pioneering work on queueing networks was carried out by J. Jackson (1957).

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The mathematical principles for analyzing queueing networks were later established by Whittle (1967, 1968), and by Kingman (1969), who approached them in terms of population processes. Since the early 1970s, there has been extensive research on complex queueing network problems. Numerous survey papers and books have been published to summarize the significant contributions made in this field. These include Basket (1975), Kelly (1975), Whitt (1974).

(ii) 'The matrix analytic method' : Marcel Neuts (1975) introduced phase-type probability distributions and subsequently developed an analysis technique that expands and adjusts the previous transform method to accommodate multiple variables. This technique has been made computationally solvable with the aid of computers. Additional references for further reading on this topic are Neuts (2013), Alfa *et al.* (1998), and Ramaswami (1998). The integration of phase type distributions to represent system components, along with the implementation of the matrix analytic method for their analysis, has greatly expanded the scope of queueing systems from which practical results can be derived.

(iii) 'Transform inversion' : The traditional approach to analyzing queuing systems involves using generating functions and/or Laplace transforms to obtain practical results. However, the challenges associated with transforming these functions have led to increased research in this area. Starting with Dubner H. and Abate (1968) and Doetsch G. (1974), numerous papers have been published on this topic. To gain a comprehensive understanding of the Fourier series method of inversion, refer to Whitt and Abate's work (1992). M.L. Chaudhry and his colleagues have also focused on inverting transforms in specific queuing systems, as evident in Chaudhary and Templeton's publication (1997) and other articles in various journals.

(iv) 'Computer and communication systems' : The resurgence of queueing theory after the 1960s can be attributed to the increasing need to analyze traffic processes in the rapidly growing computer and communication industry. Early research on queueing networks and influential books such as E.G. Coffman *et al.* (1973) and Klinrock NB (1975) laid the foundation for the subject's significant development.

To track this growth, various survey-type articles from the journal Queueing Systems are worth mentioning. Coffman and Hofri (1986) provided descriptions of important computer devices and the queueing models used to analyze their performance. Yashkov (1987) focused on analytical timesharing models, complementing Mckinney's work (1969) on the same topic. Additionally, special issues of the journal edited by Mitra and Mitrani (1991) further contributed to the subject's advancement. Mitra et al. (1991) explored communication systems in their paper. Queueing applications have also been addressed in various computer journals, and numerous books continue to be published on the subject.

The following is a brief overview of some notable research in the field of queueing and scheduling:

Disney R.L. (1975) studied the problem of Poisson output in a simple FCFS system (M/GI/1/S).

Srikanta Kumar (1986) investigated a simple learning scheme for priority assignment in a single-server queue.

P.A. Raymond (1991) conducted performance analysis on cellular networks.

D.J. Goodman *et al.* (1993) explored distributed dynamic channel assignment schemes. J.C.-I Chuang (1993) focused on channel allocation to support cellular communication.

Suleyman and Oxokici (1987) derived a formula for average waiting time in queues with scheduled batch services.

S. Kuek & W. Wong (1993) investigated an ordered dynamic channel assignment scheme with reassignment in highway microcells.

Garg *et al.* (2008) obtained the time-dependent solution of a single-channel retrial queueing system.

(v) Specialized Models : During the 1950s and 1960s, certain queueing models were developed that have since found wider applications in the field of computer and communication systems. We will discuss three such models that have garnered significant consideration.

Polling models: These models depict scenarios in which one or more servers alternate between serving multiple queues. By altering the configuration of the system and the rules governing the order in which queues are served, a wide range of models can be created.

Vacation models: It is not uncommon for queueing systems to experience service breaks, such as machine breakdowns, maintenance-related service disruptions, cyclic server queues, and scheduled job streams. Notably, the results obtained from these models can be divided into two parts: one that corresponds to systems without vacations and another that depends on the distributions associated with the vacation periods.

Retrial queues: In systems with finite capacity, it is common for customers who were initially denied entry to attempt re-entry. These customers, having already made an unsuccessful service request, constitute a distinct population from the original customers. The literature extensively explores problems related to this phenomenon.

(vi) Multi-class queueing systems: Queueing models that consider multiple classes of customers with different priorities or service requirements have gained attention. These models help in analyzing systems with diverse customer populations and can be applied to various scenarios such as healthcare, telecommunications, and transportation (Baccelli & Brémaud, 2012).

(vii) Performance evaluation of queueing networks: The performance assessment of complex queueing networks, initiate in computer systems, communication networks, and manufacturing systems, has been a significant area of research. Techniques like mean field approximations, fluid approximations, and simulation-based methods have been explored to analyze the performance of large-scale systems (Harchol-Balter, 2013).

(viii) Queueing theory in healthcare: Queueing theory has found applications in healthcare systems to optimize patient flow, reduce waiting times, and improve resource allocation. Models that consider patient arrivals, service times, prioritization strategies, and different levels of care have been developed to evaluate and enhance the performance of healthcare systems (Palvannan *et al.,* 2012).

(ix) Queueing theory in transportation: Queueing models have been extensively used to analyze traffic congestion, transportation networks, and public transportation systems. Researchers have studied the effects of different traffic management strategies, routing algorithms, and demand patterns on congestion and service levels (Cao *et al.,* 2018).

(x) Manufacturing Systems: According to Buzacott and Shanthikumar (1992a), the classical Jackson network and the problem of machine interference were initially observed in the context of manufacturing. Since the 1970s, with the integration of computers into various manufacturing stages, there has been a notable rise in the utilization of queueing theory and the emergence of novel techniques and discoveries. This swift advancement has had a significant impact on concepts such as just-in-time manufacturing. Buzacott and Shanthikumar (1992a) contain comprises three articles that extensively cite various subjects pertaining to manufacturing systems.

In any stochastic modeling theory, statistical problems naturally occur when applying the models. These problems involve tasks such as identifying the appropriate model, estimating parameters based on empirical data, and making inferences about future operations using statistical procedures. The recognition of these statistical challenges can be traced back to earlier studies conducted by Molina (1927).

Clarke (1957) made a pioneering contribution to the estimation problem by deriving maximum likelihood estimates for arrival and service rates in an M/M/1 queueing system. Building upon this work, Billingsley (1961) further advanced the field by exploring inference techniques in Markov processes. Wolff (1965) extended the research by developing likelihood ratio tests and maximum likelihood estimates specifically for queues that can be modeled by birth and death processes.

In 1972, Goyal and Harris conducted a study that focused on estimating parameters in a non-Markovian system. They utilized the transition probabilities of the embedded Markov chain to construct the likelihood function. Since then, there have been significant advancements in adapting statistical methods for various systems. Basawa and Prabhu (1981) addressed the estimation problem of parameters in the GI/G/1 queue. Rao *et al.* (1984) applied a sequential probability ratio technique to control parameters in the M/Ek/l and Ek/M/l queues. Additionally, Armero (1994) employed Bayesian techniques for inference in Markovian queues, among others. Bhat and Basawa (2002) have conducted more recent studies where they incorporated both queue length and waiting time data to estimate parameters in queueing systems.

The investigation of tangible systems is driven by the goals of enhancing their structure, management, and efficiency. Prior to the 1960s, operational issues were predominantly addressed based on behavioral outcomes, until operations researchers equipped with mathematical optimization techniques became interested in queueing problems. It is worth mentioning that Erlang's involvement in the field stemmed from his desire to develop improved telephone systems for his employer. His publication titled "On the rational determination of the optimum number of circuits" tackles the problem of determining the ideal number of channels to minimize the likelihood of system loss.

Graphs and tables were commonly used by communication system designers, especially for telephones, to present analytical measures of effectiveness. However, with the advent of computers, these graphs and tables became outdated and no longer necessary. Several examples of such graphs and tables include Bailey's (1952) research on hospital appointment systems and Edie's (1954) analysis of traffic delays at tollbooths. Morse's (1958) book, which focused on the application of queueing theory to practical problems, gained significant recognition because it effectively presented theoretical results and provided guidelines for enhancing system design.

Hillier (1963) groundbreaking paper focused on the application of standard optimization methods to address waiting line challenges in industrial economics. This paper is considered to be one of the earliest works that introduced optimization techniques to queueing problems. While Hillier specifically examined an M/M/1 queue, Heymann later in 1968 developed an optimal strategy for activating and deactivating the server in an M/G/1 queue based on the system's current condition.

Operations researchers who have received training in mathematical optimization methods have since investigated their application to a wide range of queueing systems, with increased complexity. A recommended resource for a comprehensive understanding of this subject is a special issue of the journal Queueing Systems. Additionally, Bauerle (2002) examines an optimal control problem within a queueing network.

b) Embedded Markov Chain Technique

If the distribution of interarrival times, service times, or any other distribution related to the system is not exponential, the queueing system is referred to as Non-Markovian, for example, M/G/1. The method used to transform the non-Markovian queueing system into discrete-time Markov chains is known as the Imbedded Markov Chain technique. We examine the system at same suitable points so that the new discrete time system becomes Markovian at those points. These points are called 'regeneration points. Kendall (1951), with the help of these points, studied the system M/G/1. He found that if we confine only at the time instants when the service of a unit ends, then non-Markovian process is reduced to Markovian in discrete time. Later on, Kendall (1953) studied GI/M/R process by taking the regeneration points at the time instants when the arrivals occur. This technique was used by Bailey (1954) to solve the bulk service M/G/1 system. Later onChaudhary and Templton (1983) analyzed M/G/1 queue with batch arrival and service mechanism.

Supplementary variable Technique

The supplementary variable technique refers to the method of converting a non-Markovian queueing process into a Markovian process in continuous time. This is achieved by incorporating one or more random variables into the process's state space definition, Kendall (1953) introduced a technique called "augmentation" to solve the general system G/G/R. This technique involves introducing (R+-1) variables representing the elapsed service times of each server and the elapsed time since the last arrival. Cox (1955) formulated equations and obtained a steady-state solution for the M/G/1 queueing process. In his formulation, he defined Pn(x,t) dx, where n>0, as the first-order probability that the queue length is n at time t, and the elapsed service time of the unit being served lies between x and (x+dx). P0(t) represents the probability that the server is idle at time t. Keilson and Kooharian (1960) obtained the time-dependent solution for the M/G/1 system. David M.G. Wishart (1960) applied this method to study the M/G/1 and GI/M/1 systems under the Last-Come-First-Served (LCFS) queue discipline. Conolly (1958) derived the transient solution for the GI/M/1 system and obtained the distribution of the busy period in 1959 and 1960. Jaiswal (1961) utilized this technique to analyze the behavior of dependent preemptive resume and head-of-the-line priority queues. Kashyap (1965) applied the same technique to study double-ended queues with limited waiting space, while Murari (1969) obtained a transient solution for bulk queueing systems.

Conclusion

The literature on queueing theory highlights the importance of statistical challenges and inference techniques in analyzing complex systems. Recent advancements in queueing networks, the matrix analytic method, and transform inversion have expanded the scope of practical analysis. The resurgence of queueing theory in computer and communication systems, as well as its applications in manufacturing, underscores its relevance in diverse domains. Statistical challenges in parameter estimation and inference have been addressed through significant contributions. Cox's survey provides valuable guidelines for conducting statistical investigations. Overall, statistical considerations play a crucial role in improving the accuracy and applicability of queueing theory in real-world scenarios.

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A Study on Tribal and Non-Tribal Secondary Students with Reference to Moral Judgement and Instrumental Values

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Abstract

The study aims to find out how much the tribal and non-tribal children of Uttar Pradesh and Uttarakhand differ with regard to 18 instrumental values and the level of moral judgement for this purpose the sample consisted of 100 tribal (50 of each zone) and 100 non tribal (50 of each zone) secondary School children and they were administrated by test of moral judgement (Das R.C., 1991) and the value test of (Upadhyay S.N., 1978) and it was found that the tribal and non-tribal secondary School children of Uttar Pradesh did not differ in instrumental values whereas the regard to moral judgement level they differed significantly it was also observed that tribal and non-tribal secondary School children of Uttrakhand differed significantly in their instrumental values as well as level of moral judgement the tribal children of Uttar Pradesh and Uttrakhand neither referred significantly with regard to their Instrumental values not to their moral judgement level whereas the non-tribal children of both zone referred in instrumental values but not differed significantly with reference to moral judgement level.

Introduction

The present ills of the world, the political tension, economic crisis, regional revolts, kidnapping of tourist and leaders, corruption are due to the fact that the world has begun to worship material values more than moral, spiritual/ social and instrumental values. Regretfully saying that some narrow minded and disturbing anti-social forces have been misguided in the tribal population to create regional imbalance and bring damaged public places and public property.status of living and their connection with the outside world (Sahani & Nandy, 2013). Hence, this represents diversity in its culture and societies (Das, 2006) As remedies to increase cynicism, the policy focuses on the need for readjustment in the curriculum in order to inculcate social and moral values. Instrumental values and moral judgement are affected by social conditions and social conditions are not controlled by anybody. Only we could control our own activities, thoughts and behaviour by responding to social situations and moral dilemmas. The level of instrumental values and moral judgement or we can say in total all the values have been going downward and character has been deteriorating.

It is not for the first time that concern has been expressed about the decline in the standards of values and morality in our society. Great educationists, eminent person and several committees and commissions have expressed about the decline in the standards of social and moral life of our people and attention drawn to the role of education in fostering a sense of values. The lifestyle, thoughts and way of living of tribal as well as non-tribal having changing very rapidly and the major concern of the modern society is value crisis. Hence, the researcher selected the project to know the instrumental values and moral judgement level of tribal and non-tribal secondary School children in relation to their different zone.

As we know, society needs true citizens and in school and home, the child learns and inculcates all kinds of values and moral judgement level by virtue of active interaction and influence of family members. The child of tribal is also not untouched with the knowledge and realisation of corruption, day ceremony and non-violence as these are in every sphere of life and in all classes, castes and families. The researcher try to reach at the conclusion that how far the tribal and non-tribal children of two separate zone differ or relate in instrumental values and moral judgement. The researcher hopes, this piece of study may promote and intrinsic motivation to counteract indiscipline, terrorism, selfishness, corruption, injustice, vice and other Anti-social activities and made try to find out the influence of modernisation and life values on the mortality and instrumental values. This may invite further researcher and help the parents and society

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to be conscious of the children before taking any program of action.

Defining Key Terms

Instrumental values: Instrumental values are specific types of behaviour that play a role in the formation of certain key characteristics and character within the individual. And at the same time the person is operated as a means to achieve the ultimate goal.

Moral judgment: Moral judgment is an evaluation process of certain behaviours in the context of those behaviours to decide whether that behaviour is right or wrong and good or bad. It is a dilemma to take right decision.

Tribal: The people who live in hills,forests and remote village where they are usually very traditional and orthodoxly stick to their customs, culture and taboos. Development works are not properly done such as Tharu, Gonds, Bhotia.

Non-tribal: The people who live in normal areas and developingplain areas and they do not belong to hill tribes.

Objectives

The objectives of this study are as follows:

- To know the difference in instrumental values between tribal and non-tribal secondary School children of Uttar Pradesh and Uttarakhand.
- To know the difference in moral judgement level between tribal and non-tribal secondary School children ofUttar Pradesh and Uttarakhand.

Hypothesis

The hypotheses of this study are as under:-

$H_0$1. There is not any significant difference between tribal and non-tribal secondary school children of Uttar pradesh with regards to instrumental values.

$H_0$2. There is not any significant difference between tribal and non-tribal secondary school children of Uttrakhand with regards to instrumental values.

$H_0$3. There is not any significant difference between tribal children of Uttar Pradesh and Uttrakhand with regards to instrumental values.

$H_0$4. There is not any significant difference between non-tribal children of Uttar Pradesh and Uttrakhand with regards to instrumental values.

$H_0$5. There is not any significant difference between tribal and non-tribal secondary school children of Uttrakhand with regards moral judgement level.

$H_0$6. There is not any significant difference between tribal and non-tribal secondary school children of Uttar Pradesh with regards moral judgement level.

$H_0$7. There is not any significant difference between tribal children of Uttar Pradesh and Uttrakhand with regards to moral judgement level.

$H_0$8. There is not any significant difference between non-tribal children of Uttar Pradesh and Uttrakhand with regards to moral judgement level.

Methodology

The methodology of this study aimed at making a comparative analysis of the instrumental values and moral judgement level of tribal and non-tribal secondary School children in relation to different regions.

Variables

In this study, there are two independent variables, viz: regions and tribalnon tribal difference. Instrumental values and Moral judgement level are the dependent variable.

Sample and Sampling

The sample of the study consisted of 100 tribal and non-tribal (50 + 50) secondary school children of each region.

Test of moral judgement (Das R.C., 1991) and the value test (Upadhyaya S.N, 1978) were administrated. The sample was collected fromUttar Pradesh and Uttarakhand by randomisation method and the data were analysed by CR method.

Result and Discussion

Table-1: Comparison of instrumental values of tribal and non-tribal children of Uttar Pradesh

Group	N	Mean	SD	CR
Tribal	50	6.55	3.68	3.05**
Non-tribal	50	4.29	3.71	

***means significant at .01 level*

Table 1 shows the number, means, SD and CR of the instrumental values of the children belonging to tribal and non-tribal categories of Uttar Pradesh. It is observed that the CR value was found to be 3.05 means there is a significant difference between the two categories at .01 level and thus null hypothesis no. 1 is not retained. Non-tribal children differed significantly in the field of social recognition, comfortable life, sense of accomplishment, freedom, equality, security and self-respect and tribal children showed better instrumental values with compared to their counterparts. This difference may be due to non-involvement of tribal children with modernity and extra cultural scenario. These children love freedom to move, to select the way of life and to live accordingly with proper security and self-respect.

Table 2: Comparison of instrumental values of tribal non-tribal children of Uttarakhand

Group	N	Mean	SD	CR
Tribal	50	5.86	3.70	2.24*
Non-tribal	50	4.18	3.81	

**means significant at .05 level*

Table 2 depicts the number, Means, SD and CR values of the instrumental values of children belonging to tribal and non-tribal categories it is found that the CR values as 2.24 Which means there is significance difference between the two categories at 0.05 level and hence the null hypothesis No. 2 is rejected. It was seen that there was a cross-regional difference among the tribal and non-tribal children of both regions with regard to instrumental values. As they agreed with almost 12 instrumental values but differed in 6 instrumental values. The socio-cultural factors, way of living, status, govt. policy and independent thinking have a positive impact upon children of Uttarakhand. The scientific apparatus, modern thoughts and technological discoveries and technical competencies of non-tribal students may bring out such difference.

Table 3: Comparison of instrumental values of tribal children of Uttar Pradesh and Uttarakhand

Group	N	Mean	SD	CR
Tribal of U.P.	50	6.55	3.68	0.94^{NS}
Tribal of Uttarakhand	50	5.86	3.70	

NS means Not Significant

Table 3 depicts the number, Means, SD and CR values of the instrumental values of children belonging to tribal from different regions. It is found that the CR values of 0.94 which means there is not any significance difference between the two regions at 0.05 level hence the null hypothesis no. 3 is accepted. The tribal children of U.P. had not differed in wisdom, pleasure, happiness and true friendship values slightly as compared to that of tribal children of Uttarakhand. Both groups of children showed similarity in the instrumental values as their cultural, traditional values may be similar and the pleasure of happiness and life were natural and original. Friendship and trustworthiness were found to be similar as their sanskarasof ethics may be similar.

Table 4: Comparison of instrumental values of non-tribal children of Uttar Pradesh and Uttarakhand

Group	N	Mean	SD	CR
Non-tribal of U. P.	50	4.29	3.71	0.14^{NS}
Non-tribal of Uttarakhand	50	4.18	3.81	

NS means Not Significant

Table 4 depicts the number, Means, SD and CR values of the instrumental values of children belonging to non-tribal from different regions. It is found that the CR values of 0.14 which means there is not any significance difference between the two regions at 0.05 level hence the null hypothesis no. 4 is accepted. Development and enrichment of status, provisions and opportunities at their disposal of non-tribal children of cross-regions was pretty much as same. It may be due to similarities of wisdom, pleasure, self-respect as both non-tribal groups were disclosed to modern context and cultural development and new situation.

Table 5: Comparison of moral judgement level of tribal non-tribal children of Uttarakhand

Group	N	Mean	SD	CR
Tribal	50	4.98	2.46	3.68**
Non-tribal	50	3.36	1.82	

***means significant at .01 level*

Table 5 depicts the number, Means, SD and CR values of the moral judgementlevel of children belonging to tribal and non-tribal categories it is found that the CR values as 3.68 Which means there is significance difference between the two categories at 0.01 level and hence the null hypothesis No. 5 is rejected. The tribal children and non-tribal children of Uttarakhand had been differed significantly with regard to equality, salvation, wisdom, social recognition, self-respect, pleasure etc. the tribal children had recognition in their society and also they had greater faith in spirituality and abundant trust in God, salvation and wisdom. Hence, these values differed significantly with their counterparts.

Table 6: Comparison of moral judgement level of tribal and non-tribal children of Uttar Pradesh

Group	N	Mean	SD	CR
Tribal	50	5.08	1.98	4.22**
Non-tribal	50	3.56	1.63	

***means significant at .01 level*

Table 6 shows the number, means, SD and CR values of the moral judgement level of the children belonging to tribal and non-tribal categories of Uttar Pradesh. It is observed that the CR value was found to be 4.22 means there is a significant difference between the two categories at .01 level and thus null hypothesis no. 6 is not retained. The tribal and non-tribal children of both the regions differed in their mean moral stage score (MSS). It seems to be so due to their aloofness and separation from the development concepts, modernity. It is due to their high respect and adherence to their cultural heritage and traditions. They are very much involved with customs but never be ready to look at the unpeaceful disturbed world.May be the difference is due to lack of transport facility and geographical barriers which are to be solved.

Table 7: Comparison of moral judgement level of tribal children of Uttar Pradesh and Uttarakhand

Group	N	Mean	SD	CR
Tribal of U.P.	50	5.08	1.98	0.22^{NS}
Tribal of Uttarakhand	50	4.98	2.46	

NS means Not Significant

Table 7 depicts the number, Means, SD and CR values of the moral judgement level of children belonging to tribal from different regions. It is found that the CR values of 0.22 which means there is not any significance difference between the two regions at 0.05 level hence the null hypothesis no. 7 is accepted. This non significance between the two groups may be due to similarities of culture, tradition, morality, ethics, customs and judgement power.

Table 8: Comparison of moral judgement level of non-tribal children of Uttar Pradesh and Uttarakhand

Group	N	Mean	SD	CR
Non-tribal of U.P.	50	3.56	1.63	0.57^{NS}
Non-tribal of Uttarakhand	50	3.36	1.82	

NS means Not Significant

Table 8 depicts the number, Means, SD and CR values of the moral judgementlevel of children belonging to non-tribal from different regions. It is found that the CR values of 0.57 which means there is not any significance difference between the two regions at 0.05 level hence the null hypothesis no. 8 is accepted. It accepted due to their exposure to the developed world, scientific accessories, modern trends and visionary identities.

Social Significance

In the present research, no difference has been found between tribal students of Uttar Pradesh and Uttarakhand in terms of instrumental values and moral judgement level, and also no difference has been found between non-tribal students of Uttar Pradesh and Uttarakhand in terms of instrumental values and moral judgement level. This is because equality has been found in thewisdom, pleasure, happiness and true friendship values midpoints oftribal students of both the regions, while similarity has been found in the Development and enrichment of status, provisions and opportunities at their disposal midpoints of non-tribal students of both the regions. Therefore, when a comparative study of tribal and non-tribal students of Uttar Pradesh and Uttarakhand was done, differences were found between them on the modernity and extra cultural scenario, socio-cultural factors, way of living, status, govt. policy and independent thinking points in terms of instrumental values. Similarly, when the moral judgment level of tribal and non-tribal students of Uttar Pradesh and Uttarakhand was studied, differences were also found between them on the faith in spirituality and abundant trust in God, salvation and wisdom cultural heritage and traditions points. Thus, after research, it can be said that tribal students have better performance than non-tribal students in both the fields. Thus in this research it can be said that tribal students have got more of instrumental values and moral judgement level than non-tribal students in both the fields. If non-tribal students are taught cultural values like them by taking them for educational tour to tribal areas, then non-tribal students who are inseparable from all these values will also be able to expand their personality by attaining them. In a nutshell, we can conclude that the children of various tribal areas are more efficient in dealing with behavioural gesture, etiquettes and the level of moral judgement level with regard to normal students.

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शंकर शेष कृत नाटक, "एक और द्रोणाचार्य" और आधुनिक शिक्षा व्यवस्था

*प्रो अलका पाण्डेय

सारांश

'एक और द्रोणाचार्य' नाटक में हमारे समाज की व्यवस्था, मनुष्य की विडंबना, एवं शिक्षा जगत में फैले भ्रष्टाचार तथा सुविधाभोगी मनोवृत्ति को उकेरने का प्रयास किया गया है। महाभारत के गुरु द्रोणाचार्य के मिथक के माध्यम से, आधुनिक शिक्षा व्यवस्था को, भ्रष्टाचार, असंगति, विसंगति के मध्य झूलते जीवन आदर्श तथा शिक्षक समुदाय के पंगु, बेबस और अपाहिज चरित्र को पौराणिक कथा के माध्यम से चित्रित करने का प्रयास किया गया है। इसके लिए शंकर शेष दो कथाओं तथा दृश्य को समानांतर लेकर चलते हैं। जो दर्शकों या पाठकों को विश्वसनीय लगता है। 'एक और द्रोणाचार्य' में, अरविंद, शिक्षक है तथा कथानक के केंद्र में है, इसी के समानांतर, द्रोणाचार्य का कथानक भी मंच पर चलता है। यहां भी शिक्षक पर व्यवस्था का दबाव, सुविधाभोगी मनोवृत्ति, तथा आर्थिक संकट से संबंधित प्रश्न उठते हैं ।इन्हीं प्रश्नों पर 'एक और द्रोणाचार्य नाटक' में विचार किया गया है।

प्रस्तावना

डॉ शंकर शेष के नाटकों में एक नवीन, नूतन रचनाधर्मितायुक्त, रंगमंच की संभावनाओं को देखा जा सकता है। उन्होंने हिंदी नाटकों को एक अलग और अतिरिक्त संवेदना और चेतना से अनुकल्पित करके समृद्धि के सोपान पर पहुंचाया है, जो अद्वितीय है। पारंपरिक परंपराओं को तोड़कर जीवन के विभिन्न संदर्भों को भिन्न-भिन्न आयाम द्वारा उन्होंने अपने नाटकों में प्रस्तुत किया है। डॉक्टर शंकर शेष ने जीवन के परिवर्तन को देखा है, और भोगा है। साथ ही उन्होंने अपने जीवन में आने वाले हर परिवर्तन की प्रगति को सोपान बनाकर अपनी जिंदगी को निरंतर विकासोन्मुख रखाहै। कलम, कोशिश और संघर्ष उनके जीवन के आधार स्तंभ है तथा उत्तरदायित्व का निर्वहन करना उनकी सहज वृत्ति है।

भ्रष्टाचार, महंगाई, अवसरवादिता, विघटित जीवन मूल्य, स्वार्थपूर्ण राजनीतिक व्यवस्था, भ्रष्ट शिक्षा व्यवस्था एवं मानव का विघटन आदि उनके नाट्य लेखन के आधार बने हैं। आज के समय में समाज के प्रत्येक वर्ग के हर व्यंक्ति के अंदर कहीं ना कहीं एक क्षण के मोह का बीज व्याप्त है जिसके कारण व्यक्ति पतन को प्राप्त हो रहा है, उसको भी उन्होंने अपने नाटकों में बड़ी ही कुशलता के साथ चित्रित किया है। डॉक्टर शंकर शेष ने आधुनिक हिंदी नाटकों को सूक्ष्म और नवीन दोनों प्रकार के नाट्यशिल्प से अनुप्राणित किया है। सन 1955 से 1981 तक की नाट्य साहित्य यात्रा में उनके कथ्य, शिल्प और शैली की विविधता को स्पष्ट देखा जा सकता है। उनकी प्रयोगधर्मिता उनके नाटकों में स्पष्ट परिलक्षित होती है। साथ ही उनके नाटक बदलते युग संदर्भों को वहन करने में सक्षम हैं। अपने समय की लोकधर्मी एवं नाट्यधर्मी परंपराओं का भी उन्होंने बहुत ही कुशलता के साथ अपने नाटकों में निर्वाह किया है। इसीलिए उन्हें आधुनिक नाटककारों का मसीहा भी कहा जाता है।

डॉक्टर शंकर शेष एक सजग, सक्रिय नाटककार थे जिन्होंने नव नाट्य समीक्षा के मानदंड-निर्धारण में एक सक्रिय महत्वपूर्ण भूमिका निभाई है। उन्होंने अनेक नाटक लिखे जो अपने कथ्य और शिल्प की दृष्टि से बहुत प्रसिद्ध हुए जिनमें बिन बाती के द्वीप, शिल्पी, पोस्टर, कोमल गांधार, मायावी सरोवर तथा एक और द्रोणाचार्य मुख्य है।

स्वातंत्र्योत्तर भारत में प्रवेश की व्यापकता के साथ-साथ व्यक्ति का अकांक्षा जगत भी व्यापक बना है। मध्यवर्गीय परिवार का व्यक्ति आर्थिक मोर्चों पर मूलभूत आवश्यकताओं की पूर्ति हेतु संघर्ष के उस धरातल पर पहुँच जाता है; जहाँ वह समझौता करने पर विवश हो जाता है इसके लिए वह अनैतिकता के मार्ग पर चलने से भी नहीं हिचकिचाता है। अरविंद मध्यवर्गीय जीवनयापन करने वाला, पारिवारिक अर्थ दंशिता की समस्याओं से पीड़ित, एक सामान्य अध्यापक है। जिसे पौराणिक चरित्र द्रोणाचार्य से जोड़ने का प्रयास किया गया है। द्रोणाचार्य की आर्थिक दरिद्रता का बिम्ब आधुनिक युग के शिक्षक अरविंद के द्वारा समानता के धरातल पर प्रतिबिंबित किया गया है।[1]

इस पौराणिक मिथक के माध्यम से आज के शिक्षक के मुख पर चढ़े मुखौटों की आंतरिक बदसूरती को समाज के सामने रखा गया है । इसीलिए शंकर शेष ने द्रोणाचार्य के चरित्र से प्रभावित होकर इस पौराणिक कथा को अरविंद के आधुनिक जीवन से जोड़ने का प्रयास किया है।[2]

आधुनिक कथा में अरविंद कथा का नायक है जो अपनी पत्नी लीला के आग्रह के कारण प्रोफेसर से प्रिंसिपल बन जाता है। परिवार के स्वार्थ के लिए वह आचारसंहिता भी भूल जाता है तथा व्यवस्था की सुरक्षा का भय उसे पंगु बना देता है। सुविधा तथा सुरक्षा का आकर्षण इतना अधिक तीव्र हो उठता है कि चंदू के न्यायोचित पक्ष को भी नहीं सुनता है तथा राजकुमार द्वारा

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अनुराधा के चीरहरण को भी वह नपुंसक की भाति मूक दर्शक बन देखता रहता हैं, अर्थात आज का द्रोणाचार्य भी द्रौपदी की चीख-पुकार सुनकर उसका विरोध नहीं करता है। वह दबाव, नियति और विडंबना के समक्ष विवश है। शिक्षक अरविंद भी द्रोणाचार्य की भांति अपने शिष्यों को मनुष्य बनने की शिक्षा नहीं दे पाता है और प्रेसिडेंट के मरने पर अरविंद पर आरोप लगने पर कोर्ट में गवाही देते समय वह कहता है कि हो सकता है प्रोफेसर अरविंद ने प्रेसिडेंट को धकेला हो इस समय हमें महाभारत के युधिष्ठिर की याद आ जाती है जो कहता है- "अश्वत्थामा हतो नरो वा कुंजरो वा।"

इन सभी घटनाओं के माध्यम से डॉक्टर शंकर शेष ने अरविंद को आज की व्यवस्था का द्रोणाचार्य सिद्ध किया है उनका स्पष्ट कथन है 'व्यवस्था व सत्ता के कोड़ों से पिटा हुआ द्रोणाचार्य इतिहास की धार में लकड़ी की ठूंठ की तरह बहता हुआ, वर्तमान के कगार से लगा हुआ, सड़ा-गला द्रोणाचार्य है।[3]

इस नाटक में विमलेंद्र अरविंद का मित्र है जो सदैव अन्याय के खिलाफ आवाज उठाता है। परिणामतः उसकी पत्नी और पुत्री को नरक सदृश जीवन भोगने को विवश होना पड़ता है। वह कहता है कि चंदू और युधिष्ठिर की आज आवश्यकता नहीं है उन्हें मत पैदा करो। विमलेंदु की कल्पना करके शेष ने नाटक में तीव्रता, कौतूहल वृत्ति आदि लाने का प्रयास किया है। विमलेंदु के माध्यम से अरविंद के अंतर का भय तथा द्वन्द्व स्पष्ट किया गया है। विमलेंदु की हत्या हो जाती है किंतु उसकी आत्मा सदैव अरविंद को चिंताग्रस्त करती रहती है। आज की इस दमघोंटू व्यवस्था में, जिसने व्यक्ति को सच्चाई, ईमानदारी और नैतिकता से दूर ले जाकर पटक दिया है। आज अकेली नारी की सुरक्षा भ्रमजाल के अतिरिक्त और कुछ नहीं है। विमलेंदु की पत्नी भी अंत में अफसर की बुरी नजर से बचने के लिए शहर छोड़कर चली जाती है। यहां विमलेंदु के माध्यम से सच्चाई पर बलिदान होने वाले परिवार की त्रासदी नाटक में आज से जुड़े प्रश्नों को उठाती है।[4] नाटक के अंत में अरविंद और विमलेंदु के तीव्र संवाद हमें जीवन की वास्तविक स्थितियों से अवगत कराते हैं। थोड़ी देर के लिए वह पलायनवादी प्रवृत्ति के पोषक जान पड़ते हैं।

समानांतर रूप से चलने वाले इस नाटक के कथा प्रसंगों में आज के बुद्धिजीवी या शिक्षक समुदाय की नैतिकता और चारित्रिक शक्ति के धीरे-धीरे व्यवस्था और निहित स्वार्थों के हाथो से कुंठित हो जाने की प्रक्रिया को प्रदर्शित किया गया है।[5] बृजमोहन शाह ने 'त्रिशंकु' के माध्यम से इसी प्रकार की उच्च शिक्षित पात्रो की दिशाहीनता का चित्रण करके उन्हें त्रिशंकु की भांति शून्य में टंगा प्रदर्शित किया।[6] सत्यव्रत सिन्हा के 'अमृतपुत्र' नरेंद्र कोहली के 'शंबूक की हत्या' कुसुम कुमार का 'ओम ओम कांति' तथा गिरीश रस्तोगी कृत 'रंगनाथ की वापसी' में शिक्षकों के नैतिक पतन, दिन पर दिन शैक्षिक मूल्यों में हो रही गिरावट, संस्थाओं के व्यापारिक मनोवृत्ति के प्रबंधतंत्र एवं भ्रष्ट शासनाधिकारी, शिक्षकों की लापरवाही, कामचोरी के माध्यम से बुद्धिजीवियों पर कटु व्यंग्य किया है।

आज के समय में प्रतिभा व योग्यता महत्वहीन बनकर रह गई है। शिक्षक आज अपना स्वत्व खो चुका है तथा वह व्यवस्था के हाथों बिक गया है। तभी वह यह कथन सार्थक लगता है कि "चंदू व युधिष्ठिर मत पैदा करो। राजकुमार और दुर्योधन पैदा करो।[7] मन्नू भंडारी का 'महाभोज' नाटक भी हमारी शिक्षा नीति पर व्यंग्य करता है। शिक्षकों की कर्तव्यहीनता पर "मौजूदा हालात को देखते हुए" नामक मृणाल पांडेय द्वारा लिखित नाटक एक करारा तमाचा लगता है। आज शिक्षण संस्थानों में इस प्रकार के भ्रष्टाचार की जिम्मेदार हमारी राजनीतिक व्यवस्था भी है। विभिन्न राजनीतिक दलों के शोषण, भ्रष्टाचार के कारण आज हमारे विद्या मंदिर दूषित एवं भ्रष्ट हो गए हैं। इसी का यथार्थ चित्रण हमें आधुनिक नाटककार शरद जोशी के "अन्धो के हाथी" नाटक में भी मिलता है।

"एक और द्रोणाचार्य" नाटक, आरंभ से एक समस्या के साथ विकसित होने के साथ-साथ अंत में हमारे समक्ष कुछ प्रश्नों को छोड़ता हुआ समाप्त होता है। शंकर शेष ने इस नाटक के माध्यम से आज के सामाजिक संदर्भों में व्यक्ति की आंतरिक यंत्रणा को पकड़ने की कोशिश की है। हमारे चारों ओर की दमघोंटू व्यवस्था पर कठोर प्रहार किया गया है उनकी यह आक्रामकता अरविंद और विमलेंदु के संवादों में सरलता से देखी जा सकती है। संवाद रचना में आक्रोश, चीख, कोलाहल सन्नाटे आदि स्थितियों के माध्यम से शेष ने नाटक में जिस अभिनयात्मक और क्रियात्मकता की सृष्टि की है, वह कहीं-कहीं पर हमें पारसी मंच की याद दिलाती है। "एक और द्रोणाचार्य" का कथ्य पक्ष शिक्षा के क्षेत्र के भ्रष्टाचार को उजागर करने के साथ-साथ उसका विरोध करना भी सिखाता है। शिक्षक अपनी गिरी हुई प्रतिष्ठा को पुनः स्थापित कैसे करें, इसके कुछ मुख्य संकेत यह नाटक देता है।

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4 एक और द्रोणाचार्य, शंकर शेष, पृ.सं. 99

5 स्वातंत्र्योत्तर हिंदी नाटक में मिथक तत्व, नीलम राठी

6 स्वातंत्र्योत्तर हिन्दी नाटक, रमेश गौतम, पृ.सं. 578

7 स्वातंत्र्योत्तर नाटक, मूल्य संक्रमण, डॉक्टर ज्योतीश्वर मिश्र पृ.सं. 196

The Role of Social Media in Fostering Higher Education in the Post-Pandemic Era: A Bibliometric Analysis Perspective in the Indian Context

*Harsh Vardhan, *Mohd Vaseem Mansoori, **Dr. Deepak Kumar

Abstract

The objective of this study was to apply bibliometric analysis to review the body of literature currently accessible on social media usage in higher education during the post-pandemic era. Additionally, the research aimed to identify areas for future investigation in the realm of social media and higher education while also conceptualizing the concept of social media entrepreneurship.

The Web of Science database was used to gather a total of 2041 papers that were published between 2020 and 2022. These articles were analyzed afterwards using data mining, bibliometric indicator investigation, cluster analysis, network analysis, and word clouds.

In the research, an extensive analysis was conducted, revealing significant findings regarding social media in the context of higher education. The study identified 11,676 authors from 96 countries who have contributed to the discourse on this topic. Furthermore, among the 826 journals investigated, the study identified 15 highly prolific journals that have extensively discussed social media in higher education.

This paper argues that social media entrepreneurship should be taught in higher education to prepare students for the digital age. The paper explores the benefits of social media entrepreneurship, the challenges that social media entrepreneurs face, and how higher education can support social media entrepreneurship.

The findings of this study hold significant value for practitioners, policymakers, and higher education institutions. By providing insights into the state of the art and specific characteristics of the most prolific studies in the field of social media in higher education, this research equips practitioners with an awareness of the latest developments and trends.

Introduction

The COVID-19 pandemic compelled an exponential increase in students using social media platforms for online education. This shift to online education through social media has brought about positive and negative learning outcomes, as highlighted in the study by Oliveira *et al.* (2022). On the one hand, social media can expand students' social networks and enhance their academic activities and extracurricular education. On the other hand, concerns have been raised by teachers and parents regarding the detrimental effects of excessive social media use on children's physical well-being, personal information security, and interference with on-campus education, as noted by Lu (2021).

While the frequent use of social media has positively impacted digital reading comprehension, especially for adults, the influence on adolescent learners has yet to be significant. Moreover, the effect of social media on digital reading comprehension varies between Eastern and Western countries. Chen *et al.* (2021) conducted research and found that in Eastern countries, using social media did not result in significant improvements in digital reading comprehension. However, in Western countries, it positively influenced digital reading skills.

The application of social media to education is increasingly attracting researchers' attention with the development of information technologies since it was launched in 2009. However, few studies have been devoted to the bibliometric analysis of the use of social media for educational purposes (Barrot, 2021).

Background

Platforms and tools for social media are frequently considered helpful resources for entrepreneurs. Through

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interactions and contact with peers on the networks, they help business owners quickly recognize changes and opportunities in business creation. Social media provides ways to connect with potential clients and spark fresh business concepts. Similarly, small-scale business owners benefit from social media for marketing and operations by maintaining close and fruitful relationships with colleagues, partners, and clients. (Cort *et al.,* 2015; Felix *et al.*, 2017)

Gülbahar *et al.* (2017) Their studies developed a Social Media Toolkit after analyzing social media usage among students and instructors for teaching, learning, and research purposes in Russia, Turkey, Germany, and Switzerland, revealing interesting findings. Many higher education instructors observed instructors actively use social media for personal reasons. While they recognize that students also use social media for learning purposes, instructors often need help incorporating it into their teaching practices.

Chugh *et al.* (2021) studied an under-researched user of social media: the teacher in higher education, that is, the academic and found that the main reason why so many academics do not use social media for teaching is that they do not know how to use it well or feel confident doing so. Even though academics rarely utilise social media, it has several advantages for research, teaching, and career advancement, including better connections with stakeholders, more networking opportunities, and enhanced student learning and satisfaction.

Chugh & Ruhi (2018) examined the significance of social media, particularly Facebook, as a teaching aid in higher education and came to some surprising conclusions. There are several advantages to using Facebook for learning and teaching, including greater performance, the convenience of learning, more engagement, and increased teacher-student and student-student connections.

According to Perez *et al.* (2023), there is a need for further research in the domain of social media in education, specifically addressing questions such as the potential benefits of students in an educational setting using social media platforms created for commercial purposes. Exploring this aspect can provide insights into the effectiveness and implications of utilizing commercial social media platforms for educational purposes. Addressing these research questions can contribute to a deeper understanding of social media's role, challenges, and opportunities in education.

In the post-pandemic era, where traditional educational methods have undergone significant transformations, the study aims to highlight how social media can serve as a valuable tool for pedagogy. It seeks to examine the specific benefits social media platforms offer in facilitating communication, collaboration, engagement, and personalized learning experiences in the evolving educational landscape.

Bibliometric analysis

Bibliometric analysis is useful for deciphering and mapping well-established fields' cumulative scientific knowledge and evolutionary nuances by making sense of large volumes of unstructured data in rigorous ways. Therefore, bibliometric studies that are well done can build firm foundations for advancing a field in novel and meaningful ways. It enables and empowers scholars to

(1) gain a one-stop overview,

(2) identify knowledge gaps,

(3) derive novel ideas for investigation, and

(4) position their intended contributions to the field. (Donthu *et al.,* 2021)

Donthu *et al.* (2021), The scope of the study should generally be large enough to warrant bibliometric analysis because the analysis is designed to handle large volumes of bibliometric data.

To determine whether the scope of the study is adequate, scholars can review the number of papers available in the intended research field. If there are hundreds (e.g., 500 or more) or thousands of papers, then that research field can be considered large enough to warrant bibliometric analysis.

In our instance, the database found more than 2000 documents.

Bibliometric Tools Used for research

Based on the R programming language, Professor Massimo Aria developed the bibliometric software suite Bibliometrix in 2017 (Aria & Cuccurullo, 2017). It can be applied to bibliometric analysis during the entire process and for visual display.

Statistical analysis, preliminary data processing, co-occurrence matrix construction, co-citation analysis, coupling analysis, co-word analysis, and cluster analysis are also feasible on texts from the Scopus and Web of Science databases. By merging the visualization capabilities of several scientific mapping tools, Bibliometrix provides a full set of literary information analysis and visualization tools.

VOSviewer (van Eck & Waltman, 2011; Eck & Waltman, 2010) likewise uses a system for building and visualizing bibliometric networks. It was created at Leiden University's Center for Science and Technology Studies (CWTS). Software users can conduct several bibliometric analyses, including co-citation, bibliographic coupling, and co-authorship analyses. Additionally, it has strong visualization tools that let users design and edit network maps, cluster maps, and density maps. Downloading and using the software are both free for personal and non-commercial use.

We employ the Fractional Counting approach over Full Counting (Perianes-Rodriguez *et al.,* 2016) and Bibliometrix's (Aria & Cuccurullo, 2017) biblioshiny for our results in addition to the VOSviewer program (van Eck & Waltman, 2010).

The size of the circles in the VOSviewer program shows the number of articles in each cluster, and the different colors indicate the different clusters. The thickness of the linking lines demonstrates the strength of the relationships between the objects.

Research Methodology

We limit our search to end of 2022 in order to eliminate a potential of bias arising from more recent articles. Filter in Biblioshiny was also applied to make articles visible till 2022.

Link of search - https://www.webofscience.com/wos/woscc/summary/d2a18546-132b-48bc-85f9-d175c5cd840c-8fb1ba9f/relevance/1

Fig. 1: Search Procedure
***Source:* Author's own**

Results and Discussion

Figure 2 shows the key information of the dataset derived from the bibliometric and content-based analyses. In general, the dataset contains 2041 articles published in the period 2020-2022, with a citation rate of 14.41 per article. A total of 11676 authors participated in writing these articles, which were published in 826 different sources. These articles contain around 4905 author's keywords associated with education, social media and COVID-19.

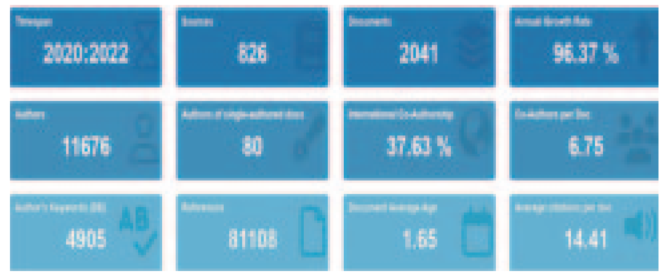

Fig. 2: Key information of the collected dataset
***Source:* Biblioshiny**

The literature in this dataset is composed of twelve types of documents. Highest was Articles (N= 1765; 86.48%) followed by Reviewpapers (N=114; 5.59%) and early access articles (N=100; 4.90%). Maximum number of articles were published in the year 2022 that were related to the topic (N=964; 47.23%)

Table 1: Year of Publications,
***Source:* Author's own**

Document Type	Total Publications (Tp)	Percentage (%)
2020	250	12.25%
2021	827	40.52%
2022	964	47.23%
Total	2041	100%

The most influencing Journal and Documents

Most relevant sources identified are International Journal of Environmental Research and Public Health with 157 documents (7.69%), followed by Sustainability 77 documents (3.77%) and Frontiers in Psychology 72 documents (3.53%).

Table 2: Most Active Source Title(N=15), *Source:* Author's own

Source Title	Total Publications	Percentage (%)
International Journal of Environmental Research And Public Health	157	7.69%
Sustainability	77	3.77%
Frontiers In Psychology	72	3.53%
Frontiers In Public Health	69	3.38%
Plos One	64	3.14%
Journal of Medical Internet Research	59	2.89%
Bmc Public Health	34	1.67%
Vaccines	34	1.67%
BMJ Open	28	1.37%
Frontiers In Psychiatry	21	1.03%
Healthcare	20	0.98%
Heliyon	19	0.93%
Bmc Medical Education	11	0.54%
Education And Information Technologies	11	0.54%
Human Vaccines & Immunotherapeutics	10	0.49%

Keywords Analysis

Keywords analysis provides valuable information about the current research interests, priorities, and directions within a field. It helps researchers and scholars stay updated with the latest developments and identify potential research gaps or opportunities. By examining the frequency, co-occurrence, and relationships between keywords, researchers can uncover the underlying themes, concepts, and connections that shape the research discourse.

Fig. 3: Word cloud of top 50 Keywords of Keywords Plus, *Source:* Biblioshiny

The words that appeared most frequently in the education and social media literature articles concerning COVID-19 are illustrated visually in Figure 2. The word cloud analysis was taken to take a comprehensive look at the development of keywords in the research.

Their appearance frequency determines the words' size in the word cloud. The more frequently a word appears, the larger it appears in the word cloud. Although the placement of the words is random, the most powerful words are typically positioned in the center to make them more visually prominent due to their larger size. This visual representation lets viewers quickly identify the most important and frequently occurring words within a text or dataset.

Studies on the topic have used the word 'impact 185 documents (2.28%)' closely followed by 'social media 182 documents (2.25%) and 'health 153 documents (1.89%)'.

Most Influential Countries

Of the 195 countries worldwide, 96 have contributed to the researched topic with at least one article on this subject. Within all of them, it is worth highlighting that the country with the highest number of publications carried out was the USA with 2000 documents (97.99%), followed in second place a distance ahead by China with 1361 (66.68%), and third place was the UK with 743 documents (36.40%). Australia (382) and Canada (333) were among the countries with the most published articles.

Table 4: Top Countries by Publications (N=10), *Source:* Biblioshiny

Country	Total Publications	Percentage(%)
USA	2000	97.99%
CHINA	1361	66.68%
UK	743	36.40%
AUSTRALIA	382	18.72%
CANADA	333	16.32%
ITALY	295	14.45%
INDIA	292	14.31%
GERMANY	285	13.96%
SPAIN	276	13.52%
SAUDI ARABIA	205	10.04%

Concerning the number of citations received, the USA (TC = 5654; AC = 14.72), followed by China (TC = 5514; AC = 14.66), United Kingdom (TC = 1693; AC =

15.39), and Australia (TC = 1166; AC = 16.42)were the countries with the highest number of citations. (Table 5)

Table 5: Top Countries by Citations(N=10), *Source:* Biblioshiny

Country	Total Citations (TC)	Average Article Citations(AC)
USA	5654	14.72
CHINA	5514	14.66
UNITED KINGDOM	1693	15.39
AUSTRALIA	1166	16.42
SAUDI ARABIA	1042	19.66
SPAIN	1033	14.15
ITALY	887	14.54
MALAYSIA	859	25.26
INDIA	778	16.55
KOREA	718	15.61

These countries also formed highest collaborative network among them. USA and China collaborated 105 times, while USA and UK collaborated 69 times. China and UK also collaborated 48 times in the study. (Table 6)

Table 6: Countries with highest number of collaborations (N=20), *Source:* Biblioshiny

From	To	Frequency
USA	China	105
USA	United Kingdom	69
CHINA	United Kingdom	48
USA	Canada	41
UNITED KINGDOM	Australia	36
USA	Germany	35
CHINA	Pakistan	33
USA	Australia	33
CHINA	Australia	27
SAUDI ARABIA	Pakistan	26
UNITED KINGDOM	Canada	26
UNITED KINGDOM	Spain	26
USA	India	26
UNITED KINGDOM	Germany	25
CHINA	Japan	24
USA	Brazil	23
USA	Korea	23
UNITED KINGDOM	Italy	22
UNITED KINGDOM	Netherlands	22

Topical trends in the Social Media and COVID-19 knowledge base with refrence to education

This section helps us understand various themes using theassociation among words. The study first suggests a co-occurrence network that enables us to analyze various social media, the coronavirus pandemic, and educational themes across time. Then, to determine the network's centrality and density, we will place these word networks on a bi-dimensional matrix termed a "Thematic Map."

In our study, we utilized the co-occurrence feature of VosViewer to construct networks based on keywords. Each keyword used by the authors is represented as a node in the network, and the node's size indicates the frequency of occurrence of that keyword. The links connecting the nodes are proportional to the degree of co-occurrence between the keywords, illustrating the strength of their association (Van Eck & Waltman, 2014).

By employing VosViewer and its co-occurrence analysis, we could visually depict the relationships and patterns among the keywords used by authors, providing valuable insights into the interconnectedness and relevance of different concepts within our research. (Fig. 4)

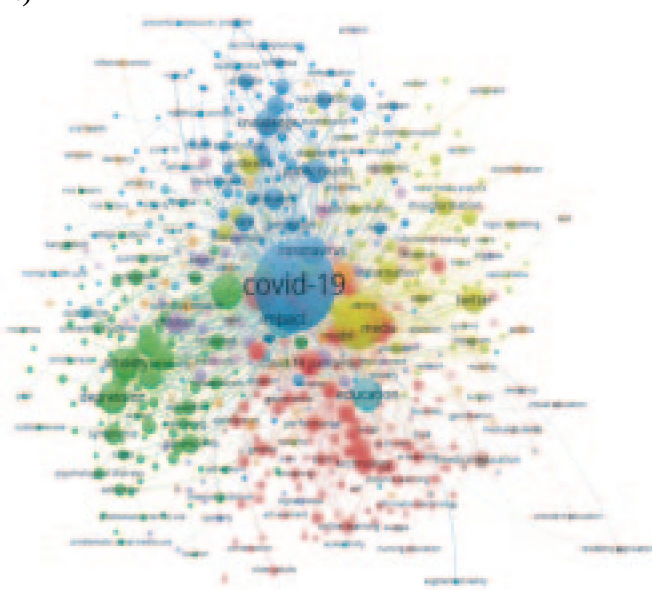

Fig. 4: Network visualization map of the co-occurrence by VOS Viwer

Unit of analysis = All Keywords; Counting method: Fractional counting

Minimum number of occurrences of keywords = 5

Five hundred fifty-one keywords met the minimum threshold of five occurrences for the mapping in

VOSviewer. A total of nine clusters are observed after the analysis. The top 10 keywords from VOSviewer are listed in Table 7, with covid-19 on top with 1174 occurrences followed by social media with 454 occurrences.

Table 7: Top Keyword Co-Occurrences (N=10) *Source:* VOSviewer

Keyword	Occurrences	Total Link Strength
covid-19	1174	1129
social media	454	447
Impact	194	187
Health	172	168
Pandemic	166	163
Education	162	159
Anxiety	151	151
Depression	146	146
Coronavirus	119	118
Media	115	113

Conceptual Framework and Thematic Evolution

The Bibliometrix package which is an open-source tool programmed in the R language and VosViewer softwares analyzes the co-occurrence of keywords and identifies patterns to form a network of closely associated words. A high-density network is formed when keywords appear together frequently. The software then examines the relationship between this keyword network and other networks of words. Based on this analysis, it groups the words into subject areas and distributes themes according to their centrality and density. Centrality measures the level of interaction a keyword network has with other networks, while density indicates the strength of connections within the network.

We used the first 250 Author's keywords and the items displayed in the cluster were set to a minimum frequency of 5. The research content was generally grouped into different themes based on the relationship between the author's keywords. The selected issues were grouped into a strategic map to analyse the significance and progression of the study topic. Each year's whole period served as the strategy map's foundation.

The importance of an issue was determined by its centrality, and its development was determined by its density.

A total of five thematic clusters are observed.

Table 8: Thematic Clusters *Source:* Biblioshiny

Cluster	Rank Density	Cluster Frequency
covid-19	5	1857
mental health	4	998
social media	3	896
medical education	2	50
psychological distress	1	17

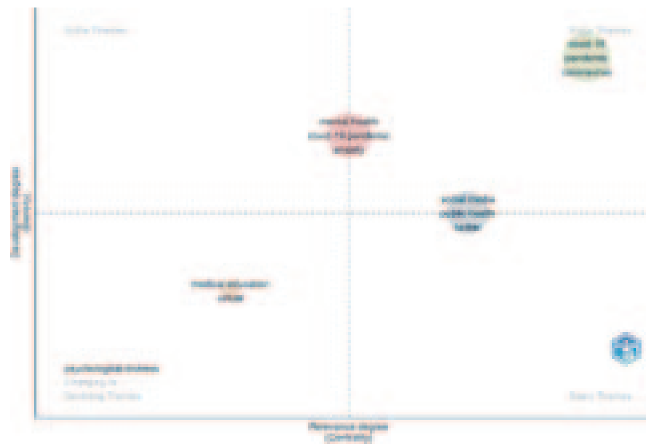

Fig. 5: Thematic Map of Author's Keywords *Source:* Bibliometrix

The identified themes can be classified into four groups based on their centrality and density:

1. **Motor themes:** These are well-developed and important research areas that significantly structure the field. They are strategically positioned in the upper right quadrant of the thematic map. Covid-19, pandemic and coronavirus form the chief cluster-driving themes.

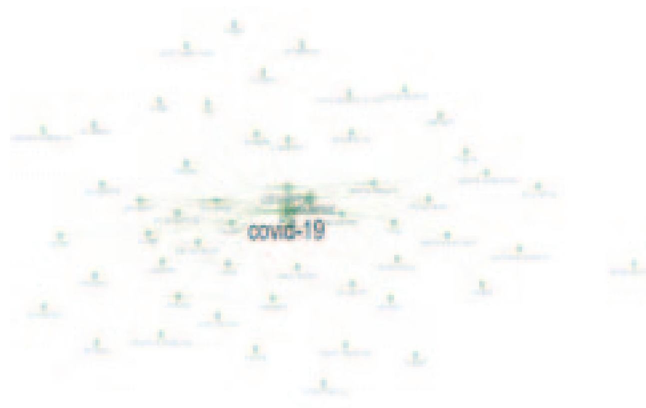

Fig. 5.1: Cluster Network of Motor Themes *Source:* Bibliometrix

2. **Niche themes:** These themes are highly specialized and relatively peripheral. They address specific and niche research areas and are located in the upper left quadrant of the thematic map.There were no particular niche themes identified. However, themes like mental health, covid-19 pandemic and anxiety were found at the intersection of niche and motor themes. Education and higher education formed secondary cluster-driving themes.

Fig. 5.2: Cluster Network of Niche and Motor Themes *Source:* Bibliometrix

3. **Emerging or declining themes:** Themes with low density and centrality represent emerging or declining research areas. They are characterized by their relatively lower prominence and influence within the field and positioned in the lower left quadrant of the thematic map. Phychological distress and Medical education are these themes. (Fig 5.2.1, Fig 5.2.2)

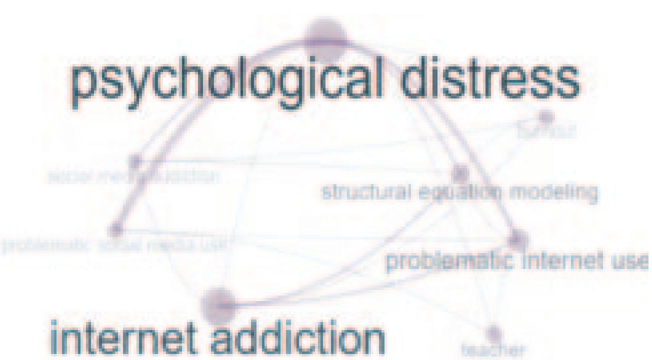

Fig. 5.2.1: Cluster Network of Emerging or Declining Themes of theme psychological distress *Source:* Bibliometrix

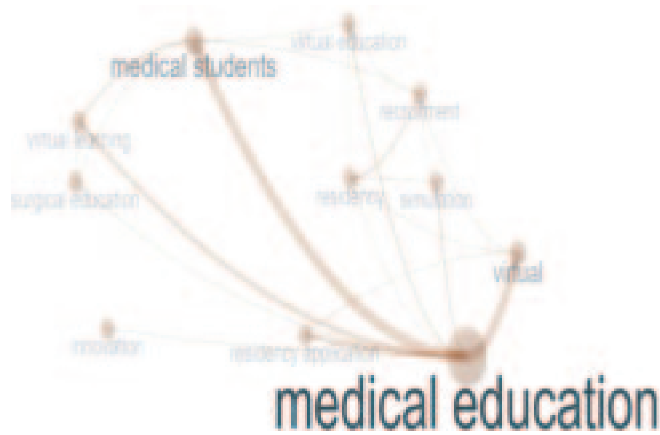

Fig. 5.2.2: Cluster Network of Emerging or Declining Themes of theme medical education *Source:* Bibliometrix

4. **Basic themes** are important but have yet to develop within the research field fully. They encompass broad, fundamental concepts that cut across multiple areas of study. Basic themes are situated in the lower right quadrant of the thematic map. Social Media is the predominant topic here

Fig. 5.2.3: Cluster Network of Basic Themes of theme social media *Source:* Bibliometrix

Discussion

The motor theme in the research pertains to COVID-19 and related keywords, which is expected given that the study focuses on the period during the pandemic. However, as depicted in Figure 6, it is noteworthy that keywords such as education and higher education play a central role in the topic. They are part of the motor theme and fall within the niche theme category. Thus, research in the social science field should not solely concentrate on higher education in the post-pandemic era but should also explore how social media can enhance online learning. Integrating motor and niche themes strengthens the overall understanding of the subject.

Additionally, because of the pandemic's major effects on mental health, problems like anxiety and depression have become key elements. However, it is important to acknowledge that the positive benefits of social media can potentially mitigate these mental health challenges. By leveraging the power of social media, individuals can access resources, support networks, and opportunities for emotional well-being.

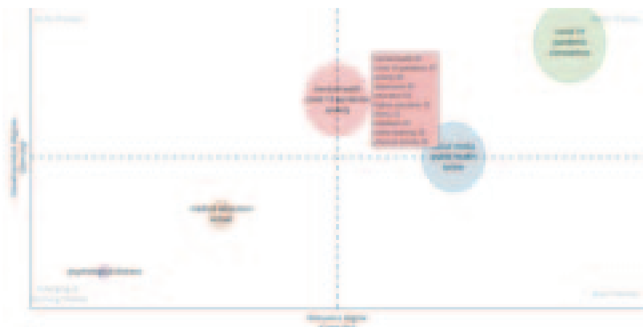

Fig. 6: Detailed thematic map of mental health theme. *Source:* Bibliometrix

Social Media Entrepreneurship

Martín-Rojas *et al.* (2020) points that the usage of social media technologies impacts all aspects of corporate entrepreneurship and improves business performance while according to Khajeheian (2017), the cost of devices, software, and knowledge needed to produce media content has decreased significantly (p. 94). This suggests a strong positive correlation between social media and entrepreneurial opportunities. Emmanuel *et al.* (2022) find that social media provides entrepreneurial opportunities for young women in emerging countries, and social media can be an attractive platform for female entrepreneurs in these countries.

The rise of social media platforms has given birth to a new form of entrepreneurship known as social media entrepreneurship. These entrepreneurs harness the power of social media to establish successful businesses, invest in promising ventures, and create new opportunities (Forbes, 2023). They achieve this by leveraging the influence of social media influencers, utilizing digital marketing strategies, and creating engaging content to reach their target audience and drive sales (Forbes, 2023). Social media entrepreneurship can take many forms, including being an influencer or promoting products on social media for payment (SABC News, 2020). Additionally, social entrepreneurs can use social media to share their stories, report on their activities, and raise funds (Entrepreneur, 2015).

Social media entrepreneurship uses platforms and tools to create, develop, and manage entrepreneurial ventures. It involves leveraging the power of social media networks, online communities, and digital marketing strategies to establish and grow businesses, promote products or services, engage with customers, and drive revenue generation.

In recent years, social media has transformed the business landscape, offering new and innovative opportunities for entrepreneurs to establish and scale their ventures. The emergence of popular social media platforms, including Facebook, Instagram, Twitter, LinkedIn, and YouTube, has significantly contributed to the accessibility and affordability of channels for individuals and businesses to engage with a worldwide audience, enhance brand recognition, and facilitate direct engagement with customers.

Social media entrepreneurship has revolutionized traditional business models by democratizing the playing field and reducing barriers to entry. It has empowered individuals to become creators, influencers, and online entrepreneurs, enabling them to monetize their expertise, passion, and creativity. Social media platforms have facilitated the emergence of new business models, such as influencer marketing, affiliate marketing, e-commerce stores, and content creation networks.

One of the key advantages of social media entrepreneurship is its ability to reach a wide and diverse audience. Through targeted advertising, content curation, and engagement strategies, entrepreneurs can connect with their target market and build a loyal customer base. Social media platforms also provide valuable analytics and data insights, enabling entrepreneurs to measure and optimize their marketing efforts.

Furthermore, social media entrepreneurship has reshaped how businesses engage with their customers. It has facilitated direct and real-time communication, allowing entrepreneurs to respond to customer inquiries, address concerns, and build meaningful relationships. This level of engagement and interaction has fostered trust, brand loyalty, and customer advocacy, which are crucial for long-term business success.

Social Media Entrepreneurs

Social media entrepreneurs seek profitable opportunities through social media and initiate and manage businesses within this social structure. They market products or services on social media platforms and make money through the content they produce. Social media entrepreneurs are distinguished from others by their ability to see lucrative opportunities in the environment where billions of people surf daily and transform their innovative ideas into profitability. They have a different environment than traditional entrepreneurs, where borders have disappeared, and any place can be a location to produce content, conduct business, and earn money (Çiçek, 2018).

The paper explores the benefits of social media entrepreneurship, and how higher education can support social media entrepreneurship. However, it also presents unique challenges, such as the need for digital skills and the ability to build online communities. Higher education institutions can play a critical role in supporting social media entrepreneurship by incorporating it into their curricula, establishing incubation programs, and forming partnerships with social media platforms and other businesses. By doing so, they can prepare students for the digital age moreover, contribute to the growth and development of the Indian economy.

Social Media in Higher Education

Social media platforms such as YouTube, Twitter, LinkedIn, Facebook, and Instagram have emerged as powerful tools that can facilitate various aspects of higher education. These platforms provide accessible and cost-effective channels for institutions and educators to connect with students, disseminate educational content, and foster interactive learning experiences. Through social media, educational institutions can reach a wider audience, promote their programs and courses, and engage with students more personally and dynamically.

These platforms enable students to connect with their peers, share ideas, and participate in virtual discussions. Social media features such as groups, forums, and live-streaming sessions create opportunities for students to collaborate on projects, exchange knowledge, and seek peer support. This collaborative environment fosters community and enhances the overall learning experience.

Sobaih *et al.* (2020) Their empirical research clearly stated that social media could play a significant role in fostering higher education in the post-pandemic era by promoting social learning and providing an alternative platform for online learning.

Moreover, social media facilitates access to many educational resources and opportunities. Students can follow influential educators, organizations, and thought leaders in their fields of interest, gaining access to valuable insights, research findings, and industry trends. Additionally, social media platforms offer many online courses, webinars, and educational content that students can explore to supplement their formal education. This accessibility to diverse learning materials empowers students to expand their knowledge and pursue self-directed learning.

Another positive aspect of social media in higher education is its potential to bridge the gap between academia and industry. Students can connect with professionals, industry experts, and alums through social media platforms, opening doors to mentorship, internships, and job opportunities. Social media provides a platform for students to showcase their skills, build professional networks, and gain exposure to real-world applications of their knowledge.

Conclusion

Discussion

Almost every aspect of life has been disrupted by the COVID-19 pandemic. It had a profound effect on many aspects of life, including health, the economy, education, society, and governance. A major effect of pandemic was felt on employment, resulting in job losses and reduced income for many people, negatively impacting the mental health and well-being of individuals. The pandemic resulted in the loss of 400 million full-time jobs in the second quarter of 2020. Unemployment has been a major problem for India since. Research studies have shown that lack of education and skills is one of the most significant factors contributing to unemployment. Despite substantial challenges, there were several benefits as well that COVID-19 has taught. One of the most significant positives was the rapid adoption of online and digital platforms for education. This shift opened new educational avenues, including online courses and remote learning opportunities. The pandemic also highlighted the importance of digital infrastructure and internet connectivity in ensuring continued access to education for all. Another positive effect of the COVID-19 pandemic in India has been the accelerated growth of digital payments, particularly the widespread adoption of Unified Payments Interface (UPI) as a preferred mode of transaction. The surge in UPI transactions has improved financial inclusion and led to greater transparency, efficiency, and security in the payment ecosystem. UPI has since then become a game changer for digital entrepreneurship in India and has led to the growth of digital entrepreneurship in the country.

Summary

Even with various entrepreneurship programs initiated by the Indian government, like Atal Tinkering Labs and Atal Innovation Mission, which aim to foster a culture of innovation and entrepreneurship among students from a young age, and several institutions and initiatives to promote entrepreneurship, a lack of focus on social media entrepreneurship is still evident! Therefore, this paper argues with the help of conceptual and thematic analysis that social media entrepreneurship should be taught in higher education to prepare students for the digital age.

Contribution

The aim of this study was to explore social media literature with respect to higher education post pandemic era. It was a first study of this kind where the term social media entrepreneurship was introduced in higher education, specially post pandemic era.

Limitation of the study

There are limitations and challenges to conducting a bibliometric analysis. Bibliometric data from scientific databases such as Scopus and Web of Science are not produced exclusively for bibliometric analysis and, therefore, can contain errors that can affect the analysis. Additionally, the nature of the bibliometric methodology itself is a limitation.

Future research- Social media entrepreneurship is a lesser explored theme in business research as well in education. The study can give futher insights to Digital literacy and skills development research of governments and policy makers. Different pedagogical approaches and strategies utilizing social media for effective higher education can also be taken further from this research.

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Materialism and Consumer Behaviour : A Bibliometric Analysis

Saurabh Gupta, **Prof.(Dr.) Sushil Pande

Abstract

Homosapiens , have made the world a pathetic place where everything is directly been related to the monetary terms , it is believed that the relations , even bond of emotions are all based upon the aspect of materialism . The paper is more like an analytical prospect with respect to the materialism and consumer behaviour, despite of the fact that there was too much scope and dimensions to be addressed most of the research has not been done accurately from this point, the bibliometric analysis is been conducted which provide us the better view of how much work has been done and what is left to be covered , the paper is more like an analysis into the aspect of materialism and the behaviour of consumer, with the help of Vos Viewer software the maps were been made to give a complete understand. The database taken for the purpose to analyse the data is the Lens which is an online patent and scholarly literature search which is been provide by Cambia Austria based non-profit organisation, this database provided a complete and detailing to make the analysis successful . with the help of the paper the future researchers are able to decide upon which part or how much more the research is to be made in this filed which some way or the other is creating some new concepts which though are been analysed many a times but more work is required to have more clarity in terms successfully.

Introduction

The concept of materialism could be explicated as expressing almost everything irrespective of money and kind in terms of value that is to say everything or as been described by Andera Lind is a personality trait that combines possessiveness with no generous behaviour, bibliometric method is used to quantify the scientific collaboration among researchers and scientific communities. Bibliometric methods, the co-authorship method is one of the most verifiable methods to quantify or analyse scientific collaboration (Sarfraz, 2022), people organisation who affect the people working together to obtain a common goal in short term would be able to achieve more when collaborate rather than to work together, further Co-occurrence analysis and Co-authorship analysis is been done identifying the teams of author or organisation who have worked together, as well as two words or concept that have been occurred most of the times will be able to provide a clear understanding in the field. The paper would further be focusing upon the concept of Citation Analysis, where it would be assessed that how many times an author, the paper and the sources is been cited by the other authors in particular.

Methodology

Bibliometric analysis is a popular and rigorous method for exploring and analysing large volumes of scientific data. It enables us to unpack the evolutionary nuances of a specific field, while shedding light on the emerging areas in that field (Donthu, 2021). Therefore, the large number of databases is been analysed, and with the help of bibliometric analysis a conceptual understanding of major aspects of the field is been ascertained. A good rule of thumb is to use sources published in the past 10 years for research in the arts, humanities, literature, history, etc. (Elyse, 2023). And hence if this criterion is been taken into consideration a total of 1614 scholarly work would be considered.

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Fig 1 Review Analysis Process

To initiate the process of bibliometric analysis, to evaluate the concept of materialism and consumer behaviour the above process is been applied, to identify the scholarly work has been done till so far in the field of Materialism and Consumer Behaviour, identifying the top organisation, authors and countries that have been working in the field. To analyse on the basis of Co-authorship analysis that how many authors have worked in collaboration, to find that which word pertaining to Materialism and Consumer Behaviour has been used most often. And finally making an analysis of the authors and the documents that have been cited the most through Citation Analysis.

Schloarly Work Done till so far that is The Year 2009-2023

To begin with the total number of scholarly articles the range of year taken into consideration was from 2009 to 2023, could be delineated with the help of a graph chart in the following manner:

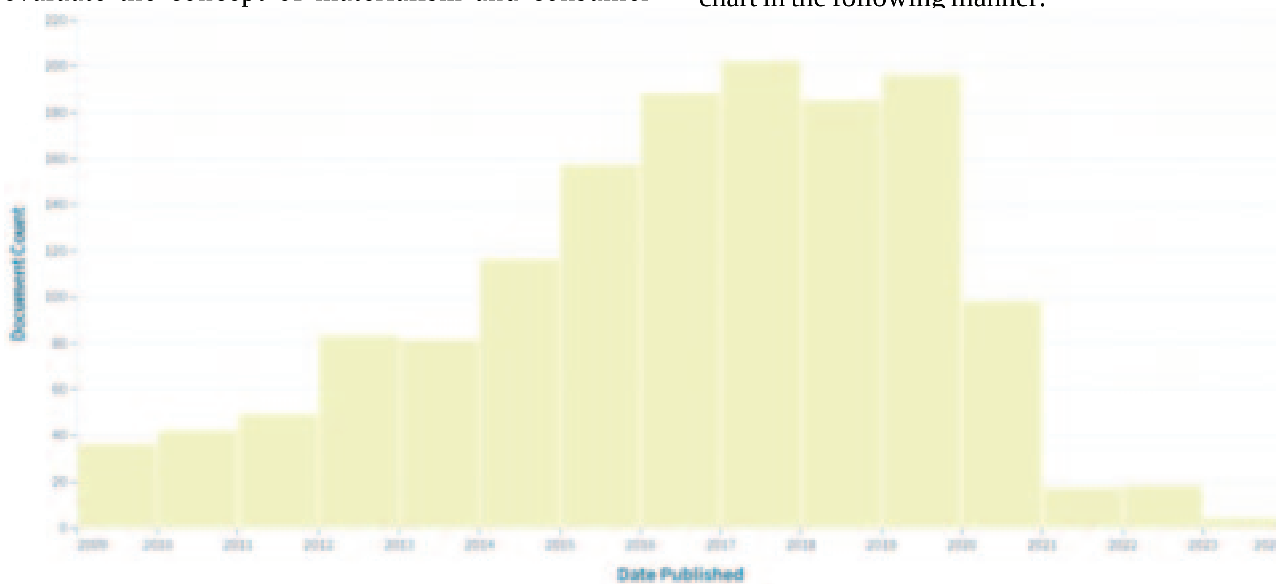

Fig 2: Showing the total number of works that is been done till so far from 2009-2023

Table 1: Tabular representation of each of the year and its data, a total of 1472 scholarly works

Date of Published	Document Count
YEAR 2009	36
YEAR 2010	42
YEAR 2011	49
YEAR 2012	83
YEAR 2013	81
YEAR 2014	116
YEAR 2015	157
YEAR 2016	188
YEAR 2017	202
YEAR 2018	185
YEAR 2019	196
YEAR 2020	98
YEAR 2021	17
YEAR 2022	18
YEAR 2023	4

It could be seen that the maximum number of scholarly works has been done mostly in the year 2017, with a maximum of 202 scholarly work, due to ongoing changes in consumer sentiment are occurring faster and faster. Trends are being adopted faster and are constantly changing that they are looking for and how you can meet these changing needs. (McMinn, 2017), the consumer ideologies were changing drastically with much of the inclination towards the materialistic that needs to be assessed.

Top Universities or Oraganisations Contributing to Materialism and Consumer Behaviour

The top organisation that are actually focusing upon the aspect of materials and consumer behaviour could be delineated with the help of a pie chart or a graph tool for complete understandability.

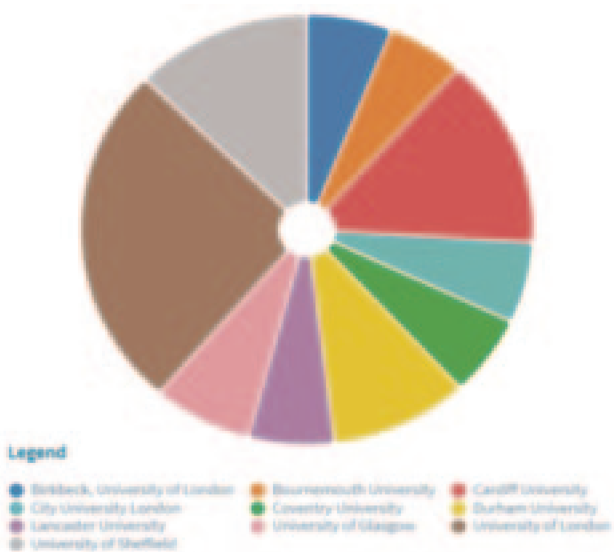

Fig 3: Showing the total percentage of contribution by top 10 organisation or Universities

Table 2: Tabular Representation of Organization and their percentage contribution

Name of the Organisation	Percentage Contribution
Brikbeck, University of London	6.1%
City University of London	6.1%
Lancaster University	6.1%
University of Sheffield	13%
Bournemouth University	5.5%
Coventry University	6.1%
University of Glasgow	7. 2%
Cardiff University	14%
Durham University	9.9%
University of London	26%

It could be clearly seen from the above pie chart that University of London holds a maximum percentage of contribution that is 26%, followed by Cardiff University 14%, University of Sheffield 13%, of which University of London holds a great reputation, when it comes to the field of research. The top region or the countries where maximum of the research work is been made is United Kingdom that could be again delineated with the help of a pie chart and further with the help of table.

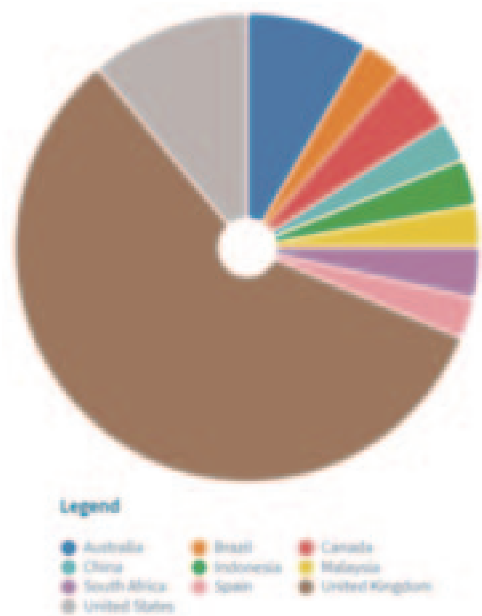

Fig 4: Showing the total percentage of contribution by top 10 regions or countries contributing the maximum towards the concept of Materialism and Consumer Behaviour

Table 3: Tabular representation of Region / Countries and their percentage contribution

Name of the Country/Region	Percentage Contribution
Australia	8.5%
China	2.9%
South Africa	3.5%
United States	11%
Brazil	3%
Indonesia	3.2%
Spain	2.9%
Canada	4.6%
Malaysia	2.9%
United Kingdom	58%

With the help of the pie graph, it could be well explicated clearly that the maximum number of contributions is been made of United Kingdom, the country has contributed maximum towards the concept of materialism and consumer behaviour, it could be explicated that the consumer of UK has three major traits - Ethical, Experimental & Healthy. The country is major contributor towards the field of research and hence it would be not wrong to exemplify that it is the only country have the greatest number of consumer base having the major traits as already explicated in previous few lines.

Analysis of Co-authorship using VOSViewer Conducting Bibliometric Analysis

In order to initiate Co-authorship analysis, acriterion have been set with a threshold of 5, which was further being boiled to have more deeper understanding to 2. In the upcoming part of the paper with the help of Citation analysis. With this the map that has been constructed, is been delineated as under.

Fig 5: Map of Co-authorship that has been constructed using VOS Viewer

The fig 5 shows 13 nodes and all together there are 3 Cluster, that is to say these are those networks which are closely related. It could be seen that the two of the clusters have the same numbers of nodes i.e., five in count represented by green network there are five authors (Yuksel Ekinci, Arnold Japutra, Lyndon Simkin, Bang Nguyen, Sung Ho Han), similarly (Charles M Cintyre, Tamira King, J Josko Barakus, Gemma Garcia Ferrer, Eleftherios Alamanaos) five authors represented by red network, lastly as the third cluster which is represented by blue network, there are three authors, which are related to each other in terms of working as a team. (T.C. Melewar, Zhongqi Jin, Charles Dennis). Out these Yuksel Ekinci, have emerged as the author who have been cited most of the times having more document and being maximum citations.

Analysis of Co-occurance using VOS Viewer Conducting Bibliometric Analysis

Co-occurrence and the unit of analysis would be all keywords, the minimum number of occurrences of a keyword has been auto set by the Vos Viewer as 5, there are a total of 483 keywords from the papers that have been analyzed for the purpose of research (1472 as already shown in Fig 1) of which 18 are the keywords of such a kind that have occurred in a document 5 times, which could be explicated more with the help of a following map. The table clearly signifies that Human is the word whose occurrence is the most.

Tabular of most commonly occurring Keywords as per the set criteria

Rank	Keyword	Occurrences
1	Humans	43
2	Female	32
3	Male	29
4	Adult	27
5	Young Adult	19
6	Middle Aged	17
7	Adolescent	16
8	Surveys and Questionnaires	12
9	Consumer Behaviour	11
10	Aged	10
11	Compulsive Buying	8
12	Materialism	8
13	Motivation	6
14	Social Values	6
15	Commerce	5
16	Culture	5
17	Personal Satisfaction	5
18	Socioeconomic Factors	5

Fig 6: Map of Co-occurrence that has been constructed using VOS Viewer

The keyword Human holds a powerful position with 43 times of occurrence, the terms Materialism and Compulsive Buying shared the same level of occurrence that is 8 times in a document. Further to analyse the author keywords 244 keywords have been taken into consideration which have occurred together or have been used by the author as author's keyword together are been fixed to 4, but to have some more of author keyword specifically,it has been set to 2, accounts to 22.

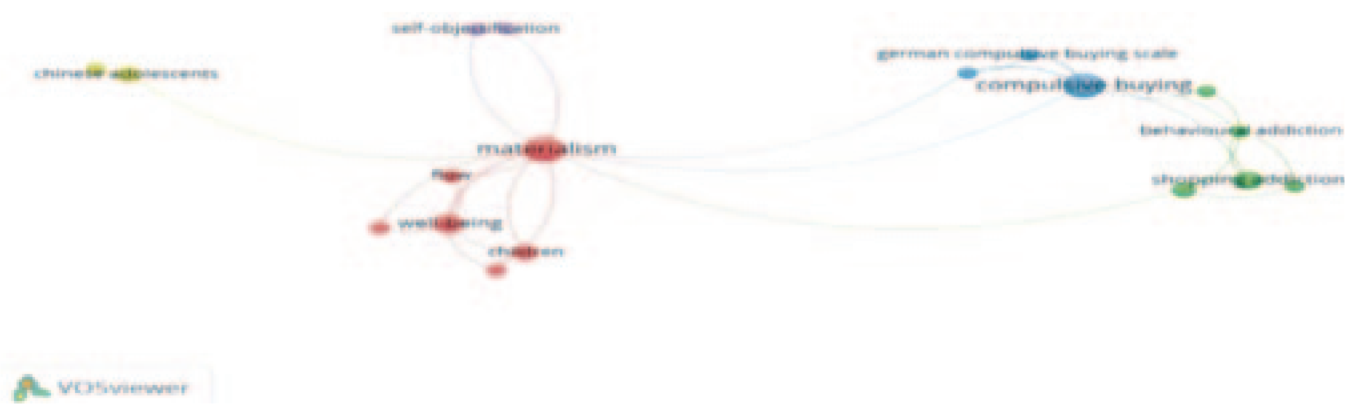

Fig 7: Map of Co-occurrence, showing the occurrence of Author Keywords

Cluster 1 (Children, flow, materialism, self-determination theory, values, wellbeing), Cluster 2 (behaviour addiction, consumer behaviour, pathological buying, prevalence, shopping addiction), Cluster 3(behavioural addiction, compulsive buying, German compulsive buying scale), Cluster 4 (Chinese adolescents, positive youth development) Cluster 5 (Self objectification, sexualization). Therefore, it could be evaluated that the largest set of author keywords which has been occurring and fulling the criteria are materialism and compulsive buying.

Analysis of Citation Using VOS Viewer Conducting Bibliometric Analysis

In order to do so a criterion has been whereby 1000 documents, here by the minimum number of citations of a document is been set, which is 25 on the basis of- The number of references depends on several factors such as novelty of the research, number of earlier studies that are accessible. However, many Journals advocate a minimum of 40 references or above (Ayon, 2018) and hence out of 1000 documents 234 were such meeting the threshold successfully.

Fig 8: Map of Citation that has been constructed using VOS Viewer, showing citation by Documents

As shown in the fig 8 there are a total of 6 clusters have been created with a total item of 23 that is 23 documents are of such which are related in a manner being cited at least 25 times, the paper by Birgitta gatersleben (2012),-Values, identity, and pro-environmental behaviour, which is a co-authored paper involving a team of five people contributing to the article in particular these include (Birgitta gatersleben 2010, Barbara Steiner 2017, Hawazin alzubaidi 2021, Janaine Demody 2015 & Janaine Demody 2018). Hence it could be deduced that it is the paper or a document by Brigitte Gatersleben has emerged as the highest number of cited documents.

Fig 10: Map of Citation that has been constructed using VOS Viewer, showing citation by Authors

For this purpose, at least 4 citations in count who have contributed the most, 14 authors were of such nature who have matched the threshold. It has been further analysed that some of the 14 items. Of all the authors the most prominent that have been cited the greatest number of times is that of Birgitta Gatersleben, which would be well interpreted in the following manner.

Table 5: Tabular representation of citation by author (where the one with maximin link strength is considered)

S. No.	Author	Documents	Citations	Total Link Strength
1	Birgitta Gatersleben	6	362	17
2	Boglárka Zsótér	4	10	0
3	David Uzzell	6	626	9
4	Janine Dermody	4	359	10
5	Lorraine Whitmarsh	4	206	3
6	Nick J. Fox	6	188	0
7	Nicole Koenig-Lewis	4	359	10
8	Nora Räthzel	4	309	5
9	Oliver Smith	4	144	7
10	Thomas Raymen	6	183	7
11	Tim Jackson	8	494	12
12	Victoria K. Wells	4	193	0
13	Yuksel Ekinci	4	205	0
14	Zsolt Demetrovics	4	323	0

According to the above table 5 it could be easily explicated that Birgitta Gatersleben is the one having highest no of documents as the criteria been set (4) with citation of 362 the link strength of his with the other researchers is more as compared to other which is 17, therefore David Uzzell even though has the highest number of citation but the link strength is only 9, which makes Gatersleben a winner.

Conclusion

The paper clearly elaborates that the major research was been done in the year 2017, as shown in fig 2 as in this year there has been a sisyphean metamorphose, that has made consumer incline towards the concept of worldly riches, is a source of happiness, similarly it could be seen that University of London holds a maximum percentage of contribution that is 26%. As it has already been elucidated that Yuksel Ekinci, have emerged as the author who have been cited most of the times having more document and being maximum citations in co-authorship analysis further two of the red and the green network, have 5 authors each, which explicates that these are those authors who have collaboratively worked to have successful finding towards the materialism.

With the help of co-occurrence analysis, it was been analysed that which was the main words that has been used or have occurred in the same document two or more times, the words humans hold the highest magnitude of co-occurrence as shown in table 4, with the help of figure 6, the explication of author keywords have been evaluated, which clearly shows in red cluster 1 hold the great impact with materialism as the main word linked and forming an association the most. Further the citation analysis which proved which explains the author, source and documents concepts providing information about the highest point of consideration in each. This has helped in finding out the maximum number of works that has been creating an impact in terms of authors. Birgitta Gatersleben 2012 meet all the criteria that has been already set with ease and convenience. Similarly, the journal of consumer behaviour proved to be a great source from where the work of reach is been trace or find a way or be guided.

It has been a great matter of concern that the consumer of today's commercial world weighs almost all the concepts and thing on the scale of materialism, and this has been suggested form the point of view of many of the researchers, the paper gives a little touch of systematic analysis in term of citing the top organisation coming together as a team to tabulate the concept of materialism and consumer behaviour, but the major of the analysis which provides the deep learning and knowledge about the co-authorship co-occurrence & citation analysis it has been done through bibliographic analysis. With the help of this analysis a clear picture of the term materialism and consumer behaviour and their conceptual relationship is been proved, bringing out the knowledge of both the terms successfully.

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Role of Anasakti in Positive Psychological Outcomes

*Shivi Tyagi, Prof. Rakesh Kumar

Abstract

In this paper, we explored the role of Anasakti in positive psychological outcomes. The concept of Anasakti highlights the state of inner freedom and non-attachment to the outcomes of one's action. We attempted to highlight how Anasakti may impact multiple dimensions of positive psychology including Mindfulness, Psychological Wellbeing, Resilience, Happiness and flourishing. Anasakti plays an important role in enhancing Resilience and subjective wellbeing. When individuals detach themselves from the fruits of actions, they develop a flexible mindset that enables them to adapt to changing circumstances.

Introduction

The notion of Asakti (attachment) and Anasakti (non-attachment) have been outlined in Srimad Bhagavad Gita as two opposite states of mind. It has taught people useful lessons on how to control their behaviour and daily lives. On the same scale or continuum, these two states represent two extremes (Bhusan, 1994). To achieve a steady state of mind, one must detach from worldly pleasure through anasakti.

In Srimad Bhagavad Gita verses (2.48) Sri Krishna told Arjuna about Yoga-

yoga-sthah kuru karmani sangam tyaktva dhanañjaya siddhy-asiddhyoh samo bhutva samatvam yoga uchyate.

In this sloka Sri Krishna Said to Arjuna! Steadfast in Yoga, giving up all attachment, unmindful of success or failure, do your work. Such equanimity of mind is called Yoga.

We can understand Anasakti as an achievement of the state of Yoga. Anasakti has been discussed across major schools of Bhartiya Darshan, as a healthy sense of separation and inner freedom, accompanying the ability to accept whatever comes in life without clinging to pleasure, desire or a preferred outcome of the action (Agrawal and Jaiswal, 2013).

Extreme aversion and extreme attachment both are obstacles in achieving freedom. Both of these are emotional responses that modify the person's ability to see the world clearly. This state is called Avidya. Avidya is also referred to as ignorance, delusion and on the opposite side of Avidya is Vidya (valid knowledge). In Advaita Vedanta, avidya is to suppress the real nature of things and present something else in its place. Avidya relates to the individual Self (Atman), while Maya is an adjunct of the cosmic Self (Brahman).

Raga-dvesha-viyuktais tu vishayan indriyaish charan atma-vashyair-vidheyatma prasadam adhigachchhati.

(2.64)

According to this verse Sri Krishna told Arjuna, a man who is able to control one's mind from aversion and attraction through his senses, attain peace.

Anasakti or non-attachment is the freedom from attractions (Raga), and in broader sense also repulsions (Dwesha) (Agrawal, 2020). In Srimad Bhagavad Gita Anasakti or Non-attachment is also discussed as Niskama karma, that means Selfless action. In Srimad Bhagavad Gita's verses 2.47 Sri Krishna told Arjuna about the action.

karmanye-vadhikaras te ma phaleshu kadachana ma karma-phala-hetur bhur ma te sango 'stvakarmani.

(2.47)

Sri Krishna said you have the right to your labor, not to its rewards. Neither your motivation for taking action nor your attachment inactivity should be the latter. This passage may be used to understand the philosophy of Karma yoga. According to Srimad Bhagavad Gita Nishkama karma is considerably superior to work with attachment. In order to find solace, operate without desire while maintaining mental equilibrium. Those who work for results and compensation are destroyed (2.49).

durena hy-avaram karma buddhi-yogad dhanañjaya buddhau sharanam anvichchha kripanah phala-hetavah

(2.49)

Studies in modern psychology have also revealed that non-attachment is linked to a better capacity for stress management, more self-compassion, and greater wellbeing (Pande and Naidu 1992; Sahdra, Shaver and Brown, 2010; Agrawal, 2020).

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The concept of Anasakti action or Nishkama Karma, which suggests arriving at the end state, has been used to explain Anasakti (the final state). Anasakt action does not mean physically ceasing to accomplish anything. It is a passionate activity that is intense yet detached, carried out without fostering worries about success or failure, loss or gain (Pandey, 1992).

Anasakti, a motivational construct described by Tiwari and Srivastava (1998), is comparable to the concept of non-attachment. For two reasons, they proposed that Anasakti controls how people behave and second they said that Anasakti is connected to some form of satisfaction.

According to Agrawal and Jaiswal (2013) Anasakti acts as a coping mechanism by teaching unconditional acceptance of one's circumstances. According to Pande and Naidu (1992) focusing on the process rather than outcomes may lessen distraction and improve performance and help in reducing stress.

Tiwari and Srivastava (1998) explored the significant association of Anasakti and religiosity on aggression. They found that Anasakti was not significantly associated with Aggression and poor mental health and Religiosity was significantly correlated with Aggression and poor mental health.

The following are some ways that the Anaskti could enhance our health:

Anasakti and Mindfulness

The practice of mindfulness involves repeatedly, gently concentrating your consciousness on the present moment. It is helpful to think about mindfulness as a way of being rather than activity in and of itself. Practically an activity can be performed with mindfulness awareness. The term mindfulness, which was first linked to Buddhist psychology, is derived from the Sanskrit word "Smrti" (Williams, Leumann, Cappeller, 2004).

A state of awareness is called mindfulness. Although awareness and attention to current events and experiences are inherent characteristics of the human organism, these qualities can range greatly from high levels of clarity and sensitivity to low levels such as in automatic, blunted, habitual thoughts or action (Wallace, 1999).

The practice of mindfulness or meditation helps in increasing the Anasakti traits of individuals. According to Buddhist theory, developing greater mindfulness can help a person gain a deeper understanding of the impermanence of reality and the futility of attempting to control the constantly changing course of experience (Xiao, Yue, He & yu, 2017).

Sahdra *et al.* (2016) conducted a study in which they found that Non-attachment (Anasakti) was positively correlated with Mindfulness. Whereas Anasakti and Mindfulness represent distinct philosophical and cultural perspectives, both of them share certain basic principles. Mindfulness and Anasakti both teach the individuals in order to find out the contentment and peace throughout our-self by helping them to let go of excessive attachment to desire as well as expectations and judgments (Sahdra, 2016).

Both Anasakti and Mindfulness provide different techniques that can help people in developing awareness of self, mental toughness and sense of peace. According to research on mindfulness, practicing awareness of the present and acceptance without judgments may decrease emotional reactivity, increase well-being, and improve cognitive ability. Several mindfulness based treatment and therapies incorporated the concept of Non-attachment within their frameworks. Acceptance and commitment therapy, mindfulness based approach which motivates people to engage in understanding their emotions and thoughts but let go clinging toward it. Similar to Anasakti, Mindfulness involves giving up of expectations and desires to ensure individuals may act unbiased without being affected by preconceived notions (Bushan & Jhaa, 2005).

Anasakti and Well-being

Well-being is a western psychological concept which provides the possibility to understand happiness and attain full potential. The term well-being is defined as optimal psychological functioning and experience. It is an inquiry of significant scientific research along with everyday personal enquiry (Ryan and Deci, 2001).

Well-being and Anasakti have some similar objectives and underlying ideas. Both of these concepts focus on the importance of achieving inner peace. Through engaging in Anasakti people might develop an attitude which is not affected by their surroundings (Banth & Talwar, 2010).

Srimad Bhagavad Gita, highlights the concepts of attaining a state of well-being by controlling the mind and accomplishment of one's task without becoming bound to its result. Anasakti should not be mistaken with disinterest or detachment with life, despite the fact that it can increase well-being. Anasakti promotes engaging in daily tasks and duties while keeping a neutral, detached viewpoint.

The most significant component of subjective well-being is life satisfaction. The meaning of life satisfaction is the fulfillment of an individual's needs and desires during one's whole life or the acceptance of one's life circumstances (Bath and Talwar, 2012). Anasakti is a spiritual practice that might provide a sense of inner peace, reduce stress and promote overall well-being.

Anasakti exhorts us to separate ourselves from the results of action and concentrate on our present situations. We can attain emotional equilibrium and alleviate emotions of tensions and worry by giving up expectations and attachments. Anasakti advises us to acquire a feeling of abstraction in our interpersonal relationship. This is not an indication that we lack interest in or feel cut out from the world; rather it means we establish a more powerful, more compatible connection and love for one another.

Anasakti And Resilience

According to the American Psychological Association (APA, 2015) "Resilience is defined as the process of coping effectively in an adverse situation or as bouncing back from a challenging situation".

Resilience is also defined as a process of positive adaptation in the face of considerable trauma or hardship. Resilience does not only involve overcoming difficulties but it also includes personal development and constructive adaptation. After experiencing difficult situations, resilient people come out better and stronger (Rajeev & Hebbani, 2020).

Anasakti emphasises the idea of accepting change and impermanence. Being flexible and dealing with difficulties and unexpected situations is another aspect of resilience. When people accept the notion of impermanence and understand that change is inevitable, they are more likely to develop the resilience that is essential to get through challenging situations.

Resilience and Anasakti both have the ability to manage and regulate emotions. By practicing Anasakti individuals easily develop emotional stability and detachment from desires and outcomes. Through the practice of Anasakti individuals easily control their own spiritual and personal development. Anasakt people also perceive obstacles as a chance for development(add reference). Rajeev and Hebbani (2020) did empirical study on older people to measure the association between Anasakti and Resilience and found that there was a positive relationship between Anasakti and resilience.

Anasakti and Happiness

According to Peterson (2005), positive psychology proponents have developed an effort to meld several diverse theoretical and empirical views in the happy existence. The creation of the orientation to happiness method is one way that this has been done.

According to (Peterson, 2005), there are three ways to happiness:

1. Enjoy yourself, magnify good feelings and avoid bad feelings.
2. Having a greater purpose than yourself and putting your bad efforts towards these higher goals.
3. Third way of happiness is being completely focused on the work at hand.

The Upanishads offer some sharp monistic insights into the nature of spiritual happiness. The discovery of one's true self is the source of real happiness and is the true purpose of spiritual life. True Happiness requires being completely detached from ego (Sharada Sugirtharajah, 2022).

There are three Gunas described in Srimad Bhagavad Gitawhich are related to happiness- Sattvik, Tamasic and Rajasic. According to Sharada Sugirtharajah (2022) Sattvik happiness is the most enduring one in that it has been attained by control of senses through inner discipline.

Srimad Bhagavad Gita, Chapter 5 Verse 21 highlights that Anasakti is the source of Happiness :

Bahya-sparsesuvasktatma Vindtyatmani yatsukham
Sa Brahma-yoga-yukt-atma Sukham-akshayam-asnute.

When an individual is non-attached to external contacts, he feels happiness within himself. According to Banth and Talwar (2012), a person who shows higher Anasakti tendencies has significantly greater orientation to meaningful life and lesser orientation to pleasurable life.

Conclusion

This paper provides compelling evidence that Anasakti plays a significant role in promoting positive psychological variables. Previous research finds that Anasakti is associated with life satisfaction, Happiness and overall well-being. Anasakti helps individuals to detach from desires of specific outcomes. Through the practice of Anasakti individuals reduce their negative emotions such as Depression, Anxiety and Stress. Individuals have fewer emotional disturbances and have higher emotional resilience when they let go of their excessive attachments to outcomes and possession. Literature indicates that through the practice of Anasakti individuals improve their interpersonal relationship. Anasakti has a tendency to support healthy coping strategies, helping people to respond to difficult situations. This capacity to cope positively with adversity contributes to higher levels of psychological well-being. Practice of Anasakti may help in better coping with stress, anxiety and depression. Future studies might inquire into ways to include Anasakti-based therapies into positive psychology programmes that increase happy feelings and general life satisfaction.

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राष्ट्रीय शिक्षा नीति-2020 एवं स्कूली शिक्षा

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सारांश

इस शोध पत्र में नई शिक्षा नीति 2020 की मुख्य विशेषताओं का वर्णन किया गया है। राष्ट्रीय शिक्षा नीति 2020 में भारत की परंपरा, संस्कृति, मूल्यों और सभ्यता को समाहित करते हुए बालक के सर्वांगीण विकास जिसमें उसके नैतिक, आध्यात्मिक, शारीरिक, मानसिक सभी प्रकार के विकास पर बल दिया गया है। इसके लिए प्रगतिशील पाठ्यक्रम तथा छात्रों को बोझिल न महसूस होने वाला, अंतर-अनुशासनात्मक विषय, नई शिक्षा व्यवस्था, निरंतर एवं व्यापक मूल्यांकन प्रणाली आदि प्रमुख परिवर्तन कर शिक्षा को अनुभव आधारित बनाने पर जोर दिया गया है। नई शिक्षा नीति का उद्देश्य प्रत्येक व्यक्ति को बिना किसी भेदभाव के शिक्षा प्रदान कर बढ़ने और विकसित होने के लिए एक सामान अवसर प्रदान करना है तथा विद्यार्थियों में ज्ञान, कौशल, बुद्धि और आत्मविश्वास का सर्जन कर उनके दृष्टिकोणों का विकास करना है। इस शोधपत्र में नई शिक्षा नीति की मुख्य विशेषताओं एवं स्कूली शिक्षा से सम्बन्धित कार्यों पर प्रकाश डाला गया है।

प्रस्तावना

राष्ट्रीय शिक्षा नीति का उद्देश्य भारत को ज्ञान के क्षेत्र में वैश्विक पहचान बनाने के साथ-साथ संयुक्त राष्ट्र संघ (वर्ष 2015) में अपनाये गये सतत् विकास के लक्ष्यों में SDG4 को 2030 तक प्राप्त करना भी है, जिसमें सभी को समावेशी, समतापूर्ण, न्यायसंगत तथा गुणवत्तायुक्त शिक्षा प्रदान करने का लक्ष्य रखा गया है। शिक्षा के माध्यम से ही अपनी चुनौतियों का सामना कर सकते हैं। शिक्षा से ही अन्य सभी लक्ष्यों की प्राप्ति के लिए प्रयास किया जा सकता है (Soumya, 2022)। यही कारण है कि 1976 मे 42वें संविधान संशोधन से शिक्षा को समवर्ती सूची में सम्मिलित किया गया तथा केंद्र और राज्य दोनों ही के द्वारा सार्वभौमिक, अनिवार्य, प्रारम्भिक शिक्षा के लक्ष्य की प्राप्ति का प्रयास किया जा रहा है। आर.टी.ई. एक्ट 2009 द्वारा 6 से 14 वर्ष के बालक एवं बालिकाओं के निःशुल्क एवं अनिवार्य शिक्षा को मौलिक अधिकार बना दिया गया है। इसका मुख्य उद्देश्य सभी को समान, गुणवत्तापूर्ण शिक्षा देने के साथ-साथ सामाजिक, न्याय एवं राष्ट्र के विकास को उत्तरोत्तर बढ़ाना है। खेद का विषय है कि स्वतंत्रता के 75 वर्ष पूर्ण करने के बाद भी हम सम्पूर्ण साक्षरता के निकट नहीं पहुंच पाए हैं और हमारे कुछ राज्यों में आज भी साक्षरता की दर संतोषजनक नहीं है, विशेषकर महिलाओं के सन्दर्भ में।

तालिका 1.0 भारत की साक्षरता दर की स्थिति

कुल साक्षरता दर	77.70%
पुरुष	84.70%
महिला	70.30%
शहरी क्षेत्र	87.7%
ग्रामीण क्षेत्र	73.5%

Source: National Survey of India 2023

तालिका 2.0 निम्न साक्षरता दर वाले राज्य

राज्य	साक्षरता दर	पुरुष	महिला
आन्ध्र प्रदेश	66.4	73.4	59.4
राजस्थान	69.7	80.8	57.6
बिहार	70.9	79.7	60.5
तेलंगाना	72.8	80.5	65.1
उत्तर प्रदेश	73	81.8	63.4

Source: National Survey of India 2023

उपरोक्त तालिका से ज्ञात होता है कि आंध्र प्रदेश की साक्षरता दर सबसे कम 66.4 है, जिसमें पुरुष की साक्षरता दर 73.4 जबकि महिला की साक्षरता दर 59.4 है, जो पुरुष की साक्षरता दर से बहुत कम है। जबकि बिहार राज्य जो पहले सबसे कम साक्षरता वाला राज्य था उसकी साक्षरता दर 70.9 के साथ तीसरे स्थान पर आ गया है। उत्तर प्रदेश 73 साक्षरता दर के साथ निम्न साक्षरता दर वाला भारत का पांचवा राज्य है जिसमें पुरुष की साक्षरता दर 81.8 और महिला की साक्षरता दर 63.4 मे बहुत अंतर है।

प्रारम्भिक शिक्षा के सन्दर्भ में नामांकन के आंकड़े भी बहुत संतोषजनक नहीं है, साथ ही विद्यालय छोड़ने वाले बच्चो की संख्या प्राइमरी लेवल पर 1.5%, उच्च प्राथमिक स्तर पर 3% एवं माध्यमिक स्तर पर 12.6% है (UDISE 2021-22)।

ज्ञान, विज्ञान व तकनीकी की क्रान्ति से सम्पूर्ण विश्व के परिदृश्य लगातार तेजी से परिवर्तित हो रहे हैं। बढती हुई जनसंख्या जहाँ एक ओर प्राकृतिक एवं मानव निर्मित संसाधनों की तेजी से खपत बढ़ा रही है, वही डेटा साइंस, आर्टिफीशियल इंटेलिजेंस

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जैसी तकनीकी विकास कुशल/अकुशल श्रमिक का स्थान लेते जा रहे हैं। ऐसे में सर्वाधिक युवा जनसंख्या वाले इस देश में युवाओ की शक्ति का सार्थक सदुपयोग करने, उन्हें शैक्षिक एवं कुशलता प्रदान कर प्रतिभा संपन्न करने तथा इस प्रकार राष्ट्र की उन्नति करने हेतु एक सशक्त, सुदृढ़ एवं दूरगामी नीति की आवश्यकता थी। राष्ट्रीय शिक्षा नीति 2020 एक श्रेष्ठ एवं सराहनीय पहल है।

राष्ट्रीय शिक्षा नीति 2020 में स्कूली शिक्षा के संवर्द्धन हेतु प्रमुख बिंदु

1. **स्कूली शिक्षा की नवीन संरचना (5+3+3+4)-** स्कूल आनन्दमयी वातावरण में सीखने का स्थान है। नई शिक्षा नीति बालक की सीखने की अवस्थाओं के अनुरूप सीखने के वातावरण के निर्माण की बात कर ली है। पाठयक्रम की संरचना 5+3+3+4 के आकार में होगी। इसमें प्रथम भाग 5 वर्षीय बुनियादी स्तर कहलायेगा। यह भी दो भागों में बंटा होगा। द्वितीय भाग 3 वर्षीय प्रिपरेटरी स्तर, तृतीय भाग 3 वर्षीय मिडिल एवं अंतिम भाग 4 वर्षीय सेकेंडरी स्तर कहलायेगा, जिसमें पहले दो साल 9-10 उसके बाद के 2 वर्ष 11-12 कक्षा के लिए होंगे।

2. **प्रारम्भिक बाल्यावस्था देखभाल और शिक्षा (ईसीसीई)-** बालक के मस्तिष्क का अधिकतम विकास बाल्यावस्था में ही होता है। शिक्षा नीति 2020 में प्रारम्भिक बाल्यावस्था देखभाल और शिक्षा (ईसीसीई) के द्वारा बालक के लिए बाल्यावस्था से ही खेल, गतिविधि और खोज आधारित शिक्षा देने की बात करती है। इसका मुख्य उद्देश्य बालक की देखभाल और उनका सम्पूर्ण विकास कर शुरुआत से ही शिक्षा के प्रति रुचि बढ़ाना है।

3. **स्कूली शिक्षा के लिए समृद्ध सीखने के अनुभव दिए जाने पर बल-** बहु सांस्कृतिक, बहुस्तरीय खेल, बहु भाषिक, पारंपरिक खेल एवं गतिविधियों को पाठयक्रम का अंग बनाने पर जोर दिया गया मातृभाषा, लोकल भाषा में साहित्य एवं पाठ्यक्रम तैयार करने की संकल्पना विशेष रूप से उल्लेखनीय है। खेल-खेल में सीखने के अनुभव छात्रों को प्रदान करना सीखने को एक एक आनंदमयी गतिविधि बनाने जैसा है। अध्ययन/अध्यापन की नवीन शैलियों का अपनाने पर बल जिसमें संवाद, कथानक का प्रयोग किया जायेगा।

4. **कार्यात्मक साक्षरता :** सार्वभौमिक संख्या-ज्ञान एवं अक्षर ज्ञान की प्राप्ति का लक्ष्य- प्रारंभिक शिक्षा में बालको को सर्वप्रथम अक्षर, ज्ञान प्रदान किया जाता है जिससे उन्हें बुनियादी शिक्षा प्रदान कर भविष्य के लिए तैयार किया जा सके। PRATHAM संस्था ने प्राथमिक विद्यालयों मे विद्यार्थियों में स्कूल प्रतिदिन जाने के बाद भी मूलभूत कौशल संख्या- ज्ञान, अक्षर पढ़ने-लिखने, समझने, सामान्य जोड़, घटाना आदि की कमी को एक प्रमुख चुनौती बताया। बुनियादी साक्षरता संबंधित कमी को तत्काल दूर करने के लिए राष्ट्रीय शिक्षा नीति 2020 ने इसे एक राष्ट्रीय अभियान बनाने का प्रस्ताव रखा है, जिसका मुख्य कार्य 2025 तक प्रत्येक बालक को बुनियादी साक्षरता प्रदान करवाना है। इसके लिए शिक्षक छात्र अनुपात 25:1 से कम हो ताकि शिक्षक प्रत्येक छात्र पर विशेष ध्यान दे सकें। इसके अतिरिक्त पियर ट्यूटोरिंग को भी बढ़ावा दिये जाने पर बल दिया है जो न सिर्फ सीखने में सहायता करेगी अपितु परस्पर सहयोग के मूल्य को विकसित करने मे भी सहायक होगी।

5. **बालक के विशिष्ट प्रतिभा की पहचान कर उसका विकास करना-** नई शिक्षा नीति विद्यार्थियों की विशिष्ट प्रतिभा को पहचान कर उसके अनुसार उन्हें शिक्षा प्रदान करने पर जोर देती है जिससे उनकी प्रतिभा का विकास हो सके और वह भविष्य में देश के विकास में सहायता करे।

6. **तकनीकी शिक्षा तथा तकनीक की सहायता से समावेशी शिक्षा-** तकनीकी के उपयोग कर विशिष्ट आवश्यकता वाले विद्यार्थियों को अमान्य विद्यार्थियों के साथ एक ही कक्षा में समावेशी शिक्षा प्रदान की जा सकती है। इसके लिए शिक्षा नीति 2020 में तकनीकी शिक्षा को प्रात्साहित करने और तकनीक के प्रयोग की बात करती है।

7. **2030 तक माध्यमिक स्तर पर शत-प्रतिशत नामांकन प्राप्ति का लक्ष्य-** राष्ट्रीय शिक्षा नीति का उद्देश्य माध्यमिक स्तर पर 2030 तक शत-प्रतिशत नामांकन प्राप्त करने का लक्ष्य रखा गया है। इसके लिए शिक्षा के पाठ्यक्रम को सरल बनाना, सार्वजनिक पहुंच, रुचिकर, जीवन से संबंधित उदाहरण युक्त बनाना एवं इसके साथ ही नेशनल इंस्टीट्यूट ऑफ ओपन स्कूलिंग ओपन एंड डिस्टेंस लर्निंग कार्यक्रमों को प्रोत्साहित करना, जिससे छात्र बिना किसी रुकावट के शिक्षा ग्रहण कर सकें।

8. **ड्रॉपआउट दर को कम करना, ड्रॉपआउट बच्चों की पहचान तथा उन्हें पुनः शिक्षा से जोड़ने की पहल-** शत प्रतिशत नामांकन प्राप्त करने के साथ-साथ नई शिक्षा नीति का उद्देश्य न सिर्फ ड्रॉपआउट दर को कम करना बल्कि ड्रॉपआउट बच्चों की पहचान कर उन्हें पुनः शिक्षा से जोड़ने की पहल करना भी है। इसके लिए विद्यालयों के पास छात्रावास की व्यवस्था करने पर भी जोर देने का प्रयास किया जा रहा है ताकि दूर से आने वाले छात्रों को बिना किसी रुकावट के शिक्षा प्राप्त हो सके। कमजोर परिवारों के बच्चों को मुख्यधारा शिक्षा में लाने के लिए समाज की सहायता एवं उनकी सुविधा के अनुसार शिक्षा प्रदान करने के लिए शिक्षा केंद्र की स्थापना की बात भी नई शिक्षा नीति में की गई है जो विद्यार्थियों को निर्बाध

शिक्षा प्राप्ति मे मील का पत्थर साबित होगी।

9. **विद्यार्थियों का संपूर्ण विकास-** शिक्षा के उद्देश्य के अनुसार नई शिक्षा नीति का प्रमुख उद्देश्य छात्रों का सर्वांगीण विकास करना है। नई शिक्षा नीति ने भारतीय ज्ञान, परंपरा, सभ्यता, नैतिक मूल्य, प्रयोगात्मक शिक्षा प्रणाली आदि के द्वारा विद्यार्थियों के शारीरिक, मानसिक, आध्यात्मिक, नैतिक, संवैधानिक विकास पर विशेष बल दिया है जिससे भविष्य के लिए जिम्मेदार नागरिक तैयार हो सकें, जो कुशलतापूर्वक अपने दायित्वों का निर्वहन करते हुए राष्ट्र को प्रगति के पथ पर अग्रसर कर सकें।

10. **मातृभाषा, स्थानीय भाषा, क्षेत्रीय भाषा में शिक्षा उपलब्ध कराना-** राष्ट्रीय शिक्षा नीति 2020 में प्राथमिक स्तर पर मातृभाषा, स्थानीय भाषा एवं क्षेत्रीय भाषा में शिक्षा प्रदान करने पर बल दिया गया है क्योंकि
    - प्राथमिक कक्षा के विद्यार्थी अपने परिवेश में चल रही भाषा में ज्यादा सरलता से सीखते हैं।
    - अपनी भाषा में शिक्षा के वातावरण से वह सरलता से उसमे घुल-मिल जाते हैं।
    - परिवार के बाद विद्यार्थी पहली बार बाहर निकलते हैं जिससे उन्हें मातृभाषा, स्थानीय भाषा, क्षेत्रीय भाषा में शिक्षा देने से उन्हें अपने परिवार की याद न आये और उन्हें परिवार जैसा माहौल दिया जा सके।
    - इसके अतिरिक्त बहुभाषावाद को भी प्रोत्साहित किया जायेगा।

11. **भारतीय ज्ञान प्रणाली को पाठ्यक्रम में स्थान-** भारत के इतिहास, परंपरा, संस्कृति एवं सभ्यता के ज्ञान को सभी तक पहुंचाने के लिए पाठ्यक्रम में भारतीय ज्ञान प्रणाली को स्थान दिया गया जिससे भारत के गौरवशाली अतीत तथा समृद्ध संस्कृति तथा परम्परा से न सिर्फ विद्यार्थियों को परिचित कराना अपितु इसके प्रति आदर, सम्मान का भाव जाग्रत करना एवं उच्च मूल्यों को विद्यार्थियों में विकसित करना भी NEP-2020 का प्रमुख उद्देश्य है जो आने वाले समय में 'एक भारत श्रेष्ठ भारत' के रूप में प्रदर्शित होगा।

12. **विद्यार्थियों के नैतिक विकास के लिए विशेष पहल-** मानवीय जीवन से नैतिक मूल्यों के हास को देखते हुए राष्ट्रीय शिक्षा नीति 2020 विद्यार्थियों के नैतिक विकास पर विशेष बल देती है।

13. **विद्यालय शिक्षा के लिए राष्ट्रीय पाठ्यचर्या रूपरेखा (2020-21)-** विद्यालयी शिक्षा के नए संरचना 5+4+4+3 के अनुसार पाठ्यचर्या बनाने के लिए राष्ट्रीय पाठ्यचर्या रूपरेखा 2020-21 के बारे में भी NEP-2020 में बताया गया है जिसमें ऐसा पाठ्यक्रम होगा जिससे बच्चों में उत्साह और शिक्षा के प्रति रुचि बढ़े और वो अपनी इच्छानुसार विद्यालय आये न कि उसे जबरदस्ती भेजना पड़े। इसके अतिरिक्त विषयवस्तु जीवन से सम्बन्धित उदाहरणों प्रोत्साहन देने वाली होगी।

14. **सतत एवं व्यापक रचनात्मक आकलन-** NEP-2020 बालक के ज्ञानात्मक, भावनात्मक, समझ, कौशल आदि पक्ष के आकलन के लिए सतत एवं व्यापक रचनात्मक आकलन की बात करती है जिससे बालक के समग्र विकास का आकलन किया जा सके।

स्कूली शिक्षा बालक के विकास में एक अहम भूमिका निभाती है। स्कूली शिक्षा विद्यार्थी में नैतिक मूल्यों, शारीरिक, मानसिक, सांवेगिक, आध्यात्मिक विकास करती है। राष्ट्रीय शिक्षा नीति 2020 शिक्षा के द्वारा छात्रों को भारतीय संवैधानिक मूल्यों एवं मौलिक दायित्वों के ज्ञान के साथ-साथ ज्ञान, कौशल, मूल्यों, सोच आदि के विकास करते हुए देश के एक जिम्मेदार नागरिक बनाने वाली है, जिससे वो मानवाधिकारों, स्थायी विकास और जीवनयापन तथा वैश्विाक कल्याण के लिए प्रतिबद्ध हो और सही मायने में वैश्विक नागरिक बन सकें। नई शिक्षा नीति-2020 में स्कूली शिक्षा के लिए अनेक नये प्रावधान जैसे- स्कूली शिक्षा का नयी संरचना, मातृभाषा पर जोर, समावेशी शिक्षा पर जोर, सर्वांगीण विकास, नवीन शिक्षण विधि, सतत एवं व्यापक मूल्यांकन आदि के द्वारा स्कूली शिक्षा में परिवर्तन कर उसकी गुणवत्ता को बढ़ाने का प्रयास किया है। नई शिक्षा नीति ने स्कूली शिक्षा में आने वाली बाधाओं जैसे शिक्षा की पहुंच, शिक्षण विधियों से संबंधित,पाठ्यक्रम संबंधित समस्याओं, विद्यालयी समस्याओं आदि को दूर किया है जिससे स्कूली शिक्षा को सरल और सबके पहुंच वाली बना दिया। इसलिये नई शिक्षा नीति शिक्षा को रटने वाले विषयों और अंक प्राप्त करने वाली पुरानी परम्परा से आगे शिक्षा के वास्तविक अर्थ ज्ञान, कौशल, मूल्यों, सर्वांगीण विकास करने वाली है जो विद्यार्थियों को निरंतर कार्य करने और प्रगति करने के लिए प्रेरित करेगी।

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An Empirical Study on Financial Solvency Performance of KSCAB Ltd.

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Abstract

This study focuses on evaluating the financial performance and solvency of Karnataka State Co-operative Apex Bank Limited (KSCAB Ltd.) over a six-year period (2013-14 to 2018-19). The research addresses the significance and challenges faced by cooperative banks in India, especially in the context of rural banking and technological advancement. The study employs financial ratio analysis to understand the bank's liquidity, debt-to-equity, owned funds to borrowed funds, credit to deposit, current, and acid test ratios.The findings suggest that KSCAB Ltd. exhibited mixed results in various financial indicators. Notably, the bank experienced fluctuations in its liquid assets, debt structure, and credit deposit ratio over the study period. Furthermore, there were variations in the owned funds and the bank's ability to meet its short-term obligations. The research also highlights the gaps in technological adoption by cooperative banks in rural areas compared to public and private sector banks.

Overall, the study provides valuable insights into the financial performance of cooperative apex banks, specifically focusing on KSCAB Ltd., and offers recommendations for improving their financial solvency in the face of market challenges and evolving banking landscapes.

Introduction

The co-operative movement in India basically aims at bringing about the importance of the socio-economic states of its members and their families and the community as a whole. The success of cooperatives primarily depends on universal and active membership covering all population segments. It is possible to generally split the Indian cooperative credit structure into rural and urban sections. Banks of urban and semi-urban cooperatives serve the country's cities and semi-urban areas, while rural cooperative banks serve the country's countryside. It is the responsibility of urban cooperative banks to provide credit for non-agricultural purposes.

In India, cooperative banks have experienced strong competition from both public and private sector banks. Financial service diversification has gained traction in the banking business. Banks' modern services are becoming more important, while old services are becoming less important. The Cooperative banks are meant for rendering baking services to rural areas. Nowadays, the public and private sector banks are stretching their banking services to the rural regions of India with modern technology. In contrast, cooperative banks lack in adopting the new technology in the banking activities. The present study will help understand the financial performance of cooperative apex banks.

The researcher has evaluated Karnataka State Co-operative Apex Bank Limited (KSCAB Ltd.) regarding its share capital, reserves and surplus, investments, loans and advances, total income and borrowings, total expenditure and net profit. The researcher also evaluated the financial solvency of KSCAB Ltd. by considering ratio's like- liquid assets to deposit balance; there are a number of ratios that may be used to evaluate a company's financial health. Cash to deposit, investment to deposit and credit to deposit ratios were among major financial resources used by the study. The profitability analysis of KSCAB Ltd. has been analysed with the DuPont model's help.

This study is helpful to give the proper guidelines to the researcher who is interested in making addition in this area. Moreover, this study will be beneficial to improve the financial performance of KSCAB Ltd.

Significance of the Study

Indian banking sector have gone through various transformation phases in terms of providing technological services. The performance and survival of cooperative banks are in questioning stage. Financial Solvency is one of the important parameter on which abank's financial performance is to be measured.

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Research Gap

Various research studies were conducted on the co-operative banks in India in the form of conceptual and analytical. The researcher has reviewed related literature in cooperative banks to find the research gap. It has been identified that there is no particular study conducted on the Karnataka State Co-operative Apex Banks. Hence, the researcher attempted to evaluate the financial solvency performance evaluation of Karnataka State Co-operative Apex Bank Limited.

Statement of problem

There is a need to have a critical study of the development and advancement of prestigious Karnataka State Co-operative Bank in terms of financial solvency. The finest way is to evaluate the effect through the financial variables.

Objectives of the Study

1. To understand the financial performance of KSCABL
2. To study and examine financial solvency performance of KSCABL.

Source of Data

The present study is based on secondary data collected from annual reports of State Cooperative Banks in India. The secondary data also collected from the Prowess IQ Data base and other websites likes-Zauba Corp, leading provider of commercial information and insight on businesses.

Period of the study

Annual reports of KSCAB Ltd. are being analysed for six years (2013-14 to 2018-19) in order to assess the banksfinancial performance and solvency status.

Tools and Techniques used for the study

Key financial ratios such as

1. Liquid Assets to Deposits Ratio
2. Debt to Equity Ratio
3. Owned Funds to Borrowed Funds Ratio
4. Credit to Deposit Ratio
5. Current Ratio
6. Acid Test Ratio

Review of Literature

Hosamani (1995) used various ratios to evaluate the performance of Malaprabha Grameena Bank in Karnataka. Profitability ratios were negative (-43%) due to higher burden ratio (3.11%) compared to spread (2.96%).

Pathania and Sharma (1997) studied the working of Himachal Pradesh State Cooperative Agricultural and Rural Development Bank, which lends money on a long term basis for a variety of end users. The financial durability of the bank was measured and data were presented on the long-term financial strength, debt to equity ratio, fixed assets to net worth ratio, the short-term financial performance, and the current ratio. It was concluded that the financial position of the bank was not sound, with liabilities exceeding equity.

Shekhar *et al.* (1999) employed financial ratio analysis for the Karimnagar District Central Cooperative Bank in Andhra Pradesh, India. Financial ratios relating to solvency, liquidity, profitability, efficiency and strength of the bank were analysed for the period 1985/86-1994/95. Siddhanti (1999) used various financial ratios to analyze financial performance of Indian Farmers Fertilizers Cooperative and opined that the current ratio of the institution between 1987-88 and 1997-98 was ranging from 2.62 to 2.52 as against the standard norm of 2:1. The debt equity ratio during the period was between 1.05 and 1.07 as against standard norm of 1:1.

Patil (2000) used various financial ratios to evaluate the performance of Primary Cooperative Agricultural and Rural Development Banks in Dharwad district of Karnataka. The study revealed that the current ratio was more than unity and acid-test ratio was less than unity, while the net worth and profitability ratios were negative for all the banks in all the periods except for PCARDB, Dharwad. Deepak (2004) evaluated the financial viability of two primary agricultural cooperative societies (PACS) in Kolhapur district, Maharashtra, India, using data covering seven years after (1992-98) and seven years before (1985-91) the economic reforms. The two PACS selected represent class A and B societies, respectively. Results showed a reduction in the operational efficiency of the selected PACS during the post-reform period compared to the pre-reform period. The selected PACS showed a decline in their current liquidity ratio, rate of return on assets, return on owner's equity, and marginal efficiency of capital.

Developments in Cooperative Banking

Co-operative institutions play a significant role in credit delivery to unbanked segments of the population and financial inclusion within the multi-agency approach adopted in India in this context. They consisted of 1,551 urban co-operative banks (UCBs) at end-March 2018 and 96,612 rural co-operative banks at end-March 2017, with the latter accounting for 65.8 per cent of the total asset size of all co-operatives taken together.

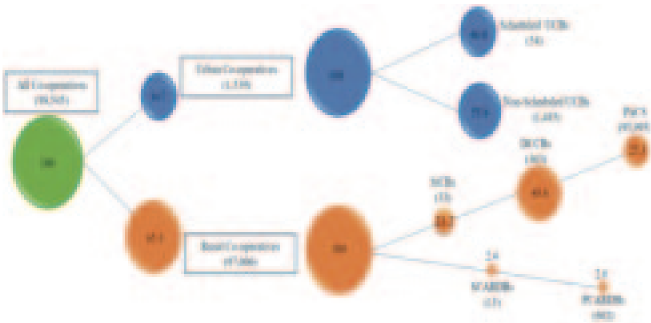


Fig. 2.1 The Structure of co-operatives by Asset size

Source: RBI Report

Notes: 1. Figures in per cent and bubble size is scaled to asset size.

State Co-operative Agriculture and Rural Development Banks (SCARDBs) are all abbreviations for the same thing: State Co-operative Agriculture and Rural Development Banks (DCCBs, PACS, SCARDB) (State Co-operative Agriculture and Rural Development Banks).

At the end of March 2020 and March 2019, the numbers in parenthesis denote the number of UCBs and rural co-ops, respectively. Thirty-six of the 54 UCBs slated will involve more than one state, while the remaining 18 will involve only one state. Out of 1,485 non-scheduled UCBs, there are 25 multi-state UCBs and 1,460 single-state UCBs.

At the end of March-2020, the sector's asset size was just 10% of that of SCBs, despite its critical importance. Although rural co-operative lending has a primary focus on agriculture, its percentage of total agricultural loans has decreased from 64% in 1992-93 to 13% in 2019-20.

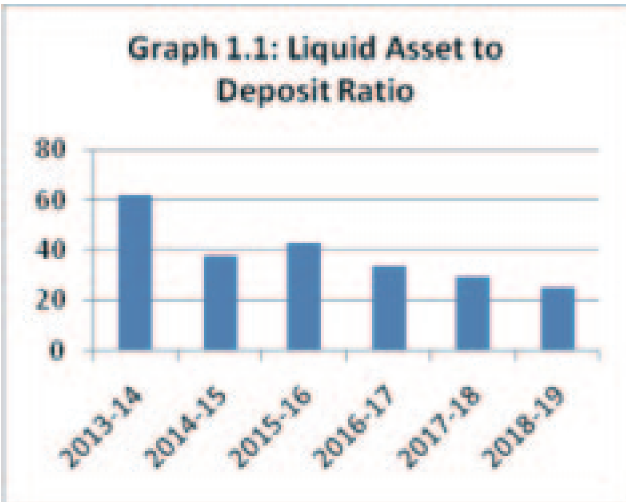
Over the past few years, the financial health of this sector has been a concern. All Inclusive Directions have been issued to 52 UCBs since April 1, 2015. 3 More than 94.3 per cent of the total claims paid out by the Deposit Insurance and Credit Guarantee Corporation (DICGC) since its founding have come from the defunct co-operative banks.

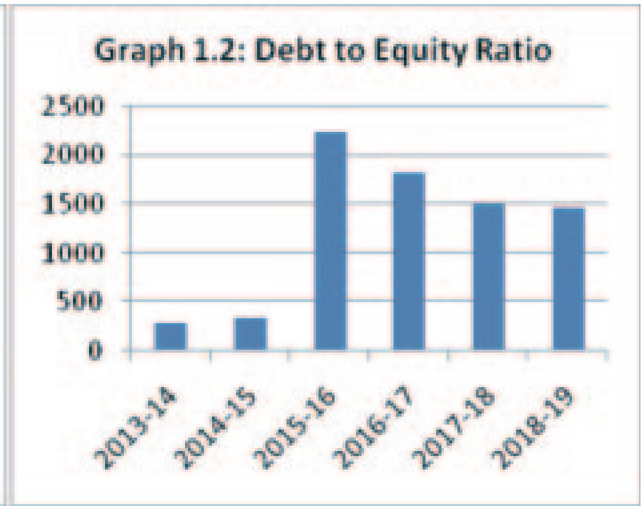
Data Analysis and Interpretation

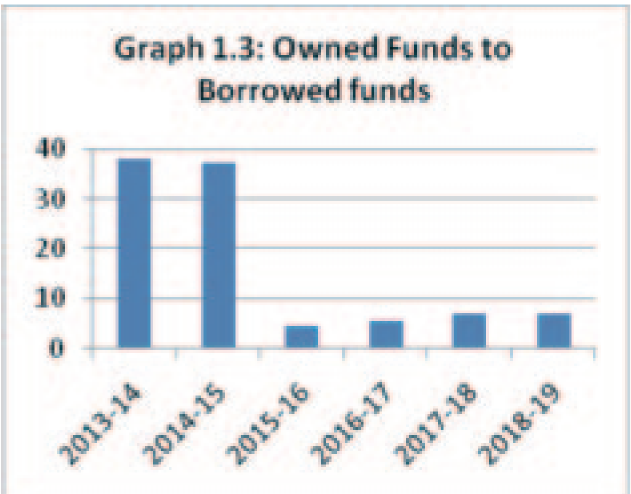
A basic statistical technique is used to conduct explicit comparisons and explain the relationship between two graphs in order to understand the financial solvency of Karnataka State Co-operative Apex Bank Ltd.'s. Any firm may be compared quantitatively to one component. There are a variety of ratios that reveal distinct aspects of an organization's overall success. To evaluate the financial solvency and related, a ratio analysis technique is used for this objective. The following financial variables were examined for six years.

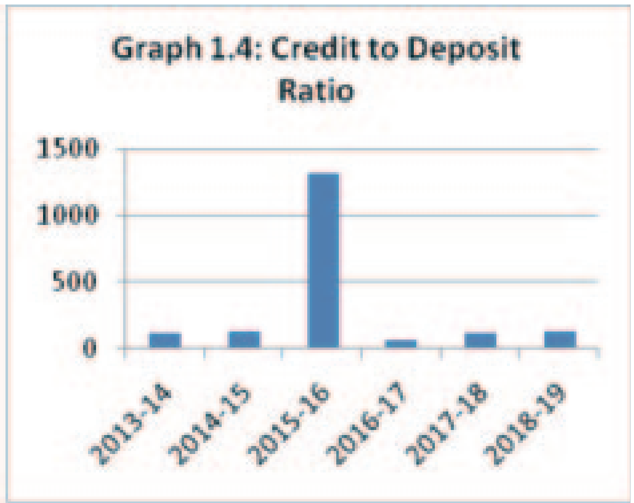
- Liquid Asset to Deposits Ratios
- Debt to Equity Ratio
- Owned Funds to Borrowed Funds Ratio
- Credit to Deposit Ratio
- Current Ratio
- Acid Test Ratio

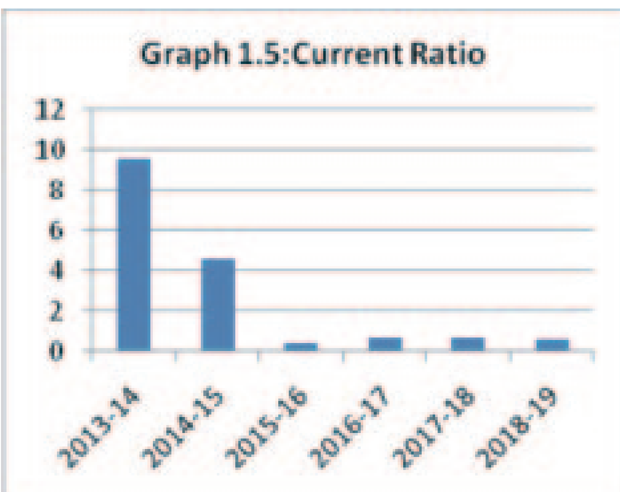
	Liquid Asset to Deposit Ratio	Debt to Equity Ratio	Owned Funds to Borrowed funds	Credit to Deposit Ratio	Current Ratio	Acid Test Ratio
2013-14	61.84	298.15	38.0389	121.137	9.53007	0.83927
2014-15	37.94	349.86	37.1189	130.617	4.57337	0.90594
2015-16	42.74	2245.01	4.59665	1319.35	0.47753	0.08149
2016-17	33.48	1824.19	5.61951	67.5473	0.66542	0.23035
2017-18	29.6	1496.61	6.92124	119.285	0.71726	0.1863
2018-19	25.18	1459.03	7.15363	126.599	0.5962	0.21311

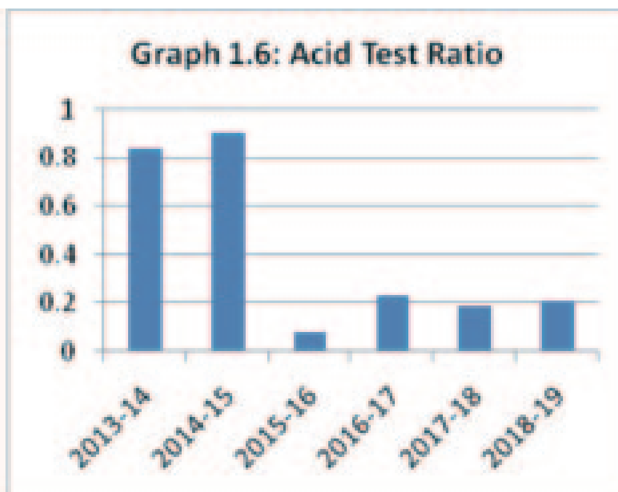












Interpretation

Graph 1.1 depicts that the liquid assets to demand and time liability ratio was 61.84 per cent in the year 2013-14, and it decreased to 37.94 per cent in the year 2014-15 of the study period. Later on, the ratio declined to 10.84 per cent in the year 2015-16, and it increased to 33.48 per cent in the year 2016-17. Again, the ratio decreased to 29.60 per cent and increased to 40.61 per cent in 2017-18 and 2018-19, respectively.

Graph 1.2 denotes the debt-to-equity ratio of Karnataka State Co-operative Apex Bank (KSCAB) Ltd., from 2013-14 to 2018-19. Debt includes the borrowings and debentures. In 2013-14, the debt-to-equity ratio was 298.15 percent; by 2015-16, it had risen to 2245.01 percent, the year with the highest ratio throughout the time period under consideration. Later on, the ratio declined to 1824.19 per cent in the year 2016-17 and continued to follow the declined trend till the year 2018-19.

Graph 1.3 represents the own fund to borrowed fund ratio of Karnataka State Co-operative Apex Bank (KSCAB) Ltd., from 2013-14 to 2018-19. It observed that the own fund and bowered fund ratio was 38.04 per cent in the year 2013-14, and it decreased to 37.12 per cent in the year 2014-15. Later on, the ratio declined to 4.60 per cent in 2015-16. From 2015-16 onwards, the increasing trend continues until 2018-19.

Graph 1.4 signifies the credit deposit ratio, i.e., From 2013-14 to 2018-19, KSCAB Ltd. made loans and advances to its customers' savings accounts. One thing that stood out to researchers is that the credit deposit ratio climbed from 121.14% to 1319.36% in the year 2015-16, which was a record high during this time period.

KSCAB Ltd.'s current assets to current liabilities ratio is shown in Graph 1.5, which includes data from 2013-14 to 2018-19 for Karnataka State Co-operative Apex Bank For the years 2013-14 and 2015-16, the present ratio was 9.53 times higher than the lowest point recorded in the research period of 0.48 times.

From the year 2013-14 to 2018-19, the Acid Test Ratio, or the ratio of acid assets to current liabilities, of Karnataka State Co-operative Apex Bank (KSCAB) Ltd. is shown in Graph 1.6. It was shown that the credit deposit ratio was 0.84 times in 2013-14 and declined to 0.08 times in 2015-16, the lowest year of the research period.

Major Findings

1. The share of cash in hand in the liquid assets of KSCAB Ltd. was less than the investments share. The debenture shares in KSCAB Ltd.'s debt was too low compared to the borrowings share.
2. The owned funds of KSCAB Ltd. recorded a higher variation in the amount.
3. The credit to deposit ratio of KSCAB Ltd. recorded the mixed response in ratio values The loans and advances of the KSCAB Ltd. recorded more fluctuation in the absolute value.
4. The cash and bank balance and investment share recorded the decreasing value.
5. The liquid assets stood higher than the current liabilities during the study period. The acid test ratio of KSCAB Ltd is decreased during the study period.

Conclusion

The Cooperative banks are meant for rendering baking services to rural areas. Nowadays, the public and private sector banks are stretching their banking services to the rural regions of India with modern technology. In contrast, cooperative banks lack in adopting the new technology in the banking activities. The present study will help understand the financial performance of cooperative apex banks.

The liquid assets to deposit ratio, debt-to-equity ratio, owned funds to borrowed funds ratio, current ratio and Acid Test Ratio of KSCAB Ltd. recorded a mixed response during the study period.

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Boosting Cognitive Skills through Abacus: An Affordable Educational Tool

*Dr. Kiran Lata Dangwal

Abstract

The human brain, which is divided into the left brain, also called the analogue brain, and the right brain, also called the digital brain, must be stimulated in order to improve children's cognitive skills. It turns out that using an abacus is a really powerful way to stimulate the brain, which helps to build mental activities, brain muscles, and lifelong abilities. When performing arithmetic, abacus users mentally manipulate the abacus beads, which is a particularly useful technique for developing the right brain, or the analogue brain. As children practice using the abacus repeatedly, it becomes entrenched in their minds, enabling them to mentally execute calculations using a virtual abacus. The use of the abacus and its make-believe equivalent increases the cognitive abilities of the brain's left and right hemispheres. By streamlining and reducing the amount of work students have to do in class, the abacus increases accessibility, sparks curiosity, and encourages mental engagement. In the present paper it is highlighted that the abacus is essential for promoting intellect and offering high-quality education in addition to its calculative purposes. It shows to be a useful, reasonably priced teaching aid that improves children mental exercises. Training using an abacus improves one's speed, accuracy, learning capacity, writing abilities, endurance, reasoning, and memory, providing a holistic approach to cognitive growth.

Introduction

The mind is the greatest level of all things. Human thought ultimately answers human ends.

The aforementioned lines by Daniel Webster aptly underscore the significance of the human brain. In the present technological and competitive era, speed has given great emphasis. But it is necessary to prioritize the accuracy along with speed. Parents and teachers both focuses on the cultivation of various mental abilities in their children such as retention, recall, understanding and creative thinking. But the question is that how to enhance these mental activities during the influential years which can foster their diligent mindset. These formative years represent a crucial period of growth and transition in the mental activities of students.

Human brain activation is important to augment the mental activities of children. Various research studies emphasize the importance of enhancing the mental abilities of children by the age of twelve because this period is characterized by rapid mental growth. This mental growth significantly influences the future life. Brain development outpaces bodily growth from birth to eighteen years of age. A child's continued intellectual brilliance throughout this stage is influenced by regular cognitive stimulation.

Human Brain: Cognitive Resilience

The potential of the human brain is boundless, particularly during the crucial growth period from four to fourteen years of age. One of the human brain's regions, the cerebral neocortex, holds the amazing capacity to produce new nerve cells. During this crucial stage, giving youngsters the right stimuli promote the full development of nerve cells and helps them grow into well-rounded adults. The left and right hemispheres of the human brain are separate organs with different purposes. The left brain, known as the "digital brain," is in charge of reading, writing, math, and logical reasoning. The right brain, known as the analogue brain, is in charge of creativity, creative ability, and three-dimensional perception. The main channel of communication between the two hemispheres is the corpus callosum. Jerre Levy's (1972) shows that the right hemisphere acts holistically and is superior in visual and spatial skills, while the left hemisphere is greater in analytical functions and language. Robert Ornstein (1977) and Roger Sperry (1964), emphases that each hemisphere has a specialized function; the left hemisphere functions sequentially and is responsible for academic tasks, while the right hemisphere functions holistically and is involved in artistic endeavours.

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Creativity, which encompasses original and inventive thought, is closely linked to the right brain. The development and activation of the right brain enhance mental functions and memory clarity. The brain's left and right hemispheres are in control of separate cognitive processes; the left is in charge of language and logical cognition, while the right is in charge of creativity and image thinking, according to Nobel Prize winner R.W. Sperry. The creative process depends on the interplay and synchronization of the left and right brains. While the left brain is involved in language, calculation, logical reasoning, and analysis, the right brain is the nerve centre for sensation, imagination, spatial sense, and image thinking. The abacus is viewed by the cerebral neocortex as a powerful tool for brain activation that produces inputs that are useful in the motor and sensory domains. Educational research has shown the benefits of multimodal learning environments, which may be made with the help of instruments like the abacus to facilitate the best possible learning outcomes.

Abacus Empowerment: A Low-Cost Educational Tool

In ancient times, people employed various tools for counting. As civilization progressed, the abacus emerged as the first mechanical calculating device, pioneered by the Chinese around 2000 years ago. This ancient counting tool continues to find utility in many countries, including India, especially in primary education. The term "abacus" derives from the Latin word, but its roots trace back to the Greek words "abax" or "abakon," meaning table or tablet. Constructed from sturdy hardwood, the abacus comprises a frame with a series of vertical rods. A horizontal beam divides the frame into two sections known as the upper deck and lower deck. The upper deck accommodates one bead per rod, each with a value of five, while the lower deck has four beads per rod, each with a value of one. The beads on the abacus slide freely. The abacus itself doesn't perform calculations; instead, it serves as a straightforward device that aids learners in tallying by keeping track of counted values. When doing calculations, it does away with the necessity for paper and pen.

Brain workouts that involve creative or cognitively stimulating activities, such as playing games like chess or other cognitive training programmes, can enhance cognitive abilities. Every parent and educator have a responsibility to assist the child in engaging in activities that will help them maximize their inherent potential. The youngster does mental calculations in the advanced course later on, without using any tangible equipment like calculators or pens and pencils. The more intelligent and efficient method of learning mathematical problems, from simple to complex, is using Abacus Maths.

Abacus Mastery: A Gateway to Mental Arithmetic Excellence

An effective and time-tested tool that promotes entire brain growth is the ancient abacus, an arithmetic calculating programme. Abacus is a technological marvel that combines old and modern elements to foster confidence and problem-solving skills. People often only use one side of their brains. Using the abacus consistently can help build right brain activities that support the development of the entire brain.

Childhood is a critical age of transition, during which children move from thinking in terms of objects to thinking in concrete terms of images and finally to thinking in terms of abstract logic. Performing mental maths with an abacus as a visual aid greatly accelerates this cognitive development. The practice of mental abacus arithmetic is based on a strong theoretical and scientific basis. Research on abacus skills was done by Stigler (1984), who focused on the "mental abacus" and also associates investigated the impact of mental abacus abilities (Stigler, Chalip, & Miller, 1986). His objective was to document the accuracy and speed at which experts performed calculations using a mental abacus. He was also intrigued by the characteristics, mental model, and functioning of the mental abacus.

Hatida Takesi (1984) verified that abacus mental arithmetic engages the right brain, contributing to its development. Combining the development of both the left and right brains result in overall wisdom in children. Jiang Zhifeng's in 2000 revealed that abacus training enhances brain functions related to creative ability, leading to improved physiological functions required for creative development.

Abacus is most commonly used for addition and subtraction calculations, but with little work, users can also learn how to calculate square and cube roots, multiply, and divide. Because of its incredible speed and accuracy, the mental abacus compares highly to other calculating techniques, such as electronic calculators (Kojima, 1954) and alternative mental arithmetic systems. Children who know how to use an abacus have a better cognitive grasp of mathematics and can learn more easily. Learning how to use the abacus and mental arithmetic can raise a person's mental ability, teach youth valuable lessons, uplift the nation's cultural norms, and help present and future generations. Teaching elementary school students' mental arithmetic on an abacus helps them become more proficient with numbers and develop logical thinking skills. Thus, the primary advantage of utilizing an abacus and mental arithmetic is the develop numerical intelligence and memory skills. Mental math exercises improve cognitive flexibility, unlock intelligence, and enable precise computations without the need for computers. An abacus is a very helpful and accessible tool since it makes mental arithmetic easier to perform.

Beyond Beads and Bytes: Exploring Abacus and Computer Synergy

In the information and communication technology era, day by day, the world is becoming smaller along with the machinery of civilization. Computers have replaced the era that used abacus to calculate. "Beyond Beads and Bytes" evokes a journey across the timeline of human computation, bridging the ancient world of the abacus with the modern realm of computers. This exploration delves into the historical, educational, cultural, and technological intersections between these seemingly disparate tools, aiming to uncover the unique synergy that emerges when traditional methods meet contemporary technology. Reys and Barger (1994) claim that work needs to be done to help teachers plan curriculum in the area of mental computation. In their study, students learned to use knowledge of the abacus to promote mental computation strategies. Use of this technique as part of the curriculum has had success in elementary mathematics classrooms in Asia, and has a direct effect on students' spatial and concentration skills (Stigler, Chalip, & Miller, 1986; Hatano, Amaiwa, & Shimizu, 1987). Stigler, Chalip and Miller (1986) also assert that building the necessary skills to use the abacus encourages flexible thinking.

The extraordinary speed and shortcut features of computers do not negate the importance of studying calculation methods and skills. Mathematics, being inherently abstract, proves challenging to master compared to other subjects. Excessive use of computers by children can hinder their ideation and foster a dependence on machines, potentially compromising their ability to calculate independently.

Despite the prevailing belief that the abacus belongs in museums with the advent of informatics and electronic gadgets, it has proven to have lifelong utility in education, enlightening the brain beyond mere calculation. The abacus plays a crucial role in effectively tapping into children's intelligence and human brainpower. Abacus, mental arithmetic, and computer studies complement each other. The abacus shares similarities with the computer in terms of calculation principles, mechanisms, and models, both initiating calculations from multi-digit numbers. Studying abacus and mental arithmetic doesn't render computer learning obsolete; instead, it enhances the understanding and utilisation of computer technology. When performing addition, subtraction, and one-digit multiplication quickly, an abacus surpasses a computer.

Abacus is not just computation tools; they also provide important cognitive skills. Mental arithmetic and an abacus share many information processing similarities with human intelligence. Since it encourages creative access to and use of computer capabilities, cultivating a mental math mindset is a helpful tactic for enhancing human intellect and simplifying computer control. The abacus is a price-effective teaching tool that improves kids' cognitive development in addition to serving important roles in intelligence development and high-quality education. In order to properly develop intelligence, it builds fortitude, confidence, visual awareness, attention, practical skills, creative thinking, fortitude, competitive spirit, and memory.

Abacus-Driven Cognitive Enhancement

The abacus is a cost-effective computational technology that centers on the concept of "beads." It encompasses both hardware, serving as an educational and calculation tool, and software, functioning as a method of computation. Utilising the abacus proves to be an effective means of activating the brain, fostering the development of lifelong skills by engaging the brain's muscles. During abacus usage, children employ their thumb, index finger, and middle fingers for counting, employing a technique that influences the activation of the right brain. This activation contributes to achieving speed, accuracy, and concentration across various learning domains.

Engaging the right brain through abacus usage enhances a child's photographic memory, often referred to as permanent memory. Abacus learning proves valuable in instilling a fondness for mathematics, elevating concentration levels, and fostering memory power, creativity, reasoning, imagination, organisational skills, confidence in other school subjects, and overall development. As Hartley Howe noted, "the Abacus is a milestone in the use of mathematics to master the physical world" (Encyclopaedia, Vol. 1, Edition, 1999).

Cognitive theory is a learning theory of psychology that attempts to explain human behavior by analyzing the human thought process. It is concerned with the development of a human being's mental process. It also studies how mental processes influence human behavior development and how people understand and interact with the world through their learning (Piaget, 1973). Abacus users mentally manipulate the abacus beads during computations, which is an effective technique to train the right brain, or analogue brain. Unlike non-users who rely on inner voice-based arithmetic notions, abacus users visualise an image of the abacus in their minds. When both hands cooperate to operate an abacus, the right hand helps the left hand develop its reasoning and calculation skills while the left hand stimulates activity in the right brain. This encourages general brain growth. This bilateral coordination facilitates easier communication between the left and right hemispheres of the brain.

Reys (1985) asserts that the primary advantage of mental computation for students is that it develops their capacity for flexibility when handling numbers. Students gain knowledge of the characteristics of the number system and often develop original algorithms as a result of mental computation (Heirdsfield, 1996). The primary techniques for resolving common mathematical problems are computational estimating or mental computation (Maier, 1977; Clarke & Kelly, 1989).

The Benefits of the Abacus in boosting Cognitive skills

An ancient tool for calculation, the abacus is acknowledged for having a significant influence on the development of cognitive skills. Abacus primarily helps with a deeper comprehension of number systems and improves the speed and accuracy of complex arithmetic operations. By encouraging the user to visualise the beads and their movement and therefore activating numerous cognitive processes simultaneously, learning to operate an abacus enhances focus, memory retention, and visualisation skills (Hegarty & Kozhevnikov, 1999; Hatano, Miyake, & Binks, 1977). This versatile development tool serves as both a useful tool for carrying out computations and an effective teaching tool that develops a variety of cognitive skills. Following are several important benefits to using an abacus for mental calculations, especially when it comes to schooling and cognitive growth:

Strengthening Mental Calculation Skills: Using an abacus is a mental workout in addition to an arithmetic practice. This type of instruction is recognised to greatly improve one's capacity for mental arithmetic, which is useful in daily life as well as in academic settings. Mental computation skills are strengthened by the act of handling and visualising the beads (Hatano, Miyake, & Binks, 1977). Learning mathematics is made more interesting and pleasurable for students by adding a tactile element brought about by the abacus. It has been demonstrated that this practical approach greatly improves attitudes and confidence in mathematics, a subject that is sometimes seen as difficult. Research by Baroody and Dowker (2003) has demonstrated how the abacus helps students feel more confident about their arithmetic abilities, which in turn makes learning more enjoyable.

Sharpening Concentration Skills: Children's ability to maintain attention has improved since using an abacus demands focus and concentration. These advancements hold immense value not only in professional settings but also in academic environments, where concentrated attention is crucial. It has been demonstrated that consistent use of this instrument improves attention span and concentration (Stigler, 1984). Davidson & Davidson (2012) demonstrated that using the abacus on a regular basis enhances young learners' attention span and concentration.

Fortifying Retention and Recall Skills: Regular use of the abacus provides the brain with different types of workouts. By making users recall bead positions and calculation techniques, it helps to strengthen both short-term and long-term memory (Frank & Barner, 2012).

Enhances Visualisation and Spatial Skills: The abacus facilitates understanding of abstract mathematical topics by providing a concrete and visual representation of numbers. Baroody (1987) said that children could better understand numerical concepts and make abstract thoughts more concrete because of the abacus's physical appearance. This experiential learning method is especially helpful in boosting cognitive skills. Abacus learners frequently work on mentally visualising the movements of the beads, which greatly improves their visualisation abilities (Nag & Narayan, 2013). This component is fundamental to spatial intelligence as it facilitates the understanding and interpretation of spatial relationships in practical situations in daily life.

Enhances Problem-Solving Skills: The intricacy of the calculations made on the abacus demands a thorough comprehension of numbers and how they are manipulated, which promotes improved problem-solving abilities and a solid mathematical foundation (Kojima & Miura, 2005).

Improvement of Fine Motor Skills: According to study by Casey, Nuttall, and Pezaris (1992), manipulating beads on an abacus physically improves hand-eye coordination and fine motor skills in addition to aiding in mathematical knowledge. Not only are these core skills essential for academic success, but they are also necessary for many daily tasks, such as writing and typing.

Nurturing Endurance and Patience: Learning to use an abacus takes time. It requires patience and constant practice, both of which are developed by use (Siegler & Mu, 2008). These qualities are extremely valuable in a variety of spheres of life, such as academic and career endeavours.

Cultivating a Deeper Sense of Numbers: Interacting with an abacus improves children's comprehension of arithmetic operations and number relationships. According to Suan, Loo, and Wenger (2015), physically moving the beads on an abacus promotes a better comprehension of mathematics by facilitating a more intuitive grasp of numerical values and arithmetic operations.

Optimizing Multisensory Education: Training using an abacus stimulates the tactile, visual, and auditory senses, resulting in a multisensory learning environment. According to Wilson (2011), using a multisensory approach greatly improves the learning process, increasing its effectiveness and engagement.

The abacus stands out as a tactile and engaging way to improve critical cognitive abilities in our increasingly digital society, with educational and practical uses.

Accelerating Thought Processes: Mental computation improves one's capacity for quick thinking and self-sufficient problem-solving. Thompson (2018) emphasises the value of mental computation in helping kids develop rapid, flexible thinking, which is a critical ability in mathematics and other subjects.

Excelling in problem Solving: Making calculations mentally promotes critical thinking and the creation of problem-solving techniques. According to research by Patel (2020), mental math can greatly improve children's problem-solving skills, which are crucial in many facets of life.

Elevating Confidence Levels: When a youngster can complete mental calculations successfully, their confidence grows. According to Jones (2016), a more positive attitude towards mathematics and learning in general can result from the confidence that comes with understanding mental arithmetic.

Using both mental computation and an abacus together provides a holistic approach to cognitive development. This synergy is demonstrated by Kumar's (2021) research, which indicated that children's mathematical skills, brain activation, and confidence significantly improved when they exercised both mental arithmetic and abacus. Mental calculation honed rapid thinking and problem-solving abilities, while the abacus established solid mathematical foundations. According to Green (2022), mentally calculating and using both hands to move abacus beads concurrently activate multiple brain areas and support holistic brain growth. According to Nguyen's (2023) research, developing mental calculation skills through abacus practice gives youngsters a sense of success and inspires them to do well in mathematics.

Conclusion

The abacus's value as an inexpensive and useful teaching instrument is highlighted by a thorough analysis of its importance and advantages for cognitive development. Highlighting the brain's capacity for development, especially during the early years from four to fourteen, the abacus is unique as a tool for improving a variety of mental functions, such as creativity, memory, logical thinking, and problem-solving ability. The abacus, refined over two millennia, offers a tactile and visual means of comprehending complex mathematical ideas, supporting a multimodal educational process. Abacus training efficiently facilitates the synchronisation of the brain's left and right hemispheres, which are responsible for logical and creative activities, respectively. A child's whole intellectual growth depends on an overall improvement in brain activation and cognitive resilience brought about by this harmonisation.

Beyond simple math computations, the abacus also promotes a profound comprehension of number systems, increases focus, and enhances memory and retention. It acts as a stimulant for the growth of quick, adaptable thinking and self-sufficient problem-solving skills. This tool enhances confidence and a positive attitude towards learning, in addition to strengthening mathematical foundations. The combination of abacus use and mental arithmetic shows a whole approach to cognitive growth, which is crucial in a time when technology is taking over. The abacus is still useful in today's world, even with the introduction of computers and digital calculators. This shows how classical calculating techniques continue to be important in promoting children's creativity and intellectual development.

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उत्तराखण्डी लोकसंगीत के संवाहक बेडा समुदाय का सामाजिक-सांस्कृतिक अध्ययन

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सारांश

भारत के उत्तर में अवस्थित उत्तराखण्ड राज्य अपनी अनूठी सांस्कृतिक परम्पराओं के लिए जाना जाता है। इन अनूठी परम्पराओं से मनोरंजन के अनेक सांस्कृतिक संसाधनों का विकास हुआ है जिनमें से कुछ विशिष्ट संसाधनों का स्वरूप वर्तमान में एक कल्पना मात्र रह गया है। कुछ दशक पूर्व तक उत्तराखण्ड के लोकसमाज में गाँव के मध्य बड़े-बड़े खेतों में पशुओं की भिड़ंत, जिसमें विभिन्न गाँवों के तन्दुरुस्त भैंसों (बेलों) एवं बैलों (बल्दों) की जोड़ियों की भिड़ंत जैसे साहसिक खेल कौतूहल व मनोरंजन के वृहत संसाधनों के रूप में विकसित हुआ करते थे। इन्हीं खेलों से प्रेरित होकर बच्चे व चरवाह खेत-खलिहानों में बकरियों एवं मुर्गों की जोड़ियों की भिड़ंत करवाकर अपना मनोरंजन करते थे। इसके अलावा लोक संगीतज्ञ समुदाय के लोग स्थानीय संसाधनों पर आश्रित होकर विभिन्न प्रकार के नटकौशलों का प्रदर्शन किया करते थे जिनमें बेड्बार्त एवं लांग/लांकनृत्य सबसे महत्वपूर्ण है, किन्तु इस प्रकार के साहसिक खेल लगभग 20वीं शताब्दी के उत्तरार्द्ध तक पूर्णरूपेण समाप्त हो गए थे। इन लोक सांस्कृतिक परम्पराओं के पुरोधाओं ने जहाँ इस प्रकार की संस्कृति को जन्म दिया है, वहीं वह आज अपनी पहचान के मोहताज बने हुए हैं। प्रस्तुत शोध अध्ययन में उत्तराखण्ड राज्य के लोक समाज से धूमिल होते बेडा समुदायों का तथा इनके द्वारा लोकसंस्कृति के रूप में जनित 'बेड्बार्त एवं लांक/लांगनृत्य' जैसे साहसिक खेल परम्पराओं का सामाजिक-सांस्कृतिक अध्ययन किया गया है।

प्रस्तावना

समाज विकसित मनुष्य की पहचान का प्रथम द्योतक माना गया है। समाज मूल रूप से किसी समूह व समुदाय के जीवन-यापन की वह व्यवस्था है जिसमें समूह व समुदाय के लोग एक दूसरे की सहभागिता के साथ जीवन-यापन करते हैं। इस व्यवस्था के निर्वहन हेतु उपयुक्त संसाधनों कोसंस्कृति के विभिन्न अंगों के रूप में विकसित किया गया है जिसमें से लोकसंगीत भी एक है। किसी भी क्षेत्र के लोकसंगीत पर सदैव उस क्षेत्र में निवास करने वाले लोगों का बराबर का अधिकार होता है क्योंकि किसी निश्चित भू-भाग में निवास करने वाले लोगों की भागीदारी से ही उस क्षेत्र का लोकसंगीत विकसित होता है। अपने शैशवकाल से ही लोकसंगीत इस परम्परा का निर्वहन करता रहा है, किन्तु भारत जैसे अन्य कई देशों में ब्रिटिश हुकूमत के समय लोकसंगीत की इन परम्पराओं का ह्रास होने लगा और मुख्य धारा से वंचित समुदाय के द्वारा ही लोकसंगीत को सहेजने का कार्य किया गया जिस कारण भारत में लोकसंगीत को पल्लवित करने वाले इन सजग प्रहरियों की अनेक उपजातियों का जन्म हुआ। वादक-नर्तक के अन्तर्गत औजी, बाजगी, बेडा, ढाकी, अठपहरिया, डोंडी गड़ोई, होत्याड़ा, भाट, हुड़क्या, बादी और भाण्ड आदि उपजातियाँ गिनी जाती हैं (डबराल, 1962 : 531)। विषय की गम्भीरता यह है, कि सदियों से लोकसंगीत को प्राणवायु देने वाले यह सजग प्रहरी और उनके द्वारा पल्लवित लोकसंगीत आधुनिकता और विज्ञान के इस दौर में कहीं धूमिल से हो गए हैं। जबकि लोकसंगीत के इन सजग प्रहरियों के द्वारा जनित विभिन्न प्रकार की लोक सांस्कृतिक विरासतों एवं साहासिक खेलों से प्रेरित होकर वर्तमान समय में तकनीकी एवं सुरक्षा के विभिन्न संसाधनों का उपयोग कर अनेक प्रकार के सहासिक खेलों का विकास हो रहा है। जबकि उत्तराखण्ड राज्य के लोकसंगीत व संस्कृति के यह सजग प्रहरी पिछले कुछ दशकों से अपनी पहचान तक के मोहताज हो गए हैं।

साहित्य का पुनरावलोकन

नैथानी, शिवप्रसाद (2012) ने अपनी पुस्तक 'उत्तराखण्ड गढ़वाल का जनजीवन' में भाट, वादी और अवाजी नाम से कुछ समुदायों पर अपना अध्ययन प्रस्तुत किया है। पहाड़ी लोकसंगीत पर चिन्ता व्यक्त करते हुए आप लिखते हैं, कि बैण्ड-बाजों और मैदानी व नगरीय आयातित संस्कृति की चकाचौंध से हमारे

* शोध छात्र, समाजशास्त्र विभाग, हेमवती नन्दन बहुगुणा गढ़वाल विश्वविद्यालय (केन्द्रीय विश्वविद्यालय), स्वामी रामतीर्थ परिसर बादशाहीथौल, टिहरी गढ़वाल, उत्तराखण्ड

** विभागाध्यक्ष, समाजशास्त्र विभाग, हेमवती नन्दन बहुगुणा गढ़वाल विश्वविद्यालय (केन्द्रीय विश्वविद्यालय), स्वामी रामतीर्थ परिसर बादशाहीथौल, टिहरी गढ़वाल, उत्तराखण्ड

ढोल-दमौ और मशकबीन बजाने वाला औजी समाज निरन्तर उपेक्षा का शिकार हो रहा है जोकि वादी समाज से सौ गुना बड़ा समाज है जिसके अध्ययन की अत्यन्त आवश्यकता है।

मौहम्मद, तालिब (2019) ने 'नट समुदाय की स्थिति : एक सामाजिक केस अध्ययन' किया है जिसका मुख्य उद्देश्य नट समुदाय की स्थिति को उनकी गरीबी के सम्बन्ध में समझना है। आपने अपने अध्ययन में पाया कि आजादी के सात दशकों बाद भी नट समुदाय सामाजिक आर्थिक दृष्टि से बहिष्कृत है तथा अनेक संवैधानिक प्रावधानों के होते हुए भी अस्पृश्यता, शिक्षा एवं व्यावसायिक शोषण का शिकार है। यातायात के साधनों के विकसित होने से मनोरंजन के साधन घर-घर तक आसानी से उपलब्ध हो रहे हैं जिससे इनके मनोरंजन का व्यवसाय फीका पड़ गया है।

राजपूत, अंजना (2022) ने 'बेड़िया जनजाति : एक झलक' नाम से प्रकाशित अपने शोधपत्र में मध्य प्रदेश बुन्देलखण्ड की बेड़िया जनजाति की महिलाओं की स्थिति का अध्ययन प्रस्तुत किया है। इस शोध के अनुसार भले ही बेड़िन जनजाति परम्परा और रीतिरिवाजों की दृष्टि से समृद्ध है, किन्तु इस समाज में सदियों से चली आ रही वेश्यावृत्ति की परम्परा दूसरा सबसे दुःखद पहलू है। इस जनजाति में महिलाओं को आय के स्रोत के रूप में जन्म दिया जाता है जिनके रजस्वला होते ही 2000 से 5000 रूपयों में इसकी बोली लगनी शुरू हो जाती है।

रावत, कुसुम (2022) ने अपने एक संस्मरण 'बादी परम्परा की वाहक हिमालयी गंधर्वों के साथ एक रोमांचक सफर' में उत्तराखण्ड के बेडा समुदाय की सामाजिक-सांस्कृतिक एवं आर्थिक स्थिति को उजागर किया है। बदलते सामाजिक परिवेश के कारण यह समाज और इस समाज की संस्कृति कहीं विलुप्त हो गई है जिसे बचाने का हमारे द्वारा कोई सार्थक प्रयास नहीं किया गया है।

उपरोक्त अध्ययनों से विश्लेषण से स्पष्ट होता है कि वर्तमान में उत्तराखण्ड ही नहीं बल्कि सम्पूर्ण भारत में लोकसंगीत के यह सजग प्रहरी बड़ी विकट सामाजिक-आर्थिक स्थिति से गुजर रहे हैं। यहाँ तक कि इन समुदायों में से अधिकतर समुदाय आज अपनी पहचान तक के भी मोहताज हो गए हैं। जिस पर सभी शोधकर्ताओं ने लोक संगीतज्ञ समुदायों के अध्ययन की आवश्यकता को महत्वपूर्ण बताया है जिसको मद्देनजर रखते हुए शोधकर्ता ने शोध हेतु ''उत्तराखण्डी लोकसंगीत के संवाहक बेडा समुदाय का सामाजिक-सांस्कृतिक अध्ययन'' विषय का चयन किया है।

अध्ययन के उद्देश्य

1. उत्तराखण्ड राज्य के बेडा समुदाय के उद्‌भव का पता लगाना।
2. बेडा समुदाय के पारम्परिक व्यवसायों का अध्ययन करना।
3. बेडा समुदाय की सामाजिक-सांस्कृतिक योगदान का अध्ययन करना।

शोध प्रविधि

प्रस्तुत शोध विवरणात्मक शोध प्ररचना पर आधारित है। प्राथमिक तथ्यों का संकलन शोधकर्ता द्वारा उत्तराखण्ड राज्य के जनपद टिहरी गढ़वाल के विभिन्न गाँवों से साक्षात्कार अनुसूची एवं फोनकॉल का प्रयोग कर किया गया है, साथ ही द्वितीयक तथ्यों का संकलन लोक संस्कृति एवं लोक संगीत के संवाहक समुदायों पर आधारित अनेक पुस्तकों और शोध पत्रों, सरकारी एवं गैर सरकारी संस्थाओं की वेबसाइटों के माध्यम से किया गया है जिनका विवरण सन्दर्भ ग्रन्थ के रूप में दिया गया है।

बेडा समुदाय का उद्भव

उत्तराखण्ड राज्य में निवास करने वाले सभी लोक कलावन्त अपनी उत्पत्ति शिव से बताते हैं। इनका कहना है, कि इनकी उत्पत्ति स्वयं भगवान शिव ने अपने शरीर के मैल से की है। ब्रह्माजी के द्वारा सृष्टि का सृजन करने के पश्चात भगवान शिव और माता गौरा कैलाश चले गए जहाँ एक दिन माता गौरा और शिव ने देवताओं की एक सभा का आयोजन किया जिसमें भोलेनाथ ने अपना नाद मृदंग उठाकर बजाना शुरू किया तो माता गौरा रजोगगुण से प्रवृत्त होकर नाचने लगी। माता गौरा के इस नृत्य से पृथ्वी हिलने लगी। जिस कारण सभी देवताओं ने माता गौरा से आग्रह किया कि आप नृत्य करना बन्द करें। तब माता गौरा ने शिव से इस नाद मृदंग का वादन बन्द करवाकर 12 भाई कलावन्तों को उत्पन्न कर संसार के इस वादन कार्य को समर्पित करने को कहा (ओंकारदास, 2016 : 25)। तत्पश्चात् शिव ने महेश रूप धारण कर अवाजी, बाद्‌दी, भान, हुड़क्या, नागारिया, मिराशी, घढ़ियाल्या, लोहार, मिस्त्री, नृतकी, किन्नर-गन्दर्भ और भाट के रूप में 12 भाई कलावन्तों को उत्पन्न कर छत्तीस बाजेत्रों का विभाजन किया (ओंकारदास, 2016 : 27)। इसी सन्दर्भ में गोविन्द चातक अपनी कृति 'गढ़वाल का भाषा साहित्य और संस्कृति' में लिखते हैं कि औजी, बेडा, वद्दी, ढ़ाकी, हुड़क्या आदि समुदायों के सभी लोग प्राचीन गंधर्व किन्नर संतान हैं (चातक, 2008 : 134)। पुराणों में उत्तरी हिमालय में सिद्ध, गन्धर्व, यक्ष, किन्नर आदि जातियों की सृष्टि बताई गई (भट्ट, 1999 : 17)। किन्नर विशेष रूप से उन मनुष्यों को कहा जाता है जिनमें विषमलिंगी गुण विद्यमान होते हैं। उत्तराखण्डी लोकसंगीत के धनी बेडा समुदाय के पुरूष जिन्हें बहुत से स्थानों पर बदी व वद्दी नाम से भी जाना जाता है महिलाओं के जैसे लम्बे केश रखते थे। यह विषमलिंगी गुण को धारण करने की एक प्रवृत्ति समझी जा सकती है। इस बद्दी समुदाय की उत्पत्ति के सम्बन्ध में शिवप्रसाद

नैथानी लिखते हैं कि कैलाश मानसरोवर के पश्चिम में पड़ने वाले किन्नर देश के किन्नर गन्धर्वों से बद्दियों की उत्पत्ति मानी जा सकती है (नैथानी, 2012 : 236)। वहीं शिवानन्द नौटियाल ने अपनी पुस्तक 'गढ़वाल के लोकनृत्य' के शीर्षक 'पेशेवर जातियाँ और उनके नृत्य' में बेडा समुदाय की उत्पत्ति के सम्बन्ध में लिखा है कि बद्दी शैव हैं (नौटियाल, 1974 : 166)। उपरोक्त तथ्यों से स्पष्ट होता है, कि किन्नर देश से विसरित होकर हिमालय के विभिन्न क्षेत्रों की भाँति ही उत्तराखण्ड राज्य में भी बेडा समुदाय के लोगों का आगमन हुआ है। भले ही हिमालय के अन्य प्रान्तों व क्षेत्रों में लोकसंगीत के इन वाहकों को भिन्न-भिन्न नामों से जाना जाता है। उत्तराखण्ड के पश्चिम में अवस्थित हिमाचल प्रदेश में भी इस समुदाय को बेडाव नौड़ नाम से जाना जाता है। जबकि उत्तर प्रदेश, मध्य प्रदेश, बिहार, झारखण्ड और पश्चिम बंगाल में इन समुदायों के जैसे ही पारम्परिक व्यवसाय से जुड़े जातीय समुदाय को बेड़िया नाम से जाना जाता है (राजपूत, 2022 : 1)।

बेडा समुदाय का पारम्परिक व्यवसाय

उत्तराखण्ड में बेडा समुदाय अपने शैशवकाल से ही अल्पसंख्यक श्रेणी में रहा है जिसके परिवारों की संख्या सम्पूर्ण उत्तराखण्ड में कुछ सैकड़ों तक ही सीमित रही है। इस समुदाय के लोगों की बसागत कुमाँऊ की अपेक्षा गढ़वाल अधिक रही है। उत्तरदाताओं का कहना है, कि इस समुदाय के लोग व्यवसाय के लिए यह एक स्थान से दूसरे स्थान पर विचरण करते रहते थे जिस कारण यह बहुत लम्बे समय तक एक स्थानपर नहीं रूकते थे। शिवप्रसाद नैथानी लिखते हैं कि वादी लोग खेल कर तथा भाण्ड असंस्कृत ढ़ग से जनता का मनोरंजन करते और कुछ अपनी पुत्री व नारियों को नचाकर आजीविका चलाते थे (नैथानी, 2012 : 230)। गढ़वाल के प्रसिद्ध इतिहासकार हरिकृष्ण रतूड़ी लिखते हैं कि 'बेड़ा या बाद्दी नाचने-गाने तथा रस्सी (बर्त) पर फिसलने का पेशा करते हैं (कठोच, 2007 : 96)। मूलतः उत्तराखण्डी लोकसंगीत के संवाहक बेडा समुदाय के पारम्परिक व्यवसायों में लोकसंगीत की गीत, नृत्य एवं वाद्य परम्परा के साथ ही नटकौशल प्रमुख रहा है जिसका विवरण निम्न बिन्दुओं के माध्यम से किया जा रहा है:-

1. लोक संगीत

संगीत गायन, नृत्य एवं वादन का संयुक्त रूप है। मूल रूप से उत्तराखण्ड हिमालय का बेडा समुदाय यहाँ के परिशुद्ध लोकसंगीत का पोषक रहा है। स्थानीय समस्याओं, घटित घटनाओं, धर्म, आस्था-विश्वास, इतिहास, हर्षोल्लास एवं विषाद जैसे अनेक विषयों पर गीतों कीरचना कर जन-जन तक पहुँचाना और इन गीतों के साथ-साथ नृत्य एवं वादन कर लोगों का मनोरंजन करना इस समुदाय का मुख्य व्यवसाय रहा है। इस समुदाय के गायन की एक विशिष्ट परम्परा रही है जिसमें गीत का मुखड़ा और अन्तरा की प्रत्येक लाइन को सर्वप्रथम पुरूष के द्वारा उठाया जाता था तथा महिला इस मुखड़े और अन्तरे को बीच से पकड़ कर गायन के साथ-साथ विभिन्न शैलियों के नृत्य प्रस्तुत करती थी। यूँ तो बेडा समुदाय सभी लोक वाद्य यंत्रों के वादन में पारंगत होते थे, किन्तु व्यावसायिक तौर पर इस समुदाय का मुख्य वाद्य यंत्र ढोलकी रहा है जोकि वहन करने में आसान तथा वादन करने में लगभग संगीत की सभी विधाओं में सम्भव होता है। केशव अनुरागी लिखते हैं कि ढोलक मुख्यतः ढक्की अथवा वादियों का ही मुख्य वाद्य है (डबराल, 1996, 41)। इसके साथ ही हारमोनियम बाजा भी इस समुदाय का एक लोकप्रिय वाद्य रहा है जिसको उत्तराखण्ड में लाने का श्रेय मिरासी समुदाय के नाम है।

ऐतिहासिक दृष्टि से बेडा समुदाय वर्ष भर भिन्न-भिन्न गाँवों में विचरण कर लोकसंगीत से लोगों का मनोरंजन करते थे। समय के साथ-साथ इनके सामाजिक जीवन में भी बदलाव आने लगे और ब्रिटिश शासन के मध्यकाल तक इस समुदाय के लोग कुछ स्थाई आवास बनाकर रहने लगे थे जिससे यजमानी के परिवर्तित स्वरूप गैख्वाली के रूप में इस समुदाय का व्यवसाय भी कुछ क्षेत्रों तक सीमित हो गया था। भले ही इस समुदाय के व्यावसायिक क्षेत्र की सीमाएं एक वृहत स्तर पर नियोजित होती थी, किन्तु इनमें बहुत हद तक स्थायित्व का गुण विद्यमान हो गया था। अब इनके व्यवसायों के स्वरूप में भी कुछ परिवर्तन होने लगे थे। गैख्वाली होने से अब मुख्य त्यौहारों एवं समारोहों में इनकी भूमिका तय होने लगी थी। विवाह समारोहों हेतु अवाजी समुदाय की तरह ही इस समुदाय की भूमिका भी मनोरंजन हेतु सुनिश्चित हो गई थी। विवाह समारोह के दौरान बारात प्रस्थान से पूर्व अतिथियों को तिलक लगाते समय, पैदल मार्ग में बारातियों के विश्राम करते समय तथा वधू के घर के आंगन में बारात बैठने के पश्चात बारातियों एवं घरातियों का मनोरंजन करना इस समुदाय की स्त्री-पुरूषों का विशेष कार्य होता था। लोकसंगीत की इस पेशकश के दौरान नर्तकी अपने गैखों (कदरदानों) की जेब से धन निकालने के लिए उन्हें सम्मोहित करने की कला में विशेष पारंगत होती थी। अपने नृत्यों की लोच से कदरदानों को प्रभावित कर बीच-बीच में उनसे धन प्राप्त करती थी और यदि कोई कदरदान धन देने में कंजूसी करे तो अपने गीतों के बीच में कुछ पट्ट जोड़कर उस व्यक्ति पर तंज कसना इनकी गायन शैली का एक विशिष्ट गुण रहा है। बारात में सम्मिलित सभी व्यक्ति अपनी हैसियत के अनुसार औजी और बेडा समुदाय के लोगों की कला के प्रदर्शन के लिए कुछ धन अवश्य भेंट करते थे जिसे इनाम-किताब कहा जाता था। विशेष रूप से बारात में सभी अतिथियों को तिलक स्वरूप दिए गए धन पर इन्हीं लोगों का हक होता था जिसे घर वापसी के दौरान मार्ग

में विश्राम करते समय किए गए लोकसंगीत कार्यक्रम के दौरान इन्हें भेंट किया जाता था। इस प्रकार बेडा समुदाय के लोग लोकसंगीत के माध्यम से अपनी आजीविका का निर्वहन करते थे, किन्तु समय के साथ बढ़ती सामाजिक कुरीतियों, रूढ़ियों तथा मनोरंजन के अन्य संसाधनों के विकास ने इस सममुदाय की व्यक्तिगत पहचान के साथ-साथ इस समुदाय के द्वारा पोषित इन अनूठी सांस्कृतिक परम्पराओं को धूमिल करने का कार्य किया है।

2. नटकौशल

भारत में नटकौशल मुख्य रूप से उत्तर प्रदेश, मध्य प्रदेश, बिहार, पंजाब, हरियाणा, राजस्थान, छत्तीसगढ़ राज्यों के भिन्न-भिन्न क्षेत्रों में निवास करने वाली कुछ विशेष जाति व जनजातीय समुदायों का पारम्परिक व्यवसाय है। यह समुदाय नृत्य-गायन के साथ-साथ रस्सी-डण्डों के सहारे अनेक प्रकार के साहसिक खेलों का प्रस्तुतीकरण कर जीवन यापन करते हैं। इन समुदायों को नट, बेडा, बेड़िया एवं नौड़ आदि नामों से जाना जाता है। उत्तराखण्ड में भी इन्हें बेडा समुदाय के नाम से जाना जाता है। भूमि के अभाव व आजीविका की तलाश में अपने यौवनकाल में यह समुदाय अर्द्धघुमन्त जीवन यापन करता था। यही कारण है कि इस समुदाय के लोग स्थाई आवास बनाने में ज्यादा रूचिकर नहीं थे, किन्तु वर्तमान में इस समुदाय का पारम्परिक व्यवसाय समाप्त होने के कारण यह स्थाई आवास बनाकर रहने लगे हैं। उत्तराखण्ड राज्य के इन लोक कलावन्त समुदायों के द्वारा आयोजित किए जाने वाले लांगनृत्य एवं बेडबार्त नाम के दोनट उत्सव भी बड़े लोकप्रिय हुआ करते थे, किन्तु जान-माल के अधिक नुकसान के कारण सर्वप्रथम 1856 में ब्रिटिश सरकार ने इन आयोजनों को प्रतिबन्धित किया था (नैथानी, 2012 : 241)। धीरे-धीरे यह प्रथा लगभग 20वीं शताब्दी के उत्तरार्द्ध तक पूर्ण रूप से समाप्त हो चुकी थी, किन्तु कतिपय स्थानों पर यह प्रथा परम्परा स्वरूप कठ बद्दी के रूप में आयोजित की जाती है जोकि अब अपने अवसान की अवस्था में है।

क) लांगनृत्य : लांगनृत्य एक साहसिक क्रीड़ा पर आधारित नृत्य है जिसे उत्तर भारत में नटकौशल कहा जाता है। लांगनृत्य का आयोजन उत्तराखण्ड राज्य के ग्रामीण अंचलों में लगभग 20वीं शताब्दी के पूर्वार्द्ध तक बड़े हर्षोल्लास के साथ किया जाता रहा है। इस नृत्य का उद्‌भव मध्य युग में हुआ माना जाता है जिसे उत्तराखण्ड के पेशेवर कलाकारों के द्वारा धार्मिक स्वरूप प्रदान किया गया है (नौटियाल, 1974 : 181)। गढ़वाल अंचल में लांग नृत्य का आयोजन कुछ विशेष स्थानों का चयन कर किया जाता था। इस नृत्य का आयोजन मुख्यतः फसल की अच्छी पैदावार एवं उस क्षेत्र के लोगों के सुख-समृद्धि के लिए किया जाता था। यह 9 दिन का एक वृहत आयोजन हुआ करता था जिसमें सर्वप्रथम आयोजन स्थल पर गाँव के लोग अपने खेतों की मिट्टी और अग्याळ के साथ एकत्रित होते थे। वहीं लांग पर चढ़ने वाला व्यक्ति भी अपनी पत्नी व पुत्रियों के साथ इस प्रांगण में उपस्थित होता था। अभिवादनोपरान्त लांग पर चढ़ने वाले व्यक्ति द्वारा सर्वप्रथम आयोजन स्थल के मध्य भाग में लांग स्तम्भ की पूजास्थली तैयार की जाती थी। इस पूजास्थली में सर्वप्रथम कुटणी देवी और बुड्ण्या देवता की पूजा की जाती थी। तत्पश्चात् विधि स्वरूप शिव को स्थापित किया जाता था। लांग पर चढ़ने वाला व्यक्ति अपने विधि विधान से भूमि या देवता एवं शिव की पूजा करता था। पूजा के उपरान्त चीड़ की लगभग 20-25 फीट की ऊँचाई वाले लांग (बळी) को शिव के त्रिशूल स्वरूप इस बेदिका में गाढ़ दिया जाता था। कतिपय स्थानों पर लांग के रूप में 9 गाँठ वाला बांस चार रस्सियों के सहारे पूजास्थली के चारों कोनों से बांध दिया जाता था। उत्तरदाताओं का कहना है कि यह लांग इतनी लम्बी होती थी की यदि मैदान से इसके ऊपरी छोर को देखें तो सिर पर रखी टोपी जमीन पर गिर जाती थी। इस लांग की पूजा पूरे नौ दिन तक नियमित रूप से लांग पर चढ़ने वाला व्यक्ति स्वयं करता था। प्रत्येक दिन लांग की पूजा के पश्चात् अवाजी अपने ढोल-दमौ के माध्यम से लांगनर्तक पर बुड्ण्याँ देवता तथा नृतिका पर कुटणी देवी को अवतरित कराते थे जोकि क्षेत्रवासियों को उनकी फसल की सुरक्षा का आश्वासन देते थे। तदोपरान्त लांग पर चढ़ने वाला नायक और उसके साथ संगत करने वाली स्त्रियाँ अनेक प्रकार के स्वांग नृत्य कर लोगों का मनोरंजन करते थे। अन्ततः दसवें दिन लांग का यह साहसिक खेल खेला जाता था। आयोजन स्थल पर गढ़े उस बांस के खम्बे के ऊपरी सिरे पर कपड़े की एक गोल चौकी बनाई जाती थी जिस पर लांग खेलते समय व्यक्ति अपनी नाभी टिकाकर गोल-गोल फेरे लेता था। इस आयोजन के दसवें दिन स्तम्भ की पूजा के पश्चात गाँव के लोग लांग पर चढ़ने वाले व्यक्ति की पूजा करते थे। लांग के चारों तरफ पहले घेरे में लांगनर्तक की पत्नी/पत्नियाँ तथा पुत्रियाँ खड़े होकर प्रोत्साहन गीत गाते थे और बाहरी घेरे में खड़े गाँव के लोग भोले महाराज के जयकारों और तालियों से लांगनर्तक को प्रोत्साहित करते थे। प्रोत्साहन गीत के दौरान लांग नर्तक प्रांगण में गढ़े लांग पर लपकता हुआ लांग के ऊपरी छोर पर जाकर बैठता था।

> पौंछी रे पौंछी, कै कानौ से पौंछी?
> हांजी महाराज शंकर मादेवा नौ से पौंछी,
> माता पार्वती अर पंचनाम देवतां का नौ से पौंछी
> भूमि का भुमियाळ अर ढुंग खेतरपाळ का नौ से पौंछी,
> खैट खणद्वारी अर पिड़ि की भराड़ियों का नौ से पौछी
> केमर का राणा अर बासर का सयाणा का नौ से पौछी
> पौंछी रे पौछी भोले महाराज का नौ से पौंछी

लांग के ऊपरी छोर पर पहुँचने के पश्चात् लांग नर्तक लांग के ऊपरी छोर पर रखी कपड़े की चौकी से अपनी नाभी को टिकाते हुए गोल-गोल फेरे लेता है इसे ही लांगनृत्य कहते हैं। सर्वप्रथम लांग नर्तक फेरे लेते हुए देवी देवताओं का सुमिरण करता है। इसके पश्चात् गाँव वालों के अनुरोध पर उनका व दनक परिवारजनों के नाम का सुमिरण करता है जिसे देवतुल्य बोल व खण्ड बाजा कहते हैं जो इस प्रकार हैः-

खण्ड बाजे हो खण्ड बाजे, शिव पार्वती को खण्ड बाजे।
पंचनाम देवतौं को खण्ड बाजे, भूमि का भुमियाळ को खण्ड बाजे।
टीरी रजा को खण्ड बाजे, पंच पदानू को खण्ड बाजे।
मुलकै ध्याण्यों को खण्ड बाजे, फलाणी मौ को खण्ड बाजे।

यह देवतुल्य बोल भगवान से उस क्षेत्र के लोगों को सुख-समृद्धि प्रदान करने, फसलों की पैदावार बढ़ाने तथा अकाल व महामारी जैसे प्रकोप से बचने के लिए प्रार्थनास्वरूप गाये जाते थे। इसके पश्चात् भीड़ से लोग नर्तक को अपने नाम का उच्चारण करने को कहते थे। एक व्यक्ति के नाम का उच्चारण करने के साथ लांगनर्तक एक फेरा पूर्ण करता था। ऐसा माना जाता था कि लांगनर्तक के मुख से निकले यह बोल सत्य होते थे इसलिए लोग अपनी व अपने परिवार की खुशहाली के लिए लांगनर्तक से अपने व अपने परिवार के लोगों के नाम का उच्चारण करवाते थे। लांग के इस सफल आयोजन के उपरांत जब नर्तक लांग से नीचे उतरता था तो लोग अपने हाथों में लिए हुए अपने खेत की मिट्टी के गोलों को नर्तक के बालों से स्पर्श करते थे और प्रसाद स्वरूप इन मिट्टी के गोलों से कुछ मिट्टी घर के पूजास्थल पर रखते थे और कुछ मिट्टी अपने खेतों में बिखेर देते थे। इस समय नर्तक के सिर से कुछ बाल भी नोचे जाते थे जिसे लोग प्रसाद स्वरूप अपने घर में रखते थे। इसके पश्चात् प्रत्येक परिवार सुप्पों में अनाज एवं थालियों में पकवान भरकर इन्हें भेंट करते थे जिससे इनके पास कई दोण अनाज इकट्ठा हो जाता था और इसी से इनका भरण पोषण होता था।

ख) बेड्र्बात : लांगनृत्य की भाँति ही बेड्र्बात भी एक नटकौशल है। बेड्र्बात गढ़वाली बोली के दो शब्द बेडा और बर्त से मिलकर बना है। बेडा एक समुदाय का नाम है वहीं बर्त का शाब्दिक अर्थ है सेतू**!** अर्थात नदी को पार करने वाला टिकाऊ साधन है। पौराणिक काल में नदियों और छोटे गाढ़ गेदेरों को पार करने हेतु बर्त का उपयोग किया जाता था। जिसमें नदी के दोनों किनारों पर लकड़ी के बड़े-बड़े खम्बे गाढ़ दिए जाते थे जिसे स्थानीय भाषा में खुंट (खूंटे) कहते थे। इन दोनों छोर के खूंटों को एक घास की रस्सी से जोड़ दिया जाता था जिसे बर्त कहते थे। इस बर्त की सहायता से केवट व घुनार समुदाय के लोग स्थानीय लोगों को नदी व गाढ़ पार करवाने का कार्य करते थे। ठीक इसी प्रकार बेडा समुदाय का एक विशिष्ट पारंगत व्यक्ति एक चोटी से आयोजन स्थल तक एक लम्बे रस्से पर फिसलता था, जिसे बर्तरड़ना कहते थे। अर्थात बेड्र्बात बेडा के बर्त पर फिसलने का एक उत्सव है जिसका आयोजन अकाल, सूखा पड़ने व क्षेत्र में किसी महामारी के निवारण हेतु प्रत्येक 3 व 5 वर्ष में किया जाता था। ऐसा माना जाता है कि बेडा समुदाय के लोग शिव के बीर है जो अपने क्षेत्र के लोगों के धन-धान्य एवं सुख समृद्धि के लिए इस तरह के आयोजन करते थे। इस खेल के दौरान अल्प पारंगत व्यक्ति अपनी जान से हाथ धो बैठते थे जिस कारण इसे बेडा की बली का उत्सव भी कहा जाता था। इस उत्सव का नायक सर्वप्रथम स्वंय बाबला नाम के घास से एक 500 से 1000 मीटर लम्बा रस्सा तैयार करता था जिसे आयोजन स्थल के पास बहते हुए पानी में चाल बनाकर कुछ दिन तक डुबाकर रखा जाता था। इस आयोजन के लिए एक लकड़ी की घोड़ी व कहीं-कहीं लकड़ी की चौकी तैयार की जाती थी। इस लकड़ी की घोड़ी के कंठ से उदर भाग के मध्य एक मोटा छिद्र किया जाता था। यह छिद्र बेड्बार्त के नायक को रस्सें से खिसकने में सुरक्षा प्रदान करता था। बेड्बार्त का दिन तय होते ही उस क्षेत्र के सभी गाँवों तक आयोजन की सूचना पहुँचा दी जाती थी जिसे स्थानीय भाषा में डोंडी पीटना कहते थे। बेड्बार्त के दिन क्षेत्र के सभी लोग अपने साथ सामळ रखकर भारी संख्या में अपने-अपने गाँव के ढोल-दमौ के साथ आयोजन स्थल पर एकत्र होते थे। इसके पश्चात गाँव के युवा इस बाबला घास से तैयार रस्से को सर्वप्रथम हल्दी और तेल का लेप लगाकर चिकना करते थे और फिर खींचते हुए बर्त खुंट तक ले जाते थे जहाँ पर उस रस्से को लकड़ी के घोड़े में उपस्थित छिद्र से पार करते हुए खुंट से बाँधा जाता था। इस रस्से का दूसरा छोर घाटी में अवस्थित आयोजित स्थल के दूसरे खुंट पर बंधा होता था। सभी दर्शक गाँव के मुखिया के साथ आयोजन स्थल पर इस करतब को देखने के लिए खड़े रहते थे। वहीं इस उत्सव के नायक की पत्नी आयोजनस्थल पर रस्सी के समीप खड़े होकर अपने पति की कुशलता की कामना कर रही होती थी। पूजास्थल पर बेड्बार्त के इस नायक को स्नान कराकर नए वस्त्र धारण करवाए जाते थे। उसके पश्चात् बर्त के खूंटों (किलों) की पूजा की जाती थी। बेड्बार्त के नायक को खुली जटावाली मुद्रा में काठ के घोड़े के ऊपर बैठाया जाता था। बेड्बार्त के इस नायक के एक हाथ में कटार तथा दूसरे हाथ में डमरू होता था और गले में ढोलक लटक रही होती थी। फिर गाँव का मुखिया आकर बेड्बार्त के नायक की पूजा करता था और सम्पूर्ण माथे पर हल्दी लगे चावलों से तिलक लगाकर उसके ऊपर पीला व लाल कपड़ा बांधा जाता था जिसे स्थानीय भाषा में मथबेडू कहा जाता है। सन्तुलन बनाने के लिए नायक के दोनों पैरों पर समान भार वाली मिट्टी की दो अलग-अलग पोटलियाँ बाँधी जाती थी। फिर बेड्बार्त का नायक कुछ क्षणों में इस रस्से से फिसलता हुआ

आयोजन स्थल तक पहुँचता था। यूँ तो पहाड़ी से फिसल कर आयोजन स्थल तक पहुँचना ही अपने आप में एक कठिन कार्य था जिसमें बहुत से लोग पहाड़ी से गिरकर मृत हुए हैं। इसीलिए इसे बेडा की बलि का उत्सव भी कहते थे, किन्तु यदि व्यक्ति आयोजन स्थल तक किसी प्रकार सुरक्षित पहुँच जाता था तो भी यहाँ पर सभी दर्शक उसके बालों को प्रसाद स्वरूप नोचने के लिए तैयार खड़े रहते थे जिस कारण इस खीच-तान में भी व्यक्ति की मृत्यु की सम्भावना अधिक रहती थी। इससे बचने का एक मात्र उपाय यह था, कि यदि नायक की पत्नी भीड़ से मस्सकत करते हुए अपने पति के सिर के ऊपर अपना घाघरा फैलाने में सफल रही तो तब लोग उस व्यक्ति के बाल नोचना बन्द कर देते थे। फिर गाँव के लोग इस व्यक्ति को कन्धे पर बैठा कर उसके घर तक पहुँचाते थे। उपहार स्वरूप उस परिवार को सामळ के रूप में लाया गया काफी अन्न-धन प्राप्त हो जाता था जिससे बहुत लम्बे समय तक इनका भरण-पोषण हो पाता था। इस प्रकार बेड्बार्त नाम का यह आयोजन सम्पन्न होता था। बेड्र्बात 20वीं शताब्दी के पूर्वार्द्ध तक विशेष रूप से आयोजित होने वाला उत्सव रहा है जिसे टिहरीनरेश कीर्तिशाह ने अपने शासनकाल में बन्द करवाकर केवल कठवद्दी खिसकाने का आदेश दिया था (पंवार, 2011 : 287)। 20वीं शताब्दी के अन्त तक यह प्रथा पूर्णरूपेण समाप्त हो गई थी।

निष्कर्ष

इस समुदाय के लोग उत्तर भारत के विभिन्न क्षेत्रों में फैले हुए हैं जो संगीत के साथ-साथ रस्सी-डण्डों के सहारे अनेक प्रकार के साहसिक खेलों का प्रस्तुतीकरण कर जीवन यापन करते हैं। यह घुमंत प्रवृति का समुदाय है जो उत्तर भारत के मैदानी क्षेत्रों से हिमालय के विभिन्न क्षेत्रों में प्रवासित हुआ है। कालान्तर में इस समुदाय के लोगों ने अपने संगीत व नटकौशल को आस्था और विश्वास से जोड़कर प्रदर्शित करना प्रारम्भ किया और यहाँ की विभिन्न सांस्कृतिक परम्पराओं के जन्मदाता के रूप के अपने आप को स्थापित करने में सफल रहे हैं, किन्तु इस समुदाय में यह अनूठी सांस्कृतिक परम्पराएं राजतंत्र तक ही सीमित रह पाई हैं। आजादी के बाद इस कला के कदरदानों में त्वरित गति से ह्रास होने लगा जिस कारण लोकसंगीत व संस्कृति के यह सजग प्रहरी अपनी इस विशिष्ट कला और अपनी व्यक्तिगत पहचान के मोहताज होते चले गए। इस कारण यह समुदाय ढोल वादन के साथ जुड़ता चला गया और इस समुदाय की पहचान अवाजी समुदाय के रूप में होने लगी। जिस कारण वर्तमान समय में लोक संगीत के इन सजग प्रहरियों के समुदायगत भेद को स्पष्ट कर पाना सम्भव नहीं है। इसके अलावा मनोरंजन के नवीन व अत्याधुनिक संसाधनों के गाँव-गाँव तक पहुँचने, नगरीकरण और विभिन्न प्रकार की सामाजिक कुरीतियों व रूढ़ियों के पनपने से इस समुदाय के लोग वर्तमान समय में निजी क्षेत्रों में कार्य करने लगे हैं। शोध क्षेत्र में इस समुदाय के युवा मुख्यतः देश-विदेश के होटल-रेस्टोरेन्ट में कार्यरत हैं और अपने पारम्परिक व्यवसायों को पूर्ण रूप से त्याग चुके हैं।

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Academic Bank Credit System (ABCS) in India: A Step Forward in Higher Education

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Abstract

The evolution of academic credit system in Higher Education institutions across the world has led towards introduction of credit transfer, credit accumulation, credit validation through the creation of Academic Bank of Credits. The main aim of this article is to highlight the implementation of Academic Bank of Credit (ABC) system in Indian Higher Education in the light of existing Academic Credit systems in some countries like Korean Academic Credit Bank System, Shanghai Academic Credit Transfer & Accumulation Bank for Life Long Education, European Credit Transfer & Accumulation System and Australian Quality Framework. It also delves into the features and workflow of academic bank credit system in Indian higher education institutions. The presented statistics of academic bank credit system in India highlight the gaining popularity of this system in tertiary education. Moreover, some suggestions are recommended which could be taken up by the UGC from other countries so that this system could prevail flawlessly in the Indian scenario viz., mitigating the stigma of low social recognition and lack of prestige associated with academic credit transfer, provision of standard national curriculum providing homogeneity for different programmes, formation of Quality Assurance Framework and making the process of credit transfer economic and least cumbersome in terms of time.

Introduction

The most important tool for a country's economic and social development is education. The economies producing the maximum information and knowledge are said to be the most developed ones. The growth in global economy has led to the increment of opportunities for the countries possessing high educational levels while there is a decline in the growth of countries with low educational levels (Stewart, 1996). The globalisation, technological advancements and knowledge-based economy-all influence the need to improve the population's skills and competences (Marjan *et al.,* 2012). Thus, Higher Education Institutions have to satisfy the needs of diverse students by providing them with opportunities of individualized learning pathways by incorporating different modes of learning (ECTS Users' Guide, 2015). This century calls for Delor's commission recommendation for lifelong learning (LLL)- a new trend in education- which is characterised by more diversified and flexible learning opportunities including blended learning, individual learning pathways, massive open online courses (MOOCs), E-learning, Open Educational Resources (OER), work-based leaning, self-directed learning, blended learning, flipped learning, continuing professional development (CPD), Open and distance education (ODL) and academic creditbank system (ABCS). The latter is recognised by different names in different countries which involves the transfer, accumulation and validation of academic credits from one institution to another institution.

Academic credit bank is meant to construct a learned society. It bears commonalities infunctioning with the banks like storage and exchange as it transfers the credits earned by students in different educational programmes/courses through accumulation and certification (Sun, 2018). According to Quality Assurance Agency (QAA), credit transfer is a process by which the credits awarded by a Higher Education awarding body are valued, recognized and added by another Higher Education institution or between programmes within the Higher Education Institution so as to fulfil the credit requirement for a given programme (Pollard *et al.,* 2017).

Academic Bank of Credits operating in different countries

- **Korean Academic Credit Bank System (ACBS)**

It is operating in Republic of Korea since 1998. It has offered an open and accessible system of Higher Education in Korea over the past two decades (Hannon *et al.,* 2013; Usher 2014). In Korean Higher Education curricula, the credit hours are classified as- 'academic

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core' (include those courses that are of one's area of concentration), 'general education' (includes some compulsory courses while some are chosen from electives) and 'electives' (include those courses chosen by the student which may or may not be from the student's area of concentration). Although different institutions running similar programs may have curricula with different combination of core, general and elective credits, but the organisation of all programmes revolve around these three types of credits (Usher, 2014). In order to earn a degree/ diploma/certificate in ABCS, the students must complete the mandatory assignments in addition to the number of credits specific to the degree/diploma/certificate requirements of an institution. A request for the degree is sent and approval is taken from National Institute for Lifelong Education (NILE) under the Ministry of Education (MoE) or from the university. The student is awarded degree from MoE or directly from the university/ college.

- **Shanghai Academic Credit Transfer & Accumulation Bank for Life Long Education (SHCB)**

It is open to the public since 2012. Its initiative was taken by Shanghai Municipal Education Commission and is run by Shanghai Open University. SHCB major functions involve Credit Recognition (recognition of the prior learning and granting credits for it), Credit Accumulation (deposition of the recognized credits) and Credit Transfer (transfer of the recognized credits among concerned institutions) for academic degree, vocational training and leisure courses (Li *et al.,* 2013).

- **European Credit Transfer & Accumulation System (ECTS)**

It was launched in 1989 to support the European Union's (EU) Erasmus programme. It has played a significant role in the Bologna process. The EU and other Bologna Signatory countries widely use it, thus making it a national system of education (Pollard *et al.,* 2017). According to Bologna Process stocktaking Report, 2009 the ECTS credits were widely used for credit accumulation as well as credit transfer in many participating countries. There are three models of credit transfer- topping up (means shifting from one qualification to other qualification usually from a vocational/ professional qualification to an undergraduate course), returning to study (means students' return to Higher Education), switching (means changing from one program to another) (Pollard *et al.,* 2017).

- **Australian Quality Framework (AQF)**

It was introduced in Australia in 1995. It is recognized as a national framework for regulated qualifications in education including higher education, vocational education, training and school. Thus, forming a single comprehensive national qualifications framework which incorporates the qualifications from all education and training sector (AQF, 2013). The descriptor determines the AQF qualification type expressed in terms of learning outcomes. There are 14 AQFs qualification types in all which cover the entire education and training areas. Each AQF except (Senior Secondary Certificate of education) is located at one of the 10 levels which is defined by a taxonomy of learning skills and their application of knowledge. The different structures of AQF qualification types are certificate 1,2,3,4, diploma, bachelor/ associate/ bachelor honors degree, master's degree and Ph.D. degree. Aunified credit system does not exist in Australian universities while the AQF establishes and coordinates the credit transfer.

- **Academic Bank Credit (ABC) system in India**

The vision of ABC system in India was born out of the National Education Policy (NEP), 2020 and was launched in July 2021. Education is transcending the physical boundaries of nations. Also, Life Long Learning (LLL) is the order of the day. Hence, on these lines, NEP 2020, recommended the Indian Higher Education to be streamlined with the international standards. Although a lot of Higher Education Institutions are developing in India, yet it is not on a global list of students aspiring to come to study here-the absence of academic credit transfers could be one of the lacunae for it (Keerthan, 2019). The pressing need for the introduction of ABC in the India was due to the following reasons-firstly, it would bring Indian Higher Education on the international platform. Secondly, with the success of Government of India's flagship programmes like Sarva Shiksha Abhiyan (SSA) and Rashtriya Madhyamik Shiksha Abhiyan (RMSA) for elementary and secondary school education respectively, the country is experiencing high rates of progressions from secondary education to tertiary education. ABC stands an as an ultimate solution to cater to the demands of the high demography aspiring for tertiary education. Thirdly, idea of Life Long Learning (LLL) has permeated into the minds of Indian masses. LLL is a continuous, conscious process of learning taking place throughout one's lifetime which is focussed on the needs of an individual as well as the society and thus evolving a person to be a responsible and active participant of his/her society (Abukari, 2004).

ABC system mainly focusses on student centricity, interdisciplinary approach, flexibility in selection of courses, cost effectiveness, tailor made degrees, multiple entry and multiple exit, student mobility, blended approach of learning, innovative and interchangeable curricular structure, new degree nomenclature like Bachelor's of Liberal Education, study at one's ownpace, lifelong learning, multidisciplinary approach, teacher- taught autonomy, examination reforms and seamless student mobility.

The UGC established the 'Academic Bank of Credits' (ABC) with the approval of the Central Government. It is an online, digitalised, virtual academic entity created for the students to enhance accessibility, mobility and flexibility in teaching learning process through the system of credit recognition, credit accumulation, credit transfers and credit redemption between or within registered Higher Educational Institutions (UGC, 2021).

ABC is established on the lines of National Academic Depository (NAD). The NAD is an online digitised deposit in which academic institutions/ boards/ eligibility assessment bodies lodge all kinds of academic awards like certificates, diplomas, degrees, mark-sheets etc. It isan authentic and safe store house where the accessibility and retrieval of the academic awards is easily possible.

Features & Workflow of ABC system

A glance at the following terminology would help to comprehend the working of ABCsystem in India- 'Academic Bank Account' is an academic account of a student in which all his/her academic credits earned after undergoing the programmes/courses are deposited, recognised, maintained and validated, that are used for the purpose of award of certificates/degree/diploma by the Higher Educational Institutions which is registered with ABC [UGC, 2021,2(a)].

'Credit' is calculated through the standard method in which one hour of tutorial/theory or two hours of laboratory in a week will be equal to one credit for the entire semester (13-15 weeks). For internship, the credits will be one credit per week of internship upto a maximum of six credits [UGC, 2021.2(h)].

'Credit-accumulation' is the process of consolidating and accumulating the credits, earned by a student after undergoing a course, in his/her Academic Bank Account [UGC, 2021,2(i)].

'Credits recognition' is the transference of the credits earned through a Higher Educational Institution registered with ABC directly to the Academic Bank of Credits by the same Higher Educational Institution [UGC, 2021,2(j)].

'Credit redemption' is the process in which the student's accrued credits deposited in the Academic Bank Account are commuted in order to fulfil the credits requirements for the award of Diplomas/ Certificate/s Degrees/ Ph.D. Course work programme etc., by the Higher Educational Institutions which is registered with ABC [UGC, 2021,2(k)].

'Credit transfer' is a process which enables a registered Higher Education Institution to receive or provide credits, as the case may be, of a student to his/ her Academic Bank.

Account for a given programme/course being pursued by the student who is enrolled in an Higher Education institution registered with ABC within India [UGC, 2021,2(l)].

There is a technologically assisted organisational setup of ABC which consists of criteria of accreditation for credit transfer, credit redemption, credit accumulation, credit recognition and students' profile.

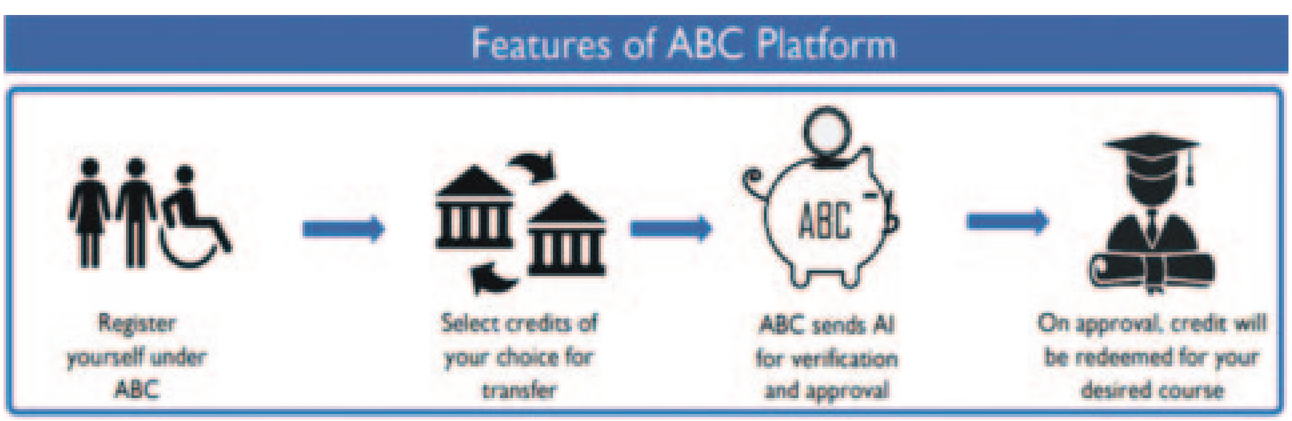

Fig 1: Features of ABC platform (*Source:* Academic Bank of Credits User Manual, Ministry of Education, Government of India, pg.3; 17 July 21 Version: 1.1)

The student is required to register under ABC for a unique ABC ID. This ID can be shared between academic institutions (AIs) for any course. The candidate can view his/her accumulated total credits and can select the credits of his/her choice for transfer to other institution or redemption for earning a degree/certificate/diploma. Once the credits are selected by the student, the ABC sends it to the concerned AI for verification and approval. The transfer request status can be viewed by the student in the meantime. On approval from the AI, the concerned student's credits will be redeemed for his/her desired courses. However, ABC shall not by itself, be a degree awarding organisation.

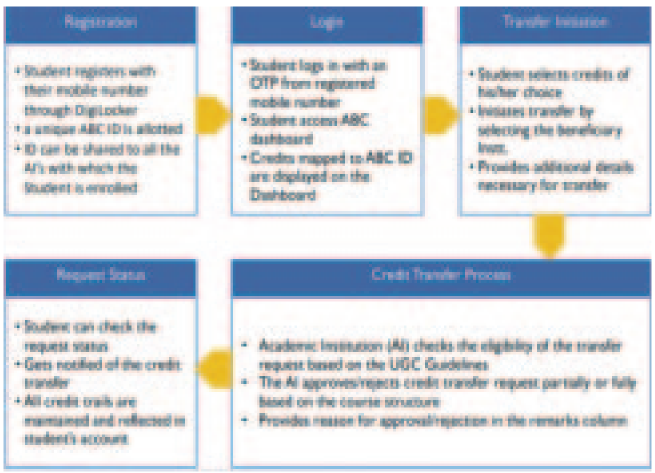

Fig 2: Workflow of ABC (*Source:* Academic Bank of Credits User Manual, Ministry of Education, Government of India, pg.4; 17 July 21 Version: 1.1)

Present Statistics of Academic Bank Credit System in India

The present statistics indicate gaining popularity of academic bank credit system in Indian higher education institutions. The total number of higher education institutions registered on academic bank of credits are 1735 and the total number of students registered for them is 10.48 crore since its launch in 2021. Also, the total number of academic records with credit data mapped with academic bank of credits has risen from 1819031 in August 2023 to 3391253 in January 2024. Moreover, the academic bank of credits accounts with credit data have increased from 974277 in August 2023 to 1755595 in January 2024. Academic Bank of credits ID creation have increased from 5068899 in December 20222 to 33632468 in January 2024. The perusal of tables 1, 2 and 3 corroborates successful incorporation of academic bank credit system in higher education institutions-

Table 1: Type of Higher education institutions onboarded

S. No.	Type of institution onboarded for academic bank of credits	Number
1.	AICTE	20
2.	Autonomous College	337
3.	Central Higher Education Institution	120
4.	Central University	54
5.	Colleges	20
6.	Deemed to be University	118
7.	Private University	399
8.	Skill	17
9.	State University	408
10.	Others	22

(*Source:* www.abc.gov.in retrieved on 24/01/2024)

Table 2: State/UT-wise details of onboard higher education institutions

S.No.	State/UT	Number
1.	Andra Pradesh	131
2.	Arunachal Pradesh	10
3.	Assam	38
4.	Bihar	33
5.	Chandigarh	04
6.	Chhattisgarh	47
7.	Delhi	43
8.	Goa	04
9.	Gujarat	116
10.	Haryana	67
11.	Himachal Pradesh	28
12.	Jammu and Kasmir	20
13.	Jharkhand	35
14.	Karnataka	115
15.	Kerala	47
16.	Ladakh	01
17.	Madhya Pradesh	120
18.	Maharashtra	12
19.	Meghalaya	09

20.	Mizoram	02
21.	Nagaland	08
22.	Odisha	71
23.	Puducherry	08
24.	Punjab	42
25.	Rajasthan	105
26.	Sikkim	08
27.	Tamil Nadu	143
28.	Telangana	30
29.	Tripura	05
30.	Uttar Pradesh	113
31.	Uttarakhand	40
32.	West Bengal	65

(*Source:* www.abc.gov.in retrieved on 24/01/2024)

Table 3:Top five active participants possessing maximum number of academic bank accounts

S. No.	Institution	ABC accounts
1.	Skill India Digital	6078363
2.	Indira Gandhi National Open University	2037888
3.	University of Delhi	1325088
4.	Savitribai Pule Pune University	672071
5.	Yashwantrao Chavan Maharashtra Open University	628772

(*Source:* www.abc.gov.in retrieved on 24/01/2024)

Lessons to be learnt

In India, as envisaged, if the academic credit transfer system has to bea successful model then lot of learnings from the existing credit transfer models have to be adopted (Keerthan, 2019). Some of the suggested strategies mentioned herein should be adopted for the success of the model-

- University Grants Commission (Establishment and Operation of Academic Bank of Credits in Higher Education) Regulations, 2021 mandated a certain quality criterion for the institutions which could register themselves with ABC. However, the matter of concern is that the dilution of the qualifying criteria by the UGC's regulations first amendment may lead to the deterioration of the quality of credits. The problem of quality control is one of the main challenges faced by ACBS in Korea (Usher 2014). Hence, the quality of institutions should be upgraded rather than dilution of the standards for institutions for registering with ABC.
- As the name suggests, academic credit system is the backbone of ABC. However, many institutions in India which run certain courses which do not follow Choice Based Credit System (CBCS) in Higher Education. Such universities or college or institutions lie beyond the scope of ABC and would eventually be marginalized in due course of time.
- The introduction of ABC in Indian Higher Education system since July 2021 reminds of the implementation of Choice Based Credit System (CBCS) in Higher Education in 2015. Both were enforced into the Higher Education system in such a hasty manner that the majority of Higher Education fraternity was left in a state of utter confusion and dilemma. Moreover, till date, the method of conversion of credits into marks and percentage and vice-versa are not uniform throughout the country. This may lead to low popularity and feeble demand of the ABC amongst the stakeholders especially the students. The low demand of credit transfer amongst students is linked with the fear of risk in shifting from one institution to another which is further augmented by the lack of guidance, information and advice (Pollard, 2017). Therefore, it is suggested that the stakeholders should be well informed about the concept of ABC before its introduction in Higher Education. Secondly, efforts should be made to make a homogeneous tertiary education nationally which should gel well internationally also for maximum student mobility.
- Since ABC offers the facility for tailor made courses like Bachelor of Liberal Education, effective counseling should be done for the keen candidates about their future vocational prospects before they select a combination of course/programme for their degree/diplomas/certificate.
- The Indian Higher Education system will have to largely liberalise itself in terms of decompart-mentalisation of subjects and switch over to 'delinking of degrees from jobs in selected areas' (NPE, 1986, pg. 20) in order to run courses like Bachelor of Liberal Education. The polling report conducted in Canada in 2011 showed that the credits

transfer was most difficult for those students whose got their credits transferred in unrelated programmes where there was barely any overlap in the required courses (Usher, 2014).

- The cost of resources and time incurred by an institution in order to process a candidate's credits to and fro the institute is eventually passed on to the student's pocket which can act as a disincentive for students to follow ABC (Pollard *et al.,* 2017). Therefore, in order to popularize ABC system in India, effective measures should be taken to make the process of credit transfer economic and least cumbersome in terms of time.
- It has been observed that the different institutions do not possess consistency in matters related credit policies and their practices, mutual credit recognition, course content and structure (AoC, 2014; Munro, 2005). The UK nations do not follow a common framework for credit transfer. Although, the Higher Educational Institutions registered with ABC would prescribe the credit requirement and the course content of study for award of diploma/UG/PG degree/PhD coursework (UGC, 2021, 5.6).

  Yet, a standard national curriculum providing homogeneity for different programmes would be an added advantage for the smooth functioning of ABC system in India. Majority of the institutions in Republic of Korea can easily follow a standard national curriculum prescribed by the ABCS as there is a significant level of consistency in Korean curriculum (Usher, 2014).
- There should be formation of Quality Assurance Framework for establishing minimum acceptable non-disputable scores [(eg. International English Language Testing System (IELTS)] pertaining to Indian standards (Keerthan *et al.,* 2019).
- Regulations regarding the facilitation of student transfers, pathways and credit transfers between education sectors, viz. Higher Education and Vocational Education and vice versa, should be made and implemented effectively. A fundamental tension arises with Australian Quality Framework Council (AQFC) for transfer credits between Higher Education (HE) and Vocational Education (VET) as they are based on competency training models of curriculum and input models of curriculum respectively (Wheelahan, 2011)
- Efforts should be made by the government to incorporate the prior learning assessment of the students into ABC system by converting them into credits, in the welfare of the students.
- The complexity of academic credit accumulation, transfer and validation need to be resolved for the proper functioning of ABC system in India. The criteria for accreditation of courses like vocational training, degree programmes and education for leisure should be set up with the policy support from the government, legislation and credit system in order to recognize the credits and transfer them among the different types of credits (Li, 2013).
- The degree earned through the academic credit transfer is associated with low social recognition and lack of prestige (Park *et al.,* 2019) and it is expected that their level of competency would also be very low in Republic of Korea (Kee, 2005). Effective measures should be taken by the UGC that such stigma does not permeate into the ABC system in Indian Higher Educational Institutions.

Conclusion

Academic Credit System has played a pivotal role in providing flexible educational opportunities and increasing access to education to a variety of stakeholders including learners, educational institutional and employees around the world. It has led to a paradigm shift from a teacher centered to a learner centered approach in Higher Education where the programmes are tailormade according to the students' needs by using their learning outcomes and workload (Pollard, 2017). One of the significant features of ABC is that it converts the students' learning outcomes into credits which can be deposited and transferred whenever required for further learning (NILE, 2018b).

The effectiveness of ABC in India is yet to be seen in the coming times. Although, it is seldom possible to directly borrow systems from abroad without some modifications as it is important to have a clear understanding of the context in which the system has developed as well as the situation in which it will be applied, yet our Higher Education system should take the cognizance of the lacunae and shortcomings of the credit systems prevailing in other countries. The uniform and informed adoption of ABCS throughout the country would lead India to convert its demographic dividend into an asset. It is suggested that in-depth qualitative examination along with critical reflections on ABC should be done in order to evaluate the progress and feasibility of this system in the Indian Higher Education.

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Psychological Variable of Sprinter and Long Jumper Girls Athletes

*Dr. Mohammad Muqarram

Abstract

The present study was to investigate psychological variable among the sprinter and long jumper girls athletes. A sample comprised of 60 self-confidence and 100 pre-competitive anxiety sprinter and long jumper athletes from senior secondary school competition of J&K board. The age of athletes 15 to 19 years. Measure included the self-confidence and pre-competitive anxiety of all athletes. For measuring the to asses the self-confidence and pre-competitive anxiety of the subjects, the sport self-confidence inventory (SSCI), developed by Dr. Reena Kaul and Madalsa Mittal (2003) and competitive anxiety (SCAT) by Marten (1977) was used. To compare the self-confidence and pre-competitive anxiety of sprinter and long jumper athletes t-test was applied. It was found that there is significant difference between the mean score of athletes on variable competitive anxiety of sprinter and jumper (girls) athletes senior secondary school competition of J&K board. No significant was observed between sprinter and long jumper (girls) athletes of senior secondary school in their self-confidence.

Introduction

The running and hurdling competitions make up the track events, while the jumping and throwing contests comprise the field events. In many countries the sports as a whole is called athletics. Running races are the most prominent track events; that ranges in length from the indoor 50 meter dash to the outdoor marathon.

In sports the self confidence is about one's ability to execute physical skills. It is the ability to utilize the psychological skills during the competitions. It is the ability to employ perceptual skills and belief on ones level of physical fitness and training status. When athletes feel confident, they are more readily able to turn sporting potential into superior performance. When they feel unsure of themselves, the slightest setback or smallest hurdle can have an inordinate effect on their performance. The recent study done on university athletes (2016) says that Anxiety and self-confidence as predictors of athletic performance. It also resulted that the anxiety and confidence impact on performance.

Objectives of the study

1. To compare the difference between competitive anxiety of sprinter and long jumper girls athletes J&K board senior secondary school.
2. To compare the difference between self-confidence of sprinter and long jumper girls athletes J&K board senior secondary school.

Hypotheses of the study

1. There is no significant difference between sprinter and long jumper girls athletes of J&K board senior secondary school regarding their self-confidence.
2. There is significant difference between sprinter and long jumper girls athletes of J&K board senior secondary school regarding their competitive anxiety.

Methodology

This study two sample groups were formed. 1st group comprises of sprinter and 2rd group comprises of long jumper girls athletes were selected from the different senior secondary school competition of J&K with the age group of 15 to19 years.

Tools

The detail of the psychological instruments used in the study is as below:

Sport Competition Anxiety test:

Items 1, 4, 7, 10, and 13 are filler items used to help disguise the purpose of the test; cross them out, as they will not be used for scoring. Items 2, 3, 5, 8, 9, 12, 14,

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and 15 are scored in the following manner: hardly ever=1 pt., sometimes=2 pts, often=3 pts. For items 6 and 11, the scoring is reversed: hardly ever=3 pts, sometimes=2 pts, often=1 pt. Simply total the numbers for these items to determine your trait anxiety score, which ranges from a low of 10, to a high of 30.

Ten of the items asses' individual differences in the extent of competition anxiety present in the athletes.

Sport Self-Confidence inventory:

The sport self confidence inventory (SSCI) (Kaul & Mittal, 2003) consisted of 70 items. In the initial phase of standardization, psychometric and item analysis was done after which 44 items were dropped and 26 items were retained. It is used to measure the self-confidence of a player under different conditions in various sport situations. The items in this scale are scored on a 4- point interval scale, Items 2, 5,11,16,19,27,30,37,43,45,53,56,59, are scored in the following manner: (1= Always, 2= Often, 3= Sometimes and 4= Never).The negatively worded items 4,21,25,31,35, 36, 40, 41, 42, 49, 61, 63, 64 are scored in the reverse: (4= Always, 3= Often, 2= Sometimes and 1= Never). Cronbach alpha internal consistency of the scale (n=159) is 88.

Twenty-six of the items assess individual differences in the extent of self-confidence present in the athletes.

Design of the Study

Design of the study was random group design, as the sprinter and long jumper athletes were randomly selected from these who were talking part in the senior secondary school and comparison of self-confidence and competitive between sprinter and long jumper girls athletes was done.

t-test was used to test whether there is any significant difference among the chosen self-confidence and competitive anxiety variable of sprinter and long jumper girls athletes of senior secondary school board competition J&K board.

Analysis of data

A statistical analysis was carried out and the result obtained is given below:

Objective 1. To compare the difference between competitive anxiety of sprinter and long jumper girls athletes of Jammu & Kashmir board senior secondary school.

Hypothesis 1. There is significant difference between Jammu & Kashmir board senior secondary school sprinter and long jumper girls athletes regarding their competitive anxiety.

Table 1.1: Comparison of competitive anxiety between sprinter and long jumper girls athletes of J&K board senior secondary school

Variable	Group	N	Mean	Std. Deviation	t-Value	df	Sig.
Competitive Anxiety	Sprinter	50	24.12	2.71	2.90	98	.004
	Long jumper	50	22.32	3.43			

Significant at 0.01 level

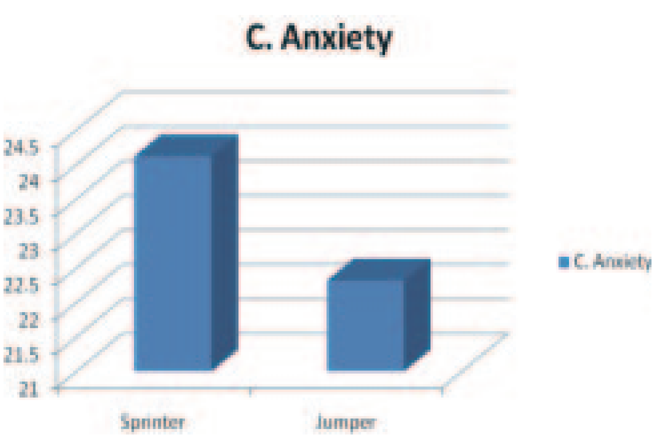

Figure 1.1: Comparison of Means & SD of competitive anxiety between sprinter and long jumper girls athletes of J & K board senior secondary school

Interpretation

The above table 1.1 indicates that the independent sample t-test is associated with a statistically significant difference t (98) = -2.90, p = .004, i.e. statistically significant at the level of 0.01 significance. The result shows that sprinters (M=24.12, SD =2.71) and long jumpers girls athletes (M =22.32, SD = 3.43) of J&K senior secondary school are found to have different competitive anxiety. So, the null hypothesis (1), "There is significant difference in the sprinter and long jumper girls athletes of J&K board senior secondary school regarding their competitive anxiety" is rejected.

A similar finding is indicated by Rani and Dhadwal (2013) also found a contradictory result, who showed that who studied that a significant difference was found compared pre-competitive anxiety and post-competitive anxiety in Inter-Collegiate football players. A group of 170 compared pre-competitive anxiety and post-competitive anxiety in Inter-Collegiate football players. A group of 170 Football players (boys=85 and girls=85) were selected from different Colleges of Ethiopia and Eritrea through the purposive sampling technique. Their age was ranged from 18 to 25 years. Data were collected from athletes using a Sports Competitive Anxiety Test-(SCAT) consists of fifteen items which include 5 spurious items, 8 positive items and 2 negative items. The t-test was used to test the effect of anxiety level between pre and post completion. The significance level was determined as $p<0.01$. The result of the study reveals that there was significant difference in 0.01 levels of pre-competitive anxiety and post-competitive anxiety among the male and female inter-collegiate football players

Objective 2. To compare the difference between self-confidence of sprinter and long jumper girls athletes of Jammu & Kashmir board senior secondary school.

Null Hypothesis 2. There is no significant difference between Jammu & Kashmir board senior secondary school sprinter and long jumper girls athletes regarding their self-confidence.

Table 2.1: Comparison of self-confidence between sprinter and long jumper girls athletes of J&K board senior secondary school

Variable	Group	N	Mean	Std. Deviation	t-Value	df	Sig.
Self-Confidence (girls)	Sprinter	30	56.53	10.11	-.052	58	.958
	Long jumper	30	56.66	9.61			

Significant at 0.05 level

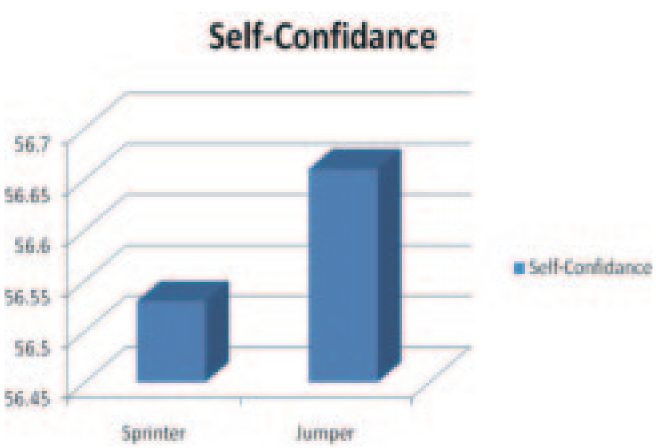

Figure 2.1: Comparison of Means & SD of self-confidence between sprinter and long jumper athletes of J&K board senior secondary school

Interpretation

The above table 2.1 indicates that the independent sample t-test is associated with statistically not significant difference t (58) = .052, p = .958. The result shows that sprinters (M =56.53, SD =10.11) and long jumpers girls (M = 56.66, SD = 9.61) of J&K senior secondary school are found to have similar self-confidence. So, the null hypothesis (1), "There is no significant difference in the sprinter and long jumper girls athletes of J&K board senior secondary school regarding their self-confidence" is accepted.

However, Singh and Amrik Amarpreet Singh (2018) also found a contradictory result, who showed that the studied main purpose of the study was to find out the mental skills between national level sprinters and long distance runners. The total number of 50 subjects selected as samples from Punjabi University, Patiala in which 25 are sprinters and 25 are long distance runners. The age group of the subjects ranged from 18-25 years. All the samples were selected on random basis. To assess mental skill level of selected subjects, Mental Skills inventory developed by Nelson & Hardy was used. This inventory measures Imagery Ability, Mental Preparation, Self-Confidence. This inventory is highly reliable & valid to assess mental skills of selected subjects. The scoring was done according to rule led down by the authors. The 't' test was used to find out significant difference among two groups i.e. male sprinters and long distance runners. Results found that there is no significant difference has been found between sprinters & long distance runners on the basis of Imagery Ability, Mental Preparation and Self-Confidence level.

Findings of the study

1. A significant difference was observed between senior secondary school sprinter and long jumper

(girls) athletes regarding their competitive anxiety (measure). The mean value of senior secondary school jumper athletes was lesser than their counter-parts, i.e. sprinter athletes of senior secondary school.

2. No significant difference was observed between senior secondary school sprinter and long jumper (girls) athletes regarding their self-confidence (measure). The mean value of senior secondary school jumper athletes was lesser than their counter-parts, i.e. sprinter athletes of senior secondary school.

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Status of Awareness of Total Immunization Program among Parents of the Urban Slums in Lucknow District

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Abstract

In today's rapidly evolving world, where medical advancements have brought about remarkable improvements in the field of healthcare, immunization stands as a cornerstone of preventive medicine. Vaccination programs play a vital role in safeguarding the health and well-being of individuals, especially children, by protecting them against various infectious diseases. However, despite the significant progress made in immunization, certain segments of society still face challenges in accessing and benefiting from these crucial interventions. Immunization is the process by which an individual's immune system becomes fortified against an agent (known as the immunogen). When this system is exposed to molecules that are foreign to the body, called non-self, it will orchestrate an immune response, and it will also develop the ability to respond to a subsequent encounter because of immunological memory quickly. This is a function of the adaptive immune system. Therefore, by exposing an animal to an immunogen in a controlled way, its body can learn to protect itself: this is called active immunization. The most important elements of the immune system that are improved by immunization are the T cells, B cells, and the antibodies B cells produce. Memory B cells and memory T cells are responsible for a swift response to a second encounter with a foreign molecule. Passive immunization is the direct introduction of these elements into the body, instead of the production of these elements by the body itself.

Introduction

Immunization is done through various techniques, most commonly vaccination. Vaccines against microorganisms that cause diseases can prepare the body's immune system, thus helping to fight or prevent an infection. The fact that mutations can cause cancer cells to produce proteins or other molecules that are known to the body forms the theoretical basis for therapeutic cancer vaccines. Other molecules can be used for immunization as well, forexample in experimental vaccines against nicotine (Nic VAX) or the hormone ghrelin in experiments to create an obesity vaccine.

India and China were two countries where "some form of inoculation" was practiced evenbefore the 16th century. However, modern immunization developed in India in the 19th century, parallel to the western world. Initial years saw considerable investment in research anddevelopment (R&D) in vaccines and about fifteen vaccine institutes were establishedbeginning in the 1890s. World's first plague vaccine by Haffkine (in 1897) and Manson'sdevelopment of an indigenous cholera vaccine were the most notable achievements of theseinstitutes. However, the benefits of this early institutionalization did not last long. By the time Indians inherited the leadership of the above institutions (from Britishers), research andtechnological innovation were sidelined as demands for routine vaccine production tookpriority.

By the early 1970s, many childhood diseases had almost disappeared from developed countries. These diseases, however, continued to take many lives in poorer countries. In fact, in 1974, fewer than 5% of children, worldwide were immunized by age 1 against diphtheria, polio, tuberculosis, pertussis, measles, and tetanus. That is why WHO launched the Expanded Programme on Immunization (EPI) in 1974 to bring vaccination against these six diseases tomany underserved areas.

India, on its part, launched its first vaccine exactly 50 years back: BCG in 1962 as a part of the National Tuberculosis Program. EPI was launched in India in 1978. Initially, it included BCG, DPT (3 doses), and typhoid vaccine; OPV was added the next year. In addition to 3 primary doses of DPT and OPV, 2 boosters at 1.5 years

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and 5 years were also given to cover children up to 5 years of age. Achieving self-sufficiency in the production of vaccines was also a part of the program. In 1985, the program was converted into the Universal Immunization Program (UIP) with the lofty goal of covering 'all' eligible children in the country, immunizing 'all' pregnant women with TT, and improvingthe quality of services. Although the first booster of DPT was retained in UIP, the second booster at 5 years was reduced to DT (pertussis component was omitted). In the same year, the measles vaccine was added at 9 months of age, but the typhoid vaccine was dropped from the program. In the next 2 decades, there were lots of administrative changes in UIP: It was given the status of National Technology Mission in 1986 to give a sense of urgency and commitment to achieving the goals; then it was made part of Child Survival and State Motherhood (CSSM) program in 1992 and Reproductive and Child Health (RCH) program in 1997. However, the focus remained on 4 vaccines (BCG, DPT, OPV, and Measles) and 6 diseases only. It was only after 2006 that new vaccines likehepatitis B, second dose of measles, and Japanese Encephalitis vaccines were introduced. The Hepatitis B vaccine was initially introduced in 10 states and then extended to the whole country. The Japanese encephalitis vaccine has been introduced in 111 districts in 15 States having a high disease burden. In December 2011, the pentavalent vaccine (containing vaccine againstdiphtheria, pertussis, tetanus (DPT), Hepatitis B, and Haemophilus influenzae type B (HiB)) was introduced in two states with high coverage of RI: Tamil Nadu and Kerala. Recently, the Government has decided to introduce it in 6 more states: Gujarat, Karnataka, Haryana, Goa, J&K and Pondicherry.

In 1988, the Government of India committed the nation to the goal of global polio eradication, along with all 192 member nations of the WHO. Pulse Polio Programme (PPP) was started initially in Delhi in 1994 and was extended to the whole country in 1995. In 1994 and 1995, children up to 3 years of age were covered. From 1996-97 onwards, all children up to 5 years of age are being covered under this program. The house-to-house component was added in 2000-01 as a part of the intensification of the Pulse Polio Programme. The National Polio Surveillance Project (NPSP) was launched in 1997 to provide technical and logistic assistance to the Government of India and work closely with state governments and a broadarray of partner agencies to achieve the goal of polio eradication in India. The efforts yielded good results: The number of polio cases reduced from about 35000 in 1994 to just 741 cases in 2009. The use of monovalent OPV and later bivalent OPV (1 and 3) in the pulse polio rounds has paid rich dividends. The last case of polio due to wild virus was reported on 13th January 2011 from West Bengal. India has been polio-free for more than a year and was removed from the endemic countries list on February 25, 2012, by the WHO. India has also joined the global post-marketing surveillance network for reporting adverse events following immunization (AEFI) associated with new vaccines and Maharashtra is the participating state.

National Immunization Schedule

Age	Vaccines given
Birth	Bacillus Calmette Guerin (BCG), Oral Polio Vaccine (OPV)-0 dose, Hepatitis B birth dose
6 Weeks	OPV-1, Pentavalent-1, Rotavirus Vaccine (RVV)-1, Fractional dose of Inactivated Polio Vaccine (fIPV)-1, **Pneumococcal Conjugate Vaccine (PCV) -1***
10 weeks	OPV-2, Pentavalent-2, RVV-2
14 weeks	OPV-3, Pentavalent-3, fIPV-2, RVV-3, **PCV-2***
9-12 months	Measles & Rubella (MR)-1, **JE-1****, **PCV-Booster***
16-24 months	MR-2, **JE-2****, Diphtheria, Pertussis & Tetanus (DPT)-Booster-1, OPV – Booster
5-6 years	DPT-Booster-2
10 years	Tetanus & adult Diphtheria (Td)
16 years	Td
Pregnant Mother	Td-1, Td-2 or Td-Booster***

* **PCV** in selected states/districts: Bihar, Himachal Pradesh, Madhya Pradesh, Uttar Pradesh (selected districts) and Rajasthan; in Haryana as state initiative

** JE in endemic districts only

*** One dose if previously vaccinated within 3 years

Research Methodology

Research methodology is a way to systematically solve the research problem. It may be understood as a science of studying how research is done scientifically. In it we study the various steps that are generally adopted by a researcher in studying his research problem along with the logic behind them.

Objective of the Study

1. To assess the awareness level regarding total immunization among the parents of urban slums.
2. To assess the knowledge of parents of urban slums about the programs and policies of the government of India regarding immunization.
3. To identify the problems and challenges of immunization.

Hypothesis of the Study

1. The rate of literacy among the parents of urban slums is directly related to their awareness regarding total immunization.
2. Due to a lack of education, difficulty in accessing

immunization centers, and a non-acceptance attitude towards the adoption of healthcare facilities, there is a lack of awareness for total immunization among the parents of urban slums.

Area of Study

In this research the specific area is the district Lucknow in the state of Uttar Pradesh, if seen through a more root level its area confronts of the slums in Lucknow. Research focuses on the people living in slums who have children that is who are parents. The whole area was later classified into clusters and a few specific areas were selected according to the researcher's convenience which were the slums in Vikasnagar and near engineering college chauraha.

Research Design

The type of research design used in the study is Descriptive research design. Descriptive research is research used to "describe" a situation, subject, behavior, or phenomenon.

Sampling

The purposive sampling researcher selected two slums that were near my place and easy for meto visit.

Profile of the Respondent

- The age of respondents in this study were the parents living in urban slums. The division of age group was kept as 25-30, 31-35, 36-40, 41-45, and 46-50. The table shows the number of respondents falling under each age group range and their percentage.
- Religions of the respondents in this study i.e. belonged to the Hindu religion which gives us 68% and 16 respondents belonged to Islam Religion which makes it 32% of the total respondents and there were none (Zero) respondents belonging to Sikh and Christian religionswhich is 0%.
- The respondents from different castes were as follows. 34 among 50 respondents belonged to the General caste which makes it 68%, 9 respondents belonged to the Scheduled Caste which makes it 18% of the total, 7 respondents were of Other Backward Class which is 14% of the total, and among all the respondents none (Zero) belonged to Scheduled Tribe which is 0%.
- Education of Respondents i.e. 41 respondents were illiterate that is 82%, 6 respondents had got education up to junior high school that is 12%, 2 respondents were graduates that is 4%, and 1 respondent was literate which makes it 2% of the total respondents.
- Occupation of the respondents among 50 respondents, 17 were labour that is 34%, 7 were working as maids which are 14%, 5 were not involved in any occupation which is 10%, 4 were working at shops, other 4 were painters, and other 4 were doing chain repair work, which gives 8% of all three individually, 3 were working as E Rikshaw drivers, and other 3 were doing repairing work of water supply which is 6% of both, 2 respondents were cleaners which is 4% and lastly 1 respondent was a tailor that is 2% of the total number of respondents.
- Type of Family of Respondents i.e. out of 50 respondents 37 were living in a nuclear family which is 74% of the total and 13 respondents were living in a joint family which is 26 % of the total respondents

Awareness Level about Immunization

¢ Regarding awareness about immunization, 30 respondents said that yes they know what immunization is, which makes it 60%, and 20 respondents said No, they don't know what immunization is, that is 40 % of the total respondents did not know.

- Immunization being beneficial for the child according to the data 43 out of 50 respondents said that immunization is beneficial for their child which is 86% of the total respondents and 7 respondents answered that No, Immunization is not beneficial for their child making it 14% of the total respondents.
- Age limit of Immunization According to the total respondents i.e. 22 respondents said that immunization is done till the age of 0-5 which is 44% of the total respondents, 20 respondents said that the age period is 0-4 which is 40% were of this view, 3 respondents answered the age to be 0-6 which made it 6% and 3 respondents did not know the age till which a child gets immunized that is again 6%, and 2 respondents said that age range is 0-7 years which means 4% of the total respondents gave this answer.
- Time intervals of vaccines according to the 50 respondents i.s. 32 respondents which is 69% of people were aware of the time interval at which a particular vaccine is given to a child, and 18 respondents which means 36% of the total respondents were not aware/ did not know about those time intervals.

Practice of Immunization

- Ever got your child immunized the data provides us with the result that among 50 respondents 49 respondents got their child immunized which is 98% of the total and there was only 1 respondent who had never gotten his child immunized which is 2% among all the respondents.
- Age you got the vaccination started of your child the data shows that 21 respondents which are 42% said that their child started getting immunized at the time of its birth, 16 people that is 32% said that they started the immunization of their child when it was 6 weeks old, 6 respondents which give 12%, answered that they began the process when their child was 12 weeks old, 5 respondents making it 10% of the total began their child's immunization at the age of 14 weeks. Lastly, 2 respondents, 4% of the total respondents said that their child was immunized first at the age between 9 to 12 months.
- Ever charged money for immunization according to the data out of 50 respondents there were 49 said that they were never charged for immunization that is 98% of the respondents had never been charged for it, and only 1 respondent said that he was once charged money for immunization which means 2% among all the respondents.
- Sources of Immunization Facilities according to the data 34 respondents availed the vaccination facility from a government hospital which is 68% of them, 9 respondents that are 18% of the people availed the facility of vaccination from a private civil hospital, 6 respondents made it 12% of all the respondents were getting the facility from a private health clinic (PHC), and 1 of the respondents that are 2% of all respondents were going to a community health center.
- Any card issued to your child from the immunization center According to 50 respondents i.e. 47 people that make 94%, had a card issuedto their child from the immunization center, and 3 respondents that are 6% among all respondents did not have any card issued for immunization from the centers.

Knowledge about Government Programmes and Policies

- Awareness about the programs and policies of the government regarding immunization According to the data 49 respondents had not heard about the programs and policies of the government regarding immunization which tells us that 98% of the respondents were unaware of this and only 1 respondent which means 2% of all respondents were aware and had heard a couple of government policies for immunization.
- Door-to-door immunization camps are that 32 respondents agreed to the question and said yes government does provide door-to-door immunization camps which means 64% of all were availing or availed the facility and 18 were of claiming that no such camps are organized by the government which 36% of all respondents never used any such opportunity.

Problems and Challenges

- Problems faced by a child if not immunized: 25 respondents were of the view that if a child is never immunized, he will have no problem in the future and 25 respondents were of the view that if a child is not immunized then he will or might suffer various problems which means 50% of the respondents answered yes and 50% answered No.
- Status of external help for immunization According to the data 38 respondents said that there is external help often by either any organization or external person which means 76% of people were aware that there are helpers around them, and 12 respondents denied that they had never encountered any external help regarding immunization which means 24% of all respondents were not aware of any help.
- Frequent migration: A challenge According to the data, 36 respondents said that their migration from one place to another never proved to be a hurdle in their child's immunization which means 72% of people were not facing such an issue, and 14 respondents said that their frequent migration does give them a problem in context of their child's immunization.
- Immunization as a burden According to the data 8 respondents, which is 16% think that immunization is nothing but a burden for them and 42 respondents were of the view that No Immunization is not a burden to them which gives us the fact that 345% of all the respondents did not considered immunization as a burden.

The above research findings help us a lot to figure out the reason behind the ignorance of immunization by the people of slums. People not being educated, believing in thoughts such as nothing happens to a child if not immunized, not using the vaccine card provided by the centers, or even thinking immunization is a burden, all these are the basic foundations of the reasons why the people of slum ignore immunization and these reasons generate more reasons and negativity which finally leads to poor people not believing in the actual significance of immunization and its need.

Results of Hypothesis

As the study reached its conclusion, it was observed that to some extent, these two hypotheses were correct. The collected data gave valid proof to the foundation of these two hypotheses. From the data collected it was seen that among all the respondents 82% respondents were illiterate but also it was seen that out of 100%, 60% of respondents were aware of what immunization is. This gives us one thing literacy does affect the awareness level among the people living in slums but is not the sole reason for people not being aware of immunization. There are other related concepts also which are the reason why there is a vast ignorance towards immunization.

Conclusion

Improve access to and utilization of immunization services is low in the urban slums owing to the unique inherent characteristics of urban slums, such as floating population, over-crowding, poor sanitation, and personal hygiene. Urban slums do have more morbidity withholding vaccinations by paramedics; there were also many instances of nonimmunization of children because there was no one in the family to take the child to the health center for vaccination. The traditional temporary migration of pregnant women for delivery, and the consequent non-availability of their records, results in missing out on services at either of the residences. This highlights the need and importance of ensuring immunization for all vulnerable poor. These findings could be helpful to the people in charge of immunization at the local level. Anganwadi workers are responsible for identifying and tracking all eligible children for immunization along with the female health workers.

The awareness regarding total immunization is seen as absent among the people living in slums as they are more focused on their survival and do not focus on other necessities. Also, it is observed that the people who say that they are aware, they know about immunization or other things, they were also not confident and did not have complete knowledge. Most of the respondents were only guessing or giving the wrong answers which brings us to the conclusion that the ones who were aware did not have much interest in updating their knowledge.

Knowledge regarding immunization is very poor among the residents of the urban slums of Lucknow. There is a need for additional training or capacity building of health workers to improve their attitudes towards clients, and to strengthen their ability to counsel regarding immunization. The overall conclusion that could be drawn is that the parents of urban slums are not fully aware of total immunization and the main reason that comes forward is their own nonacceptance attitude towards health facilities.

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वर्तमान परिदृश्य में प्रारम्भिक बाल्यावस्था देखभाल एवं शिक्षा का समीक्षात्मक अध्ययन : छत्तीसगढ़ के संदर्भ में

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सारांश

प्रारम्भिक बाल्यावस्था देखभाल एवं शिक्षा एक सम्पूर्ण योजना है, जिसमें बच्चों के स्वास्थ्य, पोषण, अनौपचारिक शिक्षा, स्वच्छ वातावरण एवं अच्छी आदतों का विकास आदि सभी आधारभूत सेवाओं का एक पुंज है जिसका संचालन आंगनबाड़ी केन्द्रों के माध्यम से किया जा रहा है। इनकी सेवाओं को गांव, ब्लाक, जिला ,राज्य तथा केंद्र स्तर पर विभाजित कर अधिक बेहतर बनाया गया है। योजना के सुलभ संचालन की जवाबदेही महिला बाल विकास अधिकारी, परियोजना अधिकारी, पर्यवेक्षक, आंगनबाड़ी कार्यकर्ता व सहायिका की है। इस लेख में प्रारम्भिक बाल्यावस्था देखभाल एवं शिक्षा के उद्देश्यों को ध्यान में रखकर छत्तीसगढ़ में इस कार्यक्रम की वर्तमान स्थिति का अध्ययन किया गया है। यह अध्ययन द्वितीयक आकड़ों पर आधारित है, जो विभिन्न पुस्तकों, पत्रिकाओं, शासकीय वेबसाइट्स से एकत्र किया गया है। निष्कर्ष में पाया गया कि छत्तीसगढ़ में 2000-01 से 2020-21 तक आंगनबाड़ी केन्द्रों की संख्या में भारी वृद्धि हुई है, परन्तु आंगनबाड़ी कार्यकर्ताओं के कुल स्वीकृत पदों मे से 8.86% पदों पर आज दिनांक तक नियुक्ति नहीं हो पायी है जबकि 2018 में लाभार्थियों की संख्या में ऋणात्मक वृद्धि देखी गयी।

प्रस्तावना

हम आज जो भी हैं वह हमारे बचपन का ही परिणाम है, हम जो कुछ बचपन से सीखते हैं उसे ही पूरे जीवन भर आगे बढ़ाते हैं। मानव जीवन में बचपन को सबसे तीव्र वृद्धि और विकास का काल कहा जाता है। वैज्ञानिक प्रमाण कहते हैं कि 90% मस्तिष्क का विकास बचपन (5 वर्ष) तक की आयु में हो जाता है (सिंह 2012, ई.सी.सी.ई. 2013)। इस विकास के बहुत से पहलू जैसे संज्ञानात्मक, भावात्मक, शारीरिक, सामाजिक, सांस्कृतिक आदि सभी का विकास भी समान रूप से होना चाहिए। जीवन की इस अवधि में आयी कमियाँ मानव विकास को जीवन भर प्रभावित करती हैं, इसलिए भारत सरकार ने पीढ़ी दर पीढ़ी चले आ रहे सुविधा विहीनता के चक्र को तोड़ने और असमानता को दूर करने के लिए व दूरगामी सामाजिक व आर्थिक लाभ हेतु 2 अक्टूबर 1975 को एकीकृत बाल विकाससेवा जो कि गर्भवती महिला, किशोरियों, शिशु देखभाल व उनकी शिक्षा व सम्पूर्ण विकास पर केन्द्रित है। जनगणना 2001 के अनुसार भारत मे प्रत्येक वर्ष 2.5 करोड़ बच्चे जन्म लेते हैं जिनका मृत्यु दर 70/1000 है। 0-6 आयु वर्ष के 15.8 करोड़ है जिसमें से केवल 42% बच्चे (12 से 23 महीने) का पूर्ण टीका लगवा पाते हैं, वहीं 14 प्रतिशत बच्चे टीकाकरण से अछूते रह जाते हैं, 0-6 आयु वर्ष के बच्चों में 5 प्रतिशत बच्चे कम या गंभीर रूप से खून की कमी (एनीमिया) रोग से पीड़ित है तथा 47% बच्चे कुपोषित हैं एवं 6 वर्ष से कम उम्र के 16 करोड़ बच्चों में से केवल 3.42 करोड़ बच्चे कुपोषण से बचाव के लाभ ले रहे हैं एवं इनमें से केवल 1.94 लाख बच्चे ही एकीकृत बाल विकास सेवा के तहत शाला पूर्व शिक्षा ग्रहण कर रहे हैं (भारत सरकार 2002(अ), भारत में बालक : एक प्रोफाइल, यू.एन.डी.पी.: मानव विकास रिपोर्ट, प्रारम्भिक बाल्यवस्था शिक्षा : राष्ट्रीय फोकस समूह 3.6)।

छत्तीसगढ़ में प्रारम्भिक बाल्यवस्था देखभाल एवं शिक्षा

भारत सरकार ने प्रारम्भिक बाल्यावस्था सेवा के आयोजन के क्षेत्र में विचार किया तब 1972 में योजना मंत्री ने समेकित बाल विकास सेवा (आई.सी.डी.एस.) योजना शुरू करने का सुझाव दिया। यह समेकित बाल विकास योजना वर्तमान की समस्त समस्याओं व समग्र आवश्यकताओं को पूरा करने का एक मजबूत कदम एवं एक सम्पूर्ण परियोजना थी। इस कदम की शुरुआत राष्ट्रीय स्तर पर 2 अक्टूबर 1975 को 33 विकासखंडों में शुरू की गई थी जिसमें से छत्तीसगढ़ (अविभाजित मध्यप्रदेश) उन प्रथम राज्यों में से एक था जो अग्रगामी परियोजना के लिए चुना गया था। समेकित बाल विकास सेवा छत्तीसगढ़ के बस्तर जिले के तोकापाल विकासखंड में अग्रगामी परियोजना की शुरुआत की गई थी। वर्ष 2011-12 के अनुसार राज्य के 27 जिलों में 220 बाल विकास परियोजनाएँ और 43,763 आंगनबाड़ी केंद्र, 6,548 मिनी आंगनबाड़ी केंद्र स्वीकृत की गई थी। वर्तमान में इन परियोजनाओं में से 84 ग्रामीण, 121 आदिवासी एवं 15 शहरी

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बाल विकास परियोजना है जो क्रमशः 23,998 ग्रामीण, 17,424 आदिवासी तथा 2.027 शहरी आंगनबाड़ी केंद्र हैं। वर्तमान में इन परियोजनाओं के तहत् 5 लाख गर्भवती और शिशुवती माताओं, किशोरियों को पूरक पोषण कार्यक्रम के तहत् और लगभग 10 लाख बच्चे शाला पूर्व शिक्षा के तहत् कुल मिलाकर 30 लाख से अधिक हितग्राही लाभान्वित हो रहे हैं (संस्कार अभियानः महिला एवं बाल विकास छत्तीसगढ़, 2017)। इस योजना में बच्चों के पोषण, टीकाकरण,स्वास्स्थ्य जाँच, देखभाल, शाला पूर्व शिक्षा, छोटी-छोटी बीमारियों के प्रति जागरूकता, इलाज व संरक्षित और अनुकूल वातावरण तथा महिलाओं को पोषण, किशोरियों को टीकाकरण व परामर्श आदि को शामिल किया गया है। इसके सुलभ संचालन हेतु कई स्तर व विभागों मे सेवाएँ प्रदान की जा रही हैं। इन सबका केंद्र बिंदु आंगनबाड़ी कार्यकर्ता है जो सभी योजनाओं को गांव, ब्लाक, जिला, राष्ट्रीय स्तर पर समन्वित व लागू करती है (थिप्पेश एंड गुंजल, 2014)। इन सभी सुविधाओं के बाद भी राष्ट्रीय स्तर पर आयु की वृद्धि के साथ-साथ पूर्व विद्यालय में भाग लेने वाले बच्चों के अनुपात में वृद्धि आयी है। 3 वर्ष की आयु के बच्चों में 42% आई.सी.डी.एस. संचालित प्री-स्कूलों में भाग ले रहे हैं और 17% निजी तौर पर संचालित प्री-स्कूलों में भाग ले रहे थे लेकिन पांच वर्ष की आयु के बच्चों में 33% आई.सी.डी एस में भाग ले रहे हैं और 44% निजी तौर पर भाग ले रहे हैं (RSOC 2013-14)। इस निरंतर गिरावट का एक भाग छत्तीसगढ़ भी है, इस कारण आंगनबाड़ी केंद्र की वर्तमान स्थिति, केन्दों में प्रदान की जाने वाली सेवाओं एवं अधिकारियों की संरचना एवं उत्तरदायित्व का अध्ययन करना आवश्यक हो गया है।

अध्ययन के उद्देश्य

अध्ययन के लिए निम्नलिखित उद्देश्य निर्धारित किये गये हैं:

1. आंगनबाड़ी केंद्र की वर्तमान स्थिति का अध्ययन निम्न के सन्दर्भ में :
   - केन्द्रों की संख्या
   - कर्मचारियों की संख्या
   - लाभार्थी छात्रों की संख्या
2. आंगनबाड़ी केंद्र द्वारा प्रदान की जाने वाली सेवाओं का अध्ययन करना।
3. आंगनबाड़ी केंद्र के अधिकारियों की संरचना एवं उत्तरदायित्व का अध्ययन करना।

अनुसंधान कार्यप्रणाली

वर्तमान अध्ययन द्वितीयक आकड़ों पर आधारित है। अध्ययन हेतु आंकड़े छत्तीसगढ़ की विभिन्न पुस्तिकाओं (आंगनबाड़ी कार्यक्रमः एक प्रवेशिका; प्रशासकीय प्रतिवेदन 2020-21; हस्त पुस्तिका-उड़ान एवं संस्कार अभियान 2017) एवं छत्तीसगढ़ सरकार की आधिकारिक वेबसाइट्स से एकत्र किया गया।

विश्लेषण एवं चर्चा

छत्तीसगढ़ राज्य में आई.सी.डी.एस.आंगनबाड़ी केन्द्रों की स्थिति

तालिका क्रमांक-1: छत्तीसगढ़ में परियोजना व आंगनबाड़ी केन्द्रों की स्थिति

वर्ष	स्वीकृत मिनी आंगनबाड़ी	स्वीकृत आंगनबाड़ी	कुल केंद्र	वृद्धि (आधार वर्ष 2001)
2000-01	836	20289	21125	
2005-06	836	29437	30237	9112(43.14)
2008-09	2319	34937	37256	16131(76.40)
2010-11	6548	43763	50311	29186(138.19)
2011-12	6548	43763	50311	29186(138.19)
2016-17	6548	43763	50311	29186(138.19)
2020-21	5814	46660	52474	31349(248.40)

Source: Strengthening Early Childhood Education in Chhattisgarh:An Evaluation of the Udaan Package

तालिका क्रमांक-1 में छत्तीसगढ़ राज्य में स्वीकृत मिनी आंगनबाड़ी केंद्र एवं आंगनबाड़ी केन्द्रों की स्थिति को दर्शाया गया है। वर्ष 2000-2001 में छत्तीसगढ़ मध्यप्रदेश से अलग होने के पश्चात छत्तीसगढ़ में 836 मिनी आंगनबाड़ी केंद्र एवं 20,289 आंगनबाड़ी केंद्र स्वीकृत थे, जो कि क्रमशः कुल केन्द्रों के 3.96% एवं 94.04% थे। उपरोक्त तालिका से यह स्पष्ट हो रहा है कि वर्ष 2005-06 में मिनी आंगनबाड़ी केन्द्रों की संख्या में एक भी वृद्धि नहीं हुई जब कि आंगनबाड़ी केन्द्रों की संख्या में 9,148 की वृद्धि हुई। उसी प्रकार 2008-09 एवं 2010-11 में क्रमशः 1,483 एवं 4,229 मिनी आंगनबाड़ी केंद्र एवं 5,500 और 8,826 नए

आंगनबाड़ी केन्द्र खोले गए परन्तु 2010-11 से 2016-17 तक एक भी मिनी आंगनबाड़ी केंद्र एवं आंगनबाड़ी केंद्र नहीं खोली गयी। इससे यह स्पष्ट हो रहा है कि 2010-11 से 2016-17 तक राज्य शासन द्वारा एक भी नए केन्द्रों की स्वीकृति नहीं दी गयी। वर्ष 2020-21 में राज्य सरकार द्वारा 2,897 नए आंगनबाड़ी केन्द्रों की स्वीकृति दी गयी और इस प्रकार 2020-21 तक छत्तीसगढ़ में कुल 46,660 आंगनबाड़ी केंद्र स्वीकृत हैं जो कि वर्ष 2000-01 कि तुलना में 129.97% की वृद्धि है। उसी प्रकार 2020-21 के आंकड़ों के देखने से यह स्पष्ट है कि मिनी आंगनबाड़ी केन्द्रों की संख्या में 734 केन्द्रों की गिरावट पायी गयी जो कि वर्ष 2016-17 के सन्दर्भ में 11.21% की कमी थी परन्तु आधार वर्ष 2000-01 की तुलना में 595.45 की वृद्धि है। उपरोक्त तालिका के विश्लेषण से हम यह कह सकते हैं कि वर्ष 2000-2001 से 2020-21 तक राज्य सरकार ने क्रमशः 4,978 मिनी आंगनबाड़ी केन्द्र एवं 26,371 नए आंगनबाड़ी केन्द्र स्वीकृत कर खोले गए।

उपर्युक्त सारणी क्रमांक 1 के आंकड़ों के वर्षवार विश्लेषण से यह स्पष्ट हो रहा है कि 2000-01 की तुलना में आंगनबाड़ी केन्द्रों की वृद्धि 2005-06 मे 9112 (43.14%), 2008-09 में 16131 (76.40%), 2010-2011 से 2016-17 तक में 2,9186 (138.19%), तथा 2020-21 में 31,349 (248.40%) की वृद्धि दर्ज की गई। अतः यह कहा जा सकता है कि छत्तीसगढ़ में 2000-01 से 2020-21 तक आंगनबाड़ी केन्द्रों की संख्या में भारी वृद्धि हुई है।

तालिका क्रमांक-2: छत्तीसगढ़ राज्य में आई.सी.डी.एस. कार्यक्रम के कर्मचारियों की स्थिति

आईसीडीएस कर्मचारी	छत्तीसगढ़ सरकार द्वारा स्वीकृत पद	नियुक्ति		रिक्त पद	
		कुल	%	कुल	%
सी.डी.पी.ओ./ ए.सी.डी.पी.ओ.	323	126	39.01	197	60.99
पर्यवेक्षक	1617	1307	80.82	310	19.17
कार्यकर्ता	50311	48901	97.19	1410	2.80
सहायिका	46660	42523	91.13	4137	8.86

Source: www.icds.wcd.nic.in

नोटः यह सूचना 2015 की स्थिति में है।

तालिका क्रमांक-2 सी.डी.पी.ओ., पर्यवेक्षक, आंगनबाड़ी कार्यकर्ता एवं सहायिकाओं के पदों की राज्य सरकार द्वारा स्वीकृत, नियुक्ति व रिक्त पदों की वर्तमान स्थिति को दर्शाता है। छत्तीसगढ़ में सी.डी.पी.ओ. के स्वीकृत पदों की संख्या 323 है जिसमें से केवल 126 पदों में ही नियुक्ति की गयी है, जो कि कुल स्वीकृत पदों का 39.01% है एवं 197 अर्थात् 60.99% पद रिक्त है। उसी प्रकार पर्यवेक्षकों के स्वीकृत पदों की संख्या 1,617 थी उनमें से 1,307 (80.82%) पदों में नियुक्ति हुई एवं 310 (19.17%) पदों में नियुक्ति शेष है। छत्तीसगढ़ में आंगनबाड़ी कार्यकर्ताओं के कुल 50,311 पद स्वीकृत है जिसमें से 48,901 (97.19%) पदों पर नियुक्त किया जा चुका है एवं मात्र 1,410 (2.80%) पदों पर ही नियुक्ति शेष है। उसी प्रकार सहायिका के कुल 46,660 स्वीकृत पदो में से 42,523 पदों में नियुक्ति की गयी जो कि कुल स्वीकृत पदों की 91.13% है एवं 4,137 (8.86%), पदों पर आज दिनांक तक नियुक्ति नहीं हो पायी है।

तालिका क्रमांक-3 छत्तीसगढ़ राज्य में शाला पूर्व शिक्षा के लाभार्थियों की स्थिति

वर्ष	बालक	बालिका	कुल	वृद्धि आधर वर्ष 2010
2010	430788	434806	865594	-
2011	434974	441054	876028	10434(1.20)
2012	443258	453678	896936	31342(3.62)
2013	446246	453439	900181	34587(3.99)
2014	435857	444376	880233	14639(1.69)
2015	435857	444376	880233	14639(1.69)
2017-18	424630	429630	854260	-11334(-1.31)
2018-19	383582	389108	772690	-92904(-10.73)

Source : www.icds.wcd.nic.in

तालिका क्रमांक-3 में छत्तीसगढ़ राज्य में शाला पूर्व शिक्षा से लाभान्वित बच्चों की संख्या को दर्शाया गया है। उपर्युक्त तालिका के अवलोकन से यह स्पष्ट है कि पिछले 10 वर्षों में

लाभान्वित बच्चों की संख्या में उतार-चढ़ाव है। 2010 में कुल लाभान्वित बच्चे 8,65,594 जिसमें से बालकों की संख्या 4,30,788 व बालिकाओं की संख्या 4,34,806 थी। उपरोक्त तालिका से स्पष्ट है कि लाभान्वित बच्चों की संख्या में सन् 2011 से 2013 तक क्रमशः 1.02, 3.62, 3.99% की वृद्धि हुई जबकि सन् 2014-2015 में लाभान्वित बच्चों की संख्या में कोई वृद्धि नहीं पाई गयी। सन् 2017-2018 की तुलना में 2018-2019 तक लाभान्वित बालकों की संख्या में 41,048 (-1.31) व बालिकाओं में 40,522 (-10.73) की कमी पायी गई। सन् 2017- 2018 व 2018-19 में लाभान्वित बच्चों की वृद्धि 2015 के तुलना में क्रमशः 25,973 एवं 1,07,543 कम पाई गयी तथा आधार वर्ष 2000-01 की तुलना में इसकी वृद्धि क्रमशः -11334 (-1.31) व -92904 (-10.73) है जो कि ऋणात्मक है। तालिका क्रमांक-3 के लाभान्वित बालक एवं बालिकाओं के आंकड़ों से यह स्पष्ट है कि सत्र 2010 से 2019 तक बालकों की तुलना में बालिकाओं में क्रमशः -93%, 1.39%, 2.35%, 1.61%, 1.95%, 1.17% व 1.44% ज्यादा लाभान्वित हुए थे। निष्कर्ष यह कहा जा सकता है कि सन् 2010 से 2015 तक लाभार्थी बच्चों की संख्या में बहुत कम वृद्धि हुई जबकि 2018 में लाभार्थियों की संख्या में ऋणात्मक वृद्धि देखी गयी।

आंगनबाड़ी कार्यक्रम के तहत् प्रदान की जाने वाली सेवाएँ

आंगनबाड़ी में पारस्परिक रूप से छः प्रकार की सेवाएँ प्रदान की जा रही हैं- पूरक पोषण आहार, टीकाकरण, संदर्भ सेवाएँ, वृद्धि निगरानी एवं स्वास्थ्य पोषण, शाला पूर्व शिक्षा एवं स्वास्थ्य परामर्श। किन्तु अक्टूबर 2012 में आंगनबाड़ी कार्यक्रम को पुनर्गठित किया गया एवं इसे प्रारम्भिक बाल्यावस्था देखभाल और विकास केंद्र के रूप में देखा गया। पुनर्गठित आंगनबाड़ी व परम्परागत आंगनबाड़ी कार्यक्रम को मिलाकर अब मुख्य रूप से आंगनबाड़ी केंद्र द्वारा छः सेवाएँ- पूरक पोषाहार, पोषण एवं स्वास्थ्य परामर्श, टीकाकरण, स्कूल पूर्व शिक्षा, स्वास्थ्य जाँच, एवं संदर्भ सेवाएँ प्रदान की जा रही हैं। उपरोक्त छः सेवाओं के विश्लेषण से निम्न निष्कर्ष पाए गए हैं:

1. पूरक पोषाहार सम्बंधित सेवाएँ

राष्ट्रीय प्रारम्भिक बाल्यवस्था देखभाल एवं शिक्षा नीति 2013 का उद्देश्य गर्भावस्था से 6 वर्ष तक के बच्चों का सम्पूर्ण विकासात्मक आवश्यकता के अनुरूप व्यापक बाल्य देखभाल सेवाएँ व सुविधाएँ प्रदान करना है। इसी उद्देश्य की पूर्ति हेतु छत्तीसगढ़ सरकार द्वारा पूरक आहार व विकास निगरानी को शामिल किया। इसके तहत आंगनबाड़ी कार्यकर्ता व सहायिका की मदद से अपने क्षेत्र का सर्वेक्षण कर गर्भवती महिला व 0-6 वर्ष तक के बच्चों की पहचान कर उन्हें पूरक आहार व स्वास्थ्य सेवाओं की सहायता प्रदान करती है।

2. स्वास्थ्य जाँच एवं संदर्भ सेवाएँ

0-6 वर्ष के बच्चों को पोलियो, टिटनेस, खसरा, डी.पी.टी., टी.बी. बाल मृत्यु, विकलांगता, रुग्णता और संबंधित कुपोषण तथा महिलाओं में एनिमिया, मातृत्व मृत्युदर, गर्भस्थ शिशु मृत्यु आदि प्रमुख समस्याएँ हैं। इस समस्या का समाधान आंगनबाड़ी व स्वास्थ्य विभाग दोनों की जिम्मेदारी है। इसके लिए ए.एन.एम. या सहायक नर्स व आंगनबाड़ी कार्यकर्ता की मदद से गर्भवती महिलाओं का प्रसवपूर्व एवं प्रसव पश्चात देख-रेख, छोटी-छोटी बीमारियों का निदान, शिशु स्वास्थ्य जाँच, दवाई वितरण, माता-पिता या पालक को जागरूक करना, रिकार्ड रखना, टीकाकरण व जाँच शिविर का सफलतापूर्वक आयोजन किया जाता है। जन्म से 3 वर्ष तक के सभी बच्चों का प्रत्येक माह वृद्धि जाँच की जाती है।

स्वास्थ्य जांच और विकास निगरानी के दौरान, बीमार या कुपोषित बच्चे, जिन्हें आवश्कतानुसार तत्काल चिकित्सा सुविधा की जरूरत होती है, उन्हें आंगनवाड़ी कार्यकर्ता द्वारा प्राथमिक स्वास्थ्य केंद्र या उप केंद्र में रेफर किया जाता है तथा छोटे बच्चों में विकलांगता का पता लगाकर उन्हें सूचीबद्ध कर प्राथमिक स्वास्थ्य केंद्र/उप-केंद्र के प्रभारी चिकित्सा अधिकारी और ए.एन.एम. को संदर्भित किया जाता है।

3. शाला पूर्व शिक्षा

इस कार्यक्रम के तहत् 3-6 वर्ष के बच्चों को सीखने योग्य वातावरण प्रदान करना उनके शारीरिक बौद्धिक, सौन्दर्यात्मक, भावात्मक व सामजिक गुणों के विकास को बढाया जा रहा है। बच्चों को शिक्षा खेल गतिविधि के माध्यम से प्रदान किया जाता है। इसके लिए सहायक सामग्री हेतु स्थानीय संस्कृति और प्रथाओं पर आधारित सामग्री का उपयोग करके शिक्षा को सरल बनाया गया है। वर्तमान में छत्तीसगढ़ मे समेकित बाल विकास योजना विस्तार के तीसरे चरण में इन आंगनबाड़ी केन्द्रों में शालापूर्व शिक्षा हेतु लगभग 10 लाख बच्चे नामांकित है। आंगनबाड़ी कार्यकर्ताओं को शाला पूर्व शिक्षा संबंधी मूलभूत जानकारी हेतु शाला पूर्व शिक्षा किट (संस्कार, उडान) का उपयोग करती है। इस किट को समय-समय पर छत्तीसगढ़ शासन द्वारा उपलब्ध कराया जाता है। (संस्कार अभियानः प्रारम्भिक बाल्यवस्था देखभाल एवं शिक्षा, 2017)।

4. टीकाकरण एवं स्वास्थ्य शिक्षा

स्वास्थ्य और परिवार कल्याण मंत्रालय द्वारा अपने शिशु बाल स्वास्थ्य (आर.सी.एच.) कार्यक्रम के तहत टीकाकरण सेवाएं प्रदान की जाती हैं। आंगनबाड़ी कार्यकर्ता टीकाकरण के लिए

लक्षित आबादी में एक निश्चित दिन के टीकाकरण सत्र के आयोजन में स्वास्थ्य कर्मियों की मदद करती है। वह आईसीडीएस लाभार्थियों के टीकाकरण रिकॉर्ड रखती है और पूर्ण लक्ष्य सुनिश्चित करने के लिए अनुवर्ती कार्यवाई करती है। आयरन और विटामिन 'ए' सप्लीमेंटेशन (आईएफए टैबलेट) टीकाकरण कार्यक्रम के तहत बच्चों और गर्भवती महिलाओं को प्रदान किया जाता है, जो स्वास्थ्य और परिवार कल्याण मंत्रालय के आर.सी.एच. कार्यक्रम के तहत भी वितरित किए जाते हैं।

5. पोषण और स्वास्थ्य शिक्षा (एन.एच.ई.)

एन.एच.ई. का 15-45 वर्ष के आयु वर्ग की महिलाओं के क्षमता निर्माण का दीर्घकालिक लक्ष्य है ताकि वे अपने स्वास्थ्य, पोषण और विकास की जरूरतों के साथ-साथ अपने बच्चों और परिवारों की देखभाल कर सकें। पोषण की शिक्षा का मुख्य उद्देश्य व्यक्ति को भोजन की आदतों और प्रथाओं को स्थापित करने में मदद करना है जो शरीर की पोषण संबंधी आवश्यकताओं के अनुरूप हैं और जिस क्षेत्र में वे रहते हैं उसके सांस्कृतिक पैटर्न और खाद्य संसाधनों के अनुकूल हैं।

आई.सी.डी.एस. का संगठन

आई.सी.डी.एस. का संगठन पांच अलग-अलग स्तरों में विभाजित है:

- केंद्रीय स्तर पर, मानव संसाधन विकास मंत्रालय के अंतर्गत महिला एवं बाल विकास विभाग नोडल विभाग है, जिसकी जिम्मेदारी बजटीय नियंत्रण और कार्यक्रम के क्रियान्वयन की है। राज्य स्तर पर, महिला एवं बाल विकास विभाग, स्वास्थ्य विभाग, ग्रामीण विकास, आदिवासी कल्याण विभाग राज्य के भीतर कार्यक्रम के सुलभ परिपालन/क्रियान्वयन के लिए जिम्मेदार हैं।
- राज्य स्तर पर कार्यक्रम की निगरानी के लिए आईसीडीएस प्रकोष्ठों की स्थापना की गई है। राज्य के भीतर, आईसीडीएस का प्रशासन जिला, ब्लॉक और ग्राम स्तर और आंगनवाड़ी केंद्र पर विकेंद्रीकृत है।
- जिला स्तर पर, जिला अधिकारी (कलेक्टर/जिला विकास और कार्यक्रम अधिकारी/उपायुक्त) योजना के समन्वय और सुलभ परिपालन/कार्यान्वयन के लिए जिम्मेदार/उत्तरदायी हैं। जिलों के भीतर आईसीडीएस की प्रशासनिक इकाई को आईसीडीएस परियोजना कहा जाता है।
- ब्लॉक स्तर पर, बाल विकास परियोजना अधिकारी (सीडीपीओ) ब्लॉक स्तर पर कार्यक्रम को सुचारु रूप से लागू करने की जिम्मेदारी है।
- आईसीडीएस परियोजना में ग्रामीण क्षेत्र में सामुदायिक विकास खंड, जनजातीय क्षेत्र में जनजातीय विकास खंड और शहरी क्षेत्र में मलिन बस्तियों का समूह शामिल है।

प्रत्येक ब्लॉक में औसतन 100 आंगनवाड़ी केंद्र हैं। पर्यवेक्षण की सुविधा के लिए आंगनबाड़ी केंद्र की संख्या के आधार पर ब्लॉक को 4-5 सर्किलों में विभाजित किया गया है। प्रत्येक सर्कल में एक पर्यवेक्षक कम से कम 25 आंगनवाड़ी केंद्रों का निरीक्षण और जो सीडीपीओ को रिपोर्ट करता है। नये मापदंड के अनुसार जनजातीय परियोजना में 17, ग्रामीण परियोजना में 20 व शहरी परियोजना में 25 पर्यवेक्षण का दायित्व है। बड़े ग्रामीण और आदिवासी ब्लॉकों में, एक अतिरिक्त बाल विकास परियोजना अधिकारी (एसीडीपीओ) की नियुक्ति की जाती है, जो पर्यवेक्षकों और सीडीपीओ के बीच की कड़ी बनाता है और सीडीपीओ को दिन-प्रतिदिन के क्रियाकलापों और क्षेत्र के दौरे में सहायता करता है। गांव स्तर पर स्वास्थ्य, पोषण और शैक्षिक सेवाओं का पैकेज गांव या शहरी स्लम क्षेत्र में स्थित आंगनवाड़ी केंद्र (एडब्ल्यूसी) में प्रदान किया जाता है। आईसीडीएस सेवा वितरण के लिए आंगनवाड़ी केंद्र बिंदु है जो रविवार और छुट्टियों को छोड़कर आम तौर पर चार घंटे के लिए दैनिक रूप से संचालित होता है। जमीनी स्तर पर एक महिला आंगनवाड़ी कार्यकर्ता (AWW) आईसीडीएस की प्रमुख कार्यकर्ता होती है जो कि एक स्वैच्छिक कार्यकर्ता है जिसे प्रति माह मानदेय के आधार पर भुगतान किया जाता है। उसे एक आंगनवाड़ी सहायिका (AWH) द्वारा सहायता प्रदान की जाती है, जिसे मासिक मानदेय मिलता है। अपने स्वास्थ्य संबंधी कार्यों को करने में आंगनवाड़ी कार्यकर्ता को स्थानीय प्राथमिक स्वास्थ्य केंद्रों (पीएचसी) और उप-केंद्रों के स्वास्थ्य अधिकारियों का समर्थन प्राप्त होता है। सहायक नर्स मिडवाइफ (एएनएम) और महिला स्वास्थ्य कार्यकर्ता शामिल हैं।

पदाधिकारियों की मुख्य जिम्मेदारियाँ : समेकित बाल विकास योजना में काम करने वाले मुख्य पदाधिकारी इस प्रकार

हैः जिला कार्यक्रम अधिकारी, जिला महिला एवं बाल विकास अधिकारी/सहायक संचालन, परियोजना स्तर पर परियोजना अधिकारी, पर्यवेक्षक, ग्राम स्तर पर आंगनबाड़ी कार्यकर्ता एवं सहायिका।

बाल विकास परियोजना अधिकारी (सी.डी.पी.ओ.): समेकित बाल विकास सेवा परियोजना का क्षेत्रीय स्तर पर प्रशासनिक और कार्यान्वयन संबंधी कार्यों के लिए जवाबदेही है।

- परियोजना स्तर पर समेकित बाल विकास सेवा परियोजना का प्रमुख कार्यकर्ता होता है यह प्रतिदिन के प्रशासनिक कार्यों की देख-रेख करता है तथा पर्यवेक्षक, आंगनबाड़ी कार्यकर्ता एवं सहायिका समेत पूरे समूह का संचालन तथा इस कार्य के लिए क्षेत्रीय दौरा व बैठक आयोजित करना।
- राज्य व जिला स्तर के अधिकारियों से संपर्क स्थापित कर कार्यक्रम में वर्णित आपूर्तियों की अधिप्राप्ति, ढुलाई, भंडारण वितरण व मासिक तथा वार्षिक निधियों को आवंटित करने की व्यवस्था करना।
- परियोजना अधिकारी, परियोजना कार्यक्रम के लिए वितरित किए गए सभी संसाधनों का इस्तेमाल, सामग्री की स्थिति व लेखा-जोखा रखना।
- समेकित बाल विकास सेवा के क्षेत्र में कार्य कर रहे प्राथमिक स्वास्थ्य केंद्र, स्वयंसेवी संगठनों व पंचायती संस्थाओं से कार्यात्मक संपर्क की स्थापना की व्यवस्था करता है, तथा स्थानीय समुदाय को योगदान एवं कार्यकर्ता की सहायता से आयोजन किए जाने वाले कार्यक्रम (पोषाहार, सफाई संबंधी, शाला पूर्व अनौपचारिक शिक्षा, टीकाकरण जागरूकता) आदि देने के लिए उत्साहित करना।
- राज्य व केन्द्रीय समेकित बाल विकास सेवा योजना को भेजी जाने वाली सूचनाओं के लिए समय-समय पर प्रगति रिपोर्ट तैयार करना परियोजना अधिकारी का उत्तरदायित्व है।
- पर्यवेक्षक व आंगनबाड़ी कार्यकर्ताओं की प्रशिक्षण या अनुशिक्षण के लिए प्रतिनियुक्त करना।

पर्यवेक्षक

- लाभार्थियों की पहचान करना उनकी सूची बनाना, ग्रामों में जन्म एवं मृत्यु का अभिलेख तैयार करने हेतु क्षेत्र सर्वेक्षण मे आंगनबाड़ी कार्यकर्ताओं का मार्गदर्शन करना।
- अपने अधीनस्थ आंगनबाड़ी केन्द्रों की नियमित निरीक्षण करना तथा सामुदायिक सदस्यों के साथ बैठक बुलाने में आंगनबाड़ी कार्यकर्ता की सहायता करना।
- परियोजना अधिकारी को नियमित रूप से प्रतिमाह मासिक प्रगति प्रतिवेदन तैयार कर भिजवाना।
- आंगनबाड़ी केन्द्रों मे निर्धारित समय-सारणी के अनुसार शाला पूर्व अनौपचारिक शिक्षा के संचालन का निरीक्षण करना तथा कमी पाए जाने पर कार्यकर्ताओं को आवश्यकतानुसार दिशा निर्देश एवं मार्गदर्शन देना।
- परियोजना अधिकारी, स्वास्थ्य कर्मचारी व आंगनबाड़ी कार्यकर्ताओं के बीच कड़ी के रूप मे कार्य करना तथा कार्य संबंधी समस्याओं को हल करने हेतु उनका मार्गदर्शन करना व आवश्कतानुसार परियोजना अधिकारी को सूचित करना।
- पूरक पोषाहार, दवाइयों, खाद्य सामग्री भंडारण, शालापूर्व शिक्षा से संबंधित सामग्री, रजिस्टरों तथा रिकार्डों का समय-समय पर निरीक्षण करना व कमी पाए जाने पर परियोजना अधिकारी को सूचित करना।
- परियोजना मुख्यालय मे होने वाली बैठक में परियोजना अधिकारी की मदद से अपने क्षेत्र की आंगनबाड़ी कार्यकर्ताओं व सहायिकाओं के मानदेय का भुगतान, उनकी अनुपस्थिति में वैकल्पिक व्यवस्था, बैठक की तिथि निर्धारण, किसी विशेष समस्याओं या स्थिति के बारे में अधिकारियों को अवगत करना।

आंगनबाड़ी कार्यकर्ता

- आंगनबाड़ी केंद्र के अंतर्गत आने वाले सभी हितग्राहियों को चिन्हित करना, उनकी सूची तैयार करना तथा हर तीसरे माह उसमें अद्यतन करना तथा हितग्राहियों के लिए कार्ड तैयार करना व कार्ड की जानकारी देना, पूरक पोषणाहार का वितरण करना।
- गर्भवती माता, शिशुवती माता, किशोरियों तथा 05 वर्ष तक के बच्चों के स्वास्थ्य जाँच व टीकाकरण सेवा उपलब्ध करना और वृद्धि निगरानी कर वृद्धि चार्ट तैयार करना एवं संबंधित योजनाओं के विषय में जागरूक करना।
- शाला पूर्व अनौपचारिक शिक्षा का पूर्व निर्धारित समय-सारणी के अनुसार आयोजन करना।
- आंगनबाड़ी केन्द्रों में शिक्षण सामग्री, मेडिसिन किट, पोषणाहार, खिलौने आदि का सही देख-रेख करना।
- आंगनबाड़ी कार्यकर्ता केंद्र स्तर पर उन सभी अभिलेख को व्यवस्थित तथा अद्यतन करना तथा पर्यवेक्षक के निर्देशानुसार व पूर्व निर्धारित प्रारूप में मासिक प्रगति प्रतिवेदन तैयार कर निर्धारित समय में पर्यवेक्षक को देना।
- जिला महिला बाल विकास अधिकारी, पर्यवेक्षक व शासन द्वारा समय-समय पर दिए गए अन्य कार्यों का निर्वहन करना।
- सामान्य आंगनबाड़ी केंद्र से एक आदर्श आंगनबाड़ी केंद्र

बनाने की हर संभव कोशिश करना। इसके लिए विशेष कार्यक्रम जैसे- गोदभराई, बाल भोज, वजन त्यौहार, व जागरूकता शिविर का आयोजन करना।

आंगनबाड़ी सहायिका

- आंगनबाड़ी केंद्र को प्रतिदिन समय पर खोलना, आसपास की सफाई करना,स्वच्छ पानी भरना आदि।
- आंगनबाड़ी कार्यकर्ता की अनुपस्थिति में कार्यकर्ता के सभी सामान्य कर्तव्यों एवं उत्तरदायित्वों को वहन करना।
- शाला पूर्व अनौपचारिक शिक्षा की गतिविधियों मे आंगनबाड़ी कार्यकर्ता की सहायता करना।

निष्कर्ष

समेकित बाल विकास योजना पर कई शोध हुए हैं जिसमें सकारात्मक व नकारात्मक परिणाम सामने आये हैं। आईसीडीएस के प्रभाव को उच्च करने के लिए इसकी कमी को कम करना होगा। आंगनबाड़ी संचालन की आधारभूत आवश्यकता भौतिक संसाधन, भवन है जिसमें कमी पायी गई है (कुमारी, 2016; प्रजापति, 2018)। भौतिक संसाधन आंगनबाड़ी कार्यकर्ता के औजार के रूप में कार्य करता है इसलिए आवश्यक है कि इसे और अधिक विशिष्ट बनाया जाये। आंगनबाड़ी के कर्तव्यों को और अधिक स्पष्ट किया जाये, सीडीपीओ, स्वास्थ्य अधिकारी व पर्यवेक्षक के साथ समन्वय और बेहतर बनाया जाए तथा इनके रिक्त पदों की भर्ती की जाए। आंगनबाड़ी मे पोषक आहार वितरण, स्वास्थ्य जाँच व सामुदायिक सदस्यों की भागीदारी से यह सभी कार्य सफलता से संचालन हो रहा है (प्रजापति, 2018)। समेकित बाल विकास कार्यक्रम का नियमित मूल्यांकन किया जाना चाहिए ताकि लाभार्थियों की संख्या में कमी के कारणों का व कमजोर कड़ी की पहचान कर उसे ठीक किया जा सके।

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Role of Tea Planters Organization and Labourer Association for the upliftment of Tea Garden Labourer

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Abstract

The Tea tribes are considered as a special group of Assam that constitutes a substantial part of the total population. Tea being the cash crop of Assam, it is a kind of responsibility of the garden authority, government, non-government associations or organization and lastly the general population of Assam to think at least once for their upliftment. Hence, this study tries to find out the role of Tea Planters Organization and Labourer Association for the upliftment of Tea Garden Labourer Community and the satisfaction of Tea Garden Labourer regarding facilities provided by them.

Introduction

In Assam, The Tea tribes are considered as a special group of Assam that constitutes a substantial part of the total population. Though various plans and policies have been made by govt. and various Tea tribes' organizations but still they have remained economically, socially, and educationally backward classes of the society. There are many people from Tea tribes who remain excluded from the sphere of education for a variety of reasons. Government policies have not been able to effectively target this section of people, due to which there has been large scale deprivation. They do not get their due status as they are not regarded as 'Scheduled Caste' and 'Schedule Tribe' in Assam. They are simply received as the 'Others Backward Classes', while in other states they are given Schedule Caste and Schedule Tribe status where they receive legislative and parliamentary benefits. Moreover, various tea tribes' organization and planters' association has been creating awareness among the people and working for the welfare of their workers. Among them, different tea planters' organization) and also various Tea Tribes Organizations.

Significance of the study

It has been seen that though various plans and policies have been made by govt. and various Tea tribes' organizations but still they have remained economically, socially, and educationally backward classes of the society. Their skills are limited to a particular area only where they are getting low wages and working in horrible working condition. Thus, this study tries to examine the role of Tea Planters Organisation and Labourer Association for the upliftment of Tea Garden Labourer Communitybased on two tea gardens of Dibrugarh of Assam.

Literature Review

Saharia (2005) has studied on "Tea Labourers in undivided Dibrugarh District: A study in population Geography." It tries to investigate the growth, distribution, and density of tea labourers as well as their demographic characteristics. The researcher also seeks to study their occupational pattern and socio-cultural characteristics. The researcher found that there have been no significant changes regarding the lifestyle of the Tea labour population. They are lagging behind in almost all demographic, economic and social indicators despite their compatible contribution to the economy of the district. Acculturation has contributed to their poor standard of education and economic backwardness.

Sharma (2013) studied on "Socio-Economic Condition of Tea Garden Labourers-Lohpohia Tea Estate of Jorhat District of Assam." The primary objectives was to find out the causes of poverty and illiteracy. The study also focuses on trying to find out the socio-economic backwardness of the labourers and their involvement in common social and political aspects. The researcher found that the survival condition of the labourers was unhygienic. They have faced so many problems like improper toilets facilities, drinking water, alcoholism, etc.

Purkayastha & Kalita (2016) investigated on "Tea garden labourer and their living conditions in the Borsillah

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tea estate of Sivasagar District." The main purpose of the study was to find out the socio-economic life of tea garden labourers and try to investigate how their poor economic condition affects their day-to-day life. The findings revealed that the labourers of the Borsillah tea estate lives in a very poor condition. They are still backward socially, economically and culturally and face remarkable problems like poverty, homeless, ill health, illiteracy, etc.

Objective of the study

1. To examine the role of Tea Planters Organization and Labourer Association for the upliftment of Tea Garden Labourer Community.
2. To find out the satisfaction of Tea Garden Labourer regarding facilities provided by Tea Planters Organization and Labourer Association.

Methodology

Method: The method adopted for the present study is Descriptive Survey Method.

Population and Sample Size: The population of the present study is all the households of the 2 sample gardens of Dibrugarh district i.e. Madarkhat T.E & Barbaruah T.E. The selected garden i.e. Barbaruah T.E., is company gardens registered under ABITA. On the other hand Madarkhat T.E is native garden registered by ATPA

The total number of households in the 2 sample gardens is accounted as 666 (401 in Barbaruah T.E and 265 in Madarkhat T.E). 10% of the total households i.e. 67 Households randomly selected as samples by using purposive sampling method.

Tools and Techniques Used: For secondary sources, the researcher has used several articles, journals, books, official records, documents related to the study. The primary data was collected by using Interview Schedule.

Analysis and Interpretation of data

Tea Planters Organization: There are five different Tea Planter's Organizations who plays a major role in the development of Tea Garden Labourer. They are as follows: Bharatiya Chah Parisad (BCP), Tea Authority of India (TAI), Assam Branch of Indian Tea Association (ABITA), Assam Tea Planters Association (ATPA), North-East Tea Association (NETA). Here we have discussed about the two organizations viz. ABITA and ATPA.

Assam Branch of Indian Tea Association (ABITA): The Assam Branch of Indian Tea Association (ABITA) gardens are the pride of Assam. National Family Welfare program is promoted by ABITA since 1950. ABITAprovide assistance for conducting football competitions, cultural heritage promotion of the tea tribe community. It helps in enabling the progress of homegrown talent in the field of handiworks and skill development. Another initiative ABITA was its partnership with UNICEF ion 2000. It lead to certain facilities such as Education, Crèche Development & Nutrition Program etc. Promotion of health, food, cleanliness facilities, and human rights among the population of the Tea Garden. The work of the project is a still at full peace with full support and participation of the local people of the Garden. The organization focuses on development of the girls in the field of Skill Development Programme (The Assam Tribune, Guwahati, Thursday, February 12, 2015).

The Assam Tea Planters' Association (ATPA) completing 50 years of its humble but useful life this year, looks forward to better productivity and industrial peace in the years to come. It helps in promoting the mutual interests of the Associate Tea Estates. ATPA provide assistance in the procurement of Rations and other crucial items required by the Member Tea Estates. The relation with Govt. and other authorities is maintained by ATPA which affects the Tea Industry. It also provides assistance and guidance to their own Tea Estates on Labour and other matters. But it is observed that like ABITA, ATPA has not been played a major role in the upliftment of the TGLs community. As a social program, they have been conducting a Football Tournament at the state level for a long time. It brings interest to TGLs youths towards sports and health.

Table No. 1.1 shows their views on the Facilities provided by ABITA, and their opinion about the organization.

Table No. 1.1: Satisfaction of Respondents Regarding Facilities Provided by ABITA

Respondents View	Responds of Gardens under ABITA	
	Frequency	Percentage(%)
Satisfactory	51	76.12%
Unsatisfactory	16	23.88%
Total	67	100%

It is inferred that out of 67 respondents of the gardens regarding facilities provided by ABITA, 51 (i.e.

76.12%) of them responded as satisfactory whereas 16 (i.e. 23.88%) of them responded as unsatisfactory. Majority of the respondents were found satisfactory about the facilities provided by them.

Table No. 1.2 shows their views on the Facilities provided by ATPA, and their opinion about the organization.

Table No. 1.2: Satisfaction of Respondents Regarding Facilities Provided by ATPA

Respondents	Responds of Garden	
View	Frequency	Percentage(%)
Satisfactory	20	29.85%
Unsatisfactory	47	70.15%
Total	67	100%

From Table No.1.2 the study revealed that out of the total respondents of selected Tea Garden, 20 (i.e. 29.85%) of them responded as satisfactory whereas 47 (i.e. 70.15%) of them responded as unsatisfactory. From the above study it is seen that majority of the respondents were found not satisfactory about the facilities provided by them.

Labour and Employee Association

Assam Chah Mazdoor Sangha (ACMS)

There exist a union-body of ACMS in every Tea Garden where there are separate president secretary and members. Simultaneously the INTUC's activities were speeded to the Tea gardens of Assam in a way that had give birth a few independent Tea trade unions such as 1. Dibrugarh Zila Chah Mazdoor Sangha, 2. Sibsagar Zila Chah Mazdoor Sangha, 3. Jorhat Zila Chah Mazdoor Sangha, 4. Tezpur Zila Chah Mazdoor Sangha, 5. Lakhimpur Zila Chah Mazdoor Sangha, Mongoldoi Zila Chah Mazdoor Sangha. After that, it was decided to amalgamate these entire district Sanghas into a single body under the banner of Assam, Chah Mazdoor Sangha on August 9, 1958. At present ACMS have all total 22 (twenty-two branches) in Assam viz. Bokakhat, Biswanath, Borsolla, Dhekiajuli, Dibrugarh, Doomdooma, Golaghat, Goalpara, Helem (Tezpur), Jorhat, Kamrup, Moran, Mangaldoi, Margherita, Naharkatia, Nazira, Nagaon, North-Lakhimpur, Panitola (Tinsukia), Sonari, Tingrai, Tezpur and Titabar. Among these 22 branches the Dibrugarh Branch is the Head office of ACMS. One of the major function of the ACMS is wage settlement of the labourers with the tea planters.

The main aims and objectives of the ACMS at par its constitution is as follows:

1. To organize and unite all the Tea workers of 15 years of age and above working either as monthly salaried employees or daily wage labourers.
2. To protect the collective interests of TGLs such as wage hike, bonus, provident fund, the abolition of child labour, medical facilities and other allied causes.
3. To increase co-operation, integration, dignity and communication among TGLs.
4. To abolish castism, racism, class conflict and partiality in the TGLs society.
5. To increase the level of understanding and goodwill among the workers and between the workers and employers.
6. To aid or social security in respect of Education, disease, death or accident of the TGLs people.
7. To take initiative for educational as well as social development of its members and their dependents.
8. To publish newspapers, produce moving pictures reflecting TGLs culture, organize symposia to discuss the appalling plight of TGLs and thereby to arouse awareness.
9. To raise political funds to meet election campaign expenses on behalf of the ACMS sponsored candidates.
10. To put pressure on the state legislative Assembly and Parliament for legislation pertaining to TGLs security and upliftment.
11. To grant social and economic rights and share of the profit in the industry and share of the profit in the industry and due share in the management for the TGLs and many others.

The major roles which are played by ACMS are as follows:

1. To enhance the working and living conditions of the TGLs, ACMS members have been putting pressure on the government and Tea planters in a democratic way.
2. ACMS is also concerned with the enrichment or revision of a Tea worker's daily wage. The revision of the daily wage has come through the agreement between ACMS and Tea planters association.
3. ACMS plays a significant role in settling Bonus disputes arising in different Tea companies and

private Tea gardens of Assam. It was tried to raising the percentage of Bonus.

4. The ACMS is also related to the lingo-cultural development of the TGLs. It tries to preserve and develop its diversified lingo-cultural heritage.
5. ACMS has been regularly conducted workers educational program and training in collaboration with various organizations.

Apart from all of these, the ACMS has been raised the vexed demand for the inclusion of the TGLs community into the Scheduled Tribes list.

Table No.1.3: Satisfaction of Respondents regarding Initiatives taken by ACMS

Respondents View	Responds	
	Frequency	Percentage(%)
Satisfactory	26	38.80%
Unsatisfactory	41	61.20%
Total	67	100%

From Table No 1.3, it is seen that out of 67 respondents, 26 of them (i.e.38.80%) are satisfied with the initiatives taken by Labour and Employee Association (ACMS), whereas 41of them (i.e. 61.20%) of them are not very satisfied with the initiatives taken by the ACMS.

Major Findings

The major findings have been presented below:

1. It was found that out of 67 respondents of the gardens regarding facilities provided by ABITA, 51 (i.e. 76.12%) of them responded as satisfactory whereas 16 (i.e. 23.88%) of them responded as unsatisfactory. From the above study it is seen that majority of the respondents were found satisfactory about the facilities provided by them.
2. The study revealed that out of the total respondents of selected Tea Garden, 20 (i.e. 29.85%) of them responded as satisfactory whereas 47 (i.e. 70.15%) of them responded as unsatisfactory. From the above study it is seen that most of the respondents were found not satisfactory about the assistance provided by them.
3. It is also found that out of 67 respondents, 26 of them (i.e. 38.80%) are satisfied with the iniiatives taken by Labour and Employee Association (ACMS), whereas 41 of them (i.e. 61.20%) of them are not very satisfied with the initiatives taken by the ACMS.

Conclusions

The initiatives taken by Government, Planter's Associations such as Assam Branch Indian Tea Association (ABITA), Assam Tea Planters Association (ATPA), Assam Chah Mazdoor Sangha (ACMS), Tea Board of India (TBI) etc. even though various initiatives and welfare programs has been implemented, but it is very necessary to know whether the respondents are aware and truly benefitted with the schemes and initiatives. Even though many schemes were implemented but quite a few of them are new and are still in the implementation stage, so the schemes still have a lot of portions to cover in the coming days.

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Assessing the Conflicting Situations for Value-oriented Behaviour experienced by Adolescents

*Dr. Usha Choudhary

Abstract

The purpose of conducting this study was to assess the conflicting situations for value-oriented behavior experienced by adolescents. One hundred and sixty students from two types of societal background (Rural and Urban) with two levels of gender (Male and Female) belonging to two level of age (12-14 years and 16-18 years) participants 80 were from rural areas studying in institutes situated in villages from Uttar Pradesh, while 80 from city. All the participants were studying in High School and Intermediate Classes and belonging to middle class families. The data were used qualitative. Results, analyzed using the chi- square test, revealed that the highest percentage of value related conflict situation (family vs friends), rural, female and elders.

Introduction

Human beings have the unique ability to define their identity, choose their values, and establish their beliefs. All three of these directly influence the behavior of a person. People have done much, including war and sacrificing their lives, to demonstrate the validity of their beliefs! In contrast, people are not motivated to support or validate another's beliefs when those beliefs contradict their own beliefs.

According to (Furman and Buhrmester, 1992), the adolescent's growing desire to establish his or her own identity may result in a temporary increase in conflict between parent and child during early adolescence. These conflicts primarily result from inconsistent expectations of adolescents and parents regarding appropriate behavior and the transition to greater autonomy and responsibilities, (Dekovic *et al.,* 1997; Montemayor, 1983; Smetana, 1989; Smetana, 1995). However, too many conflicts may be a risk for adolescent psychosocial adjustment and well-being (Cooper, 1988; Mills and Grusec, 1988).

Value conflict is an integral part of human life and it is unavoidable to avoid it. When adolescents, groups, organizations, and nations interact with each other, there is a possibility that some type of value conflict may occur when two or more have goals and objectives, activities or desirable or pro-social aspects of humanity's well-being. When relationships are active at the same time, they can be called value conflicts. Since value conflicts lie at the core of a person's identity, they are extremely difficult to resolve and reducing conflicts becomes essential for the welfare of mankind, (Trehub, 1959). During adolescence, important changes take place in the social world. As youth increasingly value their inter-personal relationships, it may be particularly important to perceive high levels of social support to promote a sense of social connectedness and overall happiness, during adolescence, important changes take place in the social world. As youth increasingly value their interpersonal relationships, it may be particularly important to perceive high levels of social support to promote a sense of social connectedness and overall happiness (Meehan, Durlak and Bryant, 1993).

In fact during adolescence, time spent with close friends becomes increasingly beneficial and mood enhancing, (Masten, Telzer, Fuligni, Lieberman, & Eisnberger, 2012).

These findings suggest that conflict resolution might moderate the relation between parent-adolescent conflict frequency and adolescent adjustment. Moreover, the findings regarding interparental conflict resolution suggest that it is not only important to include conflict resolution, but also to distinguish different conflict resolution styles. Although there are no reported data on the moderating role of different conflict resolution styles, conflict resolution has been associated with adolescents' psychosocial adjustment.

Conflict engagement of adolescents, characterized by attack and display of anger, seems to be positively related to both externalizing problems (Edwards *et al.,* 2001; Jaffee & D'Zurilla, 2003; Rubenstein & Feldman, 1993, Sanders *et al.,* 1992).

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Statement of the problem

The purpose of this study is to investigate to assess the conflicting situations for value oriented behaviour experience among adolescents. Further in-depth consideration is needed to advance our understanding of the relationship between conflicting situations. This strategy is varied important also because value related changes during in this age group (Adolescents) might prove as an investment into societal development in a broader time perspective.

On the basis of this comprehensive background, some question arises in the mind that needs some further insight (investigation). The following questions are major concern:

Method

Objective of the Study: To map the domain of understanding effect of conflicting situations for human values oriented behaviour to experiences among adolescents.

Hypothesis:

1. There is a significant difference in human value of adolescents from urban and rural area.
2. There is a significant difference in human value of adolescents male and female.
3. There is a significant difference in human value of adolescents younger and elder.

Participants: One hundred and sixty students from two types of societal background (Rural and Urban) with two levels of gender (Male and Female) belonging to two levels of age (12-14 years and 16-18 years) were participants in the study. Out of 160 participants 80 were from rural areas studying in institutes situated in village of Uttar Pradesh, while 80 were from city. All the participants were studying in High School and Inter-mediate classes and belonging to middle class families.

Task and Procedure

The participants were engaged in conversation with the help of an interview guide. It had a number of pertinent questions. These questions were in Hindi for the convenience of the different societal background students. These were:

1. Describe those characteristics and behavior of a person that are necessary for a good personality. Describe those characteristics and behaviors, which you value to lead a better life.
2. Describe your our life experiences or any real experiences that you have come across which involve these values.
3. What positive situations that is helpful in facilitating such value oriented behaviors?
4. What are the negative situations in your view which inhibit the movement toward these values?
5. Explain any of your value conflicting situations.
6. Why these values are not taken into account while acting or behaving in real life circumstances?
7. What are the outcomes of value oriented behaviors: for self and society?

It may be noted that the above questions were not posed in the form of any set questions or stimuli leading to quick response rather they were more like reflective analysis routed in real life value experiences. They were given enough time to think and respond.

The details of conversation were recorded by the researcher and content analyzed to learn about the issues of present research.

This paper is focused on assess the conflicting situations for value- oriented behaviour experienced by Adolescents (covered under the second point of the interview guide). The conflicting situations for value-oriented behaviour related experience elicited by participants includes- Good vs. Bad conduct, Honesty vs. Dishonesty, Respect vs. Disrespect, Truth vs. Lies, Violence vs. Non- violence and Family vs. Friends.

Results

This section reports an exploration of the conflicting situations for value-oriented behavior reported by adolescents. The study involved 160 students from two types of societal background (rural and urban) with two levels of gender (male and female) belonging to two levels of age (12-14 years and 16-18 years) participants with a view to answer the research question about value related experiences elicited by entire participants and the data were analyzed.

Table 1: Conflicting situations for value-oriented behavior experienced by entire participants (N=160)

S. no.	Value related conflicts	Total frequency (N=160)	Percent-age
1.	Good conduct vs. Bad conduct	34	21.25
2.	Honesty vs. Dishonesty	14	8.75
3.	Respect vs. Disrespect	12	7.5
4.	Truth vs. Lies	26	16.25
5.	Violence vs. Non-violence	24	15
6.	Family vs. Friends	44	27.5

This table shows that the most conflicting situation among all the participants is Family vs. Friends (44), then Good conduct vs. Bad conduct (34) and the least conflicting situation among all participants is Respect vs. Disrespect (12), then Honesty vs. Dishonesty (14).

Table 2: Conflicting situations for value- oriented behavior experienced by Urban (N=80) and Rural (N=80) participants

S. No.	Value related conflicts	Urban		Rural		X^2
		F	%	F	%	
1.	Good conduct vs. bad conduct	20	12.5	14	8.75	1.05
2.	Honesty vs. Dishonesty	8	5	6	3.75	0.28
3.	Respect vs. Disrespect	10	6.25	2	1.25	5.33*
4.	Truth vs. Lies	18	11.25	8	5	3.84
5.	Violence vs. Non-violence	16	10	8	5	2.66
6.	Family vs. Friends	12	7.5	32	20	9.09**

*P<0.05; **P<0.01

Respect vs. Disrespect (5.33) = P<0.05 and Family vs. Friends (9.09) =P<0.01. The chi-square results revealed significant conflicting situations for value-oriented experienced between Urban and Rural participants. Results are shown in Fig. 1.

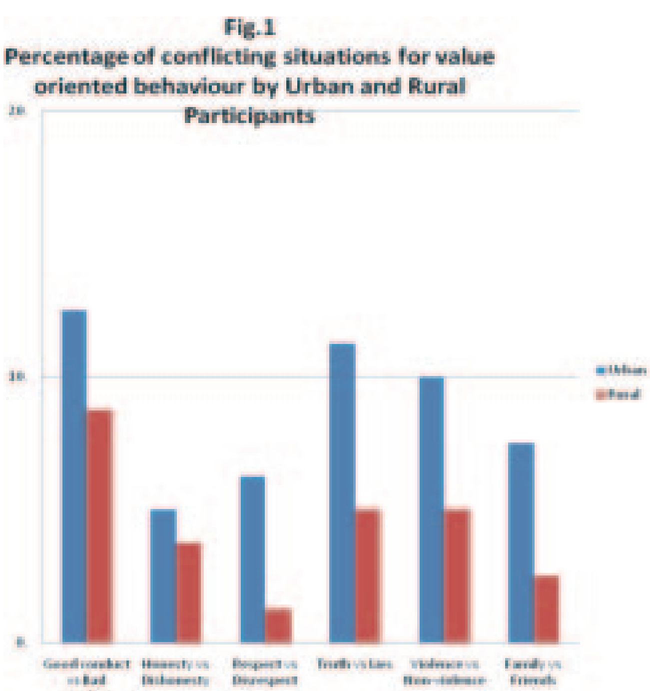


Fig.1 Percentage of conflicting situations for value oriented behaviour by Urban and Rural Participants

Table 3: Conflicting situations for value-oriented behavior experienced by Male (N=80) and Female (N=80) participants

S. No.	Value related conflicts	Urban		Rural		X^2
		F	%	F	%	
1.	Good conduct vs bad conduct	20	12.5	14	8.75	1.05
2.	Honesty vs Dishonesty	8	5	6	3.75	0.28
3.	Respect vs Disrespect	8	5	4	2.5	1.33
4.	Truth vs Lies	10	6.25	16	10	1.38
5.	Violence vs Non-violence	20	12.5	4	2.5	10.66*
6.	Family vs Friends	14	8.75	30	18.75	5.81*

*P<0.05

Violence vs. Non- violence (10.66) and Family vs. Friends (5.81) = P<0.05. The chi-square result revealed significant conflicting situations for value- oriented experienced between Male and Female participants. Results are shown in Fig. 2.

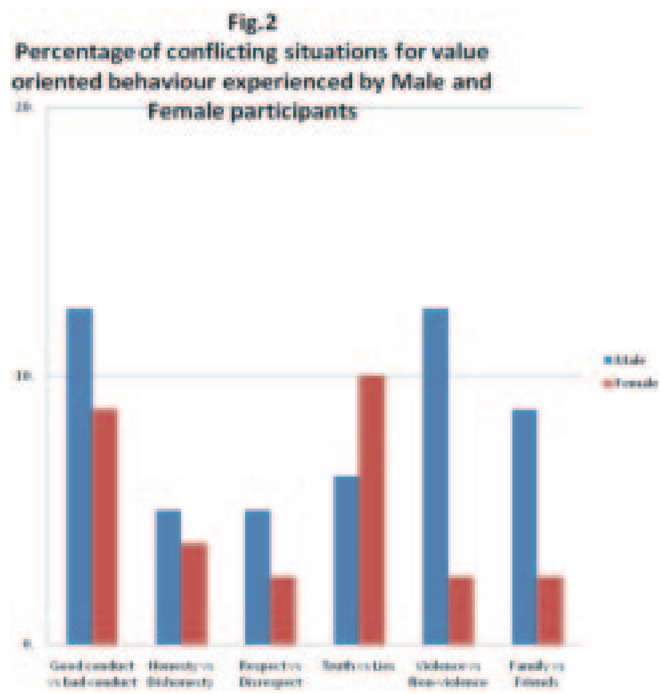


Fig.2 Percentage of conflicting situations for value oriented behaviour experienced by Male and Female participants

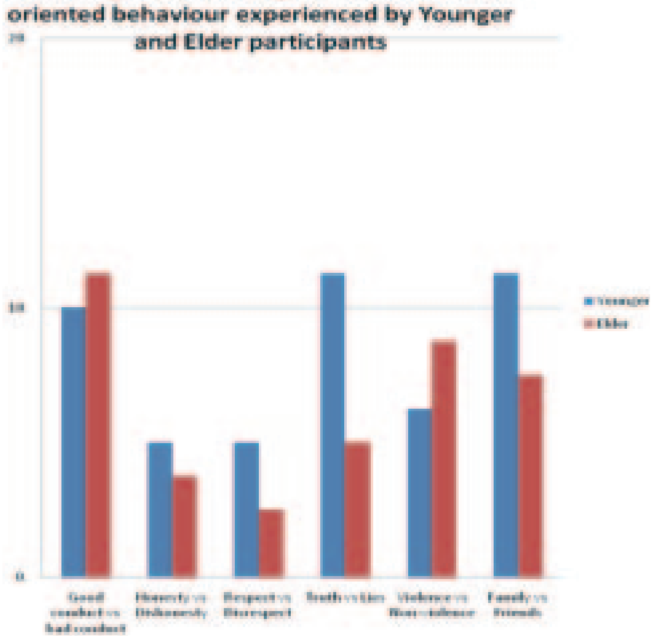
Table 4: Conflicting situations for value- oriented behavior experienced by Younger (N=80) and Elder (N=80) participants

S. No.	Value related conflicts	Younger		Elder		X^2
		F	%	F	%	
1.	Good conduct vs bad conduct	16	10	18	11.25	0.11
2.	Honesty vs Dishonesty	8	5	6	3.75	0.28
3.	Respect vs Disrespect	8	5	4	2.5	0.33
4.	Truth vs Lies	18	11.25	8	5	3.84*
5.	Violence vs Non-violence	10	6.25	14	8.75	0.66
6.	Family vs Friends	18	11.25	26	16.25	1.45

*$P<0.05$

Truth vs. Lies (3.84) = $P<0.05$. The chi-square results revealed significant conflicting situations for value oriented experienced between Younger and Elder participants.

Fig.3
Percentage of conflicting situations for value oriented behaviour experienced by Younger and Elder participants



Summary of Results

Summary of present study of research, conflicting situations for value oriented behavior experienced by participant's responded most preferred value related conflict was Family vs. Friend, then Good conduct vs. Bad conduct, Honesty vs. dishonesty by urban, Family vs. Friends by rural, Good conduct vs. Bad conduct and Violence vs. Non-violence by male, Family vs. Friends by female, Truth vs. Lies and Family vs. Friends by younger and Family vs. Friends by elder. Least preferred value related conflict was Respect vs. Disrespect by entire participants, Honesty vs. Dishonesty by urban, Respect vs. Disrecpect by rural, Honesty vs. Dishonesty and Respect vs. Disrespected by male, Respect vs. Disrespect by female, Honesty vs. Dishonesty and Respect vs. Disrespect by younger and Respect vs. Disrespect by elder participants.

Finally the findings clearly demonstrated that in comparison to urban-rural, male-female and younger-elder participants' effects of conflicting situations for value oriented behaviour experienced by adolescents.

Discussion

In the present study, values of adolescents from two types of societal background (Urban and Rural) with two levels of gender (Male and Female) belonging to two levels of age (12-14 and 16-18 years) examined. The participants were selected from middle class family, participants were given a questionnaire and they were interviewed to indicate the extent of values present on the scale. Data regarding the variable name, value related experience. The results were analyzed using chi- square and are elaborated in the result section.

The results of the entire participants reveal that value related conflicting situations are very high in Family vs. Friends and Good conduct vs. Bad conduct.

According to several studies have considered how within- person changes in support relate to fluctuations in distress over the course of months or years during adolescence (e.g., Hazel, Oppenheimer, Technow, Young & Hankin, 2014; Weinstein *et al.*, 2006; Zhang *et al.*, 2018). Although adolescents should not only feel happier and more socially connected when they perceive more "absolute" levels of support from close people, but also when they experience a relative increase in support in daily life. Therefore, no studies have examined the independent and support on adolescents' daily social and emotional well- being.

Talib, Abdullah and Mansoor (2011) argue that a child's family is a socio-cultural-economic system that has a significant impact not only on children's behavior but also on the development of their character. Therefore, ignorance in their parenting can lead them towards unwanted harmful effects which ultimately lead to behavioral problems in adolescents.

Leal (1999), Western industrial society has not to terms with being an industrial society at all. It continues to struggle with conflicting value systems, all of which are important but which are important but which are difficult to reconcile and which have internal contradictions. Although these conflicts can be readily appreciated in the relations between organizations dedicated to serve those antagonistic values. The present study is a theoretical exercise, in other words, it is an attemptat finding a better way of looking at value conflicts which, by enhancing our understanding of what is going on when they occur, may hopefully help us in finding better ways to deal with them practically.

Conclusion

Conflicting situations an extra and a very important part of the value oriented behavior experienced among adolescents. Participants examined on three parts: urban-rural, male-female and younger-elder. The entire responses obtained on the value related conflicts were: Good conduct vs. Bad conduct, Honesty vs. Dishonesty, Respect vs. Disrespect, Truth vs. Lies, Violence vs. Non-violence and Family vs. Friends.

It was supported by Bhagavad Gita begins with a description of the breakdown of a healthy, competent human being in a very stressful and conflicting situations. Stress was due to stake involved and the immediacy of the crisis and conflict because, lack of acceptable choices.

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A Critical Review on Workplace Stress and Coping Mechanism: Employee Perspective (A special reference to Multinational Company)

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Abstract

Work-related stress is a prevalent response that arises when the workload intensifies and reaches unreasonable levels. The presence of stress is an inherent aspect of both our personal and professional lives, affecting almost all individuals without exception. Work-related stress is an emerging and valid concern in contemporary society. Occupational stress is a significant challenge for both organizations and people. The aforementioned factors may lead to increased rates of employee turnover, burnout, absenteeism, compromised physical and mental well-being, diminished morale, and decreased levels of efficiency and performance. A significant proportion of the workforce lacks awareness of their own stress levels. Individuals may exhibit deviant behavior unknowingly, which may have negative effects on their health and performance. The present research aims to evaluate the impact of organizational and job design on alleviating the negative effects of certain stresses. This research focuses on the literature on stress, including its definition, historical background, key contributors in stress research, different forms of stress, factors that give rise to stress, and the associated consequences of stress.

Introduction

The workforce's abilities and aptitudes serve as indicators of the totality of human resources, which also include innate skill, capacity, and acquired knowledge. In the contemporary period characterized by globalization and liberalization, there has been a notable surge in competitiveness among organizations, resulting in employees dedicating a significant portion of their time to work-related activities. Employees have a significant responsibility for attending to work-related tasks, managing work-related stress, nurturing personal relationships, handling personal finances, and adapting to changes. The many facets of modern-day existence may induce significant levels of stress, resulting in heightened physical exertion and emotional tolls on the overall well-being of workers. In contemporary times, the term "stress" is often used in several fields such as management, organizational behavior, psychology, medicine, and health sciences. This is due to the increasing significance of stress as a pressing issue in modern society. The topic under consideration has been a subject of recurrent controversy over an extended period of time, with several meanings and implications attributed to it, varying according to various views. Effective administration, strategic planning, continuous growth, and retention of people are fundamental factors contributing to the achievement of organizational success. In the quest for organizational success, the establishment of a stress-free working environment is vital for the efficient operation of the firm. Stress refers to the psychological and physiological pressure, strain, or tension that individuals encounter on the job, which they endeavor to mitigate in order to maintain a state of normalcy in the working environment. Research has shown that job stress (JS) is a global concern, with significant financial implications for organizations and communities on a yearly basis. The projected cost of JS-related repercussions is believed to reach hundreds of billions of dollars globally. Stressors possess several dimensions, and the cumulative effect of stressors may be a primary factor leading to job stress, which in turn negatively impacts job satisfaction. The individual occupying a position within an organization fulfills the anticipated responsibilities of the role assigner by dedicating their physical and mental capabilities, therefore commencing the execution of their duties and integrating themselves into the organizational structure via this role. Individuals experience stress when their expectations are not fulfilled by the resources provided

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by the business, as a result of an excessive workload that exceeds their physical and mental capacities to effectively manage the allocated tasks. The findings of the study indicate that inadequate management of role stressors might lead to the manifestation of stress symptoms among individuals in the workplace, therefore posing a risk to their behavioral patterns. In recent years, scholars studying multinational corporations (MNCs) with a cross-cultural emphasis have directed their attention towards several aspects that impact the behaviors and attitudes of workers. These elements are particularly significant owing to the unique attributes of cross-cultural MNCs, including worldwide dispersion, intrinsic cultural variety, and the dynamic nature of their organizational structure.

Review of Literature

Dar, Akmal, Naseem & Khan (2011) study aimed to identify the different causes of stress and analyze how occupational stress affects job performance in 143 Pakistani multinational business, college, and bank workers. The study findings indicate that job-related stress has various consequences, including the underestimation of one's abilities, workplace discrimination, a lack of clarity regarding one's role, concerns about job security, distressing events within the organization, and financial instability. These outcomes can lead to reduced attentiveness, mental distress, and impaired decision-making capabilities. The research examined the differential levels of stress exposure between male and female workers. The study's findings indicated that work-related stress had a detrimental impact on both the job performance and motivation levels of the workers.

Malik (2011) study investigated the effects of occupational stress on a sample of 200 workers working in commercial and state banks located in Quetta City. The research found that private sector bankers reported substantially greater job-related stress than public sector workers. The poll also indicated that private bank employees were stressed by their workloads and busy schedules. Role load, authority, conflict, and lack of superior support were the most workplace stressors in both industries. The research found that when bank workers were saddled with too much responsibility, work multiplicity, injustice, partiality, and contradictory assignments, they were unable to take the necessary breaks. The stress management training of female nurses at Golestan, Razi, and Abuzar Hospital, affiliated with Ahvaz University of Medical Sciences, was studied by Hazrati, Karimi, Hasani, Dalvand, and Soltani (2012). The curriculum included instruction on coping with uncomfortable exhaustion, a loss of uniqueness, and the option of private execution. The female nurses were split into an experimental and a control group. The initial section of the sample did not participate in the drills. The second group had participated in cognitive behavioral therapy for a total of nine sessions. Finally, the research indicated that the training had helped members of the experimental group recover from burnout and demonstrate their uniqueness and increase their private execution compared to the control group. Rabe, Nubling & Giacomuzzi (2013) Compared the mental stress of 309 German work council members to the average of all professions. According to the research, work council members had more mental stress than the ordinary professional. The survey found that full-time and volunteer work councils had different stress levels. Due to their occupation, work council members' employment responsibilities vary. Increased psychological stress has been linked to crowd formation, leadership, job uncertainty, and poor colleague support. The research suggests implementing preventative steps to address the particular needs of work council members and mitigate psychological stress and strain. Work satisfaction and morale were shown to be negatively affected by self-role distance and inter-role distance, according to study by. An experimental study of government and business IT services was done by Pestonjee and Singh (1987). This study's findings indicated that the primary contributors to role stress for system analysts and managers were 'role erosion and resource inadequacy,' while 'role expectation conflict and personal inadequacy' were identified as secondary contributors. An organization may experience role-related stress, as proposed by Cox (1987), when its members are unclear about their tasks, their status within the organization, or their connections with others. A stressful situation may arise when an employee feels pressured to meet the expectations of too many influential people in their professional network. Another possibility is role overload, which occurs when a person in a given profession struggles to meet the demands of many positions. Coverman (1989) argues that reducing workplace tension may be achieved via more methodical approaches to designing jobs within an organization. Pareek (1999) provided an extensive compilation of stressors linked to an individual's performance within a professional setting, often referred to as organizational role stress. This was accomplished through the development of a measurement tool known as the Organizational Role Stress (ORS) scale. Bano and Jha (2012)conducted a study in India to look at how employees in the private and public sectors there see organizational role stress differently. The results showed that role erosion was the most significant stressor, whereas a lack of resources was the least significant. There were also no statistically significant differences between public and private sector workers' reports of experiencing Organizational Role Stress. (Sharma *et al.,* 2020), Identified educational attainment and work experience as additional variables that influence workers' perceptions of Organizational Role Stress. Role isolation may be seen as a consequence of inadequate inter-connection and communication between workers' responsibilities and other functions within an organization. The phenomenon of psychological differentiation within the role set may be elucidated by this concept. The phenomenon under consideration is characterized by the sense that individuals encounter challenges in establishing connections, indicating the presence of limited connections between one's own role and that of others. A study conducted by Sameera, Shaik, and Firoz (2016) investigated stress management practices among personnel working in the business process outsourcing (BPO) industry in the city of Chennai. The study was conducted among workers of nationalized business process outsourcing (BPO) companies in Chennai. The sample size consisted of 100 participants. The researchers used percentage analysis and utilized Microsoft Excel for data analysis. The researchers discovered that a significant proportion of workers experience apprehension due to the presence of inadequate job quality, which then leads to heightened levels of stress. Research indicates that a significant proportion of workers in the Business Process Outsourcing (BPO) industry experience high levels of stress. A majority of the workers express a sentiment of being overwhelmed with their workload. A significant number of individuals experience heightened levels of stress as a result of their failure to meet work-related performance goals. Fifty percent of the workers acknowledged the existence of interpersonal conflict within the workforce. The matter is of significant importance to senior executives. I believe that the strategies used by Business Process Outsourcing (BPO) firms to mitigate employee stress are efficacious. The majority of workers endeavor to identify solutions that might alleviate their stress levels. On average, the workers engage in the practice of yoga or adopt other methods to alleviate stress. Additionally, a majority of the employees successfully maintain a balance between their professional and personal lives. Direction and counseling The concept of quality awareness refers to the level of understanding and recognition individuals have towards the importance of quality in various contexts. It encompasses It is important to provide financial resources towards psychological support for workers. In table 1, we have described the common attribute of research domains which is accepted by parameters.

Statement of the Problem

Stress is a physiological and psychological state characterized by a range of non-specific alterations in a biological system. It is essential for each employee to possess a comprehensive comprehension of their own stress-provoking cognitions, emotions, and actions. The impact of Job stress significantly affects organizational productivity and well-being. Indeed, each company has unique obstacles and stressors. The multinational company (MNC) mobilizes urban resources, creates jobs, and builds transportation and communication infrastructure to develop metropolitan regions. Stress is a bodily and psychological condition with non-specific biochemical changes. It is essential for each employee to possess a comprehensive comprehension of their own stress-provoking cognitions, emotions, and actions. The detrimental impact of job stress on organizational productivity and human well-being is a significant concern. Indeed, it is evident that each sector has its own array of challenges and sources of stress. The sugar sector plays a vital role in the development of rural regions via the mobilization of rural resources, the generation of job opportunities, and the establishment of transportation and communication infrastructure. India has a total of around 500 operational sugar mills. Therefore, a research investigation is conducted inside a multinational corporation (MNC). Multinational corporations (MNCs) are operating in several regions of India. Every mill is comprised of many divisions, including processing, accounting, human resources, and the finance department. Therefore, this research is conducted from the perspective of the employee. Individuals utilize psychological and social coping mechanisms to manage and handle stress. Stress management may benefit from specific methods. The research examines respondents' stress experiences and coping mechanisms.

Stress Criteria

In recent years, several scholars have categorized stress into three distinct categories, namely eustress, neustress, and distress.

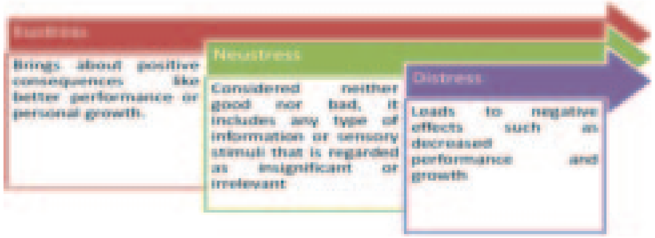

Figure 1: Stress Types

The term "eustress" refers to the kind of stress that has beneficial outcomes, such as increased productivity or personal development. The word "eu," which means "good" in Greek, is where the word "eu" comes from. When a person is inspired or driven, they are experiencing eustress. The term "eustress" refers to a certain kind of stress that motivates positive responses. In the same way, eustress refers to stress that motivates peak performance. Stress that is neutral in value, or "neustress," may refer to any sort of data or sensory stimulus that is deemed unimportant or irrelevant. Hearing about a hurricane or other natural catastrophe in one nation might cause what is known as "neustress" in a completely other country. The third kind of stress, "distress," refers to the negative repercussions of stress, such as stunted development and performance. Stress, or "bad stress" as it is often referred as, is what causes these problems. When most people think of stress, they see themselves under some kind of negative pressure or experiencing some sort of negative incident, or they picture themselves dealing with the annoying or depressing occurrences that occur on a regular basis. Acute stress is severe but short-lived, whereas chronic stress is less intense but lasts longer. The American Institute of Stress (AIS) found that persistent fear increases the body's vulnerability to illness. From what has been said above, we may infer that recent studies have classified three distinct types of stress.

Source: The Yerkes-Dodson curve (Seaward, 2017, p. 9)

Coping strategies

According to Folkman (1980), coping is defined as the cognitive and behavioral strategies used by individuals to effectively navigate and address the internal and external pressures associated with challenging circumstances. Folkman (1984) asserts that a crucial characteristic inherent in the conceptualization of coping is its formulation in isolation from its resultant effects. Coping may be defined as the deliberate actions used to effectively manage and address various pressures, irrespective of the outcomes or level of success achieved via such efforts. The efficacy of a coping method is not intrinsically determined by the approach itself. In study, it is noted that this particular approach diverges from psychodynamic conceptualizations in its treatment of intra-psychic defense processes. Unlike psychodynamic perspectives that view certain defense mechanisms, like denial, as inherently less effective than others, such as suppression, or that categorize coping strategies based on specific criteria, such as adherence to reality, this approach takes a different stance. According to Folkman (1984), this definition also diverges from the prevailing conceptualizations of coping seen in popular discourse, whereby coping often connotes effective management or achievement, while not coping is associated with failure. Stress coping tactics refer to the methods used by individuals to promote mental equilibrium and effectively navigate challenging circumstances. Smith and Kirby (2011) proposed a categorization of coping techniques into three modes. The first mode, known as primary-control engagement coping, involves endeavors to modify the circumstances. This mode includes tactics such as problem-solving and attempts at regulating emotions. As an example, an individual may choose to increase their working hours in response to a demanding circumstance, such as a heavy workload. In addition, individuals have the potential to regulate their emotions through music consumption and participation in physical exercise. The second mode refers to secondary-control engagement coping, which encompasses endeavors to modify personal attributes in order to adapt to the given circumstances. This mode encompasses several tactics, including positive thinking, cognitive restructuring, and acceptance. This coping strategy involves accepting the current state of affairs while maintaining hope that things will improve in the future. Acceptance that all the issues unfolding are God's will and that God himself will take control could be shown by regular prayer and church attendance. Disengagement coping, the third style of coping, consists of attempting to separate oneself from the cause of stress via methods including denial, avoidance, and wishful thinking. More than half of those surveyed by the American Psychological Association found relief from their symptoms through activities as varied as seeking out social support, listening to music, engaging in physical activity, reading, meditating, praying, attending religious services, practicing yoga, or receiving a massage. These recommended methods of coping aren't the only options; there are others that don't seem to be as beneficial. Methods in this category include indulging in screening activities like viewing media or browsing the web, snacking on junk food, or imbibing alcoholic beverages. Some of these methods may be hazardous to health and have a lower success rate in relieving stress. Folkman and Lazarus (1986) define coping as "the mental and behavioral processes by which an individual meets the demands of an important personal environment transaction." What's at stake in a person's main and secondary evaluations informs how that person chooses to deal with adversity. People's behavior changes, including increased self-control, avoidance, and responsibility-taking, when their sense of self-worth is at risk. Most individuals find that detaching themselves from their difficulties, exercising self-control, reaching out to others for support, and taking a more optimistic view of their situation are all helpful ways to deal with emotional pain.

Work environment

The work environment is considered to be one of the primary variables that contribute to the experience of stress. It is essential for the firm to provide personnel with adequate amenities. This facilitates a state of comfort, enabling individuals to focus their attention on their tasks. The execution of well-designed policies is crucial for ensuring a high level of environmental hygiene. The absence or substandard work environment might potentially induce stress among workers. The implementation of appropriate work schedules within an organization facilitates the allocation of tasks by taking into account the workload of individual workers. The majority of enterprises are responsible for creating schedules, although they often have difficulties executing them effectively. The proper implementation of schedules by firms has the potential to effectively alleviate the excessive workload burden placed upon personnel. The personnel will successfully do the tasks without experiencing any stress or anxiety. This initiative aims to enhance the emotional resilience of workers. This intervention is expected to facilitate stress management among workers. In order to provide necessary assistance to some workers, it is essential to arrange individual counseling sessions facilitated by professionals. These seminars aim to enhance workers' comprehension of stress-inducing factors, fostering their awareness and equipping them with effective stress management strategies. Organizing leisure activities such as excursions, entertainment events, sporting activities, and contests is recommended. These activities will help workers break away from their normal jobs, providing them with a respite from their professional responsibilities.

Table 1: Commonly Accepted Parameters by Experts

Experts Name	Effective Keywords for Research Domains						
	Coping Strategies	Stressors	Irritability	Work load	Time Pressure and Deadlines	Depression	Stress
In [1]	+	+	+	+	+	+	-
In [2]	+	-	+	+	+	+	+
In [3]	+	+	-	+	+	+	+
In [4]	+	+	+	+	+	+	+
In [8]	+	+	+	+	+	+	+
In [6]	+	+	+	+	+	+	+
In [10]	-	+	+	-	-	+	+
In [11]	+	+	+	+	+	+	+
In [12]	+	-	+	+	+	-	+
In [13]	+	+	-	+	+	+	-
In [14]	+	+	+	-	+	+	+

Observations

This review provides a methodical approach to comprehending the correlation between work-related stress and coping techniques, particularly across various data sources, study designs, and analyses. The primary objective of this systematic review is to provide valuable insights to future researchers on the phenomenon of work-related stressors and their significance in relation to coping services. This work aims to provide a valuable contribution towards the advancement of solutions that are more efficient in mitigating these stresses. The review provides a number of suggestions for future research, including the inclusion of larger sample sizes including a wider range of vocations and longer durations of study. It is recommended to further explore methodological aspects in a subsequent review, including longitudinal, qualitative, mixed-method, and experimental research designs. Further research is required in the realm of stress and coping mechanisms, considering the resolve to tackle the effects on workers' job and health-related results. In an increasingly prevalent landscape of hybrid work arrangements, whereby a balance is struck between remote work and in-office employment, the prioritization of employee well-being has heightened significance. The advent of novel work methodologies, such as hybrid working, remote working, offline working, and uberization, has resulted in heightened intricacy inside work settings. The increased awareness of the importance of mental well-being has had a significant influence on the lives and livelihoods of individuals, resulting in workers being more cognizant of their mental health. The recognition of this phenomenon has prompted workers to request more improvements in the work environment from corporations.

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कोविड-19 एवं स्कूली छात्रों के मध्य शिक्षा में डिजिटल और सामाजिक विभाजन : एक समाजशास्त्रीय विश्लेषण

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सारांश

डिजिटल लर्निंग आज के युग की महत्वपूर्ण आवश्यकता है जो किसी व्यक्ति और समाज के विकास में अहम भूमिका निभाती है। किन्तु शिक्षा में डिजिटल विभाजन सूचना एवं संचार प्रौद्योगिकी द्वारा सीखने की एक बाधा के रूप में मौजूद है। डिजिटल लर्निंग कोविड-19 महामारी के दौरान एक विकल्प के रूप में हमारे सामने आई किंतु भारत देश की असमान शिक्षा प्रणाली में डिजिटल विभाजन के कारण यह समावेशी थी या नहीं, यह कह पाना थोड़ा मुश्किल है जिसके कारण छात्र-छात्राओं को काफी समस्याओं का सामना भी करना पड़ा। कोविड-19 महामारी ने जहां सभी शैक्षिक गतिविधियों को डिजिटल क्षेत्र में धकेल दिया, वहीं पारंपरिक शिक्षा व्यवस्था में उन विद्यार्थियों के लिए कुछ मुश्किलों को बढ़ा दिया जिनके पास डिजिटल संसाधनों की अनुपलब्धता या उपयोग कौशल में कमी थी। इस पेपर का मुख्य उद्देश्य स्कूलों में डिजिटल लर्निंग में आने वाली सामाजिक चुनौतियों का विश्लेषण करना तथा कोविड-19 महामारी में शिक्षा पर इसके प्रभाव की व्याख्या करना है। संयुक्त राष्ट्र संघ 2020 के महासचिव ने कहा- कोविड महामारी के कारण विश्व स्तर पर 206 बिलियन विद्यार्थियों की शिक्षा प्रभावित हुई है। लगभग 20 मिलियन विद्यार्थी आर्थिक मंदी के कारण अगले वर्ष तक विद्यालय नहीं जा सकेंगे जिसमें लड़कियां व महिलाएं अधिक प्रभावित होंगी। इस शोध अध्ययन में आंकड़ा संकलन द्वितीयक तथ्यों के माध्यम से किया गया है। शोध अध्ययन के निष्कर्ष में पाया गया है कि डिजिटल लर्निंग ने महामारी के दौरान शिक्षा व्यवस्था को सुचारु रूप से चलाये रखने में मदद तो की किन्तु शिक्षा में डिजिटल विभाजन की समस्या कहीं न कहीं समाज में शैक्षिक असमानता एवं प्रगति में बाधक तथा सामाजिक बहिष्करण जैसी समस्याओं के लिए भी उत्तरदायी है।

प्रस्तावना

बालक के समाजीकरण एवं व्यक्तित्व के विकास में शिक्षा का महत्वपूर्ण स्थान है। परिवार के पश्चात शिक्षा ही वह माध्यम है जिसके द्वारा मनुष्य का समाजीकरण होता है। शिक्षा एक गतिशील प्रक्रिया है एवं समाज में परिवर्तन के साथ-साथ शिक्षा के स्वरूप में भी परिवर्तन हुआ है। सूचना एवं संचार प्रौद्योगिकी आज के युग की महत्वपूर्ण उपलब्धि है। मैनुएल कासटेल्स (2000) हम औद्योगिक समाज से सूचना समाज की ओर बढ़ रहे हैं। डिजिटल लर्निंग आज के समय की मांग है लेकिन शिक्षा के क्षेत्र में डिजिटल तकनीक द्वारा सीखने को इतना बढ़ावा मिलने के बाद भी यह डिजिटल विभाजन की समस्या के रूप में कहीं न कहीं मौजूद है। सामाजिक शब्द, डिजिटल डिवाइड सामाजिक, आर्थिक, सांस्कृतिक और राजनीतिक कारकों पर आधारित सूचना व संचार प्रौद्योगिकी तक असमान पहुँच को दर्शाता है।

डिजिटल डिवाइड सूचना व संचार प्रौद्योगिकी तक पहुंच उपयोग या प्रभाव के संबंध में एक आर्थिक व सामाजिक असमानता है। (अमेरिकी वाणिज्य विभाग 1995) चीन के पश्चात् भारत में दूसरी सबसे बड़ी विषम शिक्षा प्रणाली मौजूद है और कोविड-19 महामारी के पश्चात शिक्षा में सूचना एवं संचार प्रौद्योगिकी की आवश्यकता महत्वपूर्ण रूप से हमारे सामने है। कोविड-19 महामारी ने शिक्षा व्यवस्था पर प्रतिकूल प्रभाव डाला है जिसके द्वारा स्कूलों में पारंपरिक रूप से अभ्यास किए जाने वाले कक्षा आधारित शिक्षण और सीखने पर प्रतिबंध लगा दिया है। संयुक्त राष्ट्र शैक्षणिक वैज्ञानिक और सांस्कृतिक संगठन (यूनेस्को) ने एक रिपोर्ट जारी की है जिसके अनुसार- कोरोना महामारी से भारत में लगभग 32 करोड़ छात्रों की शिक्षा प्रभावित हुई है जिसमें 15.18 करोड़ लड़कियों की शिक्षा तथा 16.25 की करोड़ लड़के शामिल हैं। शिक्षण संस्थानों को कोरोना महामारी के दौरान शिक्षक व छात्र मूल्यांकन के लिए डिजिटल शिक्षण प्लेटफार्म पर स्थानांतरित होने के लिए मजबूर होना पड़ा और डिजिटल विभाजन के कारण कई समस्याओं का सामना भी करना पड़ा। भारतीय शिक्षा में सभी छात्रों को डिजिटल स्पेस में पढ़ने के लिए बुनियादी ढांचे का अभी भी अभाव है। कोरोना

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महामारी में न केवल भारत बल्कि विश्व में सभी देशों की शिक्षा प्रणाली को प्रभावित किया है। समाज को शिक्षा की लचीली प्रणाली की आवश्यकता है क्योंकि हम अप्रत्याशित संभावनाओं का सामना कर रहे हैं।

डिजिटल विभाजन : समाजशास्त्रीय दृष्टिकोण

समाजशास्त्रीय दृष्टिकोण इस बात पर जोर देता है कि तकनीक एवं सूचना संचार प्रौद्योगिकी ने राजनीति, समाज, संस्कृति के साथ-साथ शिक्षा के क्षेत्र में प्रवेश किया है तथा सामाजिक संरचना को प्रभावित किया है। किंतु शिक्षा के क्षेत्र में सूचना एवं संचार के बढ़ते महत्व के बाद भी डिजिटल असमानता के कारण डिजिटल विभाजन समस्या के रूप में मौजूद है जो सामाजिक असमानता, बहिष्करण, सांस्कृतिक अंतराल जैसी कई समस्याओं को जन्म देती है। अतः शिक्षा के समाजशास्त्र के लिए इसकी समझ महत्वपूर्ण हो जाती है। ज्ञान के क्षेत्र में सूचना एवं संचार प्रौद्योगिकी के महत्व को दर्शाते हुए ल्योटार्ड (1979) कहते हैं- भविष्य में राष्ट्रों के लिए ज्ञान, शक्ति का आधार होगा जिस राष्ट्र के पास जितना अधिक कंप्यूटरीकृत ज्ञान होगा वह उतना ही अधिक शक्तिशाली होगा। इस आधार पर हम यह कह सकते हैं कि शिक्षा में सूचना एवं संचार प्रौद्योगिकी आज के युग की मांग है किंतु असमान शिक्षा प्रणाली कहीं न कहीं सामाजिक असमानता में वृद्धि करती है। मार्क्सवादी दृष्टिकोण के अनुसार डिजिटल विभाजन समाज में असमानता लाता है क्योंकि डिजिटल संसाधनों की पहुंच केवल उच्च वर्गों के छात्रों तक ही सीमित होती है तथा निम्न वर्ग के छात्र इन संसाधनों के लाभ एवं विभिन्न अवसरों से वंचित रह जाते हैं जिससे सामाजिक असमानता को बढ़ावा मिलता है। इस संबंध में बोर्दियो (1973) का मानना है कि शिक्षा समाज में गैर-बराबरी लाती है क्योंकि अधिक सशक्त सांस्कृतिक पूंजी वाले छात्र ही शिक्षा के माध्यम से अधिक पूंजी वह शक्ति प्राप्त करते हैं और उच्च वर्गों की संस्कृति को बनाए रखते हैं। जो कहीं न कहीं सामाजिक असमानता को बढ़ावा देता है। इसी सन्दर्भ में वैन डिज्क (2005) 'संसाधन और विनियोग सिद्धांत' का प्रयोग करते हुए अपने सिद्धांत में बताते हैं कि विभिन्न सामाजिक पृष्ठभूमि एवं वर्गों के छात्रों के द्वारा संसाधनों और नई प्रौद्योगिकी के असमान वितरण के कारण डिजिटल प्रौद्योगिकी तक असमान पहुंच होती है जो समाज में असमान भागीदारी को प्रेरित करती है अतः डिजिटल विभाजन मुख्य रूप से सामाजिक असमानता से जुड़ा हुआ है। डिजिटल विभाजन सांस्कृतिक विडम्बना को भी बढ़ाने का कार्य करती है। ऑगबर्न (1922) संस्कृति को तकनीकी नवाचारों को अपनाने में भी समय लगता है इसमें अंतर होने के कारण सामाजिक समस्याएं उत्पन्न होती हैं और इसे सांस्कृतिक अंतराल कहते हैं। इस संदर्भ में हम कह सकते हैं कि अभौतिक संस्कृति (छात्रों द्वारा कौशल व उपयोग) को शिक्षा में प्रौद्योगिकी एवं नवाचारों के साथ तालमेल बिठाने और इस अंतराल के कारण होने वाली समस्याओं को समझने में समय लगता है।

अध्ययन की प्रासंगिकता

इंटरनेट सूचना का एक ऐसा पुस्तकालय है जो आईसीटी तक पहुंच को शिक्षा से जोड़कर दिमाग को बेहतर बनाता है तथा एकेडमिक सफलता तथा श्रेष्ठ अनुसंधान को भी बढ़ावा देता है। कासटेल्स (1996) ने प्रस्तावित किया है कि इंटरनेट और सूचना प्रौद्योगिकी एक नए प्रकार की सामाजिक संरचना एवं नेटवर्क का निर्माण करती है। आधुनिक ज्ञान और सूचना समाज में सूचना एवं संचार प्रौद्योगिकी के माध्यम से शिक्षा अत्यंत उपयोगी उपकरण है जो छात्रों के शैक्षणिक प्रदर्शन में सुधार कर जीवन शैली में अवसर की समानता को बढ़ाने में मदद करता है लेकिन कम साक्षरता, आय-स्तर एवं भौगोलिक-प्रतिबन्ध जैसे पहुंच की कमी और डिजिटल निरक्षरता जैसे कारक डिजिटल विभाजन में योगदान करते हैं जिसके परिणामस्वरूप छात्रों में शैक्षिक अंतर हो सकता है और वह कई अवसरों से वंचित रह जाता है या समुदाय में बुनियादी कौशल अर्जित करने में भी असमर्थ हो जाता है। जिसके कारण सामाजिक असमानता और सामाजिक बहिष्करण जैसी समस्याएं देखने को मिलती हैं। कोविड महामारी ने डिजिटल विभाजन की समस्या को उजागर किया है। भारत भी उन देशों में शामिल है, जहां कोविड-19 के प्रसार के दौरान सभी स्कूलों व शैक्षणिक संस्थाओं को बंद कर दिया गया था। भारत में विभिन्न प्रतिबंध व लॉकडाउन से 32 करोड़ से अधिक छात्र प्रभावित हुए हैं। यूनेस्को (UNESCO) की रिपोर्ट के अनुसार- भारत में लगभग 14 करोड़ प्राथमिक विद्यालय के छात्र और 53 करोड़ माध्यमिक विद्यालय के छात्र प्रभावित हुए हैं। इस संदर्भ में डिजिटल रूप से वंचित बच्चों पर विशेष ध्यान देने के साथ स्कूली शिक्षा पर कोविड-19 के प्रभाव की समझ महत्वपूर्ण हो जाती है। यूनिसेफ के अनुसार कोविड-19 महामारी ने अंतरराष्ट्रीय बालकोष दुनिया भर में 91% से अधिक छात्रों को प्रभावित किया है लगभग 106 बिलियन बच्चे और युवा लॉकडाउन के कारण शारीरिक रूप स्कूल जाने में असमर्थ हैं। इसके अतिरिक्त इंटरनेट एंड मोबाइल एसोसिएशन ऑफ इंडिया की रिपोर्ट के अनुसार- राष्ट्रीय स्तर पर पुरुष (67%) की तुलना में कम महिलाओं (33%) की इंटरनेट तक पहुंच है। शहरी क्षेत्र की तुलना में ग्रामीण क्षेत्र में अधिक असमानताएं 28 से 22% हैं। कोविड-19 के बाद के युग में तथा अन्य क्षेत्रों की तरह शिक्षा के क्षेत्र में भी एक प्रभावी शिक्षक बनने के लिए एवं समाज के साथ बने रहने के लिए नई तकनीक और नवाचारों को एकीकृत करना अति आवश्यक है तथा शिक्षण संस्थानों के लिए यह जरूरी है कि समाधानों में तेजी

से वृद्धि करें ताकि डिजिटल विभाजन की समस्या को पाटा जा सके।

साहित्य समीक्षा

इलावरसन (2013) सामाजिक असमानता के दो विपरीत दृष्टिकोण प्रस्तुत करते हैं। पहला संघर्षवादी परिप्रेक्ष्य (मार्क्सवादी विचारों) के अनुसार- जहां प्रभुत्व वर्ग के पास बेहतर स्वामित्व तथा इंटरनेट की पहुंच होगी और वेबर के सांस्कृतिक परिप्रेक्ष्य के अनुसार जहां इंटरनेट जीवनशैली का एक हिस्सा या एक प्रतिबंधित समूह की अलग संस्कृति की एक पहचान बन जाता है। अपने इस अध्ययन में इन्होंने भारत में डिजिटल विभाजन को समझने के लिए आईसीटी कार्यालय में वंचित समूह की जांच की तथा यह निष्कर्ष निकाला कि बहिष्करण की प्रक्रिया सामाजिक असमानताओं की अभिव्यक्ति है।

गोपाल कृष्ण ठाकुर (2014) ने भारत में एक विशाल डिजिटल विभाजन होने की बात कही है। डिजिटल विभाजन की समस्या को पाटने के लिए शिक्षकों को प्रशिक्षित करने, स्कूलों और छात्रों को सही आईटी उपकरण प्रदान करने तथा नियमित रूप से छात्रों का मूल्यांकन करने की भी बात कही है।

वैन डिज्क (2020) ने अपनी पुस्तक 'द डिजिटल डिवाइड' में डिजिटल विभाजन की बहुआयामी अवधारणा प्रस्तुत की है जिसमें उन्होंने चार सैद्धांतिक दृष्टिकोणों को प्रस्तुत किया है जिसके अंतर्गत तकनीकी पहुंच, मानसिक पहुंच, कौशल तथा उपयोगिता के आधार पर डिजिटल डिवाइड की अवधारणा दी है।

बनर्जी एवं गोपटू (2021) ने अपने लेख 'कोविड-19 और शिक्षा में असामानताएंः एक भारतीय संदर्भ' में शैक्षिक वितरण के व्यावहारिक परिवर्तन पर अध्ययन किया है और बताया कि इसने डिजिटल असमानता को सामने रखा है जो कि ग्रामीण और शहरी दोनों लाभार्थियों की शिक्षा के वितरण में असमानता को जन्म देती है तथा कोविड महामारी ने शिक्षा में डिजिटल विभाजन की खाई को और भी अधिक चौड़ा कर दिया है।

नॉरिस (2001) विभिन्न सामाजिक समूह के बीच डिजिटल असमानता, मुख्य रूप से सामाजिक-आर्थिक स्थिति, आय व शिक्षा के संदर्भ में सामाजिक स्तरीकरण को प्रदर्शित करती है पहुंच की कमी से (डिजिटल संसाधनों तक) जीवन अवसर की संभावना कम हो जाती है और बाद में सामाजिक रूप से हाशिये पर आ जाने की संभावना अधिक होती है जो पहले से ही वंचित है। उनके पास तकनीक तक पहुंचने और उपयोग के अवसर कम होंगे।

उद्देश्य

- कोविड-19 महामारी के दौरान स्कूली शिक्षा में डिजिटल लर्निंग की चुनौतियों की व्यवस्था करना।
- कोविड-19 महामारी का शिक्षा पर पड़ने वाले प्रभाव का विश्लेषण करना।

शिक्षा में डिजिटल लर्निंग की सामाजिक चुनौतियां

सामाजिक-आर्थिक असमानता : भारत में शिक्षा के अधिकार अधिनियम 2009 के बावजूद सामाजिक-आर्थिक असमानता के कारण स्कूलों में अपर्याप्त गुणवत्ता व असमान शिक्षा प्रणाली व्यवस्था के कारण छात्र बहिष्कृत या हाशिये पर चले जाते हैं। जॉन (2020) मानते हैं कि विभिन्न सामाजिक-आर्थिक पृष्ठभूमि से आने वाले विद्यार्थियों की पढ़ने की क्षमताएं भी भिन्न होती है। ऐसे में उनकी आवश्यकताओं को केवल प्रत्यक्ष कक्षाओं में ही बेहतर ढंग से पूरा किया जा सकता है एवं ऑनलाइन शिक्षा में विद्यार्थी केवल डिजिटल तकनीक व गैजेट पर निर्भर हो जाता है।

लिंग आधारित असमानता : लिंग आधारित मानदंड ही अक्सर समाज में पुरुषों व महिलाओं के लिए उचित व्यवहार का निर्धारण करते हैं जिसके परिणामस्वरूप पुरुषों की तुलना में डिजिटल तकनीक के उपयोग में महिलाओं में कमी देखी गई है। चौधरी व बिंडर लिखते हैं कि इंटरनेट को अक्सर पारंपरिक सामाजिक व्यवस्था के लिए जोखिम या महिलाओं के लिए असुरक्षित माना जाता है आज भी समाज (पुरुष/परिवारों/समुदायों) के द्वारा महिलाओं को इंटरनेट साधनों अथवा पहुंच तक प्रतिबंधित रखते हैं। ऑक्सफेम इंडिया द्वारा प्रकाशित भारत असमानता रिपोर्ट-2022 के अनुसार पुरुषों की तुलना में भारतीय महिलाओं के पास मोबाइल फोन रखने की संभावना 15% कम है और मोबाइल इंटरनेट सेवाओं का उपयोग करने की संभावना 33% कम है।

जाति आधारित असमानता : ऑक्सफेम इंडिया द्वारा प्रकाशित भारत असमानता रिपोर्ट-2022 के अनुसार विभिन्न जाति समूह के मध्य भी डिजिटल असमानता व्याप्त है। अनुसूचित जाति के केवल 4% प्रतिशत छात्रों के पास ओबीसी के 7% प्रतिशत छात्र एवं अन्य जाति के 21% छात्रों के पास इंटरनेट सुविधा के साथ कंप्यूटर है। डिजिटल विभाजन में व्याप्त इस असमानता के साथ सरकार तथा निजी स्कूलों ने भी डिजिटल शिक्षा को प्रोत्साहित करने का कार्य विशेष रूप से किया है।

क्रियाविधि

इस शोध पत्र **कोविड-19 एवं स्कूली छात्रों के मध्य शिक्षा में डिजिटल और सामाजिक विभाजनः एक समाजशास्त्रीय**

विश्लेषण के विषय में आंकड़े एकत्रित करने के लिए विभिन्न पुस्तकों शोध पत्रों एवं विभिन्न लेखकों के पत्र प्रकाशनों का अध्ययन किया गया है। प्रस्तुत शोधपत्र के अध्ययन में द्वितीयक आंकड़ों का प्रयोग किया गया है। यह आंकड़े सरकारी व गैर-सरकारी संस्थाओं के द्वारा प्रकाशित पत्र पत्रिकाओं से भी लिए गए हैं। विभिन्न रिपोर्ट प्रमाणित वेबसाइट एवं पत्र पत्रिकाओं के माध्यम से सूचना एकत्रित की गई है।

प्रमुख निष्कर्ष

महामारी और शैक्षणिक संस्थानों के लंबे समय तक बंद रहने के कारण शिक्षा द्वारा सीखने के तरीकों में परिवर्तन हुआ है। डिजिटल लर्निंग द्वारा सीखना आज के युग की एक आवश्यकता है एवं ऑनलाइन शिक्षण देखने में किसी को भी एक सुगम वसरल विकल्प लग सकता है किंतु भारत जैसे देश की असमान शिक्षा प्रणाली के लिए इसमें काफी समस्याएं भी देखने को मिलती है।

डिजिटल लर्निंग एक समावेशी शिक्षा के रूप में तो बिल्कुल भी नहीं थी। इस संदर्भ में बांधवा व अंदराबी (2020) कहती हैं कि ग्रामीण क्षेत्र एवं दूर-दराज के क्षेत्र में रहने वाले ग्रामीण छात्र जिनके पास डिजिटल तकनीक एवं लर्निंग के लिए संसाधन नहीं है, उनके लिए मोबाइल फोन केवल एक विलासिता है। इसके अतिरिक्त नीति आयोग की स्ट्रेटजी फॉर इंडिया एट 75 रिपोर्ट से या पता चलता है कि भारत के 1000 ग्रामीण क्षेत्रों में से केवल 28 फीसदी मोबाइल कवरेज नहीं है एवं ग्रामीण क्षेत्रों के केवल 20% छात्रों के पास ही इंटरनेट की सुविधा है। इस प्रकार वर्तमान समय में हमारे पास डिजिटल शिक्षा में अवसंरचनात्मक ढाँचे, अध्ययन सामग्री एवं कई भाषा में उपलब्ध एक उचित नीति का अभाव है। अध्यापकों का मानना है कि वर्चुअल क्लास के दौरान और छात्रों से कनेक्ट नहीं कर पाते हैं जिस प्रकार वह सामान्य कक्षा में करते हैं। स्टडी इकोनॉमी डेलओसी (OCED) के अध्ययन के अनुसार स्कूल का प्रदर्शन शिक्षकों के साथ घनिष्ठ संबंध बनाए रखने पर महत्वपूर्ण रूप से निर्भर करता है और ऑनलाइन क्लास की अपेक्षा छात्र सामान्य कक्षा में शिक्षकों के साथ भावात्मक रूप से जुड़ पाते हैं किंतु वर्चुअल क्लास में यह हो पाना मुश्किल हो जाता है। संयुक्त राष्ट्र संघ 2020 के महासचिव ने कहा- कोविड महामारी शिक्षा में बाधा के रूप में अब तक सबसे बड़ा कारण बना है जिसने विश्व स्तर पर 206 बिलियन विद्यार्थियों को प्रभावित किया है। लगभग 20 मिलियन विद्यार्थी आर्थिक मंदी के कारण अगले वर्ष विद्यालय नहीं जा पाएंगे जिसमें लड़कियां व महिलाएं ज्यादा प्रभावित होंगी। कोरोना महामारी का प्रभाव समाज के निम्न वर्ग के लोगों की शिक्षा पर अधिक देखने को मिला जो समाज के हाशिये पर जीवन निर्वाहित करते हैं जिसका परिणाम यह हुआ कि वह समाज की शिक्षा व्यवस्था की मुख्य धारा से बिल्कुल बाहर हो गए हैं। यूनेस्को (UNESCO) की रिपोर्ट के मुताबिक तत्कालीन समय में वैश्विक स्तर पर दुनिया भर के 150 देश में नामांकित 190207109 छात्र आबादी की शिक्षा प्रभावित हुई है जो दुनिया भर में कुल नामांकित छात्रों व आबादी की 68% है। इसके अतिरिक्त जैसाकि हम सभी जानते हैं कि भारत की 65% आबादी ग्रामीण क्षेत्र में निवास करती है जिसका इंटरनेट उपयोग घनत्व सबसे कम है जो ऑनलाइन शिक्षा व्यवस्था एवं डिजिटल लर्निंग के लिए एक सबसे बड़ी चुनौती है।

उपसंहार

कोविड महामारी ने मानव जीवन के अन्य पक्षों के साथ-साथ शिक्षा में भी आवश्यकता अनुसार संशोधन करने के लिए बाधित किया है महामारी के दौरान ऑनलाइन शिक्षण विकल्प के रूप में हमारे सामने तो था और किंतु क्या यह शिक्षण प्रणाली भारत जैसे देश की विषम और विशाल शिक्षा प्रणाली के छात्रों के लिए समान रूप से लाभकारी थी? यह कहना थोड़ा मुश्किल है क्योंकि कुछ व्यावहारिक समस्याएं हैं साधनहीन एवं साधन संपन्न के मध्य जो कि डिजिटल विभाजन के रूप में दिखाई देती हैं किंतु इसके विपरीत शिक्षा व्यवस्था को सुचारु रूप से चलाए रखने हेतु सरकार एवं अन्य संगठनों के द्वारा कई प्रयास भी किए जा रहे हैं तथा कई योजनाएं भी चलाई जा रही हैं। धीरे-धीरे डिजिटल लर्निंग के प्रति छात्रों में रुचि भी बढ़ रही है। यदि भारतीय शिक्षा प्रणाली का लक्ष्य भविष्य में ऑनलाइन शिक्षा की ओर बढ़ना है तो उसे उन नीतियों पर जोर देना चाहिए जो डिजिटल विभाजन को कम करने में मदद करें और देश को सतत विकास के लक्ष्य को प्राप्त करने के करीब ले जाएं। संपादकीय लेख ऑनलाइन शिक्षा की चुनौतियों में निरंजन कुमार (2020) मानते हैं कि कोरोना संकट के दौरान वैकल्पिक तौर पर ऑनलाइन शिक्षा अवश्य एक जरूरत है लेकिन यह डिजिटल लर्निंग, परंपरागत शिक्षण प्रणाली की सहायक के रूप में ही सर्वाधिक सिद्ध होगी ना कि उसके विकल्प के रूप में।

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Customer Awareness about Core Banking Technology in Rural Areas of Lucknow District

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Abstract

Almost all the Indian banks have performed the task of implementing the automation of banking processes via Core Banking Solutions. If some banks are left then they are currently in process of implementing the CBS technology. Core banking is type of a computerized system where any account holder in that particular bank can operate his/her account from any branch of the bank, which was not the case earlier. 50 respondents of different account types, income group, age group and gender were considered in this primary study and satisfaction level was assessed. Various types of service based questions have been asked to the bank customers and according to the answers given a conclusion has been reached that majority of the customers are very much satisfied by the services being provided by the banks under the core banking solution. Study has been done for a period of 3 months - Apr 2023 to June 2023 in rural areas of Lucknow district.

Introduction

Are you aware that in times before Internet arrived, the complete transaction i.e. debits and credits of the 2 accounts involved used to be one day or more? Primary reason why this has become a rare occurrence now is because of technology of Core Banking. Modern infrastructure of information technology has transformed the functioning of the banking sector worldwide. Equally important factors that stimulate the banking industry to constantly develop is the strengthening of market competition. Also adding to the challenges is the growing presence of FinTech companies in the market and the declining preference of customers for traditional style of banking. Financial institutions which fail to adapt to changing banking scene in terms of technology or make use of innovative tools will start getting behind in the market. Core banking technology can be said to be like a heart of the modern banking system throughout the world. This is why customers can quickly manage their hard earned money as per their convenience. The effectiveness of a particular core banking system also affects how customers think about their bank. This paper emphasizes about core banking technology, functions, characteristics and also implementation issues.

Understanding Core Banking Solutions

Core Banking Solutions was an unknown term in banking industry some 15-16 years ago. Developments in technology, primarily the Internet and Information Communication Technology (ICT), have changed the method of doing business in the sector of banking.

In Core Banking Solutions, computer software is developed to carry out the basic operations of banking such as recording transactions, updating a passbook, calculating interest on advances and deposits, maintaining customer records, calculation of EMIs on loans, printing interest certificates etc. This CBS is installed at various branches of a particular bank and inter-connected using communication lines such as telephones, networking devices like repeaters and routers, satellites, Internet, etc. It allows the user to operate accounts in branch X while sitting in branch Y or may be from their homes also as long as they have access to banking website. This new method of CBS has changed the basic way banks used to operate earlier. Basic banking solutions are also very useful for MSMEs in Indian scenario.

Core Banking Solution (CBS) is linking or inter connection of bank branches that allows customers of banks to manage the accounts that they have opened at the banks and then they can use various banking services from any bank branch in the entire network of core banking software solution, irrespective of the branch where the account was opened. Customer of the bank now under CBS is not limited to being customer of a particular branch only. Instead of that, the bank customer is now a client of the whole bank. Therefore, CBS is a huge step ahead to increase the convenience of customers through banking from anywhere and at any-time.

Biggest reason for terming it as the Core Banking System, is that after deployment on the network, is becomes like a heart or the center point of the bank. All that entities that are in a banking framework interact with

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the CBS. Some of those entities are :

i) Top management of bank like the CEO, CFO and board of directors, regional offices across the country, all the branches across the world etc.

ii) Bank Managers at respective branches, regional offices and head quarter.

iii) Bank customers at personal banking level, corporate banking level, international banking level etc.

iv) Bank Auditors - internal or external - for verifying if rules and regulations have been adhered to.

v) Bank Regulators who do mandatory reporting to the RBI on a periodic basis and other financial bodies like SEBI etc.

Functions of Core Banking Technology

- Opening of new customers accounts of various types- savings, current, loan etc
- Maintenance of old customer accounts i.e. updating changes if any
- Transaction processing
- Statistical reporting
- Processing of advances
- Processing cash deposits
- Updating accounts after withdrawals
- Clearing cheques
- Risk management
- Treasury management
- Felicitating foreign exchange

Issues of Core Banking Technology

Main challenges of modern Core banking technology implementation are as follows :

Undesired extensions of implementation deadline : Core banking software implementation is a highly complex activity and requires considerable amount of time. Therefore CBS implementation usually involves many extensions to the deadline that was set for the first time.

Over-budgeting: Extension of implementation also means that there is a risk of project cost increase and going over budget. Banks that seek to implement their core banking system or even update it must therefore have a proper project management guidelines and framework that carefully tracks the progress of the project and do risk management to minimize costs.

Longer Pay-off Periods: With long payback periods i.e. period to recover the costs and very high investments, banks may require to evaluate return on investment (ROI) using turnover metrics and other methods as far as CBS implementation is concerned. Infact if a bank is not having sufficient capital then it may decide to delay the CBS implementation or updation also.

Stakeholder Management: The implementation of core banking software is likely to cause a huge restructuring of the organization including the bank personnel. In such a scenario, people who have an interest in the outcome of the project may pose a significant hindrance and risk to the whole implementation process. For example, these stakeholders may pressurize the implementation team to meet their requirements first at the cost of organization and hence may further add on to the costs and complexity of the CBS implementation project. Therefore, it is highly important to have the agreement and long-term commitment of all employees to ensure that the core banking system delivers the optimum value.

Cyber-security : Protecting the digital customer data from cyber-attacks is also a huge issue in CBS implementation. Given the use of mobile apps, this threat increases even more so banks must have a defense mechanism to protect their customers' money as well as private information.

Availability of Resources: Successful implementation of core banking software requires effective business process redesign and sufficient resources. Therefore, banks should have a suitable strategy to reassess their goals and make new strategies for transitioning to a new core banking system on the basis of financial resources and manpower available to them.

Adaptability Issues : Almost everyone of afraid of changes in life as well as in organizations. So implementation of a new core banking software faces a tough resistance. Reluctance to adopt new core banking system, lack of official communication by the top management with the affected employees about the transformation and employee training are some of the issues a bank may face when implementing, updating or changing its core banking software. So it should be dealt effectively and on a timely basis.

Review of Literature

The studies that have been done till now have highlighted the advantages that customer satisfaction delivers to a company. Utility provided to the company by a customer is directly proportional to the time he stays at the company. Business of banking is no exception to this.

Leeds (1992) in his analysis has mentioned that the approximately 40% customers closed their bank accounts because of poor service provided by the bank personnel. Leeds specifically claimed that almost 75% of bank customers mentioned the politeness of the teller as the biggest reason before opening a new bank account at any new bank. This study also highlighted that if the quality of service provided to existing customers is satisfactory and behavior of bank employees is friendly towards the customers then it will improve satisfaction level and perception of the customers.

Fornell (1992) in his study in Sweden on bank customers notes that although customer satisfaction is even more necessary for long term loyalty in industries like banking, insurance, and automobiles.

Kaynak *et al.,* (1992) said that there are a large number of criteria that customers evaluate a before finally deciding on a particular bank to open their accounts at.

Kucukemiroglu's (1992) particularly studied the banking scenario of Hong Kong and concluded that duration of association, ease of banking, recommendations of relatives and acquaintances and availability / extension of credit limit were the key factors for the customers to select a given bank.

Reichheld (1996) in his study said that dissatisfied customers are least likely to change their bank because they do not have much expectations from the other banks in terms of the service they provide.

Abratt *et al.* (1999) Key factors influencing customer intentions to stay at a bank are what all services does the bank offer and what are the services rates and fee it charges.

Szymanski *et al.* (2001) quality of service being provided to the existing customers is the primary factor of customer satisfaction.

Ioanna (2002) suggested that quality of the service that banks are providing to their existing customers is an essential reason influencing the level of customer satisfaction in the banking industry. To stay ahead of the other banks , banks should ideally focus on studying the current needs in the market in various segments, behavior patterns of customers and their attitude.

Yang *et al.* (2004) concluded that convenience in using bank services is the most important reason behind satisfaction of customer. Customer does not want to waste too much of time in reading instructions given by the bank.

Johnson (2008) concluded that the effect of various kinds of dissatisfactions regarding the online banking customer experience can be removed by informing them about the various issues that they face in order to strengthen their belief on new core banking technology. This can also lead to a better relation between banks and customers in the long run.

Chairlone (2009) in his study mentioned that most important function of CBS is to perform deposit of money and extending credit facility in a bank and these two affect customer satisfaction the most.

Hariharan & Reeshma (2015) in their study have said that CBS is the software used to enhance sustenance of banks.

Bimal Jaiswal & Yusuf Kamal (2019) found out that customer satisfaction has been significantly influenced by operational efficiency during the last few years.

Objectives of Study

A primary research was conducted among customers who are using e-banking facility provided by different banks. This was done in order to :

i) To know how much aware the customers are about e-banking services provided by their banks?

ii) To know how much they use them?

iii) To know what really prompted customers into going for e-banking?

iv) To know how various banks are faring in providing the services to customers i.e are the customers facing any issues while using e-banking services?

Research Methodology

The Study- study is primarily based on finding out the extent of satisfaction of the bank's customers after the implementation of the core banking technology in rural areas of Lucknow. Whether this facility is a step forward towards customer convenience or not. This system makes banking easy for the customer anywhere.

Sample- The survey is conducted on 50 persons so as to get effective results. The survey was conducted in rural areas of Lucknow.

Tools for Data Collection and Analysis- The report is based on primary data only. Primary data was collected through the Questionnaire using telephone calls, e-mails and also personally interviewing the respondents.

To understand the savings preference, bank preference, services taken, time period since becoming customer, and to identify the information source of customer satisfaction through core banking system, a questionnaire was designed and the respondents were asked to mark their preferences on a ranking scale.

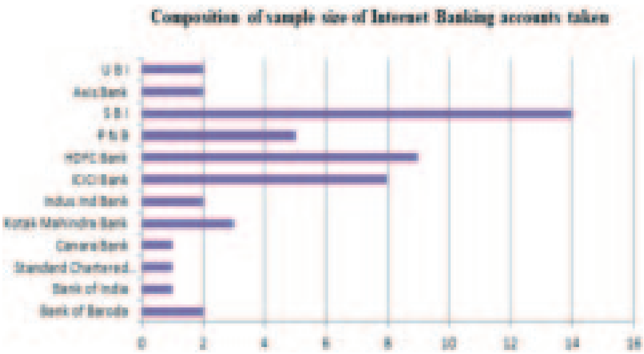
The questionnaire also contains factors that affect the customer satisfaction. Also the customers were asked to rate their overall satisfaction on a 5 point scale.

Duration of Study- survey is conducted for a period of three months starting from April 2023 to June 2023.

Results

From the data collected through primary source (questionnaire), we come to the results which are as follows in each of the questions :

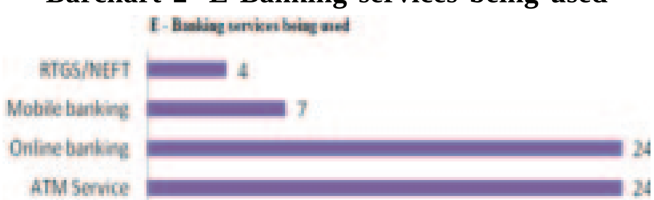
Barchart 1- Composition of sample size of Internet Banking accounts taken



Source : Primary data obtained from rural region of Lucknow City

State Bank of India had the largest share among the 50 samples taken. This indicates it may be having the largest customer base among those users who avail the facilties of core banking. Since State Bank of India is the largest bank in India by total assets so this finding is on the expected lines.

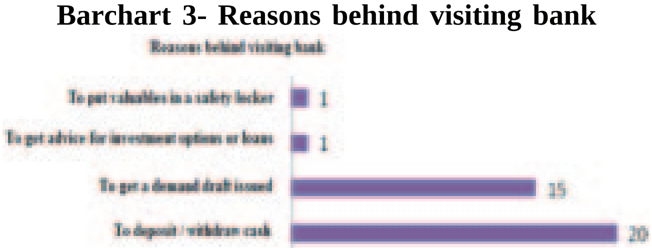
Barchart 2- E Banking services being used



Source : Primary data obtained from rural region of Lucknow City

Maximum services being availed by the customers are ATM services and online banking. RTGS and NEFT payments lag behind significantly. Since UPI payments have gained a lot of interest so lesser use of RTGS and NEFT is not unexpected.

Barchart 3- Reasons behind visiting bank



Source - Primary data obtained from rural region of Lucknow City

In rural areas of Lucknow, bank customers still do not prefer using safety lockers that banks provide. Customers visit banks mainly to either withdraw or deposit cash. Getting a demand draft from the bank to pay some agency / individual comes second in the list.

Factors behind going for Internet Banking accounts

Barchart 4 - Convenience as a factor

Source - Primary data obtained from rural region of Lucknow City

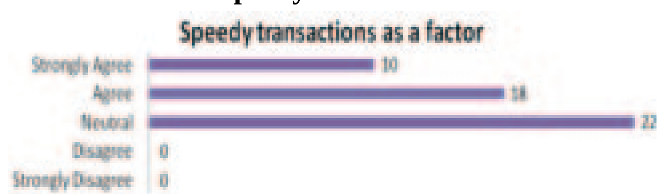
For a majority of 94% of the sample respondents i.e. 47 out of 50, convenience and hence ease of doing banking is the deciding factor behind using Internet banking. Almost none of the customers were in diasgreement in this regard. Everyone is busy today including the residents of rual areas so not requiring to go to a bank to avail banking services and doing many activities of bank from anywhere at any place at anytime is definitely a boosting factor behind the surge of electronic banking.

Barchart 5- Online shopping as a factor

Source - Primary data obtained from rural region of Lucknow City

Online shopping is still not that a motivating factor as convenience is behind using E-banking.

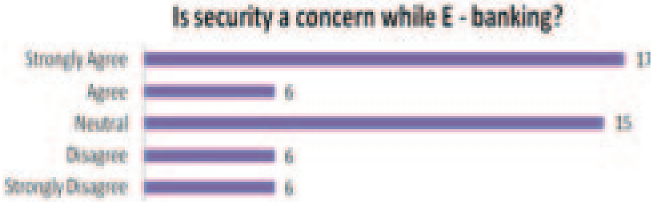
Barchart 6 - Speedy transactions as a factor



Source - Primary data obtained from rural region of Lucknow City

Not a single respondent ruled out the importance of fast banking transactions.Either the customers agreed to it or were neutral to it.

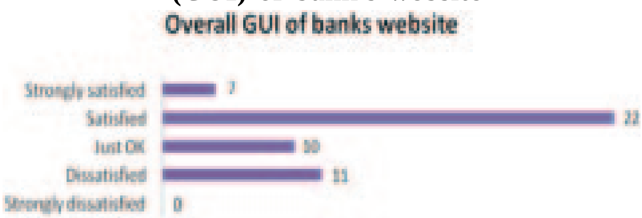
Barchart 7 - Is security a concern while E- banking?



Source - Primary data obtained from rural region of Lucknow City

There were somewhat mixed reactions from the sample respondents when asked about the security aspect about E-banking. While 34% of respondents strongly agreed to the security being a concern while doing E-banking, 30 % were indifferent to it.

Barchart 8 - Overall Graphical User Interface (GUI) of bank's website



Source - Primary data obtained from rural region of Lucknow City

When asked about the Graphical User Interface (GUI) i.e. ease of using the banks websites, majority of 58% of respondents seemed to be satisfied from it. However 22 % of respondents did not think likewise and were dissatisfied. This showed that there is some room for the banks to improve in this regard. Rural customers might find slighly difficult to adapt to the E-Banking specifically the user interface of the website when compared to the urban customers.

Limitations of Study

i) Sample size was limited to 50 respondents only and so the sample size may not represent whole market.

ii) This study has not been conducted over an extended period of time considering both market fluctuations. The market state has a major impact on the satisfaction level of customers. The study cannot capture such real time situations.

iii) This study is limited to the customers of rural region of Lucknow only. Therefore the inferences cannot be generalized.

iv) It is possible that few respondents might not have been able to understand some of the banking or technology terms of the questionnaire which may affect the outcomes of the study to a little extent.

Conclusions

i) SBI, ICICI & HDFC banks are doing better than other banks as far as E-banking are concerned and hence are able to attract more customers as well as retain them.

ii) People are still not using mobile banking facilities that their bank is providing or they don't use it in day to day life.

iii) Facilities like RTGS & NEFT are almost unheard of by the rural customers when most of the banks have been providing these services to transfer funds since many years now.

iv) Convenience is the key factor that is leading customers to avail Internet banking facilities.

v) Online shopping still is not very popular among internet banking customers of rural areas of Lucknow.

vi) Although customers are finding the online portals of banks satisfactory, still some scope for improvement is there.

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Analysing the Economic Status of Individuals and Households Slightly Above Poverty Line

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Abstract

This research paper addresses a critical gap in existing literature by delving into the intricate economic lives of households situated just above the poverty line in India. Against the backdrop of a declining economy since 2017, exacerbated by the COVID-19 pandemic, the study seeks to provide nuanced insights into the challenges faced by this economically vulnerable group.

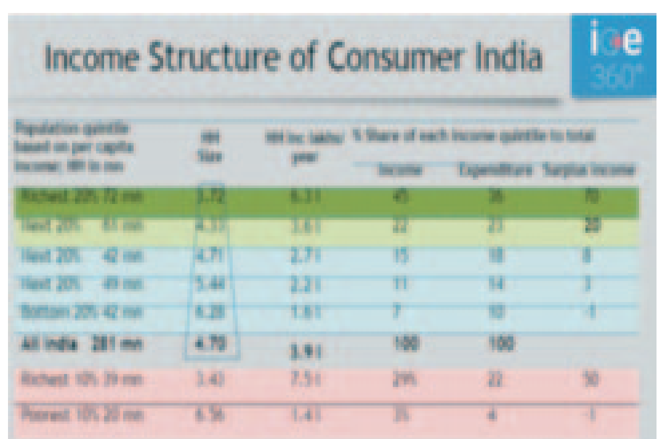
The primary research findings reveal that households earning slightly above the World Bank's poverty line ($6.11) are grappling with precarious livelihoods. A significant portion of their income–more than 55 percent–is allocated to food expenditure, with even those utilizing Ration Cards compelled to purchase essential items from external sources. The investigation identifies vegetables and oil as crucial components, prompting further inquiry into the drivers of elevated prices in these markets.

While the mean income stands at Rs. 11,547, the study unveils income disparities, seasonal variations, and delayed wage payments for those employed in sectors like construction. Despite earnings that fall above the poverty line, households remain ill-equipped to withstand economic shocks, relying heavily on borrowing during crises. Concerns arise about low education spending, potentially hindering future generations' skill acquisition. While awareness of health schemes exists, accessibility challenges persist, especially for migrant workers and street vendors. Water access is widespread, but tap water safety is questioned. Sanitation conditions vary, with some lacking proper waste disposal. The Vidhwa Pension Scheme benefits women treated as burdens.

Women in these households bear domestic violence and overwhelming workloads despite contributing significantly. Absence of leisure underscores the need for state interventions. In conclusion, the study provides comprehensive insights into the economic challenges faced by households just above the poverty line, offering a foundation for informed policy recommendations aimed at improving their overall well-being and fostering inclusive growth.

Background of the Problem

Since 2017, the Indian economy has been declining, with the COVID-19 pandemic exacerbating the situation. Understanding the key drivers of India's GDP is crucial for addressing economic challenges. Consumption, contributing 55 percent to the GDP, is a major factor. Recent Q2 2021 figures reveal that consumption has not yet returned to pre-pandemic levels (2019), indicating reduced spending compared to the same quarter two years ago. Yet, the table above provides a broad overview of consumption in terms of absolute numbers. It's crucial to emphasize that the reality is bleaker due to existing income inequality. The subsequent table outlines the income distribution of consumers, revealing that the bottom 60 percent are spending more than their incomes. How does this income group navigate survival? What is the income expenditure dynamic? How much is allocated to food and non-food items? What trade-offs do they face? Do government policies aid them, or does the future appear bleak?


Income Structure of Consumer India

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*** Professor, Department of Management Studies, Graphic Era Deemed to be University, Dehradun.

The Problem Being Studied

The geographical and industry-based variations in minimum wage across India are regulated by the Ministry of Labour and Employment. The minimum wage for unskilled workers in Region-B, where Dehradun is located, averages Rs. 466. However, considering self-employed individuals, the study uses this minimum wage as a benchmark, equating to Rs. 13,980 per month for full-time work. Given that these individuals typically take 3-4 days off each month, the adjusted monthly income ranges from Rs. 11,661 to Rs. 12,116.

This study analyses spending patterns among a specific income group, exploring allocations for food, education, health, fuel, light, intoxicants, etc. It delves into how they manage with limited income, investigating responses to economic shocks like job loss or health crises. The study documents techniques and support networks during crises, also recording access to basic services to comprehend overall demand. Ultimately, it seeks to understand economic decisions, analysing demand patterns based on their behaviour.

Objectives

1. To understand the basic characteristics of the households.
2. To analyse the food and non-food expenditure of these households.
3. To understand the demand patterns of these households
4. To suggest policies to improve their living conditions in order to promote inclusive growth.

Literature Review

Various studies delve into understanding household consumption patterns across diverse parameters such as regions, occupation groups, income levels, and gender. A substantial body of research focuses on households living on or below the international poverty line, with the World Bank updating it to $2.15 per person per day in September 2002. Abhijit Banerjee and Esther Duflo's work, "The Economic Lives of the Poor" (2006), explores the economic circumstances of individuals living on less than $2 or $1 per day, highlighting their choices, constraints, and challenges across 13 countries. Additionally, studies like Guddi Tiwary *et al.'s* (2011) analysis of construction workers in Kolkata and Sheela Kharkwal and Ravindra Malhotra's (2020) economic analysis of households in the Kumaon Hills of Uttarakhand contribute valuable insights into the socio-economic aspects of specific groups.

Dr. K.A. Rajanna's case study in 2020 focuses on the consumption expenditure patterns of women workers in the construction industry, shedding light on income levels and spending habits. Furthermore, the think tank PRICE (People's Research on India's Consumer Economy & India's Citizen Environment) plays a significant role in generating and disseminating essential knowledge about India's macro consumer economy and citizen environment, with the aim of influencing public policy and business strategy formulation.

Research Methodology

This research delves into the economic well-being of individuals and households earning the 2018 minimum wage set by the Ministry of Labour and Employment in Area-B, Dehradun. For unskilled and semi-skilled construction workers, the monthly wages are Rs. 466.6 and Rs. 527, totalling Rs. 13,980. The study focuses on monthly consumption expenditure, exploring cause-and-effect relationships between income and food/non-food expenditures. It also examines the income elasticity of these expenditures using a mixed-methods approach, integrating qualitative and quantitative methods through Stratified Random Sampling.

Primary data is derived from the National Sample Survey Organization's Socio-Economic Survey, Sixtieth Round, offering yearly consumption expenditure insights. The analysis emphasizes monthly expenditure, concentrating on food (cereals, pulses, vegetables, sugar, oil, spices, milk) and toxicants (pan, tobacco, alcohol). Qualitative insights on cooking fuel, dwelling type, loans, education, ration card ownership, and sanitation facilities are collected randomly during the study. STATA software is utilized for a comprehensive examination.

In essence, this research unfolds the financial circumstances of minimum wage earners, providing an in-depth exploration of monthly consumption patterns. The integrated qualitative and quantitative methods, along with Stratified Random Sampling, enhance the analysis's robustness, capturing a holistic understanding of economic well-being.

Hypothesis

1. Increase in income leads to an increase in savings for households earning thrice the amount above the poverty line.
2. An increase in income will lead to an increase in food and non-food expenditure of the households

but the increase in non-food expenditure will be greater.

3. Food expenditure is inelastic

4. Non-Food expenditure in elastic

There have been five regression models used :

$Y_i = \circledR_0 + \circledR_1 X_i + \sum_i$

Y_i : consumption expenditure; $\circledR_0$: Constant Co-efficient; $\circledR_1$: For a unit change in income the consumption expenditure changes by this amount on an average i.e. MPS (Marginal Propensity to Save); X_i : Income; $\sum_i$: Residual

$Y_i = \circledR_0 + \circledR_1 X_i + \sum_i$

Y_i : Food expenditure; $\circledR_0$: Constant Co-efficient; $\circledR_1$: For a unit change in income the food expenditure changes by this amount on an average; X_i : Income; $\sum_i$: Residual

$Y_i = \circledR_0 + \circledR_1 X_i + \sum_i$

Y_i: Non-Food expenditure; μ_0: Constant Co-efficient; μ_1: For a unit change in income, non-food expenditure changes on average; X_i: Income; ε_i: Residual.

$\log y_i = \circledR_0 + \circledR_1 \log x_i + \sum_i$

$\log y_i$: Food expenditure; μ_0: Constant coefficient; μ_1: Percentage change in food expenditure for a 1 percent change in income; $\log x_i$: Income; ε_i: Residual.

$\log y_i = \circledR_0 + \circledR_1 \log x_i + \sum_i$

$\log y_i$: Non-food expenditure; μ_0: Constant coefficient; μ_1: Percentage change in non-food expenditure for a 1 percent change in income; $\log x_i$: Income; ε_i: Residual.

The data has limitations as it doesn't account for phone and internet expenses. The research focuses solely on urban areas, and some households were reluctant to discuss issues.

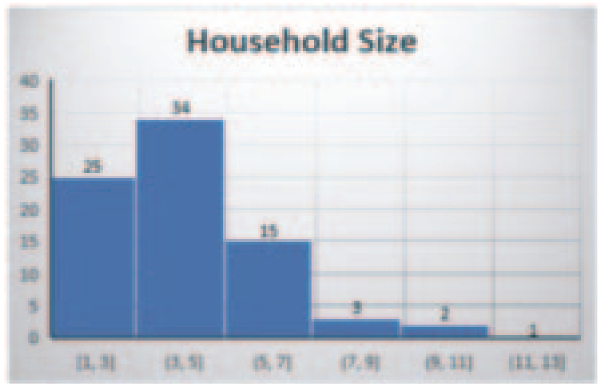
Characteristics of the Household

Household Size: Table 1 illustrates the household size distribution among surveyed households, categorized into five groups. The most frequent category, with 34 instances, indicates that out of the eighty households surveyed, 34 had an average household size ranging from 3 to 5 members. Notably, households with significant income constraints had both males and females contributing to earnings. The perception of children as productive assets for future social security persists.

Table 1 : Household Size

No. of Members	No. of Households
one -three	25
three -five	34
five -seven	15
seven -nine	3
nine-eleven	2
eleven-thirteen	1

Source: Primary Data

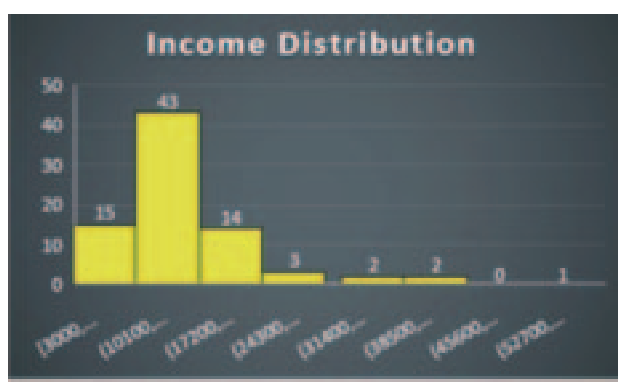


Income Distribution : The monthly income distribution of the households surveyed is shown in table 2.

Table 2: Income Distribution of Households

Income Levels (in Rupees)	No. of Households
3000-10,100	15
10,100-17,200	43
17,200-24,300	14
24,300-31,400	3
31,400-38,500	2
38,500-45,600	2
45,600-52,700	0
52,700-59,800	1

Source: Primary Data



The chart displays income distribution among surveyed households, with 43 earning between 10,100 to 17,200 Rupees. The average income is 16,030 Rupees, primarily earned through daily wage work, leading to income fluctuations. Construction workers face delayed payments, prompting borrowing. Notably, women receive lower daily wages (350 Rupees) compared to men (400 Rupees), both below the minimum wage of 466 Rupees.

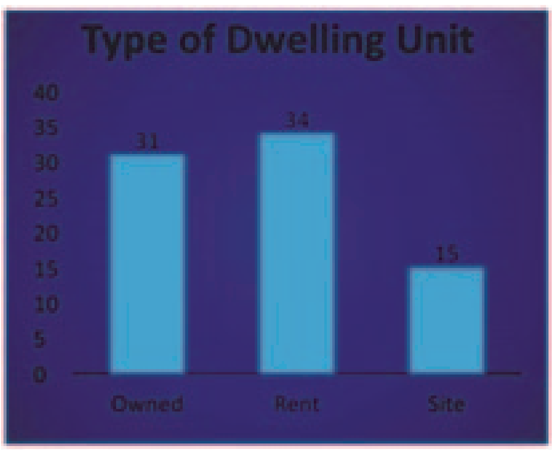
Education Level : The table 3 shows the education level of the participants from the households who were surveyed.

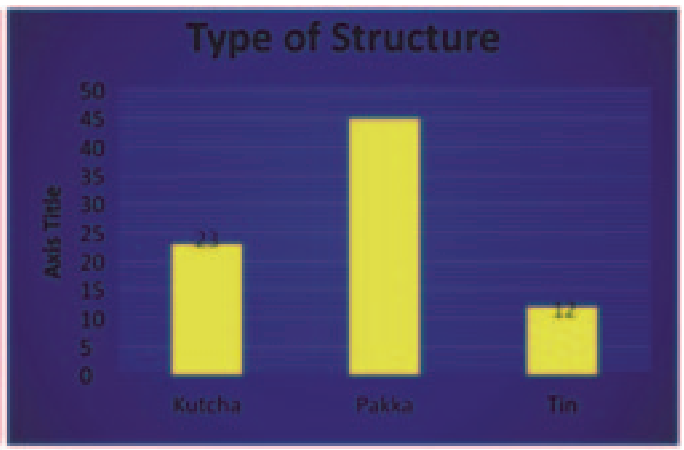
Table 3: Education Level of the Participants

Level	No. of Households
No Formal Education	30
Lower Primary	16
Upper Primary	9
Lower Secondary	15
Higher Secondary	8
Higher Education	2

According to the diagram, 37 percent of surveyed individuals lacked formal education. Despite literacy, their employment didn't align with educational backgrounds, highlighting prevalence of low-skilled work. Households with school-age children enrolled them in government or private schools, but education wasn't perceived as a path to upward mobility. Financially able households provided supplementary tuition, while migrant workers, especially in construction, faced challenges in educational support, relying on contractors or NGOs. Limited education impacted toddlers' health, revealing complex dynamics between education, occupation, and support access.

Ownership and Type of Structure of the Households





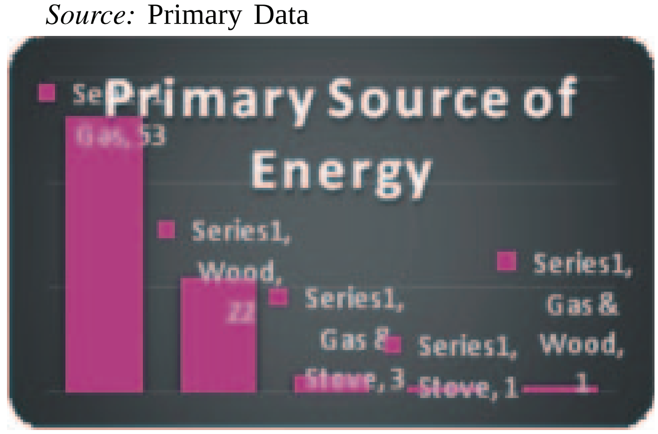
The chart shows that 31 households own their homes, while others rent (34) or live on the construction site (15). Predominantly, households reside in pukka structures, with kutcha houses being less common due to limited resources. Interestingly, many homeowners are second or third-generation earners, inheriting their dwellings. Despite owning their houses, financial constraints prevent them from undertaking significant construction investments.

Primary Source of Energy: The distribution of the households using the fuels is shown in table 4. There are three types of cooking fuel being used- gas, stove, and a mix of these two.

Table 4: Primary Source of Energy-Cooking

Type	No. of Households
Gas	53
Wood	22
Stove	3
Gas & Stove	1
Gas & Wood	1

Source: Primary Data



Members also mentioned that when they could not afford the gas, they had to use the stove. Thus, the gas and stove were used parallel, one serving as a substitute for the other. The wood was being used by migrant workers who stayed on the site. The majority of the household using wood were the construction workers, who simply lacked the means to obtain a gas cylinder.

Rent : The table 5 shows the total rent paid by the households which has been divided into different frequencies and the number of households falling within the each frequency distribution.

Table 5: Rent Expenditure

Rent Paid (Rupees)	No. of Households
0-1900	20
1900-3800	15
3800-5700	4
5700-7600	1

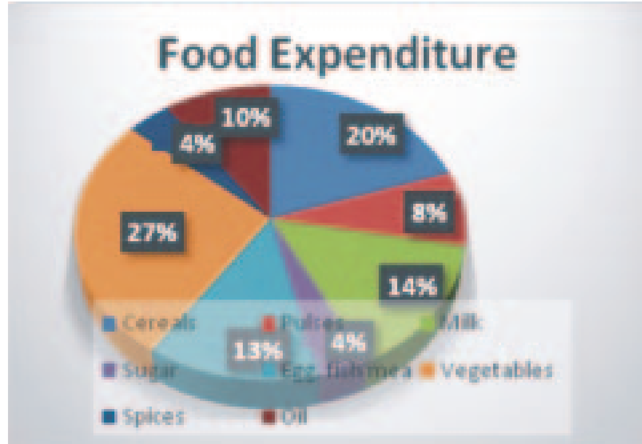
Of the thirty-two surveyed households renting, some were migrant construction workers at work sites. Those without homes allocated a significant portion of monthly income to rent. Despite a mean rent of 1313.5, sample variance resulted from certain households overspending, often due to choosing a pricier yet convenient location.

Monthly Expenditure Analysis

Food Expenditure: Understanding the ration card's significance is crucial for examining household food expenditure. Surprisingly, over fifty percent of surveyed individuals lacked a ration card due to various reasons, such as not obtaining one, losing it, or facing barriers like distant Fair Price Shops and bribery issues hindering card rectification..

Table 6: Total Food Expenditure

Food Items	Food Expenditure (Rupees)
Cereals	120409
Pulses	49820
Milk	89246
Sugar	19640
Egg, fish meat	72250
Vegetables	159400
Spices	21600
Oil	60790

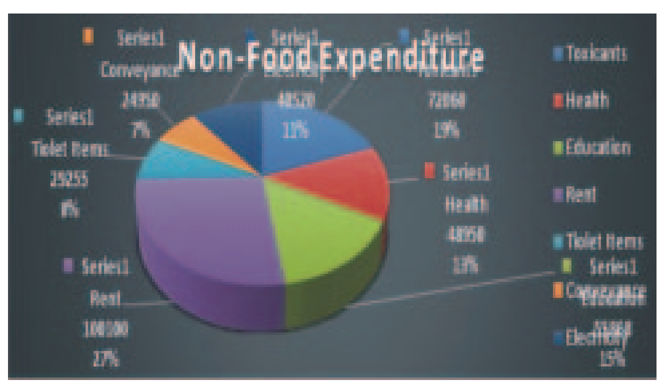


The table details monthly food expenditure for surveyed households. The pie chart illustrates spending distribution, with 20% on cereals and 27% on vegetables. Notably, 10% is spent on edible oil, impacted by rising prices during the survey. Households allocate 60% of their Rs. 12,350 incomes to food, with a mean spending of Rs. 7,409.31. The right-skewed distribution (skewness 0.19) is evident, and the 95% confidence interval (-Rs. 6,857.27 to Rs. 7,961.75) indicates where the average expenditure falls in 95 out of 100 instances, offering insights into households' financial dynamics.

Non-Food Expenditure: The table shows the total monthly non-food expenditure of the households along with the distribution among various items.

Table 7: Total Non-Food Expenditure

Non-Food Items	Total Expenditure (Rupees)
Toxicants	72060
Health	48950
Education	55868
Rent	100100
Toilet Items	29255
Conveyance	24950
Electricity	40520



The table shows the total non-food expenditure of the households surveyed.

The pie chart illustrates monthly non-food expenditure for surveyed households, emphasizing intoxicants, leisure, and health. The analysis excludes yearly expenses to focus on understanding monthly financial patterns.

In non-food expenditure, intoxicants form a significant category, constituting 25% of total spending, with 27% allocated specifically to alcohol. Despite owning phones, women lack leisure resources. Some households spend on gambling, primarily managed by males. Health constitutes 10%, but only two households have an Ayushman Bharat Card. During major health crises, they rely on family, employers, and neighbours for financial support, underscoring the limited healthcare safety nets.

Table 8 : Total Toxicant Expenditure

Type of Toxicant	Total Expenditure (Rupees)
Pan	14150
Tobacco	28300
Alcohol	29610

Source: Primary Data

The table shows the total monthly expenditure of the households on three kinds of toxicants- pan, tobacco, and alcohol.

Social Sector Expenditure - Health and Education

Table 9: Proportion of Income Spent on Education and Health

Parameters	Total Expenditure (in Rupees)	Total Income (in Rupees)	Percentage of the Income Spent
Health	48950	1282400	3.8
Education	55868	1282400	4.4

Source : Primary Data

The table depicts variations in household spending on health and education. Government school expenses are lower, contrasting with higher costs for higher education. Limited support, particularly for migrant workers' children, hinders education spending. Health expenses are modest, often leading to borrowing for serious needs. Elderly individuals face challenges in obtaining medicines, relying on government aid. Widespread lack of awareness of the Ayushman Bharat Card is attributed to document scarcity and high opportunity costs.

Sanitation Availability

The chart assesses two vital indicators for households: safe drinking water and sanitation. One household, unable to pay the water bill, resorts to daily water collection from varied sources. While tap water is commonly available, concerns about its cleanliness, especially for infants, persist. Regarding sanitation, households with toilets typically have them on their premises. Those lacking toilet access fall into two categories: toilets just outside the house and temporary solutions for construction workers involving a pit with a cloth enclosure. These insights reveal disparities in water and sanitation access, emphasizing the need for further examination, particularly regarding water quality and its potential health implications for infants.

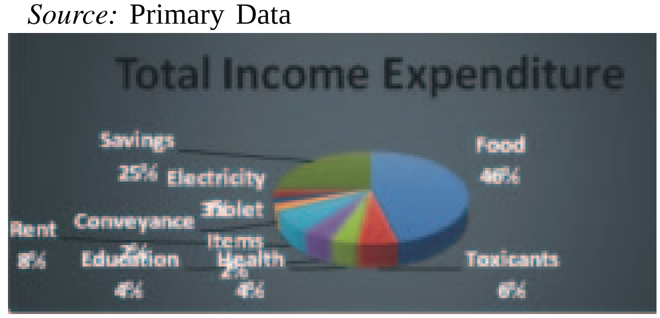
Household Monthly Income Analysis

Total Income Expenditure

Table 10: Total Income Expenditure-Savings

Monthly Expenditure Items	Income Expenditure (Rupees)
Food	5,93,155
Toxicants	72,060
Health	48,950
Education	55,868
Rent	1,00,100
Toilet Items	29,255
Conveyance	24,950
Electricity	40,520
Saving	3,17,872

Source: Primary Data



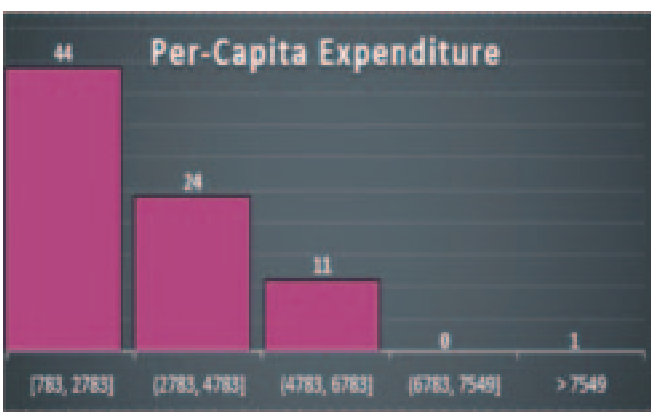
The table details monthly income distribution among surveyed households, presented in an accompanying pie chart. A significant portion is allocated to food, highlighting financial vulnerability. Rent ranks as the second-highest expenditure, with homeowners prioritizing savings and food. Although toxicants' spending slightly surpasses education, factors like government school attendance and infant care contribute. Conveyance represents 4% of expenditure due to work proximity or vehicle ownership. Savings alter the composition, reducing food expenses to 46%. Rent remains substantial, while migrant workers' savings constitute 25%, totalling Rs. 3,17,872. This data emphasizes financial challenges, necessitating targeted policies aligned with their spending patterns.

Per Capita Average Monthly Expenditure-Comparisons

Table 11: Per Capita Monthly Consumption Expenditure-Food

Monthly Expenditure Items	Per Capita Expenditure (Rupees)
Total Food Expenditure	1611.8
Cereals	327.2
Pulses	135.4
Milk	242.5
Sugar	53.4
Egg, fish meat	196.3
Vegetables	433.2
Spices	58.7
Oil	165.2

Source : Primary Data



The diagram illustrates the MPCE distribution of surveyed households, with the highest frequency at 44 in the MPCE range of 783-2753, aligning with the mean MPCE for the entire sample. The average monthly per capita expenditure for the surveyed households is 2621, with 60% allocated to monthly per capita food expenditure at 1611.8. The table further details the monthly per capita food expenditure, emphasizing spending on various food items.

Table 12: Comparison of the MPCE with NSSO: Consumption Survey (2011-12)

Items	2011-12 (NSSO Data)	2011-12(Adjusted for Inflation) Economic Survey (2020-21)	2022-House-holds surveyed
Cereals	175.00	293.93	327.2
Pulses	54.00	90.70	135.4
Milk	184.00	309.05	242.5
Sugar, Spices	94.00	157.88	53.4
Egg, Fish, Meat	96.00	161.24	196.3
Vegetables	122.00	204.91	433.2
Oil	70.00	117.57	165.2
Total Food	795.00	1335.29	1611.8

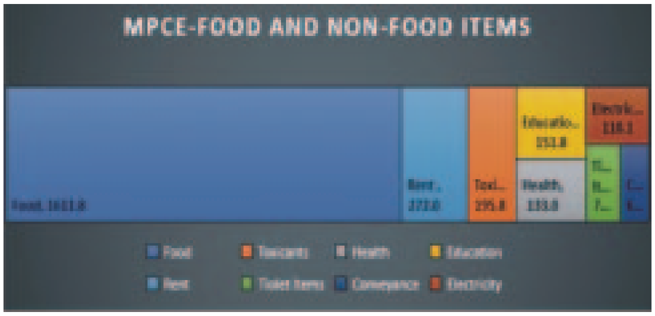
Table 13: Comparison of the MPCE (Non-Food) with NSSO: Consumption Survey (2011-12)

MPCE	NSS0-65	NSS0,65 (Adjusted for Inflation)	2022-Household Figures
Toxicants	42	73.10	195.8
Fuel and Light	176	306.34	170.1
Education	182	316.78	151.8
Medical	146	254.12	133.0
Conveyance	171	297.63	67.8
Rent	164	285.45	272
Non-food	882	1535.16	1003

Source: Primary Source, NSSO: Consumption Survey, 65th Round

Derived from the 65th NSSO Consumption Expenditure Survey (2011-12) and adjusted for inflation, the table reveals noteworthy trends. Per capita spending on cereals slightly decreased by 4%, while pulses surged by 49%. Monthly expenditure on vegetables increased by 84%, contributing to a 6.01% rise in overall food expenditure over the past decade. Non-food items show diverse patterns, with rent increasing by 13% and fuel/light expenditure notably decreasing by 58%. A threefold increase in toxicants expenditure signifies a distinctive shift in consumption patterns, providing valuable insights for policymakers addressing evolving financial priorities.

MPCE of the Households



The tree map displays the MPCE for surveyed households, with food expenditure topping at Rs. 1611.8. Rent follows at Rs. 272.0, surpassing toxicants at Rs. 195.48. Interestingly, toxicant expenditure exceeds education, potentially indicating their use as a substitute for leisure. Education spending is low due to fewer children attending school-some quit, and others attend low-fee government schools. This insight highlights diverse factors influencing expenditure patterns, including toxicant consumption and educational choices within surveyed households.

Proportion of the Income Spent on Different Items

Table 14: Proportion of Monthly Income Spent on Different Goods

Household Monthly Expenditure Items	Total Expenditure (in Rupees)	Total Income (in Rupees)	Proportion of Income Spent	Percentage of the Income
Food	5,93,155	1282400	0.46	46.25
Toxicants	72,060	1282400	0.05	5.6
Health	48,950	1282400	0.03	3.81
Education	55,868	1282400	0.04	4.35
Rent	1,00,100	1282400	0.07	7.80
Toilet Items	29,555	1282400	0.02	2.30
Conveyance	24,950	1282400	0.01	1.94
Electricity	40520	1282400	0.03	3.15
Total	964528	1282400	0.75	75.2

Source: Primary Source

The table illustrates income distribution between food and non-food items. Households allocate 46% to monthly food expenses, while 0.07 is spent on rent. Notably, 0.05 is spent on toxicants, closely followed by education at 0.04. This proximity underscores substantial spending on toxicants, potentially substituting for leisure activities.

Regression Models

Consumption and Income, computation of MPS

$Y_i = \circledR_0 + \circledR_1 X_i + \sum_i$

Y_i : consumption expenditure

$\circledR_0$:Constant Co-efficient

$\circledR_1$: For a unit change in income the consumption expenditure changes by this amount on an average i.e. MPS(Marginal Propensity to Save)

X_i : Income

$\sum_i$: Residual

saving	Coef.	St. Err.	t-value	p-value	[95% Conf	Interval]	Sig
income	.982	.063	15.61	0	.857	1.107	***
Constant	-11764.206	1147.599	-10.25	0	-14048.899	-9479.512	***

Mean dependent var	3973.400	SD dependent var	9884.964
R-squared	0.757	Number of obs	80
F-test	243.555	Prob > F	0.000
Akaike crit. (AIC)	1588.510	Bayesian crit. (BIC)	1593.274

**** p<.01, ** p<.05, * p<.1*

Interpretation :

0.98-The value indicates a 0.98 unit change on average in saving expenditure for a unit income change, aligning with Keynesian analysis of high MPS in low-income households.

P value - .000 (Exact Level of Significance) - As the value is 0.2 <1 showing that the 1 is significant at one percent.

Confidence Interval: 0.85-1.107 - at the true population parameter -i.e. 1 = 0 does not lie in the interval, hence we reject the null hypothesis. And accept the alternative. Income does have a significant impact on saving.

Food expenditure and Income

Y_i = ®$_0$ +®$_1$$X_i$+$\Sigma_i$

Y_i : Food expenditure ®$_0$:Constant Co-efficient

®$_1$: For a unit change in income the food expenditure changes by this amount on an average

X_i : Income Σ_i : Residual

Results

food	Coef.	St. Err.	t-value	p-value	[95% Conf	Interval]	Sig
income	.08	.031	2.60	.011	.019	.141	**
Constant	6126.298	560.879	10.92	0	5009.674	7242.921	***

Mean dependent var	7409.313	SD dependent var	2480.647
R-squared	0.080	Number of obs	80
F-test	6.777	Prob > F	0.011
Akaike crit. (AIC)	1473.963	Bayesian crit. (BIC)	1478.727

*** *p<.01*, ** *p<.05*, * *p<.1*

Interpretation :

0.08- The value highlights for a unit change in income the food expenditure increases on an average by 0.08units.

p- value-0.011 - Shows the Exact Level of Significance

Hence the result is significant at 5 % (0.011*100=1.1<5)

The interval (0.019-0.141) excludes the true parameter ($\mu_1 = 0$), leading to rejecting the null hypothesis. Income significantly impacts food expenditure.

R-squared= 0.08; 8 % of the total variation in food expenditure is explained by income.

Non-Food Expenditure and Income

Y_i = ®$_0$ +®$_1$$X_i$+$\Sigma_i$

Y_i : Non-Food expenditure ®$_0$:Constant Co-efficient

®$_1$: For a unit change in income the non-food expenditure changes by this amount on an average

X_i : Income Σ_i : Residual

Results

nonfood	Coef.	St. Err.	t-value	p-value	[95% Conf	Interval]	Sig
income	.92	.031	29.92	0	.859	.981	***
Constant	-6126.298	560.879	-10.92	0	-7242.921	-5009.674	***

Mean dependent var	8620.688	SD dependent var	8405.230
R-squared	0.920	Number of obs	80
F-test	895.299	Prob > F	0.000
Akaike crit. (AIC)	1473.963	Bayesian crit. (BIC)	1478.727

*** *p<.01*, ** *p<.05*, * *p<.1*

Interpretation:

0.92 - Shows that for a unit change in income the average non-food expenditure increases by 0.92.

The p-value is 0, highlighting the value of ®$_1$ is significant at 1 percent.

The interval (0.859-0.981) excludes the null hypothesis, leading to its rejection. This underscores the significant impact of income on non-food expenditure.

R-squared-0.92, showing how 92% variation in the non -food expenditure is explained by the income.

Income Elasticity of Food

log y_i = ®$_0$ + ®$_1$ log x_i+$\sum_i$

log y_i - the food expenditure ®$_0$ - constant coefficient

β_1®$_1$ - For a 1 percent change in income what is the percentage change in food expenditure

log x_i - income $\sum_i$ - Residual

Log food	Coef.	St. Err.	t-value	p-value	[95% Conf	Interval]	Sig
Log income	.279	.078	3.58	.001	.124	.434	***
Constant	6.182	.745	8.29	0	4.698	7.665	***
Mean dependent var	8.848		SD dependent var		0.371		
R-squared	0.141		Number of obs		80		
F-test	12.834		Prob > F		0.001		
Akaike crit. (AIC)	59.369		Bayesian crit. (BIC)		64.133		

*** *p<.01, ** p<.05, * p<.1*

0.55- For 1 % change in income the food expenditure changes by 0.27%. This is a direct measure of elasticity, also showing how the demand is income inelastic.

p-0 showing how the results is significant at 1 percent.

Income Elasticity of Non-Food Items

log y_i = ®$_0$ + ®$_1$ log x_i+$\sum_i$

log y_i - non-food expenditure ®$_0$ - constant coefficient

®$_1$ - For a 1 percent change in income what is the percentage change in non-food expenditure

log X_i- income $\sum_i$ - Residual

Results

Log non-food	Coef.	St. Err.	t-value	p-value	[95% Conf	Interval]	Sig
Log income	1.644	.131	12.59	0	1.383	1.904	***
Constant	-7.006	1.256	-5.58	0	-9.51	-4.502	***
Mean dependent var	8.791		SD dependent var		0.912		
R-squared	0.685		Number of obs		75		
F-test	158.427		Prob > F		0.000		
Akaike crit. (AIC)	115.427		Bayesian crit. (BIC)		120.062		

*** *p<.01, ** p<.05, * p<.1*

1.64- A 1 percent change in income corresponds to a 1.64 change in non-food expenditure, indicating high income elasticity.

With a confidence interval of 1.38-1.90, excluding the null hypothesis, we reject it. Income elasticity is significant.

Conclusions and Policy Suggestions

The study reveals that households just above the poverty line, earning $6.11, are grappling with precarious financial situations. Over 55 percent of their income is allocated to food, with no significant reduction for those using the Ration Card. Notably, the mean income of these households is Rs. 11,547, subject to seasonal variations. Construction workers, earning daily wages, experience frequent payment delays, leading to minimal savings. Desire for a male child persists for potential caregiving. Economic shocks result in substantial borrowing, impacting future purchasing power. Hopes for government assistance mainly revolve around financial transfers, housing support, or debt waivers.Childhood development is hindered by low education spending and inadequate nutrition. Awareness of schemes like Ayushman Bharat exists, but uptake is limited. Water access is widespread, but sanitation conditions vary. The Vidhwa Pension Scheme provides financial relief to widows facing economic challengesWomen, primarily responsible for household chores, often face domestic violence. Leisure is a luxury rarely enjoyed. While men's work ends with the workday, women's responsibilities continue, hindering opportunities for upward mobility. State intervention is crucial for addressing these challenges and facilitating economic progress for this vulnerable demographic.

Policy Suggestions

- **Ration Card Distribution:** Conduct bi-annual provisions for ration cards by municipal corporations, focusing on the urban poor. Increase awareness about the "One Nation, One Ration Card" scheme, particularly among migrant workers.
- **Ration Card Utilization:** Address the challenge of FPS being distant from residences, hindering effective use of ration cards. Consider augmenting the ration allocation, especially for pulses, to enhance nutrition and alleviate the burden on the food bill.
- **Inflation Control in Oil Prices:** Encourage domestic production to stabilize oil prices, mitigating fluctuations impacting the food bills of low-income households.
- **Health Initiatives:** Collaborate with local governments to enhance awareness about health programs, especially at construction sites. Organize workshops led by college students to educate families on nutrition and health practices. Provide basic amenities for children at construction sites, addressing issues like deworming and iodine deficiencies.
- **Education Focus:** Improve the quality of education to ensure a strong foundation for children from low-income households. Establish partnerships with NGOs to provide extra help and bridge educational gaps. Introduce initiatives focusing on mental health support for children facing violence and peer pressure.
- **Women's Empowerment:** Address wage discrimination with officials monitoring social justice at construction sites. Empower women through self-help groups and online education platforms for enhanced employability.
- **Social Security Measures:** Develop a comprehensive database of the unorganized sector, categorizing workers and their needs. Implement a flexible contribution scheme (e.g., 30-70) with varying interest rates, encouraging workers to save digitally.
- **Construction Workers Welfare:** Ensure timely wage payments, prevent wage discrimination, and avoid wage cuts for designated holidays. Introduce leisure activities, such as monthly film screenings, to provide relaxation for workers and their families
- **Public Transport:** - Invest in a robust public transport system to save costs and empower women to access work opportunities further from home.
- **Social Security for Vulnerable Groups:** Explore innovative financial models, like a 30-70 contribution, to provide social security for workers. Train college students to collect data for a comprehensive unorganized sector database.

These recommendations, spanning targeted awareness campaigns to structural improvements, seek to address the intricate challenges faced by low-income households, particularly those employed in the construction sector. Implementation of these measures could significantly contribute to enhancing their overall well-being and future prospects.

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कार्यस्थल के सियासी खेलः अच्छाई और बुराई की वकालत

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सारांश

स्कूलों, कॉलेजों, विश्वविद्यालयों, अस्पतालों, खेल टीमों और सार्वजनिक और निजी संस्थाओं सहित लगभग हर संगठन में राजनीति मौजूद है। कार्यस्थल की राजनीति हमेशा नकारात्मक नहीं होती है और इसके सकारात्मक पहलू भी हो सकते हैं। शोधकर्ताओं ने कहा कि परिप्रेक्ष्य को व्यापक बनाने के लिए कार्यस्थल की राजनीति में भी सकारात्मक होने की क्षमता है। यह 1990 और 2021 के बीच प्रकाशित कई प्रकाशनों, शोध पत्रिकाओं और अन्य वैज्ञानिक संदर्भों की जांच करके साहित्य अध्ययन करने के लिए द्वितीयक डेटा पर आधारित गुणात्मक दृष्टिकोण के साथ एक वर्णनात्मक अध्ययन है जो कार्यस्थल की राजनीति का पता लगाता है। साहित्य विश्लेषण के परिणामस्वरूप कई संकेतक विकसित होते हैं, जैसे- उद्देश्यों की अस्पष्टता, बजट का आवंटन, निर्णय लेना, वेतन और पदोन्नति, शक्ति और नौकरी में असंतोष ये पांच संकेतक हैं।

परिचय

राजनीति हमारे जीवन का एक पहलू है, और इससे बचना मुश्किल है। लोग राजनीतिक रूप से उन तरीकों से कार्य करना पसंद करते हैं जो उन्हें सबसे अधिक लाभ पहुंचाते हैं। यह व्यक्तिगत शक्ति और स्थिति से जुड़ी एक प्रकार की संगठनात्मक गतिविधि है। संगठनों में बहुत से लोग उनके खिलाफ खेली जा रही राजनीति के परिणामस्वरूप पीड़ित हैं; यह उनकी पेशेवर उन्नति में बाधा भी बन सकता है, और ऐसी राजनीति का अंतिम परिणाम तनाव और चिंता हो सकता है। ऐसे कारण हैं कि लोग ऐसी राजनीति में क्यों शामिल होते हैं, साथ ही वे इस तरह की राजनीति में कैसे शामिल होते हैं और लोगों को ऐसी राजनीति में शामिल होने की आवश्यकता क्यों होती है। कार्यस्थल की राजनीति का उपयोग विचारों को बेचने, लोगों को प्रभावित करने और लक्ष्यों को प्राप्त करने के लिए किया जाता है; यह अनौपचारिक और अनौपचारिक है, और यह कभी-कभार "बंद दरवाजों के पीछे" हो सकता है (ब्रैंडन एंड सेल्डमैन, 2004)।

कार्य-स्थल की राजनीति का एक लंबा इतिहास रहा है, अरस्तू ने कहा कि राजनीति परस्पर विरोधी हितों के कारण मौजूद है जिसे सुलझाया जाना चाहिए। जब तर्कसंगत सोच काम नहीं करती है, तो कई अधिकारी अनुपालन प्राप्त करने के लिए राजनीतिक रणनीति अपनाते हैं। कार्यस्थल की राजनीति के इस प्रतिकूल प्रभाव के बावजूद, इस बात का सबूत है कि यह हमेशा बुरा नहीं होता है, और राजनीतिक कौशल, यदि प्रभावी ढंग से उपयोग किया जाता है, तो चुनौतीपूर्ण कार्यस्थल वातावरण में समझौता करने में मदद मिल सकती है। (होचवार्टर, विट, और काकमार, 2000)।

कार्यस्थल की राजनीति को दो तरह से देखा जा सकता हैः सामाजिक प्रभाव प्रक्रियाओं के एक लक्षण के रूप में जो संगठन की मदद करते हैं, या एक स्व-सेवा परिणाम के रूप में जो संगठनात्मक लक्ष्य को कमजोर करता है। (गोत्सिस एंड कोर्टे-जी, 2010ः 498)।

ओलोरुनलेके (2015) के शोध के अनुसार, विभिन्न कारक कार्यस्थल की राजनीति में योगदान करते हैं, जिनमें उच्च पदानुक्रम, एक अनिश्चित वातावरण, अस्पष्ट लक्ष्य और अन्य शामिल हैं। संगठन विभिन्न प्रकार के लोगों, संसाधनों और उद्देश्यों से बने होते हैं। जब संसाधन आवंटित करने की बात आती है, तो प्रत्येक व्यक्ति का एक अलग दृष्टिकोण हो सकता है। नतीजतन, प्रत्येक संगठनात्मक नेता राजनीतिक रणनीति के माध्यम से संसाधन आवंटन को प्रभावित करने का प्रयास करता है। किसी भी फर्म में बजट का आवंटन एक सामान्य घटना है। कर्मचारी अपने रोजगार को सुरक्षित रखने की कोशिश करेंगे और विलय और अधिग्रहण या प्रबंधन परिवर्तन जैसी अनिश्चित स्थितियों में गठबंधन बनाएंगे। ओलोरुनलेके (2015) के अनुसार, कार्यस्थल की राजनीति से बचा नहीं जा सकता है और जरूरी नहीं कि यह हानिकारक हो। कार्यस्थल की राजनीति से संगठनात्मक निर्णय लेने की प्रक्रिया प्रभावित हो सकती है। नेता भी अपने अधीनस्थों को अपने निर्णयों का समर्थन करने के लिए राजी करने का प्रयास करते हैं। ये कारक निर्णय लेने की प्रक्रिया में सहायता करने के साथ-साथ कार्य कुशलता में वृद्धि कर सकते हैं। इसके अलावा, इसमें फर्म के भीतर कर्मचारियों पर ध्यान केंद्रित करने की क्षमता है (सोनाइक, 2013)।

साहित्य की समीक्षा

कार्य-स्थल की राजनीति एक सामाजिक प्रभाव प्रक्रिया है

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जिसमें व्यवहार को जान-बूझकर संरचित किया जाता है ताकि दूसरों के हितों के साथ या विरोध में या तो अल्पकालिक या दीर्घकालिक स्व-हित को अधिकतम किया जा सके (मिलर *एट अल,* 2008)। फेरिस के शोध (1989) के अनुसार, राजनीति को कार्यस्थल व्यवहार के रूप में परिभाषित किया गया है जिसका उद्देश्य कर्मचारियों के स्वयं-लाभ को बढ़ाना है (नसरदीन, अहमद और रजल्ली, 2014)। एक शोधकर्ता का तर्क है कि गतिविधियाँ कर्मचारी लाभ को बढ़ाएंगी और कर्मचारियों को पुरस्कार के लिए राजी करेंगी। -गिव-आईएनजी प्राधिकरण (क्रोपंजानो, 1989; नसरदीन, अहमद, और रजाली, 2014)। कार्यस्थल की राजनीति प्रभावों के तीन समूहों से प्रभावित होती है। संगठनात्मक प्रभाव या संगठनात्मक संरचना पहली श्रेणी है; कार्य और सहकर्मी दूसरी श्रेणी है; और कर्मचारी गुण तीसरी श्रेणी है (फेरिस एंड काकमार, 1992)। इसके अलावा, कार्यस्थल की राजनीति के कई परिणाम हैं, जिसमें कर्मचारी का इस्तीफा या फर्म से अनुपस्थिति शामिल है (फेरिस, रस, और फंड्ट, 1989य फेरिस और काकमार, 1992)। कर्मचारी कार्यस्थल की राजनीति में शामिल हो सकते हैं यदि वे कंपनी के साथ बने रहते हैं (फेरिस, रस, और फैंड्ट, 1989य फेरिस और काकमार, 1992)। बुकानन (2008) के अनुसार, कार्यस्थल की राजनीति का विषय अभी भी समझा जाता है। ओल्सन, बाओ और परायितम (2014) द्वारा किए गए शोध में कहा गया है कि अधिकांश शोधकर्ता दो क्षेत्रों पर ध्यान केंद्रित करते हैः कार्यस्थल की राजनीति और राजनीतिक व्यवहार के बारे में कर्मचारियों की धारणा। (ओल्सन, बाओ, और परायितम, 2014)। विगोडा-गैडोट एंड ड्रोरी (2006) और कैसियाट्टो-लो (2013) द्वारा किए गए शोध भी राजनीतिक संकट के दौरान कर्मचारी व्यवहार और प्रतिक्रियाओं में अधिक शोध की सलाह देते हैं। इसके अलावा, राजनीतिक स्थिति उत्पन्न करने वाले कारणों को समझना कर्मचारियों की राजनीतिक गतिविधि को समझने के लिए महत्वपूर्ण है (कैसियाटोलो, 2013)। कई शिक्षाविदों का मानना है कि कार्यस्थल की राजनीति में अभी भी सुधार की बहुत गुंजाइश है।

कार्यस्थल गपशप

कार्य-स्थल की राजनीति गपशप में फैल गई है। गपशप कार्यस्थल की राजनीति से अटूट रूप से जुड़ी हुई है, और इसे आम तौर पर हानिकारक माना जाता है, हालांकि गपशप अध्ययन असहमत हैं। ब्रैडी, ब्राउन और लियांग (2017) के अनुसार, अधिकांश लोग दूसरों को नकारात्मक रूप से प्रभावित करने के बजाय जानकारी प्राप्त करने और मान्य करने के लिए गपशप करते हैं। कार्यस्थल की गपशप जिसे नकारात्मक के रूप में देखा जा सकता है। संचार की कमी के कारण कर्मचारी ईमानदार जानकारी चाहते हैं (ग्रॉसर, लोपेज-किडवेल, लबियांका, और एलवर्ड्ट, 2012, पी। 54)। ग्रॉसर *एट अल* (2012) के निम्नलिखित उदाहरण का हवाला देते हैं। एक निर्माण कंपनी में जब कर्मचारियों ने वरिष्ठ प्रबंधन से पूछताछ की, तो उन्होंने पाया कि वे आसन्न डाउनसाइजिंग के बारे में जानकारी को दबा रहे थे और इसके बारे में उनसे झूठ बोल रहे थे। जब कर्मचारियों को कटौती के बारे में सच्चाई का पता चला, तो वरिष्ठ प्रबंधन द्वारा प्रदान की गई जानकारी पर उनका भरोसा टूट गया। कर्मचारियों ने गपशप और अफवाहों की पहचान संचार के सबसे प्रभावी तरीकों में से एक के रूप में की, जिसमें फर्म में सूचना के सभी औपचारिक स्रोत संदिग्ध थे।

कार्यस्थल की राजनीति के सकारात्मक पहलू

कार्यस्थल की राजनीति और प्रक्रियाओं को कभी-कभी रक्षात्मक संगठनात्मक प्रथाओं के रूप में गलत समझा जाता है जो वास्तविक डेटा को संशोधित और फिल्टर करते हैं (एसईओ, 2003ः 11)। दूसरी ओर, कार्यस्थल की राजनीति को सत्ता-संघर्ष, अविश्वास, या छिपे हुए उद्देश्यों के बारे में नहीं होना चाहिए। कार्यस्थल की राजनीति उन तरीकों से उपयोगी हो सकती है जो केवल राजनीतिक रूप से शिक्षित और प्रतिबद्ध अल्पसंख्यक (वेदेनबर्ग और शिया-वान फॉसेन) से अधिक लाभ पहुंचाते हैं। विगोडा गैडोट एंड ड्रोरी, (2006) दर्शाता है कि कार्यस्थल की राजनीति हमेशा नकारात्मक प्रभाव नहीं डाल सकती है, क्योंकि अलग-अलग व्यक्तित्व राजनीति को दूसरों की तुलना में अधिक सकारात्मक रूप से देख सकते हैं।

कार्यस्थल से राजनीति के प्रति स्पर्धात्मक लाभ

सकारात्मक कार्यस्थल की राजनीति आपको प्रति स्पर्धात्मक लाभ प्राप्त करने में मदद कर सकती है, खासकर यदि आपके पास सही राजनीतिक कौशल है। यह प्रस्तावित किया गया है कि राजनीतिक रूप से समझदार प्रबंधन तनावग्रस्त कार्यस्थल स्थितियों का सफलतापूर्वक प्रबंधन करता है- एक राजनीतिक कौशल जिसमें विश्वास, आत्मविश्वास और ईमानदारी की भावनाओं को बढ़ावा देने वाले कार्यों का उपयोग करने की क्षमता शामिल है (ड्रोरी और विगोडा-गडोट, 2010ः 195; गोटिस और कोर्टेजी, 2010ः 504)। यह इंगित करता है कि जो लोग यह समझते हैं कि बुरे व्यवहार से बचने के दौरान सकारात्मक प्रभाव वाले व्यवहारों और तरीकों को कैसे नियोजित किया जाए, उनके सकारात्मक राजनीति में संलग्न होने की अधिक संभावना है। ड्रोरी और विगोडा-गडोट (2010) के अनुसार, सकारात्मक राजनीतिक कौशल का एक सेट विकसित करने से अन्याय, अन्याय और असमानता से मुक्त एक प्रभावी राजनीतिक माहौल बनता है।

राजनीतिक रूप से कुशल व्यक्ति और संगठन की सफलता में सुधार

कर्मचारी कार्यस्थल की राजनीति की अपनी धारणाओं का उपयोग उस वातावरण की समझ बनाने के लिए करते हैं जिसमें वे काम करते हैं, और कुछ कार्यस्थल की राजनीति को संगठनों में विवादों के माध्यम से काम करने के साधन के रूप में मानते हैं (लाडेबो, 2006: 256)। अन्य लोग सोचते हैं कि राजनीतिक कौशल होने से एक व्यक्ति और एक कंपनी को संगठनात्मक परिवर्तन की सुविधा और पर्यावरण के अनुकूल होने में मदद मिल सकती है (लेडेबो, 2006: 256, 259; वेदेनबर्ग और शिया-वानफॉसेन, 2010: 41)। कुरचनर-हॉकिन्स और मिलर (विगोडा-गडोट और ड्रोरी, 2006 में) के अनुसार, राजनीतिक व्यवहार रचनात्मक होता है जब यह संगठन के दृष्टिकोण और उद्देश्यों को पूरा करता है, टीमवर्क और आत्मविश्वास को बढ़ावा देता है, और नैतिक रूप से संतुलित होता है। इसके अलावा, सकारात्मक या रचनात्मक राजनीतिक व्यवहार संगठनों को अधिक समानता प्राप्त करने में मदद कर सकता है (गोटिस और कोर्टेजी, 2010: 505)।

संबद्धता, गठबंधन-निर्माण और मार्गदर्शन के रूप में राजनीतिक व्यवहार

बुचर और क्लार्क (2006: 297) तर्क की इस पंक्ति का विस्तार करते हैं, यह तर्क देते हुए कि प्रबंधक जो अपने कार्यस्थल के राजनीतिक वातावरण के बारे में पूरी तरह से जागरूक हैं, वे समानता प्राप्त करने के लिए राजनीतिक व्यवहारों को नियंत्रित करने में बेहतर सक्षम हैं। ऐसा इसलिए भी है, क्योंकि करचनर-हॉकिन्स एंड मिलर (विगोडा-गडोट एंड ड्रोरी, 2006 में) के अनुसार, वर्कप्लेस पॉलिटिक्स एक संगठन के वातावरण और दक्षता (2006: 331) पर राजनीतिक व्यवहार के संभावित प्रभाव के कारण एक महत्वपूर्ण नेतृत्व चिंता है। परिणामस्वरूप, यदि राजनीतिक व्यवहार को संगठनों में सामान्य और लाभकारी के रूप में देखा जाता है, तो राजनीतिक रणनीतियों को संबद्धता, संबंध बनाने, गठबंधन बनाने, या यहां तक कि नेतृत्व प्रदान करने के रूप में माना जा सकता है।

कार्यस्थल की राजनीति कार्यस्थल सीखने के रूप में

उनके संगठन में व्यक्तियों की भूमिका और स्थिति के बावजूद, कोओपी और बरगॉय (2000) सुझाव देते हैं कि उदार प्रकार की राजनीति सीखने पर अच्छा प्रभाव डाल सकती है (2000: 869) ।वे दावा करते हैं, विशेष रूप से, कि राजनीति का एक खुला रूप एक संगठन में कर्मचारियों को नए विचारों को प्राप्त करने के लिए और अधिक प्रतिबद्ध होने के लिए प्रोत्साहित करता है (2000: 879)। कोपेई और बरगॉय (2000) द्वारा संस्थागत सिद्धांत का उपयोग यह दिखाने के लिए किया जाता है कि कई व्यक्तियों को शामिल करने वाले समूह स्तर पर खुली राजनीतिक प्रक्रियाओं के परिणामस्वरूप एक संगठन में सीखना होता है। वे यह भी दावा करते हैं कि संगठनात्मक राजनीति संगठनों को अधिक लचीला और आविष्कारशील बनने में मदद कर सकती है। यह अभ्यास के समुदायों के अंतर्संबंध के माध्यम से सीखने को प्रसारित करने की अनुमति देगा। (कूपे और बरगॉय, 2000: 882)।

कैरियर में उन्नति और मान्यता जैसे राजनीति के सकारात्मक परिणाम

विगोडा-गडोट और कपुन (2005) लिखते हैं, "कैरियर में उन्नति, मान्यता और स्थिति, अधिक अधिकार और स्थिति, व्यक्तिगत और संगठनात्मक लक्ष्यों की प्राप्ति, नौकरी या नीति कार्यान्वयन की सफल उपलब्धि, और उपलब्धि की भावनाएं, अहंकार, नियंत्रण और सफलता"। इसका मतलब यह है कि ऊपर सूचीबद्ध सभी परिदृश्यों में राजनीतिक व्यवहार की आवश्यकता हो सकती है, खासकर यदि कोई व्यक्ति किसी संगठन में प्रगति करना चाहता है या सहकर्मियों द्वारा मान्यता प्राप्त करना चाहता है। (ड्रोरी और विगोडा-गडोट, 2010: 195)।

कार्यस्थल की राजनीति के नकारात्मक पहलू

हालांकि कार्यस्थल की राजनीति को स्व-सकारात्मक क्षमता के लिए व्यापक रूप से स्वीकार किया जाता है, अध्ययनों से पता चलता है कि व्यक्ति अभी भी मुख्य रूप से इन्हें नकारात्मक मानते हैं (ड्रोरी और विगोडा-गडोट, 2010: 195; ओथमैन, 2008: 44; पून, 2003: 138)। राजनीतिक कार्यस्थल के वातावरण को आम तौर पर व्यक्तियों द्वारा नकारात्मक रूप से माना जाता है और यह अनुचितता, अभाव और असमानता का एक तरीका प्रेरित करेगा (गोटिस और कोर्टेजी, 2010: 499; हैरिस *एट अल,* 2009: 2669; लेडेबो, 2006: 256; विगोडा-गादोट और कपुन, 2005: 258)। नतीजतन वे कर्मचारी जो अपने संगठन को राजनीतिक रूप से देखते हैं, वे उपयोगी जानकारी को रोक देते हैं (विगोडा-गदोट और ड्रोरी में बेग्रे और लिवरपूल, 2006: 125)। कार्यस्थल की राजनीति लोगों की आवाज और राय को मूक और विकृत कर सकती है, ऐसे तथ्य जो रक्षा तंत्र को जन्म देते हैं और अनिश्चितता को बनाए रखते हैं (विंस, 2001: 1344)। कर्मचारियों को राजनीतिक कार्यस्थल के वातावरण में अनिश्चितता, अस्पष्टता से खतरा महसूस होता है और इसलिए स्व-ब्याज क्रियाएं जो व्यक्तियों के साथ होती हैं (हैरिस *एट अल,* 2009: 2680)। वेदेनबर्ग और शिया-वानफॉसन (2010) का तर्क है कि आनुवंशिक प्रवृत्ति जैसे जबरदस्ती, शक्ति और नियंत्रण की आवश्यकता, जोड़-तोड़, रैंक प्रतिद्वंद्विता, और अहंकारवाद सभी अनिश्चितता, संसाधन की

कमी और असहमति की सामान्य संगठनात्मक परिस्थितियों के जवाब में प्रकट हो सकते हैं।

नौकरी के प्रदर्शन और संगठनात्मक प्रतिबद्धता पर नकारात्मक प्रभाव

वास्तव में, विभिन्न शोधकर्ताओं ने पाया कि कार्यस्थल की राजनीति का नौकरी के प्रदर्शन और संगठनात्मक प्रतिबद्धता पर नकारात्मक प्रभाव पड़ता है, विशेष रूप से निचले दर्जे के कर्मचारियों के लिए (ड्रोरी, 1993; फेरिस *एट अल,* 1989: 158; गोटिस और कोर्टेजी, 2010: 499; विगोडा- गैडोट और कपुन, 2005: 258)।

कार्यस्थल पर तनाव और संघर्ष का स्रोत

शोधकर्ताओं का प्रस्ताव है कि कार्यस्थल की राजनीति कार्यस्थल पर तनाव और संघर्ष का स्रोत है (लाडेबो, 2006: 263; विगोडा-गडोट और कपुन, 2005: 259)। 1993 के फेरिस *एट अल* के अध्ययन ने पहचान की कि राजनीति कम कथित नियंत्रण वाले लोगों के लिए नौकरी की चिंता से जुड़ी हुई थी (2006: 143)। इसका तात्पर्य यह है कि निचले स्तर की शक्ति वाले कर्मचारी अपने कार्यस्थल के वातावरण में राजनीति का अनुभव करने के बाद अधिक तनाव महसूस करते हैं। परिणामस्वरूप, कार्यस्थल की राजनीति किसी व्यक्ति को कार्यस्थल से शारीरिक या मानसिक रूप से अलग करने का कारण बन सकती है (विगोडा-गडोट और कपुन, 2005: 260)

सूचना साझा करने और संचार को प्रतिबंधित का कारण

कुछ शोधकर्ता कहते हैं कि राजनीतिक व्यवहार सूचना साझा करने और संचार को प्रतिबंधित करता है और इस प्रकार सीखने को रोकता है (कर्टिस, 2003: 296; पून, 2003: 138)। इस मामले के दौरान, करचनर-हॉकिन्स एंड मिलर (विगोडा-गडोट एंड ड्रोरी, 2006 में) ने कहा कि संचार और डेटा राजनीतिक अभ्यासों में प्रमुख खिलाड़ी हैं और उनका नियंत्रण संगठनों में राजनीतिक प्रक्रियाओं के लिए अत्यधिक महत्व रखता है (2006: 339)। ऐसा इसलिए हो सकता है क्योंकि सूचना और संचार दोनों ही उन मुद्दों और कार्यों को उत्पन्न करने और जागरूक करने के तरीके हैं जो काम पर हो रहे हैं।

कार्यस्थल की राजनीति सीखने में बाधित

राजनीतिक व्यवहार सांस्कृतिक कारकों में शामिल है जो सीखने को भी बाधित कर सकते हैं। बिशप *एट अल* के अनुसार (2006), संस्कृतियाँ जो तकनीकी कौशल के अधिग्रहण और जमाखोरी पर उच्च मूल्य रखती हैं जो व्यक्तियों द्वारा स्वयं उपयोग की जाती हैं, ज्ञान-साझाकरण नेटवर्क को प्रोत्साहित करने की संभावना कम होती है (2006: 20)। इसी तरह, संस्कृतियां जो विश्वास की कमी से प्रतिष्ठित हैं, संभवतः व्यक्ति से समूह या संगठन (बिशप *एट अल,* 2006: 20) में डेटा के हस्तांतरण को प्रोत्साहित नहीं करेंगी। अल्ब्रेक्ट (विगोडा-गैडोट एंड ड्रोरी, 2006 में) नोट करता है कि जब कर्मचारियों को लगता है कि वे अन्य कर्मचारियों पर भरोसा नहीं कर सकते हैं और इसलिए एक संगठन की प्रक्रियाएं हैं, तो उनके पास अपने समर्पण को कम करने, कम प्रयास करने और बातचीत करने की प्रवृत्ति होती है।

कार्यस्थल की राजनीति से भरोसे की कठिनाई और हिंसक व्यवहार उत्पन्न

वर्कप्लेस पॉलिटिक्स भी भरोसे के मुद्दे से जुड़ी है। ट्रस्ट अक्सर लोगों के व्यवहार को प्रभावित करता है, और कर्मचारियों को दूसरों के इरादों के बारे में संदेह होने की अधिक संभावना होती है यदि वे कॉफ-फी ट्रस्ट क्लाइमेट जोड़ते हैं (ओथमैन, 2008: 45; पून, 2003: 142; जालेजनिक, 1971: 58)। यह अनौपचारिक अत्यधिक राजनीतिक व्यवहार की ओर जाता है। इसके अतिरिक्त, क्रोपैंजानो और ली (विगोडा-गडोट और ड्रोरी, 2006 में) कहते हैं कि राजनीतिक माहौल के उन लोगों के लिए भी नकारात्मक परिणाम हो सकते हैं जो सीधे तौर पर पहली राजनीतिक गतिविधि से अटे पड़े हैं।

उद्देश्य

1. कार्यस्थल की राजनीति के बारे में तथ्यों का पता लगाने के लिए।
2. कार्यस्थल की राजनीति के सकारात्मक और नकारात्मक पहलुओं का पता लगाने के लिए।
3. कार्यस्थल की राजनीति में कार्यस्थल की गपशप की भूमिका का पता लगाना

अनुसंधान के तरीके

उपयोग की जाने वाली शोध पद्धति साहित्य अध्ययन अनुसंधान है जिसमें कार्यस्थल की राजनीति पर 1990-2021 से 20 प्रकाशित अध्ययनों की पहचान की जाती है और उनकी समीक्षा की जाती है। कार्यस्थल की राजनीति में नियोजित यह डेटा कार्यस्थल की राजनीति के छह संकेतकों पर भी चर्चा करता है: उद्देश्यों की अस्पष्टता, बजट का आवंटन, निर्णय लेना, वेतन और पदोन्नति, शक्ति और नौकरी से असंतोष।

परिणाम और चर्चा

ओथमैन (2008) ने न्याय, विश्वास और नौकरी की अस्पष्टता (2008: 44) की भूमिका पर अपने पेपर में कार्यस्थल की राजनीति

के दो पक्षों का उल्लेख किया है, अर्थात् नकारात्मक पक्ष, जिसमें सुविधाजनक और अवैध व्यवहार शामिल है, और सकारात्मक पक्ष भी जो एक हो सकता है, अवसर जो संगठनों के जीवित रहने के लिए महत्वपूर्ण है (2008: 44)। नकारात्मक कार्यस्थल की राजनीति को उनके साथ सौंपी गई नैतिक दुविधाओं और इसलिए उत्पन्न होने वाले कार्यस्थल संघर्षों के लिए धन्यवाद से अस्वीकृत किया जाता है, जबकि सकारात्मक कार्यस्थल की राजनीति साझा लक्ष्यों के समामेलन और उत्तेजक सहयोग से उत्पन्न होती है (ड्रोरी और विगोडा-गडोट, 2010: 196; गोटिस और कोर्टेजी, 2010: 509)। राजनीतिक व्यवहार अक्सर निजी संगठनों के बारे में बाहरी पार्टियों को सूचना प्रसारित करने की शैली के भीतर होता है, बैठकों के दौरान दूसरों को बताए बिना कुछ सूचनाओं को रोक कर, गठबंधन (रॉबिन्स एंड जज, 2013) बनाते हैं। राजनीतिक व्यवहार को नैतिक माना जाता है यदि वह सीधे तौर पर दूसरों को नुकसान नहीं पहुँचाता है। दूसरे शब्दों में, यदि राजनीतिक व्यवहार सीधे तौर पर दूसरों के लिए हानिकारक है, तो इसे अनैतिक व्यवहार माना जाता है। ओमिसोर और न्वेके (2014) राजनीतिक व्यवहार की जांच करने से पहले सौदेबाजी, सत्ता के प्रभाव और गठबंधन को जानने की आवश्यकता का सुझाव देते हैं। शक्ति, संगठनात्मक संसाधनों और स्वयं के लाभ के लिए कर्मचारी राजनीति में शामिल हैं (एनई, 2014)। कार्यस्थल की राजनीति के संबंध में साहित्य समीक्षा से छह संकेतक स्थापित किए गए हैं। छह कारक उद्देश्यों की अस्पष्टता, बजट का आवंटन, निर्णय लेना, वेतन और पदोन्नति, शक्ति और कार्यस्थल की राजनीति से नौकरी में असंतोष हैं। इसके अलावा, नौकरी से असंतोष के अलावा पांच कारकों का कार्यस्थल की राजनीति पर तत्काल प्रभाव पड़ता है। कार्य असंतोष कार्यस्थल की राजनीति का परिणाम हो सकता है।

1. उद्देश्यों की अस्पष्टता

फेरिस *एट अल* द्वारा अनुसंधान (1989) ने तर्क दिया कि पर्यावरणीय अस्पष्टता राजनीतिक व्यवहार का समर्थन करेगी। जिन संगठनो के पास स्पष्ट नियम नहीं हैं, वे राजनीतिक व्यवहार में वृद्धि करेंगे। संगठनात्मक लक्ष्यों को संगठन को रणनीतिक रूप से तैयार करने और कर्मचारियों को दिशा प्रदान करने में महत्वपूर्णहोना चाहिए। पर्यावरण-मानसिक अनिश्चितता विलय, अधिग्रहण और संगठनात्मक संचालन (सोमोए, 2016) के सुव्यवस्थित होने का आकार ले सकती है। इसके अतिरिक्त, कर्मचारी नई प्रबंधन दिशा के बारे में अनिश्चित हैं। ओलोरुनले-के (2015) के शोध से पता चलता है कि जब कर्मचारियों को साझा मूल्यों या लक्ष्यों की आवश्यकता होती है तो कर्मचारी कार्यस्थल की राजनीति में कम व्यस्त रहते हैं। सोमोये (2016) के शोध के अनुसार, जटिल लक्ष्य, विशेष रूप से प्रौद्योगिकी, राजनीतिक आचरण में सुधार कर सकते हैं। अनिश्चितता कार्यस्थल में राजनीतिक आचरण को सुधारने में सहायता कर सकती है।

2. बजट का आवंटन

चर्चा करने वाला दूसरा कारक बजट आवंटन है। संसाधनों की कमी होने पर प्रतिस्पर्धा बढ़ेगी (काकमार और कार्लसन, 1997)। बाजार में प्रतिस्पर्धा करने के लिए, प्रत्येक कंपनी को दीर्घकालिक प्रतिस्पर्धात्मक लाभ होना चाहिए। किसी संगठन के संसाधनों और क्षमताओं को तीन श्रेणियों में वर्गीकृत किया जा सकता हैः भौतिक संसाधन, संगठनात्मक संसाधन और मानव संसाधन (डेविड, 2011)। फैक्टरी और मशीनरी, फर्नीचर और साज-सज्जा, साथ ही कंप्यूटर, भौतिक संपत्ति के उदाहरण हैं। मानव-मानव संसाधनों में संगठन के कर्मचारी शामिल हैं और इन कर्मचारियों के पास अनुभव, बुद्धिमत्ता और दक्षताओं का खजाना है। सद्भावना, कॉपीराइट, संपत्ति और अन्य संसाधन संगठन के संसाधनों का हिस्सा हैं। यदि संगठन के पास असीमित संसाधन हैं तो संसाधनों को वितरित करने की कोई आवश्यकता नहीं है। अधिकांश इकाई के नेता और उच्च प्रबंधन आवंटन प्रक्रिया के दौरान प्रत्येक इकाई को आवंटित करने के लिए किस अनुपात का चयन करते हैं। शर्मा और गौतम (2014) दुर्लभ संसाधनों के कई अर्थ प्रस्तावित करते हैं, जैसे कि उन्नति, शक्ति और एक तलहटी। एनिओला, इयाबो, अदेशिना, और ओलाजाइड (2015) की शोध राजनीतिक व्यवहार के कारणों और निहितार्थों पर जोर देती है। इसलिए, इन संसाधनों को स्थान देने की इच्छा है, जिससे राजनीतिक व्यवहार में वृद्धि हो। जब किसी संगठन के संसाधन सीमित होते हैं, तो राजनीतिक व्यवहार में भी वृद्धि होगी। हाइवे (2018) ने पाया कि बजट आवंटन और कार्यस्थल की राजनीति का सकारात्मक संबंध है। कर्मचारी इस बात से सहमत हैं कि प्रबंधन को यूनिट के भीतर बजट में देरी के बारे में पर्याप्त जानकारी रखनी चाहिए, और केवल प्रबंधन ही स्थिति से अवगत होगा। प्रबंधन कुछ सूचनाओं को रोक भी रहा है क्योंकि बजट अस्पष्ट है और संगठन में हर किसी के द्वारा सवाल उठाया जा सकता है। कर्मचारी भी इस बात से सहमत हैं कि बजट में कमी होने पर प्रबंधन के पास समझने का एक तरीका है। बजट के साथ ट्रैक पर रहने के लिए नेतृत्व नीति को थोड़ा आसान बनाकर बजट का प्रबंधन कर सकता है। इस प्रकार की कार्रवाई सकारात्मक राजनीतिक व्यवहार भी हो सकती है। राजनीतिक व्यवहार को कम करने के लिए संगठन स्पष्ट बजट आवंटन मानदंड विकसित कर सकते हैं (Hway, 2018)। यदि बजट बनाने के लिए स्पष्ट दिशा-निर्देश हैं, तो कर्मचारी यथोचित कार्य कर सकते हैं और इन दिशा-निर्देशों का पालन करेंगे। हालाँकि, ऐसा हो सकता है कि यदि कर्मचारी अत्यधिक मात्रा में मार्गदर्शन का उपयोग करते हैं, तो इससे नेतृत्व-वर्ग के भीतर

असहमति बढ़नी चाहिए। यह आवश्यक है कि नियमों को अधिकारियों के बीच साझा किया जाए ताकि सभी के पास समान दृष्टि और मानसिकता हो (ओलोरनलेके, 2015)।

3. निर्णय लेना

काकमार और कार्लसन (1997) का तर्क है कि यदि निर्णय लेने में बहुत अधिक अनिश्चितता है, तो यह राजनीतिक व्यवहार को बढ़ाएगा। प्रत्येक नेता एक बैठक के दौरान तर्कसंगत निर्णय लेने की इच्छा रखता है। एक तर्कसंगत निर्णय वह है जो किसी चीज के मूल्य को अधिकतम करता है। रॉबिंस एंड जज (2013) के अनुसार, यह निर्णय लेना तर्कहीन था। हालाँकि, उन्हें सूचित किया जाना चाहिए कि केवल अनुभव को दोहराने का अर्थ यह नहीं है कि यह गलत है। बैठक के दौरान नेतृत्व को निर्णय लेना आवश्यक है। कॉरपोरेट जगत के नेताओं को तुरंत निर्णय लेने चाहिए अन्यथा अवसरों को खोने का जोखिम है। यदि संगठन के पास कुछ गठबंधन हैं, तो गठबंधन समूह एक सकारात्मक निर्णय लेने के लिए नेतृत्व को मनाने की कोशिश करेगा (किनिकी, 2008; सोनाइक, 2013)। विट (1992) सुझाव देते हैं कि कुछ नेता अपने अधीनस्थों के साथ काम पर चर्चा नहीं करना चाहते क्योंकि उन्हें अन्य कर्मचारियों से जानकारी रखनी होती है। कभी-कभी, उन्हें हुकलाइन का पालन करने और उन्हें सिंक करने के लिए कर्मचारियों की आवश्यकता होती है। इस मामले के दौरान, उनका झुकाव शक्ति और अधिकार को आगे बढ़ाने के लिए होता है। एक शोधकर्ता का उल्लेख है कि शक्ति और अंतर-संबंध को राजनीतिक लक्षण माना जाता है (एलबन्ना, 2006)।

4. वेतन और पदोन्नति

वेतन और पदोन्नति कर्मचारी प्रतिबद्धता को बढ़ाने के लिए इनाम प्रणाली हैं (मार्खम, हार्लन, और हैक-एट, 1987; रुडरमैन और ओहलॉट, 1994)। इस पदोन्नति का उद्देश्य प्रतिभाओं को बनाए रखना और उन्हें लक्ष्यों की ओर बढ़ने के लिए प्रेरित करना है। अध्ययन में कहा गया है कि पदोन्नति काम पर किसी की स्थिति को बदल देती है और वेतन, शक्ति और कार्यक्षेत्र में वृद्धि के साथ आती है (रुडरमैन और ओहलॉट, 1994)। संगठन बाहरी लोगों के लिए पद पोस्ट कर सकते हैं और बाहरी लोगों को पद की आवश्यकता के लिए भर्ती कर सकते हैं (रुडरमैन और ओहलॉट, 1994)। आंतरिक कर्मचारियों को बढ़ावा देने के कई फायदे हैं। कर्मचारी सोचेंगे कि संगठन उन्हें करियर विकसित करने में मदद करता है। हालाँकि, कई कमियाँ हैं, अर्थात् हाल के ज्ञान का अभाव जो प्रवेश कर चुका है। यदि कर्मचारी बाहर से आते हैं, तो नई नेतृत्व शैली की बदौलत संगठन के भीतर परिवर्तन होंगे। नुकसान यह है कि मौजूदा कर्मचारियों में नए नेतृत्व का विरोध हो सकता है।

5. शक्ति और नौकरी असंतोष

शक्ति का प्रभाव कभी-कभी सकारात्मक हो सकता है और जरूरी नहीं कि सभी नकारात्मक हो। सकारात्मक परिणामों के लिए, नेता अपने अधीनस्थों के कार्य को सौंपने की क्षमता का उपयोग करता है। इसके अलावा, वे अधीनस्थ अवसर बनाने के लिए भी शक्ति का उपयोग करते हैं। प्रतिकूल परिणाम आने पर नेता अपनी शक्ति का उपयोग कर्मचारियों का बारीकी से अध्ययन करने के लिए करते हैं। कुछ नेता अपने लक्ष्यों को हासिल करने के लिए सत्ता के अपने पदों का भी फायदा उठाते हैं (सोमोये, 2016)। इसके अलावा, अधिकांश नेता संगठनात्मक उद्देश्यों को प्राप्त करने के लिए लोगों को प्रभावित करने के लिए अपनी शक्ति को नियंत्रित करने में अपना अधिकांश समय व्यतीत करते हैं (सोमोये, 2016)।

निष्कर्ष

राजनीति सभी संगठनों में मौजूद है, लेकिन यह सोचने योग्य है कि यह अच्छी चीज है या बुरी। कार्यस्थल की राजनीति के कई नकारात्मक परिणाम हो सकते हैं, जिनमें कर्मचारी का प्रस्थान या अनुपस्थिति-वाद शामिल है। परिणामस्वरूप, वे अपने उद्देश्यों को प्राप्त करने के लिए लगातार राजनीतिक आचरण में संलग्न रहते हैं। ऊपर की चर्चा के परिणामस्वरूप कई संकेतकों का निर्माण हुआ है। उद्देश्यों की अस्पष्टता, बजट आवंटन, निर्णय लेने, वेतन और पदोन्नति, शक्ति और नौकरी असंतोष पांच संकेत हैं जो राजनीतिक आचरण से जुड़े हुए हैं। अंतिम संकेत क कार्यस्थल की राजनीति और नौकरी के असंतोष के बीच की कड़ी का अन्वेषण है। कार्य असंतोष का कार्यस्थल की राजनीति पर प्रभाव पड़ता है, लेकिन यह कार्यस्थल की राजनीति को प्रभावित करने वाले पांच तत्वों से अलग है। आज के कार्यस्थलों में कार्यस्थल की राजनीति एक प्रमुख मुद्दा बनी हुई है।

कार्य-स्थल की राजनीति कार्यस्थल में घर्षण का एक स्रोत बनी हुई है, और वे अक्सर औपचारिक निर्देश के बजाय अनुभव के माध्यम से सीखी जाती हैं। विरोधी दृष्टिकोण वाले सहकर्मियों से प्रतिस्पर्धा करना, एक छात्र को एक शिक्षक को प्रतिक्रिया प्रस्तुत करने की आवश्यकता होना, या किसी को जाने देने के लिए प्रबंधन को सौंपा जाना इन स्थितियों के सभी उदाहरण हैं।

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Underrepresentation of Subaltern Groups in STEM Higher Education in India: A Secondary Analysis for Promotion of Social Inclusion

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Abstract

The purpose of the study is to analyse the representation of subaltern groups such as women, scheduled castes (SCs), scheduled tribes (STs), and other backward classes (OBCs) in STEM higher education in India from 2014-2015 to 2020-2021. The study is based on secondary data collected from All India Survey on Higher Education (AISHE). Master of Science (M.Sc.) and Master of Technology (M.Tech.) programmes are taken into account for the study. The data are analysed through the percentage analysis to understand representation of subaltern groups in master's programmes in STEM disciplines. The findings of the study revealed that subaltern groups (SCs, STs and OBCs) are underrepresented in science as well as in engineering disciplines in India. The gender parity in science disciplines is achieved in India, as the proportion of women are higher than men in science disciplines. However, the representation of women in engineering disciplines is less as compared to men and women from socially disadvantaged groups (SCs, STs, and OBCs) are relatively more underrepresented in M.Tech. programme in India. AISHE 2020-2021 data shows that under all categories 39.06%-male & 60.94%-female are enrolled in M.Sc. programme and 67.90%-male & 32.10%-female are enrolled in M.Tech. Programme. It is also observed that students from tribal groups are relatively more underrepresented in science and engineering disciplines.

Introduction

STEM higher education enables individuals to gain knowledge, kills, attitudes, and behaviours required for sustainable economic growth and progress of the country and society. Level of growth in STEM higher education also symbolise the scientific temperament of a country, as it helps in development and dissemination of scientific knowledge. Access and participation in STEM education have been critical issues in Indian higher education. According to UNCTAD (2018), STEM education, in its function of creating the essential knowledge and skills for innovative technological solutions, holds the key to achieving Sustainable Development Goals (SDGs) of building inclusive and sustainable societies. The SDG-5 highlights the need of ensuring women's' full and effective participation in all levels of decision-making in economic, political, and other public life (United Nations, 2015). Despite of the above commitments, women are less likely to pursue STEM education and careers globally and gender differences in stream choices emerging by secondary education when specialization begins (UNESCO, 2017). Similarly, the disparities in STEM education exist based on family socioeconomic status and other factors (Xie *et al.,* 2015). The underrepresentation of women and subaltern groups in STEM fields is suboptimal because the lack of diversity may weaken group comprehension and problem-solving ability (Hong & Page, 2004). It also shows that STEM disciplines are now unable to attract talents from the widest pool. The social identities of an individual (such as, gender and socio-economic status of family), over which people have no control, play a major role in deciding the academic and professional choices in STEM disciplines, is evidence to the persisting inequalities of opportunities in education (Roemer & Trannoy, 2015).

The significance of technological progress in economic growth and development raises questions regarding the missed opportunities of the under-represented groups. Segregation based on gender and socio-economic status affects also affects socioeconomic mobility and welfare on an individual basis. While the STEM gaps for women and members of underrepresented subaltern groups are widely documented at the university level (Gemici & Wiswall 2014; Wiswall & Zafar, 2018;

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Zafar, 2103), the academic track trajectories are established much earlier in the schooling years. There has been a global movement in the policy space towards addressing the STEM gaps in the developed countries (Kearney, 2011; White House Report, 2013). However, in devolving countries, there hasn't been enough focus on policy to close the gaps or even just to identify them.

This paper seeks to understand the issue of underrepresentation of subaltern groups such as women, scheduled castes (SCs), scheduled tribes (STs), and other backward classes (OBCs) in STEM higher education in India from 2014-2015 to 2020-2021 through the analysis of All India Survey on Higher education (AISHE) data.

Overview of Indian Higher Education

In the last decade, the Indian higher education has shown remarkable growth in access to higher educational opportunities. These growths include the growth in the number of enrolments in and the number of different types of intuitions. The All-India Survey on Higher Education (Ministry of Education, 2023) reveals that there are 1,113 universities, 43,796 colleges and 11,296 stand-alone institutions in the country. The Gross Enrolment Ratio (GER) in higher education in India stands at 27.3% for the 18-23 age group. GER for scheduled castes and scheduled tribes are 23.1% and 18.9%, respectively as compared to national GER of 27.3%. The GER for male population at national level is 26.7% whereas for SC males, it is 22.4% and 18.8% for ST males. Similarly, GER for female population at national level is 27.9% whereas for SC females, it is 23.9 and for ST females, it is 19.1%. The number of enrolments in higher education has increased from 34.2 million (18.5 million males and 15.7 million females) in 2014-15 to 41.3 million (21.2 million males and 20.1 million females) in 2020-2021. Out of 41.3 million students, only 14.2 % belong to scheduled castes (SCs), 5.8 % belong to scheduled tribes (STs), 35.8 % are from other backward classes (OBCs) and remaining 44.2% students are from other communities (MHRD, 2016a & Ministry of Education, 2023). The policy of positive discrimination has helped to represent the underrepresentation of subaltern groups such as women, SCs, STs and OBCs in higher education and provided them opportunity to access higher education. However, it is also highlighted that there are inequalities in access to higher education based on gender, caste, class, religion, and disability.

Subaltern Groups and STEM Higher Education

STEM education is based on interrelated and holistic teaching of the disciplines of science, technology, engineering and Mathematics. Globally, access to STEM higher education has increased, but inequalities based on socio-economic background remain. Over the past few decades, India has also experienced signification growth in terms the number of enrolments in higher education including STEM disciplines. There has been increase in enrolment in higher education from non-traditional and underrepresented groups across the disciplines. However, these growths in STEM higher education seem not equally distributed across different socio-economic groups. Inequality based on gender and socio-economic status in different levels of STEM higher education still persists (Amirtham & Kumar, 2021).

Researches shows that women are discriminated on various grounds around the world, and they are significantly less likely than man to have professional and technical education. This prevents women from having the same access to higher education as men. Similarly, the disadvantaged subaltern groups also suffer from inequality of access to STEM higher education. It has been found that students from privileged backgrounds-including men, those from higher castes and socioeconomic classes and those who live in cities-predominantly study STEM subjects, while students from socially disadvantaged groups and those who live in rural areas study subjects such as social sciences and agriculture (Varghese et al., 2019). Moreover, research (Sabharwal & Malish, 2016) has revealed that socio-economically advantaged students are overrepresented in elite/prestigious institutions, whereas the less prestigious institutions primarily serve the underprivileged students. According to Nussbaum (2001), such inequality in higher education leads to unequal human capabilities. Education is the most powerful tool to enhance human potential, economic growth and social transformation. Participation of women and subaltern groups should be seen from the perspective of access and participation. The access to STEM higher education among women and subaltern groups has the ability to develop reasons, skills, rationality and freedom to act in society and also to challenge the prevailing orthodox social norms which prevent the participation of women and subaltern groups in higher education.

Methodology

The empirical study is based on secondary data collected from All India Survey on Higher Education (AISHE). The data on students' enrolment in master's programmes in science and technology from 2014-2015 to 2020-2021 are taken from AISHE (MHRD, 2016a, 2016b, 2017, 2018, 2019; Ministry of Education, 2020 & 2023) to analyse the seven-year trend. Master of Science (M.Sc.) & Master of Technology (M.Tech.) are selected as STEM higher education programmes for the study. The data are analysed through the percentage analysis to understand representation of subaltern groups in master's programmes in STEM disciplines. This study includes only Women, scheduled castes (SCs), scheduled tribes (STs), and other backward classes (OBCs) in subaltern groups.

Findings

The purpose of the study is to analyse the representation of subaltern groups such as women, scheduled castes (SCs), scheduled tribes (STs), and other backward classes (OBCs) in STEM higher education in India from 2014-2015 to 2020-2021. The relevant data is collected, analysed and interpreted according to purpose of the study. Interpretation of obtained results has been presented along with the analysis.

Table 1: Social Group-wise distribution Enrolment in M.Sc. Programme

Period	General(%)	SCs(%)	STs(%)	OBCs(%)
2014-15	51.32	11.23	3.38	34.07
2015-16	48.22	12.09	3.64	36.06
2016-17	46.73	12.60	3.77	36.90
2017-18	43.34	11.88	4.09	40.70
2018-19	43.53	11.90	4.17	40.41
2019-20	43.89	11.56	4.37	40.19
2020-21	44.33	11.89	4.72	39.06

Note: SCs-Scheduled Castes, STs-Scheduled Tribes & OBCs-Other Backward Classes; The authors' calculation from AISHE data (2014-2015 to 2020-2021) on M.Sc. Programme.

Fig 1: Social Group-wise distribution of Enrolment in M.Sc.

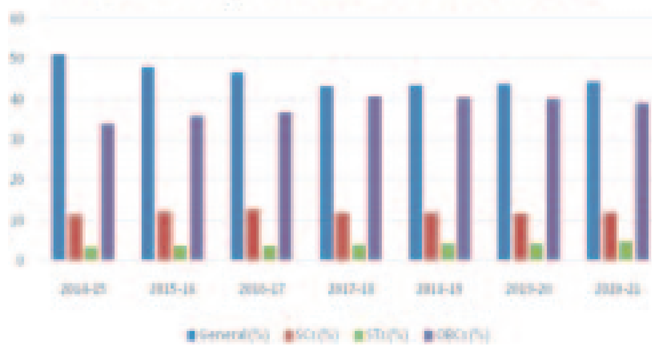

Table 1 shows that 43.89% of general category, 11.56% of SCs, 4.37% of STs, and 40.19% of OBCs students are enrolled in M.Sc. programme in 2019-2020. Similarly, 44.33 % of general category, 11.89% of SCs, 4.72% of STs, and 39.06% of OBCs students are observed in 2020-2021. Its shows that subaltern groups, such as SCs, STs, and OBCs, are underrepresented in M.Sc. programme in India. It is also observed that students from STs groups are relatively more underrepresented in M.Sc. programme in India.

Table 2: Social Group and Gender-wise distribution of Enrolment in M.Sc. Programme

Period	All Categories		General Category		SCs		STs		OBCs	
	M (%)	F (%)	M (%)	F (%)	M (%)	F (%)	M (%)	F (%)	M (%)	F (%)
2014-15	42.08	57.92	42.63	57.37	46.28	53.72	49.41	50.59	39.14	60.86
2015-16	40.56	59.44	40.82	59.18	44.59	55.41	47.82	52.18	38.13	61.87
2016-17	39.55	60.45	39.68	60.32	43.85	56.15	46.80	53.20	37.18	62.82
2017-18	39.19	60.81	38.77	61.23	42.37	57.63	44.85	55.15	38.15	61.85
2018-19	37.28	62.72	38.09	61.91	40.90	59.10	44.63	55.37	34.58	65.42
2019-20	37.48	62.52	37.59	62.41	40.86	59.14	43.17	56.83	35.76	64.24
2020-21	39.06	60.94	39.13	60.87	42.56	57.44	43.71	56.29	37.35	62.65

Note: M-Male; F-Female in Percentage; The authors' calculation from AISHE data (2014-2015 to 2020-2021) on enrolment in M.Sc. Programme.

Table 2 shows the category-wise variations in gender representation of students enrolled in M.Sc. programme in India. Under all categories (37.48 %-male, 62.52%-female), general category (37.59 %-male, 62.41%-female), SCs (40.86%-male, 59.14%-female), STs (43.17 %-male, 56.83%-female), OBCs (35.76 %-male, 64.24%-female) students are enrolled in M.Sc. programme in 2019-2020. Similarly, under all categories (39.06%-male, 60.94%-female), general category (39.13 %-male, 60.87%-female), SCs (42.56%-male, 57.44%-female), STs (43.71%-male, 56.29%-female), OBCs (37.35 %-male, 62.65%-female) students are observed in 2020-2021. The data shows that there is continuous improvement in female students' enrolment in M.Sc. programme and women are relatively more represented in M.Sc. programme in India. Gender parity is achieved in M.Sc. programme in India.

Table 3: Social Group-wise distribution of Enrolment in M.Tech. Programme

Period	General(%)	SCs(%)	STs(%)	OBCs(%)
2014-15	58.74	9.98	3.06	28.21
2015-16	56.68	10.84	3.26	29.22
2016-17	56.75	11.25	3.08	28.93
2017-18	56.04	11.48	3.03	29.45
2018-19	55.67	11.63	3.10	29.60
2019-20	55.39	11.62	3.13	29.86
2020-21	56.64	11.47	3.55	28.35

Note: SCs-Scheduled Castes, STs-Scheduled Tribes & OBCs-Other Backward Classes; The authors' calculation from AISHE data (2014-2015 to 2020-2021) on M.Tech. Programme.

Fig 2: Social Group-wise distribution of Enrolment in M.Tech.

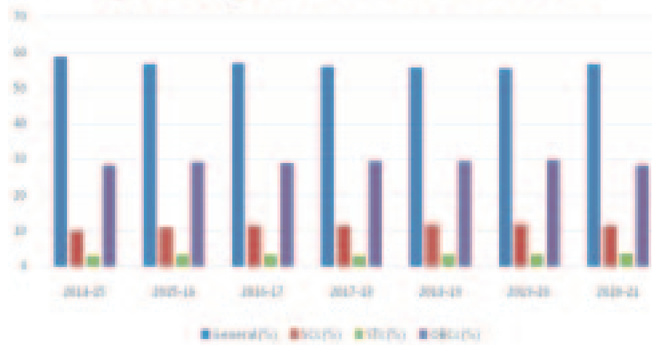

Table 3 shows the percentage of general category, SCs, STs, and OBCs students enrolled in M.Tech. programme in India. The data reveals that 55.39% of general category, 11.62% of SCs, 3.13% of STs, and 29.86% of OBCs students are enrolled in M.Tech. programme in 2019-2020. Similarly, 56.64% of general category, 11.47% of SCs, 3.55% of STs, and 28.35% of OBCs students are observed in 2020-2021. Its shows that subaltern groups, such as SCs, STs, and OBCs, are also underrepresented in M.Tech. programme in India. It is also observed that students from STs are relatively more underrepresented in M.Tech. programme in India.

Table 4: Social Group and Gender-wise distribution of Enrolment in M.Tech. Programme

Period	All Categories		General Category		SCs		STs		OBCs	
	M (%)	F (%)	M (%)	F (%)	M (%)	F (%)	M (%)	F (%)	M (%)	F (%)
2014-15	62.88	37.12	61.56	38.44	66.03	33.97	72.24	27.76	63.50	36.50
2015-16	62.73	37.27	61.77	38.23	65.32	34.68	70.30	29.70	62.78	37.22
2016-17	63.17	36.83	62.67	37.33	65.42	34.58	68.07	31.93	62.75	37.25
2017-18	64.39	35.61	64.31	35.69	65.31	34.69	68.25	31.75	63.78	36.22
2018-19	65.00	35.00	65.15	34.85	65.22	34.78	69.38	30.62	64.19	35.81
2019-20	66.80	33.20	67.47	32.53	65.77	34.23	70.89	29.11	65.53	34.47
2020-21	67.90	32.10	69.21	30.79	66.68	33.32	71.43	28.57	65.34	34.66

Note: M-Male; F-Female in Percentage; The authors' calculation from AISHE data (2014-2015 to 2020-2021) on enrolment in M.Tech. Programme.

Table 4 shows the category-wise variations in gender representation of students enrolled in M.Tech. programme in India. Under all categories (66.80%-male, 33.20%-female), general category (67.47%-male, 32.53%-female), SCs (65.77%-male, 34.23%-female), STs (70.89%-male, 29.11%-female), OBCs (65.53%-male, 34.37%-female) students are enrolled in M.Tech. programme in 2019-2020. Similarly, under all categories (67.90%-male, 32.10%-female), general category (69.21%-male, 30.79%-female), SCs (66.68%-male, 33.32%-female), STs (71.43%-male, 28.57%-female), OBCs (65.34%-male, 34.66%-female) students are observed in 2020-2021. The data shows that in women are underrepresented in M.Tech. programme and women from socially disadvantaged groups (SCs, STs, and OBCs) are relatively more underrepresented in M.Tech. programme in India.

Discussions and Suggestions

The finding of study indicates that the under-representation of subaltern groups such as, women, SCs, STs, and OBCs, in STEM higher education persists. Moreover, it is also overserved that STs students are relatively more underrepresented in science disciplines and technical disciplines compared to other subaltern groups. It is generally recognised that students from lower socio-economic background are disadvantaged in higher education. Since students' learning opportunities are stratified by socio-economic background of family (Gamoran, 1987), and students from lower socio-economic background tend to less prepared for higher education (Flores, 2007). In India, caste is a salient social identity and it significantly affects the opportunities of an individual's educational as well as economic life such as, school education, higher education and job opportunities (Mosse 2018; Munshi, 2019). As caste plays a very significate role in India, many studies have focused on disparities in higher education between social groups based on caste (Chanana, 1993; Kaul, 1993; Rao, 2006, Srivastava & Sinha, 2008; Thorat, 2008; Sundram, 2009; Twain, 2010). Most of the studies found that participation rates of two disadvantaged caste-SCs and STs-in higher education have improved over time, but in absolute terms, the rates were only half of the population of non-scheduled population in 2004. The OBCs have higher participation rates than STs and STs, but lower than students from the general category (Azam & Blom, 2009). In another study, it is found that most of the engineering students come from privileged urban families and equal opportunities for seeking professional and technical education are denied to those students coming from rural areas, from low socio-economic backgrounds, or those who come from subaltern groups-women, scheduled castes, scheduled tribes and other backward classes. Although there has been reservation for seats in public institutions for SCs/STs students for a long time and provision of scholarship for all students belonging from this category to meet their educational and living experiences, the participation of this group in engineering is very limited (Twain, 2010).

The findings of the study also revealed that overall gender parity in basic science disciplines in India is increasing over the period in higher education. The calculated data from AISHE 2014-2015 to 2020-2021 shows that women are more in science disciplines and less in engineering and technological disciplines as compared to men. The situation is not unique to India, studies conducted across the world have shown similar findings. According to statistics of U.S. Department of Education, women received 59% of the degrees in the biological and biomedical sciences, whereas only 19% and 38% of degrees were awarded to females in engineering and technological sciences respectively (Kena *et al.,* 2014). Similarly, data of Higher Education Statistics Agency 2018 (United Kingdom), shows that 39% female students were in physical sciences, 37% female students in mathematical sciences, and only 19% female students in engineering and technology (STEM Women, 2021). It is well documented that the gender parity in educational achievement in India is caused by the inter-household differences in the human capital investments based on the gender of the child (Kingdon, 2002; Kugler & Kumar, 2017; Rammohan & Vu, 2018; Sahoo, 2017). Apart from the human capital investments, it is also observed that marriage is one of important reason for gender disparity in STEM higher education because Indian parents prefer to invest more in marriage of women at this age (Chanana, 2001; Gupta, 2007; Gupta & Sharma 2003). It is important to understand that how environment of homes and gender relations influence decisions and resources distribution among the gender, which eventually promotes gender inequality or discrimination in different disciplines and at different levels of education (Kabeer, 2003).

Moreover, it is also observed from the findings of the study, representation of women from socially disadvantaged groups (SCs, STs, and OBCs) in engineering and technological education is much worse. According to Dagar (2019), the intersectionality of class, gender, and caste affects the educational experiences of an individual. The gendered experience of a lower caste or tribal women can be quite different from that of women from upper caste and class. It becomes easier for women from the upper social class to enter into higher education for professional and technical education than women from socially disadvantaged groups.

Suggestions for Promotion of Social Inclusion in STEM Higher Education

Over the period of time, India has seen a remarkable growth in higher education, it can be said that India has achieved the stage of massification - a concept developed by Trow (1973). Massification is a stage when the enrolment in higher education is 15% to 50% in the higher education in the relevant age group. Enrolments beyond 50% in higher education are called universal stage in higher education (Trow, 1997). However, massification in Indian higher education has been not equitably distributed. The growth in number of enrolments in higher education does not appear to have significantly reduced inequalities because inequalities in higher seem to be perseverated by gender and by socio-economic groups (Tilak, 2015).

In a nutshell, some recommendations or suggestion for promotion of social inclusion in STEM higher education in India are discussed below:

- Providing information about the nature of STEM disciplines and occupation perspectives to subaltern groups.
- Organising gender and culturally responsive career counselling session to motivate students from socially disadvantaged groups to become interested STEM disciplines.
- Removal of barriers such as gendered stereotypes, biasness, and discriminatory practices.
- Providing financial support to socially disadvantaged groups for enhancing enrolment in STEM disciplines specially focussing SC and ST population in the discipline of science and technology.
- Providing fund to educational institutes for enhancing the representation of students from various underrepresented social groups such as women, SCs, STs, OBCs and persons with disabilities in STEM education.
- Examining students' intuitional experiences that might influence their retention in the STEM disciplines.

Conclusion

The study analyses the representation of subaltern groups (women, SCs, STs, and OBCs) in STEM higher education in India. M.Sc. and M.Tech. programmes are taken into account for the study. The study reveals that women, SCs, STs and OBCs are underrepresented in STEM higher education and students from STs groups are more underrepresented in science and technical disciplines as compared to other subaltern groups. It is also observed from the study, there is gender parity in basic science disciplines in India as the proportion of women are higher than men in science disciplines. Enrolment of women in engineering and technical education stills needs to be improved with attractive incentives and mechanism. The calculated data from AISHE 2014-2015 to 2020-2021 shows that women are more in science disciplines and less in engineering and technological disciplines as compared to men. Women from socially disadvantaged groups are relatively more underrepresented in engineering and technological disciplines. Thus, the scenario concerning STEM higher education is not very encouraging if analysed through lenses of social inclusion. Rigorous policy intervention focusing unrepresented population groups along with its proper implementation should be the primary task of future educational endeavours for inclusive STEM higher education.

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Potential Radical Evolution of Mutual Fund Industry through Blockchain

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Abstract

Blockchain technology has the potential to transform several sectors of the economy, particularly finance. It would greatly increase regulatory oversight, eliminate many intermediaries, and make trading and post-trade activities much more effective. The technology makes it possible for transactions to be more trust-free, almost instantaneous, censorship-resistant, and transparent. These distinctive characteristics of Blockchain have demonstrated that they are quite useful in the core banking and financial industries.

The primary issue with the mutual fund sector is that it operates in a totally centralized setting, which results in high maintenance costs for digital infrastructure and uptimes. Also, the mutual fund's system framework is in a form that it incorporates a number of intermediaries or stakeholders, each of whom operates in a distinct sector. Together, they create a system that is not closely interwoven, which results in a significant delay while processing even a single transaction. Here, at this point, the emerging technology might assist the mutual fund sector in streamlining its operational processes by combining smart contracts and recording of transaction in its ledger, and thus being able to replace any kind of intermediary that maintain a registry or executes transactions between parties, also by introducing transparency in maintaining records and making the whole process almost instantaneous and therefore, removing the complexity of the system.

This article outlines the fundamentals of the Blockchain and makes an effort to assess the potential of the technology and speculate on how it can be applied to the mutual fund sector in the future. The study demonstrates how the advantages of the cutting-edge technology can accelerate the mutual fund industry's sluggish operation and growth by applying/linking its distinctive features and operational principles of Blockchain to the processing of mutual fund transactions. The usage of Blockchain and its features at each stage of mutual fund processing, as well as for the many parties involved, are explained in the paper. Also, the article highlights some probable obstacles that could impede the technology from being implemented smoothly.

Introduction

Most of the world has been transformed by technology into an accessible, interconnected digital cosmos, yet the financial sector and its investment products have frequently trailed behind. Agile innovation is hampered by regulatory moats, established, inter-dependent systems, and high stakes involving huge sums of money. The most recent and cutting-edge technology which has a great potential to disrupt processes across many industries by offering a variety of solutions to the current problems faced by different industries is- Blockchain technology. It offers a compelling and disruptive value proposition that equips businesses with the resources and motivation to advance from outdated practices. The technology was initially developed for the virtual currency Bitcoin, but early adopters saw its potential for other applications. It now is being considered as a means of distributing sensitive information because it prevents copying of digital data while allowing for its distribution.

The asset management sector has expanded significantly in both size and complexity during the last few decades. To satisfy the investor's need for a wide range of products, the variety of fund structures and exposure to underlying asset classes has increased. The sector heavily relies on service firms that serve as intermediary between them and the clearing and settlement infrastructure to service this product set. Given

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the potential to lower costs, shorten delays, deliver more timely and accurate data, and improve reporting accuracy, the ability of blockchain distributed ledgers to replace intermediary centralized systems ofrecord has received significant interest from the businesses.

The benefits and opportunities that technology may provide are increasingly being embraced by the fund management sector as well as the financial services sector as a whole. But the rise of blockchain also carries a danger and risk. Without the additional expense and complexity of a third party, it encourages direct engagement between the participants who took part in a transaction and opens the door to non-traditional competitors.

Review of Literature

Zheng and others (2018), in their publication has described the blockchain technology in detail, has discussed its algorithms and listed some challenges like privacy leakage, scalability, selfish mining that would arise in the way of its implementation in different aspects. Shweta Singh and others (2018), takes a deep look in the working mechanism and features of Blockchain and hopes the technology would be a boon for the society if the challenges will be overcome in the future. It can be applied to various fields and sectors of the society and can be taken to a more advanced epoch of digitalization. V.K. Manda & Prasada Rao, gave a detailed working system description of blockchain in the mutual fund sector and also highlights points for improvement for removing the loopholes or challenges of the system in order to implement the technology smoothly in the industry. Anotherreputed article by Northern Trustgives its view as they are cautiously optimistic about blockchain's role in revolutionary change in the mutual fund industry in the next 5 to 10 years. They have been working to understand the various features of the blockchain and how it can affect the working structure of the traditional mutual fund model. Zhao *et al.* says blockchain will be adopted in finance sector hugely and will lead to a number of business innovations. According to PWC, "Blockchain can have a profound impact on the settlement of securities transactions and afford huge opportunity to reduce the frictional cost of asset managers leading to reduced charges for investors". Deloitte simply calls the technology a "game-changer" and studies the impact of it on the fund distribution. Other than this, the World Economic Forum in one of its surveys throws light on the impact of the technology on financial services as it capable of transforming this sector with expectations of at least 10% of the global GDP being stored on blockchain platform by 2025. Min Xu, Xingtong Chen and GangKou, in their paper, reviewed 756 articles and reached a conclusion that blockchain will play an important role in many fields where the crowdfunding, supply chain management, data storage and sharing and smart trading are required. They also proposed different research directions for the future researchers in order to get a deep insight into the blockchain system and its potential application in various sectors. Ritesh Khatwani and others (2023), in their paper highlights the emerging role of new technologies in the growth of BFSI sector, alongwith the comprehensive view of the blockchain technology and the difference its creating the global financial sector with its cutting-edge features.

Objectives

- To describe the basic structure of Blockchain technology in brief.
- To explore the potential impact of Blockchain on the mutual fund industry.

Research Methodology

This style of study is descriptive, and secondary data were used to carry out the objectives of the research piece. The researcher has reviewed a number of research papers, journals, and pertinent publications in order to collect valuable information for the same. All of the secondary data sources have been mentioned in the study piece.

Defining Blockchain

A blockchain is a shared distributed database or ledger between computer network nodes. It is a digital database that saves data electronically. The most important function of blockchain is to keep a secure and decentralized record of transactions in cryptocurrency systems like Bitcoin. A blockchain's peculiarity is that it fosters confidence without a third party by ensuring the security and correctness of a data record for a trustworthy third party. The way the data is organized in this system differs significantly from how it is typically organized. Data is collected in units called blocks, each of which contains a collection of data. Each block has a certain amount of storage, and when it is full, it is sealed and joined to the block before it.Once a block is filled, it becomes a fixed point in this timeline and is no longer able to be changed. As blocks are added to the chain, each one receives a precise timestamp. Every bit of data after the most recent block contributed is utilised to create a new block, which is subsequently added to the chain. A blockchain, as its name indicates, arranges data into linked blocks in contrast to databases, which normally organise data into tables. When employed in a decentralized way, this data structure consciously creates an irreversible chronology of data.

Working Architecture of Blockchain

A blockchain transaction documents the transfer of material or digital assets inside the network from one party to another. It is a block of data that is stored and can include details like: Who took part in the exchange? What happened during the transaction? When did the actual transaction occur? Where was the transaction made? Why was the transaction made? How much of the asset was exchanged? On a decentralized blockchain network, the majority of users must concur that a transaction is valid before it can be recorded. The blockchain transactions are then recorded in blocks that are similar to the ledger's pages once the parties have attained consensus. The transactions are now accompanied by a cryptographic hash in the new block.A hash joins blocks together like a chain. The hash value changes if the blocks' contents are altered, whether purposefully or accidentally, allowing data manipulation to be detected.

Types of Blockchain

Public Blockchain: A public blockchain, like the one used by Bitcoin, where anybody is welcome to join and use. The users of this network can read and write data, although other public blockchains include restrictions on access to block data, allowing only reading or writing, not both. There may be limitations like as high processing power requirements, little to no privacy in transactions and inadequate security.

Private Blockchain: A private blockchain network is a peer-to-peer decentralised network, much like a public blockchain. However, one organisation controls the network, determining who is allowed to participate, managing the consensus process, and managing the shared ledger. Depending on the use case, this can greatly increase participant trust and confidence.

Hybrid Blockchain: It consists of a mixture of private and public blockchain information, where some works of art are under the authority of an organization and others are made publicly available. Here, people use smart contracts to obtain information.

Consortium Blockchain: It initiates or accepts transactions in addition to validating them. Another name for it is Federated Blockchain. It is a novel approach to meeting the organization's demandswhere numerous businesses desire to use the network, govern its protocols for access control, and operate it simultaneously, as opposed to just one company having complete access control.

How the Transactions on Blockchain Works?

Initially, the investor starts the transaction by sending the request for the transaction or service, and then a smart contract is created. Smart contracts carry out necessary verifications and checks, such as AML/KYC checks. After that, the fund calculates the NAV and transfers it to the smart contract. After calculating the NAV, the smart contract checks that all requirements have been completed, generates a new fund share, and sends the payment details to the banks of the investor and the fund. The investor's bank conducts the payment to the fund's bank, who then notifies the smart contract that the payment has been made based on the data given by the smart contract. The transfer of the fund share to the investor is carried out through the smart contract and recorded in the ledger as the final step of the transaction process.

What Makes Blockchain Unique?

Immutability is the quality of not being able to be altered or modified. A network of nodes allows for the use of blockchain functionalities. Each node in the system keeps a copy of the digital ledger. Each node must first confirm a transaction's legitimacy before adding it, after which it is recorded in the ledger. It becomes transparent and devoid of corruption as a result. No one changes after the transaction block is added to the ledger.

Peer-to-Peer Transferability is conceivable due to its decentralized network. It is governed by a collection of nodes rather than any central authority. Blockchain puts all users in a straightforward position and allows users the ownership over their properties and information and since no third party is involved in this system so the peer-to-peer contact and transferability gets easier with the help of smart contracts converting the network into faster settlement and zero scam network.

Enhanced Security is provided with blockchain's unique cryptography feature to customers in the additional layer of security in the form of complex mathematical algorithms. Simply put, it uses a hash to uniquely identify each piece of data that is stored on the blockchain. As hashing is irreversible, changing the information saved would require going through every block in the chain and changing its value, which is virtually impossible.

Robustness The blockchain technology is completely stable. The blockchain cannot be controlled by a single authority; hence it lacks a single point of failure. Blocks of data are stored on the network that is similar throughout the whole system.

Increased Capacity In typical transactions, a small number of centralized servers manage all activities, but in the case of blockchain, hundreds of systems collaborate to complete transactions at extremely fast speeds and in a finite amount of time.

Mutual Fund and its Structure

Mutualfund is a type of investment plan that is expertly managed by an Asset Management Company (AMC). The AMC pools a number of investors' money into a single fund and invests it in stocks, bonds, and other securities.

An investor may purchase mutual fund units to represent his stake in a specific scheme. the units are bought and sold on the basis of Net Asset Value (NAV) which keeps on changing due to highly volatile nature of market and thus is updated daily by the mutual fund company. Each and every mutual fund company is required to register their fund with SEBI which has established tough guidelines for the mutual fund houses to follow in order to safeguard the interests of all investors. Even with a tiny investment, the mutual fund allows an investor to access a wide portfolio of bonds, securities, and stocks, which is otherwise not available.

The three-tier structure of mutual funds in India consists of only a few more key elements. The fund sponsor, trustees, and AMC make up the three tiers of the system.

The various parts of the mutual fund structure are listed below:

Sponsor: The first tier of the three-tier mutual fund structure in India is the fund sponsor. Anyone who can create a mutual fund to generate income through fund management is a sponsor. additionally, the sponsor could promote the partner business. At least 40% of the net worth is supposed to come from the sponsor. A sponsor might be a person, a business, a financial institution, a corporate house, or a bank with a minimum 3-year profit history in the financial services industry.

Trustees: Trust and trustees, often known as the fund's defenders, make up the second tier of the mutual fund structure. Their employer is the fund's sponsor. They are also essential for maintaining high levels of investor confidence and keeping track of fund growth. Through trust deed, the fund sponsor establishes a trust in favor of the trustees. The trust is run by trustees. They are also the main custodians of money and property. A trustee corporation or board of trustees can establish the trustees. The trustees also keep an eye on how the AMC is run and ensure that it is adhering to SEBI rules. In other words, they keep an eye on the AMC's general operations and system processes.

Asset Management Company: Third-tier is AMCs in the mutual fund hierarchy. It was formed as a company in accordance with the Companies Act and registered with SEBI. The AMC introduces several mutual fund schemes based on the needs of the client and the status of the market. Additionally, it looks after the trust's investments or funds. The AMC is in charge of launching and overseeing the plan as well as any fund-related activities.

Custodian: An entity in charge of maintaining the security of securities is known as a custodian. They oversee the investment account of the mutual fund and are registered with SEBI. They also make sure that securities are delivered and transferred. Also, custodians assist investors in updating their holdings whenever they choose and in keeping track of their investments. Also, they gather and keep track of the interest, dividends, and bonus issues related to investments in mutual funds.

Registrar and Transfer Agent (RTA): They serve as an essential intermediary between investors and fund managers. They notify fund managers with information concerning investors. By providing the fund's benefits to investors, they serve. they offer services such as processing applications for mutual funds while keeping track of investor information, assisting with KYC for investors, sending investors recurring statements, the process of paying out dividends, modifying investor information

Auditor: The auditor is in charge of reviewing and auditing the yearly reports and books of accounts of various schemes. They are the unbiased auditors who examine the sponsors', trustees', and AMC's financial records. Additionally, they make sure the money is being used for the intended purposes. Auditors confirm that none of the books contain any indications of fraud. As a result, auditors contribute to the integrity, transparency, and maintenance of the entities.

Brokers: Brokers are firms or individual with SEBI authorization. They are authorized to manage trading accounts. Also, they serve as a conduit between investors and the stock market. AMC must consequently employ brokers' services to trade shares on the stock market. AMCs employ research reports from numerous brokers as part of their due diligence while preparing market moves.

Intermediaries: Through many forms of intermediaries, investors can purchase or sell mutual fund. Individual agents, distributor firms, national/regional brokers, banks, post offices, and other institutions can all serve as intermediates. Between the investor and the MF firm, they play a crucial role. Middlemen guarantee that the buy transactions get via them and advise MF to their investors. The mutual fund company gives a commission in return.

How the Blockchain can solve the problems of Mutual Fund industry?

The centralized environment is one of the mutual fund industry's major problems. This entails paying hefty maintenance costs for the digital infrastructure. The present system of mutual fund makes use of several different procedures and third parties. The distribution agents are unaffiliated with the money and are independent third parties. To connect investors with the fund, they provide facilities. The task of maintaining a record of investor accounts is delegated to transfer agents, such as banks or other financial organizations. They will also be in charge of managing dividend, payments and issuing investor statements.

The blockchain will significantly cut down on transaction times, which is one of its key advantages. The presence of numerous intermediaries slows down the process as a whole. It takes three to four working days from the point of subscription to the point of settlement because there are so many parties engaged in signing up a new investment. Some middlemen may vanish with the introduction of the technology in the mutual fund industry because there would be no more need of a third party. The final stakeholders will connect directly with the blockchain. Tasks typically handled by transfer agents, such as processing transactions, will be automated through the use of smart contracts. The blockchain's time-stamped transactions make it a powerful tool for information tracking and verification. The period for processing transactions from the fund order to the effective settlement might eventually be shortened by technology, allowing the latter to be performed immediately after the NAV calculation. Market contracts would instantly transmit the information, lowering the possibility of errors. Since no middleman fees would be charged, the transaction costs would be lower.The other advantage of the blockchain for Know Your Customer (KYC) is improved compliance, increased accessibility, and the ability to share a single source of data. Information is more readily available thanks to the distributed ledger because everyone can see the complete history of transactions. With the use of this technology, the underlying technologies might be mutualized and upgraded while also securing an audit trail. By connecting entities to one another, the usage of it for KYC would ensure compliance and offer a shared source for digital identification. The blockchain makes it possible to automate compliance procedures that previously required KYC documentation to be certified, validated, and published onto the network before transactions could be approved. This would result in a settlement that is almost real-time and lower compliance errors.

Blockchain technology can assist asset managers, regulators, and investors in bringing greater transparency to what has previously been a difficult investment when it comes to mutual funds. The use of technology may, and this is more significant, substantially aid in continual regulatory monitoring, which will enable investors decide whether to keep the fund or not. Due to the ability of smart contracts to detect anomalies and draw attention in real-time, compliance professionals may focus on managing risks and potential breaches rather than reviewing data and records. More transparency is another benefit of blockchain technology, which would seem to be a top requirement for investors.

Briefly, it can be said that Blockchain has the ability to improve the experience for all the stakeholders of the network. The potential advantageous outcomes from the technology can extend past the issuer to the entire chain of the system of investors.

Challenges in the implementation of Blockchain technology

Being a developing technology, it has certain difficulties to go beyond.

- First and foremost, lack of knowledge and familiarity with the technology is the largest obstacle to blockchain implementation in mutual fund sector which discourages the new steps and investments from the companies towards the acceptance and adoption of this potentially powerful technology.
- Second, its complex structure and software demands professional and in-depth knowledge which makes it less user-friendly when compared to legacy structure of the industry which is culturally and socially hugely accepted.
- Thirdly, it is crucial for the industry to study the security features of the technology and its model of workingwhich are not very strong or rather, not properly tested. Since all information can be accessed by every node of the network, it becomes very important to ensure the data privacy and confidentiality to reduce chance of any potential risk.
- Fourthly, regulators, who oversee and guide the financial markets, should encourage cautious testing of and adoption of new technologies along with providing a standardization in the use of blockchain technology and related elements.
- Fifthly, implementation of blockchain cannot be done overnight. It requires gradual and proper steps by the authorities to take both the legacy and new technology side by side in the initial phase. Also, the cost of system transformation will be very high and the returns are bound to be slow and gradual.

Conclusion

Technology has consistently been a driving force behind the financial sector's evolution and expansion, frequently leading in moments that are redefining. The driving force behind pooled investment vehicles right now is blockchain technology. In the mutual fund sector, it will likely have a favorable impact and revolutionize the game. Stakeholders will save money and time as a result of the distinctive nature of the blockchain's operating system. The goal of the mutual fund sector is to create wealth. Managers of mutual funds consider risk when choosing the best investments. With real-time customer data maintained in a single safe location, blockchain helps connect client needs with asset management systems essential to mutual fund operations.Blockchain technology has the potential to serve as an early warning system, spotting problems with decision-making. It could foresee a financial catastrophe or significant frauds and scams, sparing the mutual fund industry several billions of rupees and fund managers' personal losses. There are many such advantages this technology may provide for the mutual fund sector, and by embracing it, the blockchain could be a blessing for the asset management sector. However, due to a number of factors, including a lack of awareness, system complexity, and expensive costs and few more, blockchain is still in its infancy, particularly in India.

A transition period would be needed to migrate from the current operations to the future business model, therefore the technology couldn't be fully implemented in the short span of time. In order for the mutual fund sector to fully benefit from technological advancements and avoid being left behind, it needs to be structured. Failure to do so could result in being replaced by new competitors and losing one's position in the industry.

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बालिका सशक्तिकरण में संचार माध्यमों की भूमिका का विश्लेषणात्मक अध्ययन

*अनामिका साहनी, **डॉ. बृजेश चंद्र त्रिपाठी*

सारांश

आज के समाज को संवारने और जागृत करने में संचार माध्यमों की महत्वपूर्ण भूमिका है। इसका महत्व और भी बढ़ जाता है जब यह बालिकाओं के सशक्तिकरण से जोड़कर देखा जाता है। बाल विवाह अधिनियम की बात करें या बाल यौन शोषण, छेड़छाड़ हो या संपत्ति में महिलाओं के अधिकार की जानकारी। वैसे तो इनमें अपने जीवन के विभिन्न क्षेत्रों से संबंधित समस्याओं को बेहतर ढंग से सुलझाने की क्षमता जन्मजात होती है, शिक्षा के माध्यम से इस क्षमता का निरंतर विकास हो रहा है केवल उनमें जागरूकता का अभाव रहा है परंतु मीडिया ने उनमें यह चेतना जगाई जिसके कारण अब वे अत्याचार के विरूद्ध मुखर होकर अपनी आवाज को उठा रही हैं। और अब सरकार को भी उनके विषय में सोचते हुए उनके अधिकारों के हित के लिए कानून बनाने पड़ रहे हैं, अस्तित्व के अधिकार की लड़ाई काफी समय से चल रही थी। परन्तु जनसंचार माध्यमों ने इसे क्रांतिकारी रूप दिया। क्योंकि जनसंचार माध्यमों जैसे- रेडियो, दूरदर्शन, पत्र-पत्रिकाओं की पहुंच सीधे आम आदमी तक है।

प्रस्तावना

बालिकाओं को महिला हिंसा कानून, समान वेतन कानून, गोद लेने संबंधी कानून और संपत्ति में स्त्री के अधिकार की जानकारी सहित ऐसे अनेक उपमों का ज्ञान है जो उनके जीवन को सही दिशा दे सकते हैं। अपने जीवन की विभिन्न समस्याओं को बेहतर ढंग से सुलझाने की क्षमता उनमें निरंतर विकसित हो रही है। वे प्रारंभ से ही मेधा संपन्न रही हैं, लेकिन उनमें जागरूकता का अभाव रहा है। आत्मविश्वास की कमी भी उनकी उन्नति के मार्ग का रोड़ा रही है।

वैसे तो संचार माध्यम समाज के विकास में बहुत सहायक हैं। परंतु बालिका सशक्तिकरण के संदर्भ में बात करते समय संचार माध्यमों की सशक्त भूमिका को सर्वोपरि मानना होगा। आज समूचे विश्व में स्त्रियों का वर्चस्व बढ़ा है। शिक्षा, राजनीति, विज्ञान, कला, मनोरंजन हर क्षेत्र में स्त्रियां अपनी प्रतिभा उजागर कर रही हैं। उनकी पारिवारिक, सामाजिक और आर्थिक स्थिति में परिवर्तन स्पष्ट दिखाई दे रहा है। निःसंदेह हाल के दो दशकों में महिला हिंसा की घटनाओं में अभूतपूर्व वृद्धि दर्ज की गई है। परंतु इसी अवधि में महिलाओं ने विश्व में कीर्तिमान भी स्थापित किए हैं। इसकी अनदेखी नहीं की जा सकती। बालिकाओं के प्रति हिंसा, यौन उत्पीड़न, दहेज प्रताड़ना जैसी घटनाएं पहले से घटती आ रही हैं। परंतु मीडिया ने उनमें वह चेतना जगाई है जिसके कारण अब वे अत्याचार के विरूद्ध मुखर हो रही है और सरकार को भी उनके हित में कानून बनाने के लिए तत्पर होना पड़ रहा है।

महिलाएं अपने अस्तित्व की लड़ाई लंबे समय से लड़ती आ रही हैं, लेकिन इसने अभियान का रूप नहीं लिया था। महिलाओं के पक्ष में जमीन तैयार करने में रेडियो, दूरदर्शन, पत्र-पत्रिकाओं और सबसे अधिक समाचार पत्रों की भूमिका रही है। क्योंकि वह आम आदमी तक पहुंचने का सर्वसुलभ सस्ता माध्यम है। 73वें और 74वें संविधान संशोधन के परिणामस्वरूप देश की ग्रामीण एवं नगरीय स्वशासी संस्थाओं में महिलाओं के लिए आरक्षण की व्यवस्था ने उन्हें अधिकार संपन्न तो बनाया किन्तु जब हरियाणा, हिमाचल प्रदेश, उत्तराखण्ड, बिहार और मध्यप्रदेश के कुछ आदिवासी क्षेत्रों में निर्वाचित महिला प्रतिनिधियों ने सामाजिक बुराइयों एवं अन्याय के विरूद्ध आवाज बुलंद कर उन पर विजय पाई, तो मीडिया ने ही समाज में यह आस जगा दी कि सभी विसंगतियों के खिलाफ स्त्रियों की एकजुटता सचमुच क्रांतिकारी परिवर्तन ला सकती है यद्यपि भारत का महिला एवं बाल विकास विभाग स्त्रियों के सामाजिक एवं आर्थिक स्तर में सुधार लाने हेतु सतत् प्रयत्नशील है और अनेक योजनाएं बनाता आ रहा है। अन्य शासकीय एवं अशासकीय तथा स्वयंसेवी संस्थाएं भी इस दिशा में कार्य कर रही हैं किंतु जब से संचार माध्यम इस दिशा में सम्मिलित हुए हैं तभी से उल्लेखनीय परिणाम मिल रहे हैं। आज जितनी भी शासकीय योजनाओं की जानकारी दृश्य-श्रव्य माध्यमों द्वारा प्रसारित की जाती हैं, उनका व्यापक प्रभाव स्त्री वर्ग पर पड़ा है। अन्त्योदय योजनाएं, राष्ट्रीय ग्रामीण रोजगार गारंटी योजना और जननी सुरक्षा योजना सहित जाने कितनी योजनाओं की जानकारी सर्वहारा वर्ग की महिलाओं को है, यह प्रसन्नता की

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बात है। सरकार बालिका शिक्षा, प्रौढ़ शिक्षा और छात्रवृत्ति योजना के माध्यम से महिला साक्षरता बढ़ाने हेतु प्रयासरत है। इसमें दूरदर्शन की अहम् भूमिका है। बालिका शिक्षा संबंधी कई विज्ञापन एवं कार्यक्रम दिखाकर दूरदर्शन साक्षरता के प्रसार में सहयोग कर रहा है। कन्या भ्रूण हत्या को रोकने के उद्देश्य से भी उसने महत्वपूर्ण कार्यक्रम दिखाए हैं और कन्या जन्म को प्रोत्साहित करने में उल्लेखनीय भूमिका निभाई है। महिलाएं संवैधानिक दृष्टि से तो अधिकार सम्पन्न हैं मगर यथार्थ में वे भेद-भाव, शोषण और उत्पीड़न का शिकार बनी हुई हैं। आज आवश्यकता है, बालिकाओं को उनके अधिकार दिलाने की। उन्हें शिक्षित, स्वावलम्बी, मजबूत और अधिकार चेतना बनाने की। सरकार द्वारा महिलाओं के कल्याण हेतु कई कानून बनाए गए परंतु वे सभी कागजों में ही सिमटकर रह गए। जबकि इन कानूनों को जन-जन तक पहुंचाने की आवश्यकता है और दूरदर्शन, निजी चैनल व रेडियो के माध्यम से यह भलीभांति संभव है। इन्हीं माध्यमों से महिलाएं विवाह, दहेज, बलात्कार, संपति अधिकार, समान वेतन, प्रसूति-सुविधा आदि के संबंध में आवश्यक जानकारी एवं दिशानिर्देश प्राप्त कर सामाजिक व आर्थिक दृष्टि से सम्मानजनक स्थान पाने की कोशिश कर रही हैं।

वर्तमान में संचार माध्यम बालिकाओं के सशक्तिकरण में महत्वपूर्ण भूमिका निभा रहे हैं। बाल विवाह अधिनियम की बात करें या पत्नी के भरण-पोषण या विधवा गुजारा भत्ते की, स्त्रियां जागरूक हो रही हैं। उन्हें महिला हिंसा कानून, समान वेतन कानून, गोद लेने संबंधी कानून और संपतित में स्त्री के अधिकार की जानकारी सहित ऐसे अनेक उपमों का ज्ञान है जो उनके जीवन को सही दिशा दे सकते हैं। अपने जीवन की विभिन्न समस्याओं को बेहतर ढंग से सुलझाने की क्षमता उनमें निरंरित विकसित हो रही है। वे प्रारंभ से ही मेधा संपन्न रही हैं, लेकिन उनमें जागरूकता का अभाव रहा है। आत्मविश्वास की कमी भी उनकी उन्नति के मार्ग का रोड़ा रही है। आज आवश्यकता है स्त्रियों को उनके अधिकार दिलाने की। उन्हें शिक्षित, स्वावलम्बी, मजबूत और अधिकार चेतना बनाने की। सरकार द्वारा महिलाओं के कल्याण हेतु कई कानून बनाए गए परंतु वे सभी कागजों में ही सिमटकर रह गए। जबकि इन कानूनों को जन-जन तक पहुंचाने की आवश्यकता है और दूरदर्शन, निजी चैनल व रेडियो के माध्यम से यह भलीभांति संभव है। इन्हीं माध्यमों से महिलाएं विवाह, दहेज, बलात्कार, संपति अधिकार, समान वेतन, प्रसूति सुविधा आदि के संबंध में आवश्यक जानकारी एवं दिशानिर्देश प्राप्त कर सामाजिक व आर्थिक दृष्टि से सम्मानजनक स्थान पाने की कोशिश कर रही हैं।

संबंधित साहित्य सर्वेक्षण

पाठक, विवेक (2018) ने अपने अध्ययन के निष्कर्ष में बताया कि महिला सशक्तिकरण हेतु महिलाओं को आर्थिक रूप से मजबूत होना आवश्यक है।

सिंह, घनवीर (2019) ने अपने अध्ययन में यह निष्कर्ष दिया कि महिलाओं के सशक्तिकरण में जब तक समाज सहयोग नहीं देगा तब तक सरकारी नीतियां अपने लक्ष्य को प्राप्त नहीं कर पाएंगे।

कुमारी साथी (2019) ने अपने अध्ययन में निष्कर्ष स्वरूप बताया कि शिक्षा की वजह से ही आज महिलाएं आत्मसम्मान की जिंदगी जी रही हैं। शिक्षा ही आत्म सम्मान की सीढ़ी है।

शोध अध्ययन की आवश्यकता

वर्तमान में संचार माध्यम बालिकाओं के सशक्तिकरण में महत्वपूर्ण भूमिका निभा रहे हैं। बाल विवाह अधिनियम की बात करें या पत्नी के भरण-पोषण या विधवा गुजारा भत्ते की, स्त्रियां जागरूक हो रही हैं। उन्हें महिला हिंसा कानून, समान वेतन कानून, गोद लेने संबंधी कानून और संपत्ति में स्त्री के अधिकार की जानकारी सहित ऐसे अनेक उपमों का ज्ञान है जो उनके जीवन को सही दिशा दे सकते हैं। अपने जीवन की विभिन्न समस्याओं को बेहतर ढंग से सुलझाने की क्षमता उनमें निरंतर विकसित हो रही है। वे प्रारंभ से ही मेधा संपन्न रही हैं, लेकिन उनमें जागरूकता का अभाव रहा है। आत्मविश्वास की कमी भी उनकी उन्नति के मार्ग का रोड़ा रही है।

अतः प्रस्तुत अध्ययन इसी आवश्यकता को ध्यान में रखते हुए किया जाने वाला एक लघु प्रयास है।

अध्ययन के उद्देश्य

- बालिका सशक्तिकरण में संचार माध्यमों की भूमिका।

अध्ययन की परिकल्पना

- बालिका सशक्तिकरण में संचार माध्यम महत्वपूर्ण भूमिका निभा रहे हैं।

शोध प्रविधि : प्रस्तुत शोध-पत्र में मात्रात्मक शोध विधि का प्रयोग किया गया है। शोध को पूर्ण करने के लिए सर्वेक्षण विधि द्वारा तथ्य संकलन किया गया है।

न्यादर्श : प्रस्तुत शोध-पत्र में कस्तूरबा गांधी विद्यालय में अध्ययनरत कक्षा 6 की 50 तथा कक्षा 7 की 50, कुल 100 बालिकाओं को शोध हेतु न्यादर्श में सम्मिलित किया गया है।

प्रतिदर्श विधि : उद्देश्यपूर्ण निदर्शन विधि का चयन किया गया है। प्रस्तुत शोध पत्र में प्राथमिक स्रोत से आंकड़ों को एकत्रित किया गया है। आंकड़ों के संकलन के लिए शोधार्थी ने स्वनिर्मित प्रश्नावली का प्रयोग किया है।

परिणाम : प्राप्त आंकड़ों का विश्लेषण प्रस्तुतीकरण निम्न तालिका की सहायता से किया गया हैः

सारणी 1: आप संचार माध्यमों का उपयोग किस कार्य के लिए करते हैं?

छात्रा	पढ़ाई के लिए	मनोरंजन के लिए	लोगों से जुड़ने के लिए	विचार अभिव्यक्ति	प्रतिशत
कक्षा 6	15	10	11	14	50
कक्षा 7	10	16	9	15	50
योग	25	26	20	29	100

उपरोक्त सारणी से स्पष्ट है कि 25% किशोरियों की पढ़ाई के लिए, 26% मनोरंजन के लिए तथा 20% लोगों से जुड़ने के लिए और 29% विचार अभिव्यक्ति के लिए सोशल मीडिया का प्रयोग करती हैं।

सारणी 2: क्या आप सोशल मीडिया पर किशोरी शोषण के विरोध में कोई पोस्ट व फोटो डालते हैं?

छात्रा	हाँ	नहीं	प्रतिशत
कक्षा 6	18	32	50
कक्षा 7	29	21	50
योग	47	53	100

उपरोक्त सारणी से स्पष्ट है कि 45% किशोरियां सोशल मीडिया पर किशोरी शोषण मीडिया के विरोध में पोस्ट डालती हैं, 53% का मानना है कि वह कोई पोस्ट नहीं डालती हैं।

सारणी 3: क्या बालिकाओं की शिक्षा के समर्थन वाले पोस्ट को लाइक करती हैं?

छात्रा	हाँ	नहीं	प्रतिशत
कक्षा 6	37	13	50
कक्षा 7	41	9	50
योग	78	22	100

उपरोक्त सारणी से स्पष्ट है कि 78% बालिकाएं किशोरी शिक्षा से संबंधित पोस्ट को लाइक करती हैं जबकि 29% नहीं करती हैं।

सारणी 7: क्या आप भ्रष्टाचार विरोधी पोस्ट करती हैं?

छात्रा	हाँ	नहीं	प्रतिशत
कक्षा 6	28	22	50
कक्षा 7	27	23	50
योग	55	45	100

उपरोक्त सारणी से स्पष्ट है कि 55% बालिकाएं भ्रष्टाचार विरोधी पोस्ट सोशल मीडिया पर करती हैं जबकि 45% का मानना है कि वह नहीं करती हैं।

बालिका सशक्तिकरण में संचार माध्यम महत्वपूर्ण भूमिका निभा रहे हैं। परिकल्पना स्वीकृत हुई है।

निष्कर्ष

अध्ययन से यह पता चलता है कि 25% किशोरियां पढ़ाई के लिए, 26% मनोरंजन तथा 20% लोगों से जुड़ने के लिए और 29% विचार अभिव्यक्ति के लिए सोशल मीडिया का प्रयोग करते हैं, 47% किशोरियां सोशल मीडिया पर किशोरी शोषण के विरोध में पोस्ट डालती हैं जबकि 53% का मानना है कि वह कोई पोस्ट नहीं डालती हैं, वहीं 78% बालिकाएं किशोरी शिक्षा से संबंधित पोस्ट को लाइक करती हैं जबकि 29% का मानना है कि वह नहीं करती हैं। 55% बालिकाएं भ्रष्टाचार विरोधी पोस्ट सोशल मीडिया पर करती हैं जबकि 45% का मानना है कि वह नहीं। बहरहाल जिस तेजी से भौतिकता एवं प्रौद्योगिकी के पक्ष में स्त्री चेतना का विस्तार दृष्टिगोचर हो रहा है यदि उसी गति से स्त्री अपने अधिकारों एवं कर्तव्यों के प्रति सचेत हो सके तो समाज के अनेक ऐसे ज्वलंत प्रश्नों का हल आसानी से मिल सकता है जिनका समाधान कानून द्वारा अद्यपर्यंत संभव नहीं हो पाया है। संचार माध्यमों की ईमानदार प्रतिबद्धता निश्चय ही महिला सशक्तिकरण के इतिहास में एक स्वर्णिम अध्याय जोड़ सकती है। सरकार को भी इस दिशा में सोचने की जरूरत है।

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A Study on Availability of Financial Services in Selected Districts of Uttar Pradesh

*Dhananjay Kumar Jha, **Prof. Arun Kant Gautam

Abstract

Financial Inclusion is an innovative concept which helps to achieve the Sustainable Development of the country through available financial services to the unreached people with the help of financial institutions. This study analyse the perception of financial inclusion services in Ayodhya, Ambedkar Nagar and Prayagraj district of Uttar Pradesh The primary data was collected through well designed questionnaire form a sample size consists of 500 respondents living in selected district. Random sampling methods has been used for study comprising of 7 indicator based questionnaire designed on five point scale. As per the need of study chi square test, Percentage used to analyse the data. As a result it was observed that there are statistically strong differences among the avaibility of financial services in selected districts.

Introduction

Financial inclusion is the process of ensuring that the poor, disadvantaged and vulnerable sections of society are provided with timely and appropriate financial products and services at reasonable and affordable costs. It is a deliberate process that aims to involve all members of society without any discrimination in the country. Financial inclusion has grown in importance not only in India but also across the world. Accessibility and availability of financial services at affordable costs is became policy priorities of various countries. All countries around the world adopt different strategies, create innovative models and direct resources that best suit their country's financial and economic system. Financial access can certainly improve the financial status and standard of living of the poor and disadvantaged sections of society.

Financial Inclusion

Financial inclusion enables improved and better sustainable economic and social development of the country. Its help in the improvement of the marginalized, underprivileged, poor and women section of the society with the aim of self-sufficient and well informed to take better financial decisions. Financial inclusion takes in account of vulnerable group such as weaker section of the society and low income groups, access to financial services such as saving and payment account, credit insurance, pension etc.

The Rangarajan Committee defined: "Financial Inclusion as the process of ensuring access to financial services and timely and adequate credit where needed by vulnerable groups such as weaker section and low income groups at an affordable cost"

RBI defines Financial Inclusion as "a process of ensuring access to appropriate financial products and services needed by all sections of the society in general and vulnerable groups such as weaker sections and low income groups in particular, at an affordable cost in a fair and transparent manner by regulated mainstream institutional players".

Importance of Financial Inclusion:

Financial Inclusion is an important step towards economic development. It's importance can be Known with following Points:

- It is a necessary conditions for sustainable equitable growth because resource generation and mobilizations are key factors of financial inclusion.
- It protects the poor and deprived sections of society from the clutches of money lenders.
- It will made possible for the government to make DBT payments under social security schemes through bank accounts of the beneficiaries.
- Government shift focus from 'Every household' to 'Every unbanked adult'. It could made possible through successfully implementation of financial inclusion.
- It provides a platform to inculcate the habit of savings.

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Financial Inclusion in India:

In India, our policy makers understood the importance of financial inclusion long before. Over the decades have collectively taken many major initiatives which includes, Nationalization of 14 Banks in 1969, Establishment of priority sector landing banks in 1971, Establishment of regional rural banks in 1975, Establishment of NABARD, 1982, Launching of the self-help group Bank linkage program 1992, NABARD sets a goal for linkage 1 million self-help groups by 2008, 1998, Establishment of SIDBI foundation for micro credit 2000, Proposed Bill on Micro Finance Regulation introduce in parliament 2007, Unique identification number (AADHAR) and Direct Benefit Transfer Scheme (DBT) 2013. In 2014 Pradhan Mantri Jan dhan Yojana started, Licence for SFBs issued by RBI 2015, The G20 financial inclusion action plan (FIAP) 2017, India Post Payment Bank (IPPB) started in 2018, National Strategy for Financial Inclusion launched in 2019, Financial inclusion Index launched by RBI in 2021.

Government of India and RBI has taken major initiative towards effective financial inclusion programme. The RBI had advised from 2010 to 2014 all public and private sector banks to submit their board approved financial inclusion plans. Since 2014, Government has started number of revolutionary schemes with the aim of providing financial facilities to all the people of society in fair and transparent manner.

1. Pradhan Mantri Jan DhanYojana (PMJDY)
2. Pradhan Mantri Mudra Yojana (PMMY)
3. Pradhan Mantri Jivan Jyoti Bima Yojana (PMJJBY)
4. Pradhan Mantri Suraksha BimaYojana (PMSBY)
5. Pradhan Mantri Vay Vandana Yojana (PMVVY)
6. Atal Pension Yojana (APY)
7. Stand Up India and Start Up India Scheme
8. Sukanya Samridhi Yojana

Table 1: Financial Inclusion Plan: A Progress Report

Sr No.	Particulars	March 2010	Dec 2010	Dec 2021
1	Banking Outlets in Villages	33378	55073	53249
2	Banking Outlets in Villages BCs	34174	1194640	1844732
3	Banking Outlets in Villages 1+2	67694	1253177	1900523
4	BSBDA total no.(in lakh)	735	6384	6631
5	BSBDA total Amt(in Cr)	5500	199503	213646
6	OD Facilities availed in BSBDAs No. (in lakh)	2	59	64
7	OD Facilities availed in BSBDAs (in Cr)	10	505	556
8	KCC total no (in Lakh)	240	490	473
9	KCC total Amt.(in Cr)	124000	679064	693596

**Source:* Progress Report of RBI 2022

Review of Litrature

Jeromi (2007) highlighted the issue of financial exclusion from formal sector and proliferation of informal financial institutions and money lenders in Kerala and invited the attention towards the social, political and economic issues arising out of this situation. C Rangarajan (2008) through his committee report emphasized the need to modify the credit and financial services delivery system to achieve greater inclusion. He further suggested that while banks and other financial institutions can also take some efforts on their own to improve the absorptive capacity of the clients, it is equally important for Government at various levels to initiate actions to enhance the earnings capacity of the poorer sections of the society. The two together can bring about the desired change of greater inclusion quickly. Raghuram G. Rajan (2009) through his committee on financial sector reforms discussed in Chapter 3 (of report), the issue of financial inclusion and proposes a paradigm shift in the way we see inclusion. Instead of seeing it as an expanding credit, they urge to see it as expanding access to financial services, such as payments services, savings products, insurance products, and inflation-protected pensions. The Committee advocates a national goal of ensuring in three years that 90 per cent of households, if they so desire, have access to a deposit account and to the payments system, and that government transfers under various schemes be implemented through this system. Misra (2010) studied the various models for financial inclusion in different countries. Malegam (2011) through his committee report on Microfinance suggested the number of steps to strengthen financial inclusion in the country. Arulmurugan *et al.*(2013) tried to study the various efforts for financial inclusion in India whereas Sharma & Kukreja (2013) in their study focused on the relevance of financial inclusion in strengthening the India's position in relation to other countries economy. Krishna Kumar & Vijayakumar (2013) focused in their study on effectiveness of Financial Inclusion products and programs. Thapar (2013) in her study concluded that though the banks are complying with RBI norms in terms of opening branches within areas of at least 2000 population, offering no frills account, kissan credit card, simplifying KYC norms, but still a lot of effort is to be put in for financial inclusion progress. Nachiket Mor (2014) as mandated to develop a comprehensive monitoring framework to track the progress of the financial inclusion and deepening efforts on a nationwide basis and suggested many steps to strengthen the process of inclusion. Singh & Nisha (2014) in their study established a direct relationship between human development and financial inclusion. They further highlighted the importance of physical infrastructure for connectivity & information and Government policies for financial inclusion.

Objectives of Study

1. To study the awareness level about financial inclusion in selected districts of Uttar Pradesh.
2. To analyse the perception of beneficiaries of financial inclusion services in selected districts of Uttar Pradesh
3. To evaluate the availability and accessibility of financial services in selected districts of Uttar Pradesh.

Methodology

The proposed study is based on primary data. The primary data was collected through well designed questionnaire form a sample size consists of 610 respondents living three district namely Ayodhya, Ambedkar Nagar and Prayagraj of Uttar Pradesh. Butthe usable data for study is 500 only. In which 326 respondents are male and 174 respondents are female. For the research in question the sampling units comprises identified groups of population who get benefits from the financial inclusion services.

Research Hypothesis

H0 There is no significant differences in availability of financial services across the selected districts of Uttar Pradesh.

H1 There is significant differences in availability of financial services across the selected districts of Uttar Pradesh.

Statistical Tool

The collected data has been classified, tabulated and analysed with the help of Statistical tools such as Percentage, Chi Square Test. The statistical tools have been used as per the need of study. Random sampling methods has been used for study comprising of 7 Indicators based questionnaire designed. The study has applied Chi Square Test at 5 percent level of significance.

Table 2: Demographic Description of The Respondents

Variables	No.of Respondents	Percentage(%)
Gender		
Male	326	65.20%
Female	174	34.80%
Total	500	100%
Age		
Up to 18 Yrs	5	1.00%
18-30 Years	121	24.20%
30-45 Years	231	46.20%
45-60 Years	135	27.00%
Above 60 Years	8	1.60%
Total	500	100%
Marital status		
Single	118	23.60%
Married	382	76.40%
Total	500	100%
Qualifications		
Doctorate	5	1.0%
P.G	18	3.60%
Graduate	156	31.20%
Diploma	12	2.40%
Higher Secondary	158	31.60%
Below Higher Secondary	140	28.00%
Illiterate	11	2.20%
Total	500	100%
Occupation		
Govt Job	77	15.4%
Private Job	91	18.20%
Self Employed	98	19.60%
Housewife	88	17.60%
Labour	95	19.00%
Student	8	1.60%
Others	43	8.60%
Total	500	100%
Monthly Income		
Nil	25	5.0%
Upto Rs 5000	29	5.8%
Rs 5000-10000	75	15.00%
Rs 10000-15000	150	30.00%
Rs.15000-30000	192	38.40%
Above Rs 30000	29	5.80%
Total	500	100%

Source: From questionnaire filled by Respondents.

Table 3: Statistical Calculations

Indicators	Selected Districts for study					Chi square value
	Response	Ayodhya	Ambedkar Nagar	Prayagraj	Total	(p value)
Procedure for loan is easy	Yes	13(5.8)	11(6.5)	18(16.7)	42(8.4)	30.263 (.0001)
	No	160(71.4)	120(71.4)	87(80.6)	367(73.4)	
	No idea	51(22.8)	37(22.00)	3(2.8)	91(18.2)	
Loan is given for desired time period	Yes	14(6.3)	11(6.5)	10(9.3)	35(7)	29.843(.0001)
	No	144(64.3)	98(58.3)	91(84.3)	333(66.6)	
	No idea	66(29.5)	59(35.1)	7(6.5)	132(26.4)	
Insurance facilities provided by bank	Yes	83(37.1)	76(45.2)	43(39.8)	202(40.4)	30.348(.001)
	No	53(23.7)	43(25.6)	43(39.8)	139(27.8)	
	No idea	88(39.3)	49(29.2)	22(20.4)	159(31.8)	
Banking Facilities	ATM card	28(12.5)	8(4.8)	6(5.6)	42(8.4)	59.217(.00001)
	Cheque book	171(76.3)	108(64.3)	84(77.8)	363(72.6)	
	Locker facilities	7(3.1)	10(5.0)	35(20.8)	52(9.6)	
	No idea	18(8.0)	17(10.1)	17(15.7)	52(10.4)	
Banking schemes suit your need.	Yes	34(15.2)	45(26.8)	30(27.8)	109(21.8)	28.348(.0001)
	No	150(67)	83(49.4)	73(67.6)	306(61.2)	
	No idea	40(17.9)	40(23.8)	5(4.6)	85(17)	
Intimation of financial schemes	Bank Executives	53(23.7)	19(11.3)	26(24.1)	98(19.6)	57.76(.0001)
	News paper	49(21.9)	36(21.4)	18(16.7)	103(20.6)	
	Banking brochure	69(30.8)	44(26.2)	30(27.8)	143(28.6)	
	TV Radio	43(19.2)	26(15.5)	29(26.9)	98(19.6)	
	C.S.C	10(4.5)	43(25.6)	5(4.6)	58(11.6)	
Banking Satisfaction	Always	58(25.9)	32(19.0)	37(34.3)	127(25.4)	24.464(.0001)
	Sometimes	104(46.4)	70(41.7)	51(47.2)	225(45.0)	
	Never	27(12.1)	40(23.8)	17(15.7)	84(16.8)	
	No idea	35(15.6)	26(15.5)	3(2.8)	64(12.8)	
Total		224(100)	168(100)	108(100)	500(100)	

Source: Collected from primary data *Note:* Values in brackets are percentage

Above Table 2 enumerates regarding avaibilities of financial services in selected district of Uttar Pradesh.

1. From the above study it's observed that in Prayagraj district 80 percent respondents said the loan procedure was very difficult and 71 percent respondents of Ayodhya and Ambedkar Nagar district said it was difficult. These respondents from selected district also disclosed that they received a loan with the help on agent. Respondents from selected district said that the loan process was very difficult. Only 8.4 percent respondents had no trouble getting a loan.
2. Respondents from selected district reported that loan is not given desired time period. Only 7 percent of total respondent accepted that loan is given desired period.
3. Approx. 45 percent of respondents in Ambedkar Nagar district, 39 percent in Prayagraj and 37 percent in Ayodhya district confirm that insurance facilities provided by bank. Overall, 27 percent respondents reported no insurance facility are available. There are 31 percent of respondents from selected district do not know about insurance facilities provided by banks.
4. Nearly 72 percent of respondents in selected district revealed that the bank provided them with cheque book and ATM. Locker facilities are not provided in adequate manner. Mostly account holders

confirmed that cheque book and ATM provided by banks.

5. In above study 61.2 percent of all respondents from selected district reported that banking schemes not suitable for his need.
6. All the banks are adopting different kinds of methods to create new financial plans for customers. In the above study banking brochures is very effective means of communicating information about new financial plans.
7. Prayagraj district has 34 percent of respondents who have replied that they are always satisfied with the services provided by bank. Followed by Ayodhya and Ambedkar Nagar district by 25.9 and 19.00 percent respectively.
8. It is observed that Prayagraj district has been found the most aware district as compared to Ayodhya and Ambedkar Nagar. This finding has been found valid when enquired about various financial inclusion schemes and services. Prayagraj district has least percentage of respondents who have answered no idea.

Table 4: Summerization

Indicators	Chi square value	p value
Procedure for loan is easy	30.263	.0001
Loan is given for desired time period	29.843	.0001
Insurance facilities provided by bank	30.348	.001
Banking Facilities	59.217	.0001
Banking schemes suit your need	28.348	.0001
Intimation of financial schemes	57.767	.0001
Banking Satisfaction	24.464	.0001

Source: Concluded from research data

In the above summarizes the results of the 7 availability indicators. Strong evidence was found against the null hypothesis because all p values < 0.05. So null hypothesis was rejected and alternate hypothesis was accepted. Thus we can say that all selected district are not providing financial Inclusion services in a similar manner as directed by Reserve Bank of India and Government of India. Many variations have been reported in financial Inclusion services in selected district of Uttar Pradesh.

Conclusion

Government of India has made several efforts to include the poor deprived sections of financial mainstream in the financial inclusion process. For the effective financial inclusion process, Government, RBI and schedule commercial banks adopted a holistic approach to bring the deprived section under the banking umbrella. As per the result of study we observed that financial inclusion schemes made sincere efforts towards economic and social development. It helps to raised living standard in society, economic status and quality of life. Lastly we can say that all selected district are not providing financial Inclusion services in a similar manner as directed by Government. So there is various sectors for improvement.

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Institutional, Gender and Residential Differences in Achievement Motivation of Students at Secondary Level in Kashmir

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Abstract

The present research would like to work on the topic "Institutional, Gender and Residential differences in achievement motivation of students at secondary level in Kashmir." This topic shall explore various achievement motivation of secondary school going students in Kashmir and try to assess the Institutional, gender and residential differences in achievement motivation. In this regard students from various secondary schools shall be the object of this study by taking the responses to various situations into consideration for the judgment on their achievement motivation. Since achievement motivation happen to be one of the most important aspect or areas of educational psychological research. I propose this topic for research and dissertation work so that I may be able to understand and comprehend through field work that to what extent institutional, gender and residential differences affect achievement motivation level of students and how it could be judged and evaluated from the previous research.

Introduction

One of the mainly significant elements that guide one to their objective is the operation. This operation is identified as inspiration. It is enthusiasm and willpower with a type of pleasure that guide one to for each harsh to achieve better tallness, in no substance what street of their existence; be it-individual or expert. The operation may approach from an interior or outside basis. The person decides this. The issues that inspire a person to stay modified like one scale the steps of period and adulthood. And too, the attainment of one objective put the sphere undulating for an additional one to be got. Therefore, to be aggravated is a steady requirement. There is a period when one features a time of apathy and all appear exposed. It is then that they require to discover what would inspire them to support the act. For each person, there is a changeable heavy power. It is not presently a solitary issue, but a mixture of issues that guide the public to achieve their objective. The educational is that with a custom repetitiveness ladder in and then all appear like sluggish waters. It believes that there is nothing fresh. Contravention of this series of repetitiveness has assisted several recoveries with interest. This is why the person reserve boss makes a preparation chart, which will remove workers from the custom they are wedged to, and improve their ability in different regions.

In addition, recognized as a required hypothesis, the satisfied hypothesis of inspiration mostly concentrates on the interior issue that invigorates through personal performance. Maslow's hierarchy of needs, Alderfer's ERG theory, Herzeberg's motivator-hygiene hypothesis (Herzeberg's double issues hypothesis), and McClell and 'educated requirements or three-need hypothesis are several of the main satisfied hypothesis. Inspiration is the start of aggressive activities. Inspiration is supposed to be inherent or external. The word is usually employed for the person but, hypothetically, it can too be employed to explain the reason for the creature's actions too. This object consults a person's inspiration. According to the different hypotheses, inspiration possibly origin in the essential requirement to reduce bodily aches and increase enjoyment, or it may comprise exact requirements for example consumption as well as latent, or a preferred thing, pastime, objective, condition of a person, perfect, or it possibly credited to invisible causes, for example, humanity, self-interest, ethics, or shun humanity.

Intrinsicand Extrinsic Motivation

Inherent inspiration mention to drive that is ambitious by attention or pleasure in the job itself and living inside the person before depending on any outside difficulty. Inherent inspiration has been deliberate by community

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and instructive psychologists since the early 1970s. The study has established that it is classically linked with towering instructive achievement and pleasure by the scholar. Clarification of inherent inspiration has been known in the background of Fritz Heider's ascription hypothesis; Bandura's develop self-efficacy and Deciand Ryan's analytic assessment hypothesis. Scholars are possibly inherently aggravated.

External inspiration arrives from the exterior of the person. Ordinary external inspiration is recompense similar to currency and status, compulsion, and danger of sentence. Rivalry is generally external since it gives confidence to the player to succeed and hit others, not to like the inherent prize of the action. A mass reassuring on the person and cup is a too external inducement. Community mental study has specified that external prizes can guide more reason and a following decrease in inherent inspiration. In one learning representative of this result, kids who predictable to be (and were) satisfied with a band and a bullion celebrity for sketch painting exhausted fewer occasions live with the sketch equipment in the following surveillance then kids who were allocated to a surprising prize state and to kids who collect no external prize.

Achievement Motivation

Inspiration is usually believed to operate to attain targets and the procedure to uphold operations. Inspiration gives a significant base to absolute reasonable conduct, for example, preparation, association, governing, knowledge, as well as an appraisal. Spence and Helmreich distinct attainment as task-oriented activities. Presentation of persons is frequently contrasted alongside principles or with others for appraisal. The conflicting views of the researcher's outcome in the different meanings of attainment inspiration. The unique meaning of attainment inspiration was from Atkinson who distinguished it as the contrast of presentation with other smooth alongside sure normal behavior. Atkinson and Feather optional that attainment inspiration is a mixture of two characteristics changing: the propensity to move toward achievement and the propensity to shun breakdown.

Important Implications for Future Academic Success

It is significant for equal parents, as well as teachers, to know why endorsing and hopeful educational incentives from an early period is very important. The educational incentive is vital to a student's educational achievement at some period. As scholars for me- ideas, principles, and attitudes concerning their aptitude at a youthful era, the growth of untimely educational incentives has important inference for the afterward educational job. A huge contract of investigation has established that scholars tall in educational inspiration are further possible to have enlarged heights of educational attainment and have inferior failure charge at the present, the meaning of ultimately educational inspiration to prospect educational achievement should be obvious. Though, dissimilar kind of educational incentive has dissimilar inference for educational success. If a scholar has a tall height of educational inspiration, meaningful whether that scholar is extrinsically or intrinsically aggravated possibly significant in the creation forecast regarding those scholars? Educational vocation. As talked about previously, persons who are essentially aggravated to study perform consequently for the enjoyment of knowledge, before for outside prizes. In difference, those who are extrinsically aggravated to study, are aggravated to study for outside plunder that knowledge will transport.

Objectives

1. To assess the difference in achievement motivation among secondary level students in private and public school of Kashmir.
2. To assess the difference in achievement motivation among students of secondary level in boys and girls of Kashmir.
3. To assess the difference in achievement motivation among secondary level students from rural and urban areas of Kashmir.

Hypothesis

1. **$H0_1$.** There is no significant difference in achievement motivation among students at secondary level from private and public schools of Kashmir.
2. **$H0_2$.** There is no significant difference in achievement motivation in boys and girls at secondary level in Kashmir.

Methodology

Design

This research is an ex-post facto designin the sense that the researcher does not have direct control over independent variables because their manifestations have already occurred or because they are inherently not manipulable. The investigator therefore examined the achievement motivation on secondary schools student achievement.

Sample

The target sample of the study was fixed 200 participants including both boys as well as girls. The sample was collected by making individual contacts with participants in the schools they were reading. Two types of schools were chosen for the study which is 1) private and 2) public. As these schools provide education to rural and urban students both so the area of residence of students was also taken as a variable in the study.

Instrumentation

A final scale of achievement motivation modified from its draft version was used for collecting the data from students. The achievement motivation scale used was developed by Muthee J.M & Immanuel Thomas (2009). The instrument was divided into two parts. The firstpart require the participants demographic information like sex, age,class, name of school etc.; while the second part contain the items. It was a thirty two item scale of likert type format with response ranged from completely agrees 5, to completely disagree 1. To ascertain the reliability. The reliability coefficient yielded an r=0.85 through cronbach alpha. All the items in the instrument were really very relevant to the content of the study.

Table 1: Showing the Mean difference and SD in the Achievement motivation scores of rural and urban students

Institute	N	Total sum of scores	Mean	Variance	Std. D	Std. E
Private	32	3677	114.90	610.97	10.55	1.87
Public	32	3541	110.65	588.52	16.66	2.95

Table 2: t-showing the Mean difference in the Achievement motivation scores of private and public school students

Institute	N	Mean	Variance	Std. D	Std. E	Obtained t. value	Critical t. value at 0.05 level	Remarks
Private	32	114.90	610.97	10.55	1.87	0.24	2.00	NS
Public	32	110.65	588.52	16.66	2.95			

NS = Non significant

Result and Interpretation

Table 1 presents the results of variance and standard deviation conducted on the achievement motivation based on the type of institute. The result clearly reveals that the two samples have unequal variance standard deviations and standard error with (for private students; var=610.97 Std. dev=10.55, Std.E=1.87 and for public; var.=588.52, Std.dev=16.66 and Std.E=2.95).

Table 2 presents the results of the analysis conducted on the achievement motivation based on institute. The result clearly reveals that difference that exists in the achievement motivation of private and public student with (t.cal.=0.24;t.crit.2.00;df=62;at0.05 level), which means hypothesis $H0_1$, is accepted.

Table 3: Showing the Mean difference and SD in the achievement motivation scores of boys and girls

Institute	N	Total sum of scores	Mean	Variance	Std. D	Std. E
Boys	48	5382	112.125	178.75	13.36	1.92
Girls	48	5248	109.33	369.97	19.23	2.77

Table 4: t-Test showing the Mean difference in achievement motivation of boys and girls students

Institute	N	Mean	Variance	Std. D	Std. E	Obtained t. value	Critical t. value at 0.05 level	Remarks
Boys	48	112.125	178.75	13.36	1.92	0.34	1.98	NS
Girls	48	109.33	369.97	19.23	2.77			

The table 3 presents the results of variance and standard deviation conducted on the achievement motivation based on the type of gender. The result clearly reveals that the two samples have unequal variance standard deviations and standard error with (for boys; var=178.75 Std.dev=13.36, Std.E= 1.92 and for girls; var.=369.97, Std.dev=19.23. and Std.E=2.77).

The Table 4 presents the results of the analysis conducted on the achievement motivation based on Gender. The result clearly reveals the difference that exists in the achievement motivation of boys and girls with (t.cal.=0.34;t.crit.=1.98; df=94 and at 0.05 level) which means H02 is accepted.

Table 5: Showing the Mean difference and SD in the Achievement motivation scores of rural and urban students

Residence	N	Total sum of scores	Mean	Variance	Std. D	Std. E
Rural	46	5018	109.08	384.97	19.62	2.90
Urban	46	5250	114.13	174.38	13.20	1.95

Table 5 presents the results of variance and standard deviation conducted on the achievement pmotivation based on the type of residence. The result clearly reveals that the two samples have unequal variance standard deviations and standard error with (for rural students; var=384.97 Std.dev=19.62, Std.E=2.90 and for urban students; var.= 174.38, Std.dev=13.20 and Std.E=1.95).

Discussion

The result of the first Null hypothesis,which compares the differences among two means of achievement motivation of private and public school students using the type of institute as a variable of interest is found to be not significant. The findings indicated significant difference between the achievement motivation of the boys and girls. The result also showed that girls were higher achievers than boys. The result of the second Null hypothesis shows that there is no significant difference in achievement motivation of boys and girls at secondary level

The findings revealed that there was a significant difference in academic achievement of male and female students. Girls were found to be better performers than boys.

Conclusion

The purpose of the study was to explore the differences in achievement motivation of secondary school students in Kashmir due to Institute type, Gender and area of Residence. The results of the study revealed that there is no significant difference in achievement motivation of students due to the type of institute which are run by private organizations or by government authorities. Therefore the first research hypothesis is rejected in which it was predicted that there is a significant difference in achievement motivation among students due to difference in the type of institute.

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माध्यमिक विद्यालयों में अध्ययनरत विद्यार्थियों की समायोजन का तुलनात्मक अध्ययन

*जैनेन्द्र सिंह

सारांश

प्रस्तुत शोध अध्ययन में माध्यमिक विद्यालयों में अध्ययनरत विद्यार्थियों की समायोजन का तुलनात्मक अध्ययन किया गया है। शोध विधि में विवरणात्मक अनुसंधान के अर्न्तगत सर्वेक्षण विधि है। जनसंख्या के रूप में लखनऊ जनपद के माध्यमिक शिक्षा परिषद के विद्यालयों को लिया गया है। जनसंख्या से न्यादर्श चयन हेतु साधारण यादृच्छिक विधि का प्रयोग किया है। प्रदत्त संकलन हेतु उपकरण के रूप में विद्यालयी विद्यार्थियों के लिए समायोजन अनुसूची सिन्हा एवं सिंह द्वारा निर्मित प्रयुक्त किया गया है। अध्ययन से ज्ञात हुआ कि माध्यमिक विद्यालयों में अध्ययनरत विद्यार्थियों में शहरी विद्यार्थियों, हिन्दी माध्यम के शहरी विद्यार्थियों एवं अंग्रेजी माध्यम के शहरी विद्यार्थियों का समायोजन उच्च है।

प्रस्तावना

वास्तव में विद्यार्थियों की सफलता और असफलता उसके विद्यालय एवं शिक्षण के समायोजन पर निर्भर करता है। यदि विद्यार्थी विद्यालय एवं शिक्षण के प्रति उचित समायोजित होता है तो उसका परिणाम सकारात्मक होगा इसके विपरीत यदि व्यक्ति का समायोजन उचित नहीं होगा। इसका तात्पर्य विद्यालय में यदि विद्यार्थी समायोजित होगा तो उसका शिक्षण उच्चस्तर का होगा। प्रत्येक विद्यालय का कर्तव्य है कि वह विद्यार्थियों को समायोजित रखने का प्रयास करना चाहिए। इसके लिए उसे विद्यार्थियों को विभिन्न प्रकार की समस्याओं का सामना करने के लिए प्रशिक्षण देना, निर्देशन एवं परामर्श की उचित व्यवस्था होनी चाहिए, निराशा एवं असफलता का सामना करने के लिए प्रशिक्षण दिया जाना चाहिए, इसके साथ जीवन का उद्देश्य निश्चित होना चाहिए ताकि उसके अन्दर असुरक्षा की भावना का विकास न हो। इन सभी के फलस्वरूप वह व्यैक्तिक, शैक्षिक एवं व्यवसायिक रूप से समायोजित हो सकेगा। इस प्रकार यदि विद्यार्थी विद्यालय में उचित रूप से समायोजित होगा तो निश्चित ही वह अपने उद्देश्यों में सफल होंगे एवं यदि वे उचित रूप से समायोजित नही होंगे तो वे अपने उद्देश्यों को प्राप्त नहीं कर पायेंगे। इससे वे अपने शिक्षण में पीछे रह जायेंगे जिसके फलस्वरूप वे धीरे-धीरे समाज में भी पीछे चले जायेंगे। इसलिए विद्यालय में विद्यार्थियों का समायोजन बहुत महत्वपूर्ण है।

समायोजन

समायोजन को सामंजस्य, व्यवस्थापन या अनुकूलन भी कहते हैं। व्यक्ति को सफल जीवन व्यतीत करने के लिए अपने वातावरण और परिस्थितियों के साथ समायोजन स्थापित करना आवश्यक है। व्यक्ति के जीवन में विभिन्न प्रकार की परिस्थितियां आती हैं जिसका उसे समय-समय पर सामना करना पड़ता है। इस प्रकार व्यक्ति अपनी क्षमता के अनुसार समायोजन करते हैं। समायोजन दो शब्दों सम और आयोजन से मिलकर बना है। सम का अर्थ है अच्छी तरह से और आयोजन का अर्थ है व्यवस्था अर्थात् अच्छी तरह व्यवस्था करना। इस प्रकार समायोजन का अर्थ हुआ अच्छे ढंग से परिस्थितियों को अनुकूल बनाने की प्रक्रिया जिससे कि व्यक्ति की आवश्यकताएं पूरी हो जाए। समायोजन का अर्थ स्पष्ट करते हुए गेट्ज एवं अन्य विद्वान ने कहा कि समायोजन शब्द के दो अर्थ है। एक अर्थ में निरन्तर चलने वाली प्रक्रिया जिसके द्वारा व्यक्ति स्वयं और पर्यावरण के बीच अधिक सामंजस्यपूर्ण सम्बन्ध रखने के लिए अपने व्यवहार में परिवर्तन कर देता है। दूसरे अर्थ में समायोजन एक संतुलित अवस्था है जिस पर पहुँचने पर हम उस व्यक्ति को समायोजित कहते हैं।

समायोजन की प्रक्रिया को निम्न विशेषताओं के आधार पर स्पष्ट किया जा सकता है-

1. समायोजन एक परिवर्तनशील प्रक्रिया होने के कारण इसमें निहित व्यक्ति में समय एवं आवश्यकता के उत्कृष्ट परिवर्तन दिखलाई पड़ता है अर्थात् एक बार स्थापित किया गया समायोजन सदैव उसी रूप में नहीं रहता है।
2. समायोजन की प्रकृति स्थायी नहीं होती है वरन विभिन्न परिस्थितियों के अनुसार यह परिवर्तित होती रहती है।
3. समायोजन की प्रक्रिया सदैव समान पक्षों के बीच होती है तथापि विशेष परिस्थितियों में असमान पक्षों के बीच

* अस्सिटेन्ट प्रोफेसर, करियर कॉलेज आफ मैनेजमेण्ट एण्ड एजुकेशन, लखनऊ

भी समायोजन किया जा सकता है।

4. समायोजन करना विशेष परिस्थितियों के फलस्वरूप होने वाली प्रक्रिया है जिसका बाहरी रूप से विरोध नहीं होता है। अतः समायोजन एक प्रकार से विरोधपूर्ण सहयोग है।
5. समायोजन विभिन्न समूहों एवं व्यक्तियों को एकीकृत करने वाली एक सामाजिक प्रक्रिया के रूप में कार्य करती है।

शोध का औचित्य

समायोजन निरन्तर चलने वाली प्रक्रिया है, जिसके द्वारा विद्यार्थी अपने और वातावरण के बीच सन्तुलित सम्बन्ध बनाये रखने के लिए अपने व्यवहार में परिवर्तन करता है। इस प्रकार विद्यार्थी के सर्वांगीण विकास हेतु समायोजन अत्यंत आवश्यक है। विद्यार्थियों को समायोजित करने के लिए विद्यालय को विभिन्न गतिविधियों और कार्यकलापों का आयोजन करना चाहिए और विद्यार्थियों को उसमें उत्साहपूर्वक भाग लेना चाहिए। समायोजित होने से विद्यार्थी सफलता प्राप्त करते हैं और यदि विद्यार्थी समायोजित नहीं होंगे तो वे सफल नहीं हो पायेंगे। अतः किसी भी प्रकार की असफलता विद्यार्थियों में निराशा उत्पन्न करेगी जिससे वे प्रत्येक क्षेत्र में पीछे रह जायेंगे। इसलिए विद्यार्थियों के लिए समायोजन महत्वपूर्ण है।

उद्देश्य

1. माध्यमिक विद्यालयों में अध्ययनरत शहरी व ग्रामीण विद्यार्थियों की समायोजन का तुलनात्मक अध्ययन।
2. माध्यमिक विद्यालयों में अध्ययनरत हिन्दी माध्यम के शहरी व ग्रामीण विद्यार्थियों की समायोजन का तुलनात्मक अध्ययन।
3. माध्यमिक विद्यालयों में अध्ययनरत अंग्रेजी माध्यम के शहरी व ग्रामीण विद्यार्थियों की समायोजन का तुलनात्मक अध्ययन।

परिकल्पना

1. माध्यमिक विद्यालयों में अध्ययनरत शहरी व ग्रामीण विद्यार्थियों की समायोजन में कोई सार्थक अन्तर नहीं है।
2. माध्यमिक विद्यालयों में अध्ययनरत हिन्दी माध्यम के शहरी व ग्रामीण विद्यार्थियों की समायोजन कोई सार्थक अन्तर नहीं है।
3. माध्यमिक विद्यालयों में अध्ययनरत अंग्रेजी माध्यम के शहरी व ग्रामीण विद्यार्थियों की समायोजन कोई सार्थक अन्तर नहीं है।

परिसीमन

1. प्रस्तुत शोध कार्य में लखनऊ जनपद के माध्यमिक विद्यालयों को ही सम्मिलित किया गया है।
2. प्रस्तुत शोध कार्य में उत्तर प्रदेश माध्यमिक शिक्षा परिषद द्वारा संचालित विद्यालयों को ही सम्मिलित किया गया है।

सम्बन्धित साहित्य का अध्ययन

वर्मा माधव (2022) ने जिला बिजनौर के ग्रामीण प्राथमिक विद्यालयों के अध्यापकों के कार्यक्षेत्र में समायोजन की स्थिति का अध्ययन किया। परिणाम के रूप में ज्ञात होता है कि शिक्षा केवल एक छात्र का शारीरिक, मानसिक, चारित्रिक विकास नहीं करती अपितु यह एक शिक्षक का भी समस्त विकास करती है। यह शिक्षक के समायोजन की स्थिति को प्रदर्शित करता है कि किस प्रकार शिक्षक के बेहतर समायोजन होने पर वह छात्रों को भली प्रकार से शिक्षा प्रदान कर सकता है।

चौहान कुलदीप एवं सिंह हरिशंकर (2021) ने बी.एड. एवं बी.पी.एड. छात्रों के शैक्षिक व सामाजिक समायोजन का तुलनात्मक अध्ययन किया। परिणाम के रूप में ज्ञात हुआ कि बी.एड. एवं बी.पी.एड. छात्रों के मध्य सामाजिक समायोजन का स्तर असमान पाया गया। जबकि बी.एड. एवं बी.पी.एड. छात्रों के मध्य सामाजिक समायोजन का तुलनात्मक अध्ययन करने पर पाया गया कि बी.एड. छात्रों का सामाजिक समायोजन स्तर बी.पी.एड. छात्रों से अधिक है।

कुमारी प्रियंका (2021) ने शेखावटी के उच्च माध्यमिक विद्यालयी अध्यापकों के समायोजन का अध्ययन किया। परिणाम के रूप में ज्ञात हुआ कि महिला अध्यापकों की तुलना में पुरूष अध्यापकों का समायोजन अधिक पायी गई।

आलम मोहम्मद (2018) ने उच्च माध्यमिक विद्यालयों के छात्रों के बीच समायोजन का अध्ययन किया। परिणाम के रूप में ज्ञात हुआ कि छात्राओं की तुलना में छात्रों का समायोजन उच्च पाया गया।

सिंह तिर्मल (2016) ने उच्चतर माध्यमिक विद्यालयों के विद्यार्थियों की आत्मसिद्धि एवं समायोजन का विश्लेषण का अध्ययन किया। परिणाम के रूप में ज्ञात हुआ कि छात्रों के संवेग अस्थिर तथा आक्रामक होने के कारण वे विभिन्न क्षेत्रों में छात्राओं की तुलना में अधिक समायोजन रखते हैं।

शोध विधि

प्रस्तुत शोध वर्णनात्मक शोध के अर्न्तगत सर्वेक्षण विधि पर आधारित है।

जनसंख्या

प्रस्तुत शोध में जनपद लखनऊ में स्थित उत्तर प्रदेश माध्यमिक शिक्षा परिषद द्वारा मान्यता प्राप्त कक्षा 12 के विद्यार्थियों को जनसंख्या के रूप में लिया गया है।

न्यादर्श

प्रस्तुत शोध में न्यादर्श का चयन साधारण यादृच्छिक विधि द्वारा लखनऊ जनपद के 04 माध्यमिक विद्यालयों का चयन किया गया है। चयनित विद्यालयों में से साधारण यादृच्छिक विधि द्वारा कक्षा 12 के 100 विद्यार्थियों का चयन किया गया है।

शोध उपकरण

प्रस्तुत शोध कार्य में शोधकर्त्ता द्वारा समायोजन मापनी हेतु सिन्हा एवं सिंह द्वारा निर्मित विद्याथियों हेतु समायोजन मापनी का प्रयोग किया गया है। इस मापनी में कुल 60 एकांश है।

आंकड़ों का विश्लेषण एवं व्याख्या

सारणी 1 : शहरी व ग्रामीण विद्यार्थियों की समायोजन का तुलनात्मक आंकड़े

सांख्यिकी मान	शोध समूह	
	शहरी विद्यार्थी	ग्रामीण विद्यार्थी
विद्यार्थियों की संख्या	50	50
मध्यमान	10.50	9.00
मानक विचलन	3.79	3.96
टी अनुपात	2.08	
सार्थकता स्तर	0.01 (2.68)	

शहरी विद्यार्थियों व ग्रामीण विद्यार्थियों के मध्यमानों के अन्तर की सार्थकता परीक्षण हेतु टी अनुपात का गणना द्वारा प्राप्त मान 2.08 है जो सार्थकता स्तर 0.01 (2.68) से कम है अर्थात मध्यमानों के अन्तर सार्थक नहीं है। अतः परिकल्पना स्वीकृत है।

शहरी विद्यार्थियों व ग्रामीण विद्यार्थियों का मध्यमान क्रमशः 10.50 व 9.00 है। मध्यमानों की दृष्टि से शहरी विद्यार्थियों का ग्रामीण विद्यार्थियों से मध्यमान उच्च है जो सापेक्षिक रूप से अधिक समायोजन को प्रदर्शित करता है। इसका कारण शहरी विद्यार्थियों को ग्रामीण विद्यार्थियों की तुलना में सुविधाएं ज्यादा उपलब्ध होना है।

सारणी 2 : हिन्दी माध्यम के शहरी व ग्रामीण विद्यार्थियों की समायोजन

सांख्यिकी मान	शोध समूह	
	शहरी विद्यार्थी	ग्रामीण विद्यार्थी
विद्यार्थियों की संख्या	50	50
मध्यमान	11.04	9.90
मानक विचलन	2.31	2.91
टी अनुपात	2.15	
सार्थकता स्तर	0.01 (2.68)	

हिन्दी माध्यम के शहरी व ग्रामीण विद्यार्थियों के मध्यमानों के अन्तर की सार्थकता परीक्षण हेतु टी अनुपात का गणना द्वारा प्राप्त मान 2.15 है जो सार्थकता स्तर 0.01 (2.68) से कम है अर्थात मध्यमानों के अन्तर सार्थक नहीं है। अतः परिकल्पना स्वीकृत है।

हिन्दी माध्यम के शहरी व ग्रामीण विद्यार्थियों का मध्यमान क्रमशः 11.04 व 9.90 है। मध्यमानों की दृष्टि से शहरी विद्यार्थियों का ग्रामीण विद्यार्थियों से मध्यमान उच्च है जो सापेक्षिक रूप से अधिक समायोजन को प्रदर्शित करता है। इसका कारण शहरी विद्यार्थियों को ग्रामीण विद्यार्थियों की तुलना में सुविधाएं ज्यादा उपलब्ध होना है।

सारणी 3 : अंग्रेजी माध्यम के शहरी व ग्रामीण विद्यार्थियों की समायोजन

सांख्यिकी मान	शोध समूह	
	शहरी विद्यार्थी	ग्रामीण विद्यार्थी
विद्यार्थियों की संख्या	50	50
मध्यमान	10.74	9.90
मानक विचलन	3.04	2.94
टी अनुपात	2.31	
सार्थकता स्तर	0.01 (2.68)	

अंग्रेजी माध्यम के शहरीविद्यार्थियों व ग्रामीणविद्यार्थियों के मध्यमानों के अन्तर की सार्थकतापरीक्षणहेतुटीअनुपात का गणना द्वाराप्राप्तमान2.31हैजोसार्थकतास्तर 0.01 (2.68) से कम है।अर्थात मध्यमानों के अन्तरसार्थक नही है।अतः परिकल्पनास्वीकृतहै।

अंग्रेजी माध्यम के शहरी विद्यार्थियों व ग्रामीण विद्यार्थियों का मध्यमान क्रमशः 10.74 व 9.90 है। मध्यमानों की दृष्टि से अंगेजी माध्यम के शहरी विद्यार्थियों का ग्रामीण विद्यार्थियों से मध यमान उच्च है जो सापेक्षिक रूप से अधिक समायोजन को प्रदर्शित करता है। इसका कारण शहरी विद्यार्थियों को ग्रामीण विद्यार्थियों की तुलना में सुविधाएं ज्यादा उपलब्ध होना है।

शोध निष्कर्ष

शोध अध्ययन के निष्कर्षों से ज्ञात होता है कि-

1. शहरी विद्यार्थियों का समायोजन ग्रामीण विद्यार्थियों से बेहतर है।
2. हिन्दी माध्यम के शहरी विद्यार्थियों का ग्रामीण विद्यार्थियों की तुलना में समायोजन बेहतर है।
3. अंगेजी माध्यम के शहरी विद्यार्थियों का ग्रामीण विद्यार्थियों से समायोजन बेहतर है।

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Socio-cultural Changes in Muslim Women: A Journey from Past to Present Generation - A Case Study of Barasat Municipality, West Bengal

*Pijus Kanti Mondal, **Kuntal Kumar Basak

Abstract

This paper tries to reveal the socio-cultural changes in Muslim women of Barasat (M), N 24 Parganas, and West Bengal, India. In case of Muslim women's their status was more severe than the other religious communities. The influence of religious customs and conservative norms bound them to live traditional life style. Muslim women always deprived by Muslim man and their status always low in the society. Equal opportunity and participation of women to the men's in the society can improve their condition. Muslims are the largest religious minorities and 2nd largest religious community of the world. Muslims comprise 13.4% of the total population of India, improvement of status of Muslim women's in society is important for the development of the country. This study also analysis the three generational changing status and directions of movements among the Muslim women's.

Introduction

The status of women against man is always low in every sector human societies. But one equal opportunity and participation of women to the men's in the society only can improve their condition in human societies and this equal opportunity not only improve the condition of a woman but also beneficial for the social development. From the ancient time,third world country like India where men's always deprives women from the equal opportunity of a society.

In case of Muslim women's their status was more severe than the other religious communities. It was seen that the strong influence of religious customs and conservative norms was bound them in staying at the houses and live traditional life style with societal deception. Thus they are nurture their Childs and serve their husbands and other family members and always staying deprived to availing the facility of education, job opportunity and others things. In spite of this many customs like segregation through hijab or burqa, triple talaq, preference of male child, gender discrimination and so on are create problem and hampering mobility in their normal lively hood. Although in India there in all other communities some general problems are found like widow remarriage, problems of dowry, problems of childless women, early marriage, male child preference and the like.

But in the era of globalization the developments of education, increase of work participation rate and feminist agitation; awareness and socio-economic status of the women is increasing day by day. This positive change also found among Muslims women in the form of education, work participation and empowerment in various sectors. Though the rate is not same in the entire place it varied from one place another and from one class to another.

The current study was focuses to examine the situation of Muslim women's in India through collecting primary data for understating the three generational socio-cultural change among the Muslim women of selected ward of Barasat Municipality at North 24 Parganas district in Indian State of West Bengal.

Location of The Study Area

Barasat Municipality which is located at North 24 Parganas district of West Bengal, India, is selected as a study area. Barasat Municipality is situated within the $22^0$41' to $22^0$43' North and $88^0$30' to $88^0$32' east latitudinal and longitudinal extension. The 1,2, 17, 18 number ward of the BarasatMunicipality selected as a study area. Barasat Municipality comprisingthe area of 34.50 sq. Km. and containing the 278435 person according to the 2011 census with the 3.5% of population growth.

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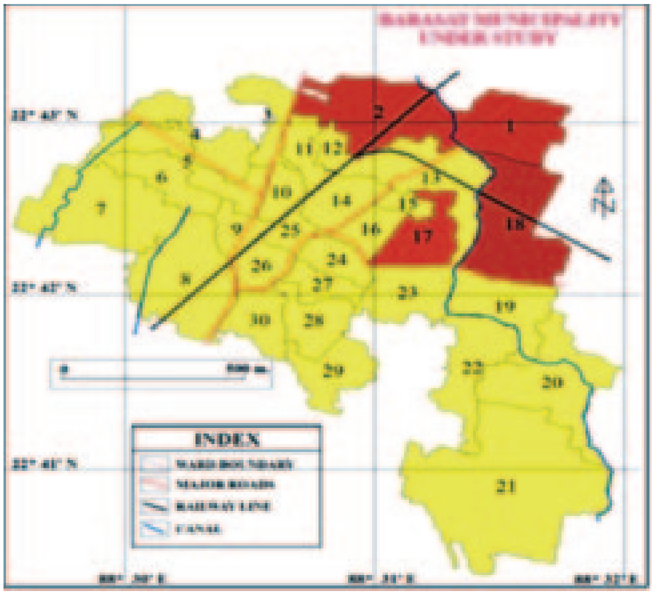


Objectives

The entire research work is based on some objectives. These are :

- To find out the social status of Muslim women in their family and society.
- To find out the cultural status of Muslim women in their family and society.
- To understand their value in the society.
- To study the problem that faced by Muslim women in the society.
- To know the family structure and awareness about the family planning among the Muslim women.
- To find out the discrimination against the Muslim women in the society.
- To know the life style of Muslim women.

Significance of The Study

Women's always play a vital role in the development of the society. People practising different kind of socio-cultural norms in Muslim religion. Muslim women always deprived by Muslim man and their status always low in the society compare to other religious women. The religious ethos, superstitions and societal customs are creating barrier for Muslim women to prosper in life through getting education and opportunity to involve in economic activities.

Muslims are the largest religious minorities and 2nd largest religious community by population of our county; it comprises about 13.4% of the total population of India. India also the 2nd largest Muslim populous country of the world after Indonesia. Thus the improvement of status of Muslim women's in the society is very much important forthe development of a country. They comprise a huge percentage of population in India and that is why the development of our country is not being possible without the improvement of their status.

Barasat is the district town of the North 24 Parganas District in Indian state of West Bengal and it is an important urban agglomeration of the state. Barasat Municipality comprise of 11.18% Muslim population to the total population. The status of Muslim women's in Barasat Municipality influence the status of the district as well as the state and in the larger context of India. It also important to find out that what was the status of Muslim women's under the influence of urban facilities and there changes over times in an important growing urban area like Barasat Municipality. So the significant of the study in this study area is very much relevant and important.

Methodology

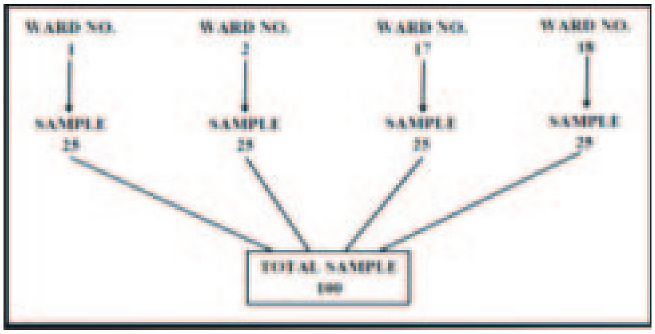
Methodology is an important stepto fulfil a research work in proper way. We complete our whole research work in three stages. Those ares:

Pre-Field Study:

Pre-field study means those works which was done before direct field survey. So many Pre-fields works in my study includes the collection of various information about the study area, collection of maps from the Barasat Municipality, visiting in the survey area, collection of related articles from the internet and journals and reports, preparation of questionnaire and some religious data also collected from the directorate of census, govt. of India etc.

Field Study:

Field study is mainly conducted through the collection of primary data from the field with the help of questionnaire. The study has been conducted over 100 Muslim married women whose ages is above 30 years and random sampling is used for the collecting of data from the ward no. of 1,2,17 and 18 as this area are Muslim concentrated area thus this wards of Barasat Municipality was selected for the study. Through the questionnaire the data or information was collected from the Muslim women's as well as the same information about their mother and daughters are also collected from them.



Post-Field Study:

Collected primary data are tabulated and processed in the form of master table. Then different cartographic technique and statistical technique are being used to represent the collected primary data. After that the interpretation work is being done on the basis of calculation and diagram. Then findings, suggestions and conclusion of the work are done in report writing stage. 21st century GIS software, Microsoft paint, Microsoft Excel and Microsoft Word are used to prepare the maps and diagrams.

Special Information about The Study

This papers is discussed the socio-cultural status of the Muslims women's of selected wards of the study area. This study also analysis the three generational changing status and directions of movements among the Muslim women's. Among the surveyed families 29% was under OBC categories and 71% under General category. As we know that the caste is a significant variable according to which the peoples as well as women status was differed.

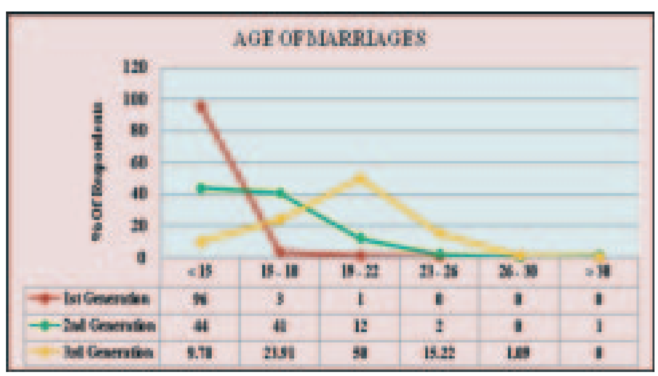
During the direct interview by schedule the relevant data was collected from the present generation women's whose are indicated as 2nd generation women in the study and also information was collected about their mothers whose are indicated as 1st generation and their daughters whose are indicated as 3rd generation in my study and some observations are also done during the interview for the purpose of the study. Thus the information about the 1st generation and 2nd generation women's is the opinion and perception of the respondents i.e. 2nd generation and in some cases preference was taken about the 3rd generation from the respondents and their guardians.

Socio-cultural Changes

In Islam religion communities there are various social and cultural norms which were practiced by the peoples form the past ages. In this part of analysis we are trying discussing the socio-cultural changes occurring among the three generation Muslim women's. In this part we take many variables like age of marriage, marriage patterns, type of marriages, family structure, no. of children's, age of issue of children's, perception about family planning, male child preference, gender discrimination, observance of hijab system, freely moments status and the like to discuss separately to know the changing status about the socio-cultural variables of the three generation women's.

Age of Marriages:

The past studies had found that due to increase in higher education, job opportunities, urbanization and others factors the age of marriage of women's are increasing day by day. Our study also showing that the age of marriage among the three generation Muslims women's. From the primary data it will seen that in 1st generation women's 96 percent are got marriage before 15 years of age and only 3 percent are got marriages in 15-18 years of age. In case of 2nd generation the rate of marriage getting down to 44 percent in before 15 years of age and 41 percent women's marriage happens in 15-18 years of age, there was also increase in the percentage of 19-22 years to 12%, in this generation one case was found that marriage was happens in above 30 years of age. A remarkable change was found in case of 3rd generation there was only 9.78 percents women's marriages happens or the guardians say that they get marriage their daughters before 15 years of age and 23.91 percent got marriage or preferred to be marriage at 15-18 years of age. 50 percent of the women's of 3rd generation got married or according to their guardians proffered to be marriages in 19-22 years of age and 15.22 percent of the women's get marriage in 23-26 years and respectively. So, there was find a remarkable change in the in the age of marriage of women in three generations.



In the time of survey it was seen that in case of 1st generation early marriage happens because of the women's can't takings education and peoples are also conservative to get marriage of women's earlier. In case of 2nd generation the early marriage provision was getting less as the women's getting education that delayed the age of marriage, job opportunity also getting well only those of poor family and those family who had a join family norms taking their daughters early marriage. In case of 3rd generation due to modernizations process people getting aware and they also provide their daughters higher education that later getting opportunity to get them job and become self-independent so the age of marriage of the girls also increase after 20 or after 22 years.

Marriage Patterns and Types:

There was found a tremendous change in the marriage patterns. In Islamic culture some peoples are get marriages in relatives. We try to find out that whether there was a change in the marriage patterns or not among the relatives or not in generation wise. We ask women's in the time of survey that if their marriages happen in relatives or not. According to the data the marriage in relation getting lower from 1st to 3rd generation, in case of 1st generation 14% respondents marriages happens in relation and in case of 2nd generation it slight increase to 15% and in case of 3rd generation it was getting down to 3.70% which indicated that the provision of marriage in relation in getting less generation after generation.

Marriage Patterns		
	Marriage in relation	No marriage in relation
1st Generation	14%	86%
2nd Generation	15%	85%
3rd Generation	3.7%	96.3%

We also ask them that whether their marriage was love marriage or engage marriage. In 1st generation only 1 case found that was love marriage and in case of 2nd generation it will increase to 4% and in case of 3rd generation the provision of love marriage increased to 5.56%. form the data we can tell that the due to higher education women's are getting aware and they are adopting the western culture so they are choosing there life partners own self, so in time the socio-cultural norms and family restriction getting dim in past generation to presents. It also significant that among the surveyed women's there was no case of leave together was found.

Type of Marriage			
	Love Marriage	Arrange Marriage	Leave Together
1st Generation	1%	99%	0
2nd Generation	4%	96%	0
3rd Generation	5.56%	94.44%	0

We also know that in Islamic culture there was culture of polygamythat's means the men s are marriage more than one women's in his life. In the time of survey in my study area I was try to find that what was changes in this culture among generations. The shows that in case of 1st generation women's there husband got marriage twice in 31% case and thrice in 1% case in. oppositely in case of 2nd generation women's their husbands marriage twice get down to 8% and there was no women was found among the surveyed people that their husbands got married thrice. So it is tell that due to modernization process, education spreading, and economic hampering condition affecting the family maintenance and increasing awareness among the peoples the provision of polygamy was getting lower generation wise. It was not possible to collect the data in this case for 3rd generation as it was the begging of their life span but it will project that in their case provision will get more lower than 2nd generation.

No. of Husband's Marriage			
	1st	2nd	3rd
1st Generation	68%	31%	1%
2nd Generation	92%	8%	0

Changes in The Family Structure:

There was further change in the family structure was also seen in 1st to 2nd generations of the women's. In joint family there are lots of people live together and there had a law that the head of the family is to deicide about anything of the individual and there was certain restriction also be seen in many cases, in case of nuclear family it was less. So the family structure was also affecting the behaviour of individual. In or study area we seen that 87% of 1st generation was belonging joint family and in case of 2nd generation it was reduced to 32%. So in case of 1st generation they have to live there life in more restrictions and under social norms rather than the 2nd generations.

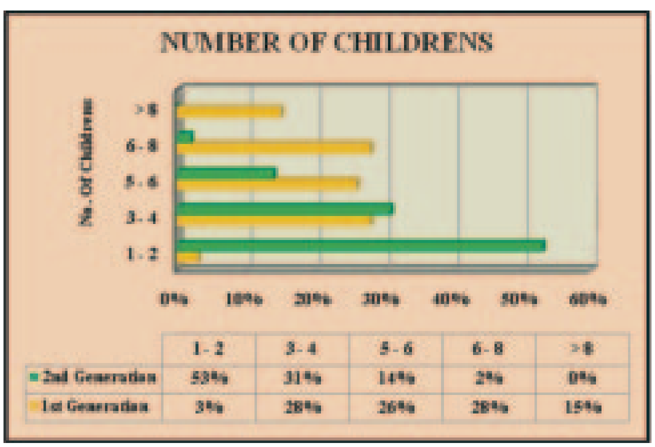
Due to migration, educational and occupational mobility or others factors the peoples presently shifted their residents as a result no. of nuclear family in 2nd generation is increased to 68% in case of 1st generation it was 13% only. Respondents who live in nuclear family can live more freely and get access to knowledge and occupational opportunities.

After analyzing the data it was seen that the changes in the family structure have fell a positive impact on the socio-cultural changes in the women. It was also seen that the women's from nuclear families have a better ratio in higher education, work participation, freedom of moment and the like.

Family Structure		
	Joint	Nuclear
1st Generation	87%	13%
2nd Generation	32%	68%

Changes in Family Size and Used of Methods of Family Planning:

In country like India the fertility rate was increasing after the independence. In Muslim communities women it was much higher than the national average. The family size and the fertility rate was depends on various socio-economic and cultural factors. After the study it was seen that there was a remarkable change in the no. of children of the women's 1st to 2nd generation. In comparison to the two generations number of children the date shows that in case of 1st generation 3% women's have 1-2 childrens, 28% have 3-4 children's, 26% have 5-6 % children's, 28% have 6-8 children and 15% have more than 8 children's, oppositely in case of 2nd generation 53% women's have 1-2 childrens, 31% have 3-4 children's, 14% have 5-6 % children's, 2% have 6-8 children and there had not found a single respondent who having more than 8 children's.



Among the data most significant thing is that the number of children's was getting decrease in 1st to 2nd generation women's and in case of 1st generation women's there 43% respondent was found who have more than 6 children's oppositely in case of 2nd generation it was only 2%. The reasons behind this types of changes in the family size was found that women's and men both of present generation are more or less educated and aware about the bad effect of high family size, changes in family structure and present socio-economic development also effecting the decrease in family size. And it also noted that some respondent said that the present expenditure on children's nourishment is very high, so better they prefer small family.In this time we ask the respondents that if they hear about population policy among the respondents only two percents are sad that they hear about population policy.

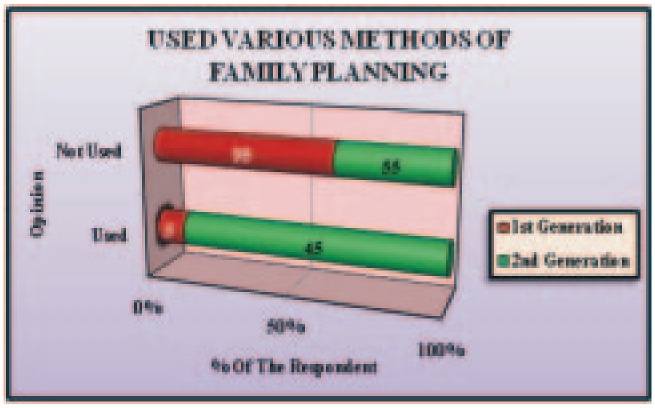
Hear About Population Policy		
Yes		No
2%		98%

In the time of primary data collection we ask the women's if they heard about the terms 'Family Planning", according to their opinion in case of 1st generation only 2% women's are heard about family planning and in case of 2nd generation it will increase to 31%.

Heard about Family Planning		
	Yes	No
1st Generation	2%	98%
2nd Generation	31%	69%

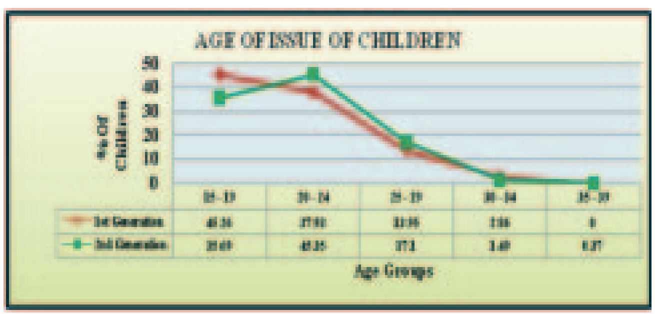
We also ask the respondents that if they are use various types of contraceptive devices or not, they said only 5% of 1st generation women's are using various methods of contraceptive devices and in case of 2nd generation it will increased to 45%.

They also said that there religious views does not support the methods of contraceptives so in past times the restrictions was much high so less of them use this methods in the past. But in modern times due to socio-economic changes and overall development process the peoples are getting more conscious about it so the use of contraceptives was getting popular in the presents generation. But it was seen that many of these women's are does not seen the terms family planning but they are using contraceptives in other words the methods of family planning.



Changes on Age of Issue of Children's:

Generally it was seen that in our country the maximums women's fertility periods start in early age as 15 years as there was the rate of early marriage was high in country and due to this the total fertility rate (TFR) was increased as they get a long fertility periods up to 49 years (as we know that women's fertility periods are take 15-49 years of age in our country) and due to early age of child bearing risk of high Maternal Mortality Ratio (MMR) also increase. This trend of fertility rates among women's varied community to community, religious group to religious group poor class people to upper class people, this was determinates by various factor.



In our survey we try to under if there was any change happens in the age of issuing children's from past generation to present. From the data we see that in 1st generation 45.26% children's was born in 15-19 years age group of mothers, 37.93% children's were born in 20-24 age group of mothers,13.95% children's were born in the age group of 25-29 and 2.86 % children's were born in the age group of 30-34 years of mothers. Oppositely in case of 2nd generation 35.69% children's was born in 15-19 years age group of mothers, 45.35% children's were born in 20-24 age group of mothers, 17.10% children's were born in the age group of 25-29 and 1.49% children's were born in the age group of 30-34 years of mothers and one case was found that one child was born in mothers age at 35-39. After analyzing the data it was seen that there was a tremendous change in the age of issuing children's of the mothers 1st to 2nd generation. In first generation there was a maximum portions fertility periods start with 15-19 years but in case of 2nd generation it was getting less and there fertility periods start in latter's stages now, this shows a good picture us. Behind the late start of fertility process in 2nd generation women we see that in this generation women's are getting much education which impact on the age of marriage and awareness among them that directly affect the fertility process. After seeing these two generations pictures we assume that in 3rd generation women it will fell a farther progress towards the starting timing of fertility process.

Changes in Preference for Male Child:

In the study we also try to find out that whether there was any of women's prefer male child or not and what was the generation wise changing situation for male child preference. The data shows that there were about 30% 1st generation's mothers who preferred male child and it was getting down to 2nd generation mothers only 3% who prefer male child.

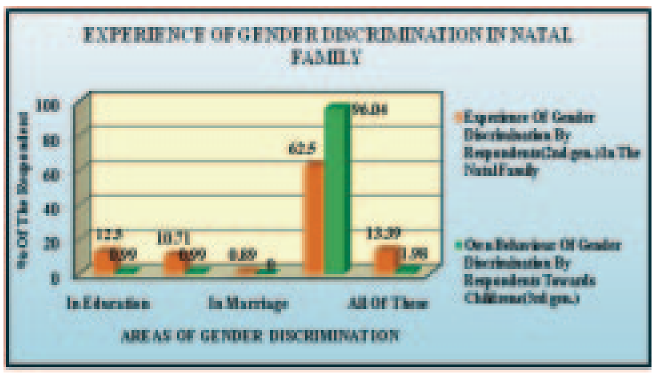
Preference for Male Child		
	Yes	No
1st Generation	30%	70%
2nd Generation	3%	97%

We also asked women's that why they are prefer male child it was seen that maximum women's of 1st generation said for surveillance of heredity (40%), no. of source of income (36.67), in sake of security (16.67%) and maintain of property (6.66%) but maximum of 2nd generation women's said that get male child preference for no. source of income (66.67%) and in sake of security (33.33%). So we see that not only for male child preference but also the causes behind male child preference is changing generation wise. Because the education level of the present generation women's getting higher, so there awareness about this matter is increasing and preference for male child decreasing. It was found that the women's from poor's family's as they are the future source of income and getting security of them, oppositely the females get married and not take much future responsibility of parents.

Changes in Gender Discrimination in Natal Family:

It was seen in the Indian society provision of gender discrimination very common form the past, the older people get advantages to the male member of the family in many situations than the female members of the family. So for this discrimination process effects the women's participation in education and job, development of the personality and self confidence and social mobility. But now a day due to educational and social development it was seen that the provision of gender discrimination was getting less as there are women's work and educational participation was increasing.

So I am trying to find out that, what was the changing status of gender discrimination among two generations Muslims women. We find out the difference between the 2nd generations women's experience of gender discrimination in their natal family and their behavior of gender discrimination towards their daughters i.e. 3rd generation women's. It was find out that they are experienced gender discrimination in education, carrier and marriage this areas.



The data shows that 13.39% 2nd generation women's feels gender discrimination in all sectors and 12.5% in case of educational matters like admission in better schools and colleges, chance of getting books and tuition etc. and 10.71% said that they feel discrimination in participating professional, vocational and technical courses in this case their brothers get preference even having not so good academic performances. 0.89% women's said in case of marriage or selecting life partners they feel discrimination, their parents their life partners for them even they have not any chance to tell their opinion.

Oppositely when we see the behavior of the respondents towards their daughters i.e. 3rd generation it was seen that there was a tremendous change was found only 1.98% says that they have discriminating their daughters in all areas, where in case of education and carrier only 0.99% respondents found who discriminating their daughters, it was noticeable that there had no respondents found we discriminate in marriage, they said they select life partners for their daughters but their opinion before marriage. So it was found that from the view point of two generations experiences in gender discrimination it easily tell that the provision of gender discrimination decreasing or removing from the society generation wise.

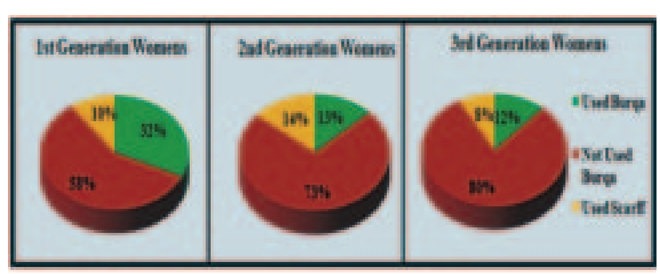
There Perception in Girls Education			
	Less than Son	Equal to Sun	More than Son
1st Generation	30%	70%	0
2nd Generation	3%	89%	8%

It was also asks to the women's that what was their opinion in girls education, it was found that 70% 1st generations women's perceptions was equal to son and 30% women's perception was less than son. But in case 2nd generation it was seen than there was a tremendous change was found in the perception about girls education, when 89% women said the girls right education should be equal to son and 3% said that it was less than son, but a significant things was come out when 8% women said girls education should be more than son. When I ask why the tell that girls education should be more than son they said that if girls should be educated they should educated their child and in recent times girls job opportunity is more better than boys as there the competition is less, and by educating girls the awareness among them should be increased that help to eradicate many social as well as human problems of our society.

Changes in Observing Hijab/ Burqa Customs:

The observation hijab system of is a familiar custom in Islamic culture. This customs is an unavoidable part of Islamic social structure as which families women's are observed hijab system those imposed a high status in the society automatically. But in changing time both in rich and poor the observance of hijab system was getting decrease by various reasons.

Mainly it was seen that the practice of hijab found in middle-east Islamic countries, where maximum women used hijab i.e. purdah to segregate them from men's and other communities outside the houses. In our country it is seen that women's used purdah in the form of burqa. This customs is restricted the women's mobility and participation in some areas.



We are tried to find out in my study area that whether there was any change happen in observing the hijab or use of burqa among the three generation women's. the data shows that in 1st generation women's 32% women's are using burqa when they get out from their houses, in case 2nd generation it was fall down to 13% and in 3rd generation it was further fall to 11.63% and oppositely the rate of not using burqa was increased to 1st gen.(58%), 2nd gen.(73%) to 3rd gen.(80.23%). It was also seen in my study area that few women's are using scarf instead off burqa which was very significant change in the culture. 10% of 1st gen. women's, 14% of 2nd gen. women's and 8.14% of 3rd gen. women's use scarf in the place of burqa. In case of burqa it cover women's face as well as whole body but in case of scarf it was only covers there face thus it was also called as a symbolic veiling use when they get out from their houses. I ask them why they use scarf instead of burqa they said that burqa is expensive they can't afford it, some them said it was not looking fashionable we the get outside house and some of them said that due to changing in the time.

From What Age They Observed Hijab					
	<15	16-18	19-22	23-25	>25
1st Generation	12.5%	21.88%	33.33%	0	20%
2nd Generation	15.39%	46.15%	0%	0	38.46%
3rd Generation	30%	40%	20%	0	10%

We ask women's that from what age they start observing hijab system or start using burqa it was found that there also a changes occurring. The maximums women's of 1st gen. start using hijab after 25 years, in case of 2nd generation women's it was seen maximum in 16-18 years of age and in case of 3rd generation it was seen in below 15 years. As there was customs after hajj women's used hijab, thus the rate among old generation women's observing hijab system is high, but in 2nd and 3rd generation they are young in the contemporary environment they are start observing hijab (who are used) when they fall in adult age. After the study it was found that 81.25% of 1st generation women, 76.92% of 2nd generation women and 60% of 3rd generations are using hijab willingly rest of them using hijab compulsion of family or parents.

They observed the Hijab (Burqa) System			
	Yes	No	Scarf
1st Generation	32%	58%	10%
2nd Generation	13%	73%	14%
3rd Generation	11.633%	80.23%	8.14%

We also try to find out that why the women's are using hijab or what were the causes behind hijab customs? Although there was a changes in generational view point in 1st, 2nd and 3rd generation women's but maximum of them said for religion and own security they are using hijab, few of them said due to family customs and compulsion of parents.

Causes behind use of Hijab					
	Family Custom	Compulsion of Parents	Religion	Own Security	Others
1st Generation	0%	12.5%	71.88%	15.62%	0
2nd Generation	15.39%	7.69%	53.85%	23.7%	0
3rd Generation	10%	0%	60%	20%	10%

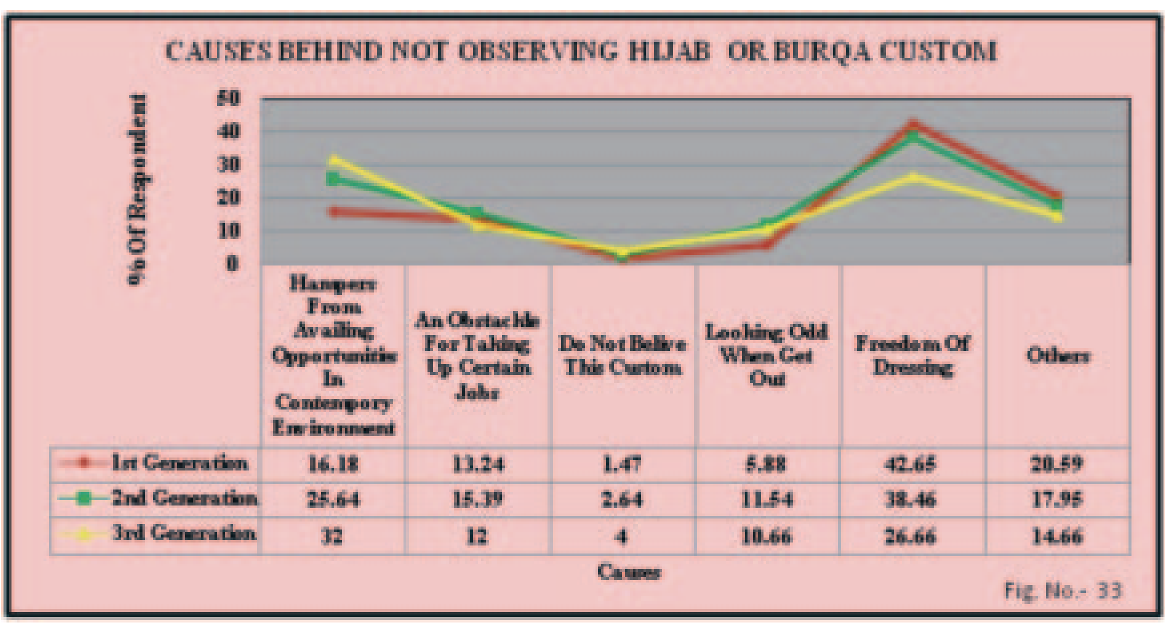


Fig. No.- 33

We also tried to find out the cause behind not using hijab or not observing hijab customs, it was seen that majority of the 1st gen. women's opinion due to freedom of dressing in their family (42.65%), it was an obstacle for taking up certain jobs (13.24%), its hampers from availing of opportunities in the contemporary social environment (16.18%) and about 20.59% said others causes like as they are living withothers community peoples, due to poor economic condition they can't afford hijab and so on. In case of 2nd generation they majority of them said due to freedom of dressing in their family (38.46%), its hampers from availing of opportunities in the contemporary social environment (25.64%)%), it was an obstacle for taking up certain jobs (15.39%), looking odd when they get out (11.54%) and others (17.95%) and if we see the 3rd gen. opinions its hampers from availing of opportunities in the contemporary social environment (32%), freedom of dressing in their family (26.66%), it was an obstacle for taking up certain jobs (12%), looking odd when they get out (10.66%), do not believed this customs (4%) and others (14.66%). So this data gives a clear picture that there was also a generation gap in the causes behind don't not observing the hijab customs as there was generation wise causes are changing. It was seen that the present generation women's are said that this customs are restricted there mobility and availing opportunity, in 3rd gen. the girls are going schools/ colleges and doing jobs in this purpose they are need to freely movements and associate with others peoples in this process its act as a hindrances thus the young generations are not ready to accept this customs, so the observance of hijab in young generation decreasing than the previous generation.

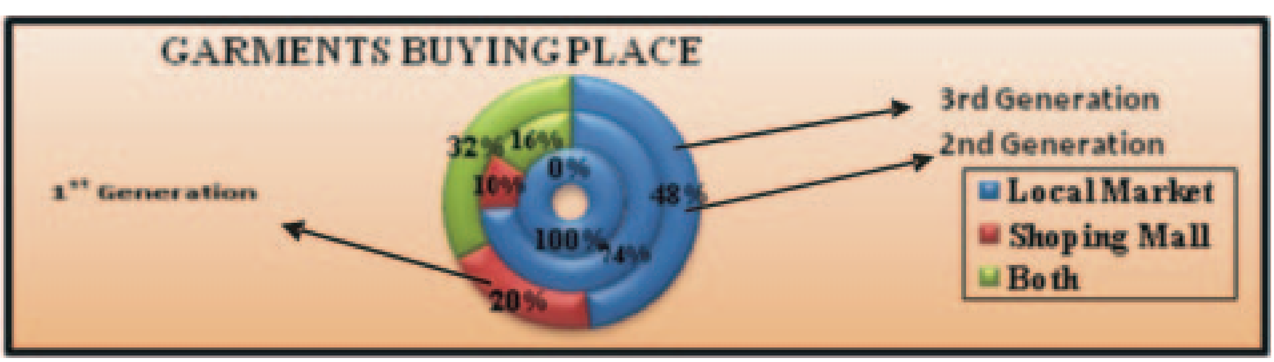
Changes in Dressing Types and Use of Cosmetics:

They dressing types and styles were varies according to different ethnic and social groups. In our countries the woman's are wearing traditional dresses from the past but after 1990's decade the globalization process took place and the western cultures are starting to enter in our countries. Which also changes peoples dressing styles; it was held at first in the urban areas and now became spread also in remote areas.

In my study I take three generations data's that shows the changing status of Muslim's women's dressing types. The shows those in case of 1st gen. women's they only wear traditional type of dress like sari, salwar kameez etc. Among the 2nd generation women's 96% of them wear traditional dresses and 4% wear both traditional and modern dresses and it was further changes in 3rd generations 66.28% are wear traditional, 24.42% wear both traditional and modern and about 9.30% were modern dresses like skirts, jeans, shirts etc. so it was seen that there was a tremendous change in type of dressing generation wise. As the new generations women's are adopting western culture, associating with other communities by educational process, joining occupations and the Bollwoods cinemas as well as television programs are also changes the present young generations for adopting modern dresses.

Type of Cosmetics they use		
	Used	Not Used
1st Generation	1%	99%
2nd Generation	24%	76%
3rd Generation	59.3%	40.76%

In this case we also studied that from where they are bought up their garments. The data shows that in 1st generation all studied women's are buy there garments from local markets, in case of 2nd gen. it was few change 74% women's said they buy garments from local markets, 10% of them said from shopping mall and 16% of them said from both local market and shopping mall. In case of 3rd gen. a further change was found 58% said that they buy garments from local markets, 14% said that they buy from shopping mall and 28% said that they buy garments from both places. So it was found that now a day's among the Muslim women's are prefer buy



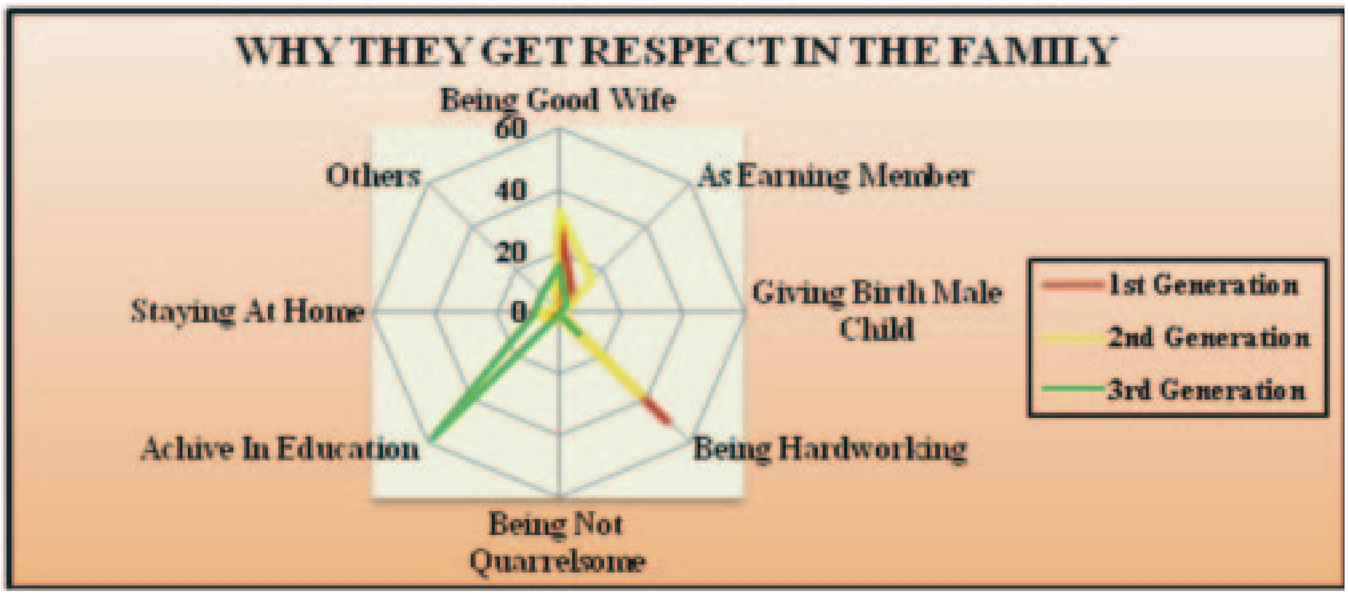
garments from shopping malls due to the modernization and socio-cultural development. It also noted that the women's going to shopping malls for marketing is depends on the economic condition of their family and availability of shopping malls. It's found that maximums richest families women's are going to shopping mall for marketing, although in Barasat areas many shopping malls are established recent 2-3 years but 1st women cant access shopping malls in their time.

We also ask women's that whether they are use any type of cosmetics, it was found 1% women's in 1st gen. 24% in 2nd gen. and 59.30% in 3rd generations are using cosmetics. So there was also a generation gap found in the use of cosmetics. Which is increasing in past to present generations.

Type of Cosmetics they use			
	Perfume	Makeup Kits	Others
1st Generation	50%	50%	0
2nd Generation	48%	34%	18%
3rd Generation	43.86%	42.985	13.16%

Changes in Women's Social Status and Respect within Family:

In our country from the past times it was seen that women's status in the society is very low, they can't freely move to an area or can't taking decision about any household matters. In case of Muslim women's there status is wicked than the other communities' women's. This was quite change in present's time due to economic and education development.



In my study I take perception of the women that why they get respect in their family, it was seen that there was changes of perception from 1st gen. old women's to 2nd gen. middle aged women's to 3rd gen. young women's.

The majority of 1st gen. women's perceptions is that they get respect in family for being hard working (50%), being a good wife (31%) and for staying at home (9%), in case of 2nd gen. it was quite change to for being hard working (38%), being a good wife (33%) and also as a earning members. In case 3rd gen. it was shifted to for achieving in education(56.96%), for being a good wife (15.19%) and being hard working (8.86). it was seen that in case of 3rd generations omens they was run their family by hardworking, thus family members respect them, in 2nd generation women's they respect their husbands and family members and for being with a good wife thus they are respect and in case of 3rd gen women's educated women's getting respect as now education are taken as a very significant and important social variables. Thus there also we see a changing perception of women's that why they getting respect from families.

Everyone Eat Together		
	Yes	No
1st Generation	73%	27%
2nd Generation	85%	15%

We also ask women's that whether they eat food together with their men members of the family or not. It was found that about 27% 1st gen women's said they do not eat together where in case of 2nd gen 15% women's said they do not eat food together with their male members.

Why women surve food to men first				
	Out of Respect	For his work Schedule	As it is a custom	Earning Member
1st Generation	37.04%	25.93%	22.22%	14.81%
2nd Generation	26.66%	66.67%	0%	6.67%

It was getting to know that in case of 1st gen women's the causes behind not eating food is out of respect (37.04%), for his work schedule (25.93%), as it is a custom (22.22) and as they are the earning members of the family (14.81%). In case of 2nd gen women there was a tremendous change in the causes behind not eating food together because for his work schedule (66.67%) and out of respect (26.66%) and as they are the earning members of the family (6.67%). In this case also a change was found from 1st to 2nd generation women's opinions.

In the time of survey I am also ask women that whether they can freely move any areas outside the house, it was found that found that 63% of 1st gen, 25% of 2nd gen and 21% of 3rd gen women can move freely in any area alone. Due to participation in education, work and others events in presents generations women's the restrictions of movements getting less now a days.

They can freely movement in any area		
	Yes	No
1st Generation	37%	63%
2nd Generation	75%	25%
3rd Generation	79%	11%

For this purpose I also studied the women's participation in decision making in household matters. It was seen that in case of 1st gen women's 97% families decision taken by their husbands, 2% families decision taken by own self and 1 % says they take decision both husband and wife.

Who takes decisions about family matters				
	Husband	Self	Both	Other Family Members
1st Generation	97%	2%	1%	0%
2nd Generation	45%	22%	20%	13%

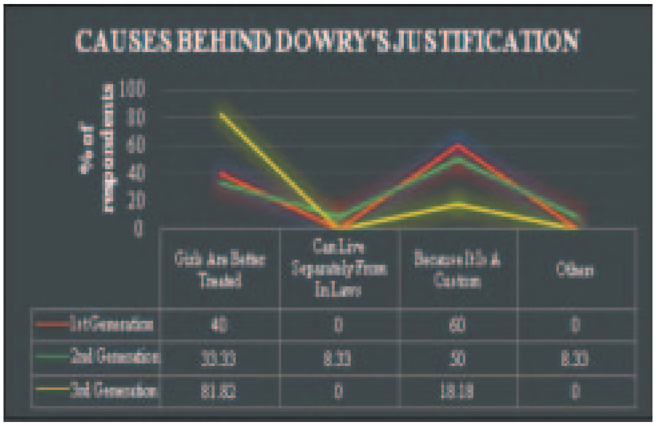
In case of 2nd gen it was seen that 45% women families decision taken by husband, 22% by own self, 20 by both husband and wife and 13% by others family members. It was seen from 1st to 2nd generation the pattern of decision making was changing and the women's are participation in decision making process of the house hold matters are increasing now a day. They are mostly taking decision about expenditure of food, cloth, house rent, visiting doctors, gifting and children's educations matters etc and in major events like loan, construction of house of purchasing land, car, savings and others mostly the male members or both they make decision. So it was seen that now present generation women's due to various reasons taking decisions more about their household matters.

In the time of study we also ask them that what they are doing in their leisure time. The data shows that in case 1st gen maximum women's opinions they can't get leisure time after completing household work, some of them said they take rest, reading religious book and doing others things, in 2nd gen women's there was a tremendous change found majority of them said the watching TV serials, movies, reading religious books, work and travelling etc in their leisure time. And in case of 3rd gen women it was found that there was also women's are watching TV serials, movie and also news, sports, reading religious and story books, travelling and doing others things. So it would be said that due to modernization many entertaining things are adopted by women's to spending their leisure time, this modern entertainments mediums effecting their socio-cultural behavior generation wise, specifically in present generation women's.

Changes in Dowry Customs:

Dowry is well known culture in Indian society. In the time of marriage the girls family get materials wealth to the boys family, in some times extra pressure created to the girls family to giving the huge amount of wealth/ cash money as dowry. This sometimes create violence in society and in few cases the after marriage husbands family tortured the newly married women for bring wealth form their fathers family, sometimes the torture go up to suicide death of the newly married women. This culture was practice more or less in every religious communities of India.

Dowry justified his opinion		
	Yes	No
1st Generation	5%	95%
2nd Generation	12%	88%
3rd Generation	11%	89%



In our study area we are tried to found that what the women's opinion about dowry customs was? It was seen 15% of 1st gen, 12% of 2nd gen and 11% of 3rd gen women's perception is dowry justified. It was seen due to increasing level of education the awareness among the bad effect of dowries are increasing behind the causes of its they said girls are better treated, they can live separately from in laws, as it was a customs and others, thought was varied generation to generation. We also ask women's what things they given as dowry; they said cash rupees, jewelers, cars/ home appliances and others. Presently the tendency of giving cash rupees and car or home appliances is increasing. It's also found that the some higher class guardians are ready to giving dowry as its help to attract well eligible men for marring their daughters. At last it is say that the practice of this customs is decreasing generation wise and the peoples are getting more conscious about it.

What things are given as Dowry				
	Cash Rupees	**Jewelleries**	**Car/Home Appliances**	**Others**
1st Generation	22.22%	44.44%	33.33%	0%
2nd Generation	25.81%	35.48%	35.48%	3.23%

Changes in Religious Practices:

In Islamic religion there was peoples practices few cultures for praying there God, Allah. They are bight up Namaz which is a procedure of praying for Allah. They also read there Holy book Names the Quran-Sharif. It was seen that the both male and female of this religion are rearing this religious customs.

In our study we tried to found that whether they are practicing this customs or there was any change happen in generation wise. The data shows that 28% of 1st gen. Muslim women read religious books, 69% of 2nd generation women and 66% of 3rd gen women's are read religious books. It was seen from 1st to 2nd gen the percentages of reading religious books are increasing cause due to increasing rate of literacy among the women's of 2nd gen to 1st gen. the percentage was rather fall down in 2nd to 3rd generation women's as present generation women's adopted western culture, getting modernized and due to work and educational schedule can't get such timing to reading religious books.

Read any Religious Books		
	Yes	No
1st Generation	28%	72%
2nd Generation	69%	31%
3rd Generation	66%	34%

In case of bright upping Namaz the same thing was happen the percentages of women's who bright up Namaz decreasing generation wise from 1st (96%) to 2nd (92) to 3rd generations (83%). So it was tell after the study there is a change or negative change was found from past to present generation Muslim women's in practicing the religious customs. It was also seen during the study that the women's are bright up Namaz in their home, where the men's are bright up Namaz in Mosque as well as in home.

They Bright up Namaz		
	Yes	No
1st Generation	96%	4%
2nd Generation	92%	8%
3rd Generation	83%	17%

Findings of The Study

After the study work and analysis of the primary data some important findings are came out about the socio-economic, cultural, health and political status of the Muslim women's of the study area and there generational changing status. The findings of this study are:

- The literacy level among the Muslim women's is very low. It was found that the literacy rate is increasing in the present generation compare to the past generations women's. The level of higher education is also increasing in a quite higher rate from 1st generation to 3rd generations women's. Although there was no single woman's found whose were taking technical educations in the three generation women's.
- After the study it was found that due to increase

level of education and awareness the age of marriage is rising past to present generations. Earlier the maximums women's marriage held below 15 years of age but now it was sifted to 19-22 years and onwards. side by side marriages patterns and types of marriages are also changing from past to present

- It was also found that due to the increase and development of education and work participation and the effect of modernization process changes there dressing type's generation wise. The observing hijab or burqa customs in getting less in the present generations women's compare to past generations due to various reasons.
- Muslim women are not well known about the family planning activities and due to some religious reason Muslim are not wanted to use any contraceptive.
- Muslim women do not get to much priority in their family and their decisions have no value for the other male member of the family.
- In Muslim family there have an illegal demand of male child which create various problem for Muslim women.
- The activity, status and empowerment of freely moments in any in area, decision making about household matters in increasing in the present generation women's which was restricted in past generations.

Suggestions

To make a country develop there have need to improve the condition of each and every people of that country and in India Muslim religion comprise huge percentage of population and they are not well developed and mainly Muslim women' status in the society is very poor. To take India in such a height of other developed country here have need to improve the condition of Muslim women. This can be done in this way-

- There have need to improvethe educational and work participation condition for Muslim women.
- Govt.hasneeded to take initiative to do something special for improving the educational condition of poor Muslim women.
- By changing governments policies, their social status should have to be secure (*"Tin Talaq"*).
- By aware them about health problems, immunization and needs for adopting various norms of family planning etc. Muslims status in the society should be increased.
- Muslim women have to aware about the age of marriage, age of first issues and number of babies act.
- Govt. has to protect Muslim child from the marriage before they reaching 18 years, otherwise their proper development will be destroyed.

Conclusion

The Muslim women's condition in the society is significantly lower than the males of the community and the women's of the other community. Not only that, the religious customs and societal norms are created barrier for them which create difficulties to put their leg out of their house door. The practices of different customs put them backward then the others community women. The poor access of education opportunity put them again backward, from where they are not get back to the competition to the other community women.

The data reflects that there was found a sequential change in socio- cultural aspects from past to present generation Muslim women's. The women's are determined about family but they have no respect in the family and their opinion about family matters become meaningless in join family systems. With the passage of time the status of Muslim women improving slowly, but it is shown the positive side for theme which is found by this three generation research work.

Education should have to be the main aid to increase their condition in the society, every Muslim girl has to be educated and for them we should have to create some job opportunity. In this aspects there need attention of the researchers, scholars and planners and policymakers, who ignoring this field for their study. There is also need more research studies in this subject, particularly in present changing socio-economic scenario and also with the effect of modernization process on the Muslim women. Thus there is a chance for evolving new ideas and approaches for the development of Muslim women in our country. So Govt. has need to take different initiatives for solving the common problem and increased their status equal to the men and the other communities women's in the society.

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Job Satisfaction and Effectiveness in Teaching of In-service Teacher Trainees: A Comparative Study

*Dr. Maheshwar G. Kallave

Abstract

Job satisfaction has been the most frequently investigated variable in organizational behavior (Spector, 1997). Job satisfaction varies and researchers, for example Peretomode (1991) and Whawo (1993), have suggested that the higher the prestige of the job, the greater the job satisfaction. Many workers, however, are satisfied in even the least prestigious jobs. That is, they simply like what they do. In any case, job satisfaction is as individual as one's feelings or state of mind.

Job satisfaction can be influenced by a variety of factors, for example, the quality of one's relationship with their supervisor, the quality of the physical environment in which they work, the degree of fulfillment in their work, etc. However, there is no strong acceptance among researchers, consultants, etc., that increased job satisfaction produces improved job performance. In fact, improved job satisfaction can sometimes decrease job performance (McNamara, [n.d]; War, 1998). Teachers are the pillars of our nation. Teachers play an important part in developing the knowledge and skills of youth. This study aims at investigating the job satisfaction among In-Service Teacher Trainees. Ninety Six (96) respondents from the Government and private school for the purpose of this study. Data collected was analyzed with descriptive statics using SPSS. On comparing the job satisfaction level between Male and Female, Age Group, Teaching of Level school teachers; it was found that there is no significant difference in their level of satisfaction irrespective of gender, age and level of teaching.

Introduction

Teachers are responsible for bringing about cognitive, psycho-motor and affective development of students. Teachers have the responsibility to develop future citizens. Hence each person entering this profession is important. Today the fact that the number of entrants in this (teaching) field is increasing, which is good also, but if teachers are turning to this profession as a last resort having left no other option before them, then certainly it becomes a matter a concern. Those who come willingly in this field are passionate and have interest in the profession. They can carry out their work responsibly. They are satisfied in their job and are action-oriented. Some of the teachers enter this field merely because they have no other option left before them and hence view their job merely as a job. The present research is, therefore, conducted to analyze whether job satisfaction affects the effectiveness in teaching regarding satisfied and dissatisfied teachers.

Objectives

1) To study job satisfaction level of teachers pursuing In-service B. Ed. course.
2) To study teaching effectiveness of teachers pursuing In-service B. Ed. course.
3) To study comparatively the job satisfaction level of male and female teachers.
4) To study comparatively the teaching effectiveness of male and female teachers.
5) To study whether age factor affects job satisfaction.
6) To study the effect of age factor on job satisfaction.
7) To study the effect of educational level on job satisfaction level and teaching effectiveness.

Assumptions

1) Teachers view the profession of teaching as a noble profession.
2) Effectiveness depends upon age factor.
3) Teachers tend to make their teaching effective.

Hypotheses

1) There is no appreciable difference between the job satisfaction levels of female and male teachers.
2) There is no appreciable difference between the teaching effectiveness of female and male teachers.
3) Age and educational level of teachers do not have appreciable effect on their job satisfaction level and teaching effectiveness.

Methodology

The present research work has been conducted by using survey method. In this research activity, the job satisfaction standardized test of Dr. Pramod Kumar and

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Dr. D.N. Mutha composed of 29 questions and standardized test regarding teaching effectiveness comprised of 69 questions have been used for compilation of data. For analysis of collected data, statistical tools such as median, standard deviation and 't' value have been drawn by calculating class interval of the data collected.

Sample

A sample comprising of (Open University) 96 teachers pursuing In-service B. Ed. course - 50 from B. Ed. 1st year and 46 from 2nd year were chosen, out of which 34 female teachers and 62 male teachers were chosen by purposive sampling method.

Job Satisfaction and Teaching Effectiveness of Teachers Pursuing In-service B.Ed. Course

From the data, it becomes clear that a total of 58 teachers are satisfied in their job, whereas 28 teachers are little satisfied, whereas 10 teachers don't find satisfaction in their job. Out of the total teachers, teaching effectiveness of 45 teachers is good whereas that of 33 teachers is average and that of 18 teachers is below average.

Table 01: Comparison between Job Satisfaction Levels of Female and Male Teachers

Sr.No.	Groups	Sample	Mean	S.D.	Calculated 't'	Table 't'		df	Significant Remarks
01	Female	34	24.17	4.60	12.35	0.05	0.01	94	Significant
02	Male	62	22.44	4.15		2.63	1.98		

Observation

On comparing job satisfaction levels of female and male teachers, it is found that the median of job satisfaction levels of female teachers is more as compared to that of male teachers by a value of 1.73. On comparing both these groups, obtained 't' value is 12.35 which is significantly higher than the value given in the table. This shows that female teachers are more satisfied in their job as compared to their male counterparts. Hence, hypothesis No. 1 is rejected.

Table 02: Comparison between Teaching Effectiveness of Female and Male Teachers

Sr.No.	Groups	Sample	Mean	S.D.	Calculated 't'	Table 't'		df	Significant Remarks
01	Female	34	321.32	17.5	7.90	0.05	0.01	94	Significant
02	Male	62	316.37	22.36		2.63	1.98		

Observation

From the analysis of teaching effectiveness, it is seen that there is difference between female and male teachers. As per teaching effectiveness index, teaching effectiveness beyond the score of 315 is considered to be good. Hence, effectiveness of both of these groups is good. But on comparing these two groups, obtained 't' value is higher than the 't' value given in the table. Hence, by rejecting hypothesis No. 2, we have to accept the hypothesis that the teaching effectiveness of female teachers is at a higher value than that of male teachers.

Table 03: The Effect of Age factor on Teaching Effectiveness and Job Satisfaction Level

Sr.No.	Age Group	Respondent	Total Score of Job Satisfaction	Mean	Total Score of Teaching Effectiveness	Mean
01	28-32	29	748	25.79	9458	326.13
02	33-37	32	751	23.46	10,242	320.06
03	38-42	17	393	23.11	5435	319.70
04	43-47	10	193	19.30	3167	316.70
05	48-52	06	131	21.83	1706	284.33
06	53-57	02	39	19.50	541	270.50
		N = 96	2255	23.48	30549	318.21

Observation

The mean of job satisfaction level between the age group 28-32 is 25.79, whereas that of teaching effectiveness is 326.13. From this, it becomes clear that teaching effectiveness from this group of teachers is good. Moreover, the teachers falling in this group are completely satisfied in their job, whereas the job satisfaction index of teachers in the age group of 33 - 37 years is 23.46 and the median of teaching effectiveness is 320.06. On considering class interval of age and scores obtained, it becomes clear that as the age progresses, the job satisfaction level goes on reducing. Moreover, the median of teaching effectiveness also goes on reducing. It has been observed that the teaching effectiveness score obtained for the age group of 53-57 is 270.50, which is very less.

Table 04: The Effect of Teaching Level on Job Satisfaction Level and Teaching Effectiveness

Sr. No.	Teaching Level	Respondent	Total Score of Job Satisfaction	Mean	Total Score of Teaching Effectiveness	Mean
01	Primary	29	665	22.93	9258	319.24
02	Secondary	28	662	23.64	8941	319.32
03	Higher Secondary	19	455	23.94	6048	318.31
04	Teacher Education	20	395	19.75	6358	317.90
		N = 96	2177	22.67	30605	318.80

Observation

There is no appreciable difference in the median of job satisfaction level of primary, secondary and higher secondary teachers, but the teachers working at teacher training institutes are not satisfied about their job. Moreover, the mean of scores of their teaching effectiveness is much lesser than the above-mentioned three types of teachers (primary, secondary and higher secondary teachers). The job satisfaction level of teachers teaching at higher secondary level is the best amongst all.

Inferences

1) Male and female teachers are satisfied in their job.
2) Female teachers are comparatively more satisfied than their male counterparts.
3) Teaching effectiveness of female and male teachers is good.
4) Teaching effectiveness of female teachers is comparatively better than that of male teachers.
5) Age factor affects job satisfaction level and teaching effectiveness.
6) As age progresses, job satisfaction level goes on declining.
7) As age progresses, teaching effectiveness level goes on declining.
8) The job satisfaction level and teaching effectiveness of young teachers between the age group of 25-35 years is good / has a higher score.
9) Primary, secondary and higher secondary teachers are satisfied in their jobs.
10) The teachers working at teacher training institutions are neither satisfied in their job nor have high teaching effectiveness.

Recommendations

1) In order to derive job satisfaction in their profession, the teachers should view their profession in a bright perspective.
2) In order to derive job satisfaction in their profession, they should keep their knowledge updated.
3) The teachers should be made permanent as early as possible in their jobs.
4) The teachers should be made available the opportunities of promotions because of which they would pursue their teaching career with determination.
5) The Govt. should take their responsibility regarding stability in their jobs and regarding their income.
6) Enthusiastic and innovative teachers at school level should be given encouragement and prizes.
7) At school level, various educational materials,

equipments and infrastructure should be made available so that teaching effectiveness can be maintained.

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A Survey Study of Child Friendly School Model: An Advancement for Better Education

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Abstract

Education is the act or process of imparting or acquiring general knowledge, developing the powers of reasoning and judgment, and generally of preparing oneself or others intellectually for mature life. Education is a powerful instrument to modify our behavior and it also makes us realize our own self. The aims of education are also very wide in their scope and cater to individual and social need of an individual. The most important aspect of education is to cultivate values among the human beings through schooling, instruction, training and teaching.

In the course of UNICEF's work during the past decade, the child-friendly school (CFS) model has emerged as the organization's signature means to advocate for and promote quality education for every girl and boy. The model can be viewed as a package solution and a holistic instrument for pulling together a comprehensive range of quality education interventions. As the main proponent of this model, UNICEF has developed the manual as a reference document and practical guidebook to help countries implement CFS.

The CFS approach to education guarantees all children the right to schools that are safe and protective, that offer safe drinking water, hand-washing facilities and clean, safe toilets. In child-friendly schools, children learn about hygiene and how to protect themselves and their families from infectious diseases. The access water, sanitation and hygiene (WASH) in schools improves health, boosts attendance and achievement, promoters gender equality and benefit communities.

A review study has been done to see the problems faced in implementing CFS model worldwide. The review of the studies carried out in different countries of the world revealed that educational institutions are willing and interested to implement the Child Friendly School Model in a positive way. Countries of the world are framing policies to provide a guideline make a conducive environment for establishing Child Friendly Schools. It has been observed that there is a need of providing training to concerned peoples and creating awareness among stakeholders regarding different elements of Child Friendly School Model. Need to upgrade schools to become child friendly have also been pointed out.

Introduction

Education is the act or process of imparting or acquiring general knowledge, developing the powers of reasoning and judgment, and generally of preparing oneself or others intellectually for mature life.

Education is a never ending process. It starts from the very beginning of one's birth and continues till the death. At every moment of our life, we learn something that may be at our home, at the school, in the society, at the workplace, and many other places. Education helps us to realise our potential abilities and helps use those in our actions. Education is a powerful instrument to modify our behavior and it also makes us realize our own self. The aims of education are also very wide in their scope and cater to individual and social need of an individual. The most important aspect of education is to cultivate values among the human beings through schooling, instruction, training and teaching.

Education is a fundamental human right and it is essential to ensure that all are able to realise their potential. A key aim of education is to give all citizens the necessary skills and values to improve their quality of life. To achieve this aim we shall continue to work together to improve access to education and to increase the quality of educational facilities in an equitable manner. The physical environment in which learning takes place has a large impact on the outcomes of education.

It has been observed that many schools are not able to provide a safe and friendly environment to students in the schools. This not only affects the physical health but also mental health of the students. Learning environment also gets affected negatively and in result the learning outcomes of the students. Government at central and state level put their best foot forward to redress this issue and to some extent they got success.

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International body like UNICEF also showed concern on this issue and developed child friendly School Model. This model tries to encompass all the dimensions related to school and students in school, to be worked on to provide safe and friendly environment to the students.

Child Friendly School Model by UNICEF

In the course of UNICEF's work during the past decade, the child-friendly school (CFS) model has emerged as the organization's signature means to advocate for and promote quality education for every girl and boy. The model can be viewed as a package solution and a holistic instrument for pulling together a comprehensive range of quality education interventions. As the main proponent of this model, UNICEF has developed the manual as a reference document and practical guidebook to help countries implement CFS.

Fulfilling every child's right to safe drinking water, adequate sanitation and hygiene remains a major challenge for policy makers, school administrators and communities in many countries around the world. The child-friendly schools (CFS) model, which has emerged as UNICEF's signature programmes, means to advocate for, and promote quality education for every girl and boy, so that all children can achieve their full potential. The CFS approach to education guarantees all children the right to schools that are safe and protective, that offer safe drinking water, hand-washing facilities and clean, safe toilets. In child-friendly schools, children learn about hygiene and how to protect themselves and their families from infectious diseases. The access water, sanitation and hygiene (WASH) in schools improves health, boosts attendance and achievement, promoters gender equality and benefit communities.

Child friendly schools aim to have several benefits:

1. They are expected to provide students with a positive environment to exploit their talents and capabilities to their maximum. This may shape them into their respective careers and professions at an early age.

2. ***Gender sensitization.*** Child friendly schools are expected to gender sensitive in their enrollment and provision of services. They will also offer students an opportunity to broaden their thinking and do away with certain stereotypes such as "sciences are meant for boys". It sensitizes both the boys and the girls on the need to respect each others' rights and dignity for peaceful coexistence and development.

3. Child friendly schools also aim to train its learners to be law abiding and patriotic. Students in such schools will used to following simple rules and regulations. They get to understand that the outside world has rules and regulations just like the school. The extensive coverage of different cultures without bias enables learners to appreciate and love others. This in turn promotes peaceful coexistence.

4. Child friendly schools also reduce drop out cases. The students feel comfortable and relaxed both emotionally and physically since all their needs are adhered to. For example a student who is well mentored will refrain from drug abuse and sex which may lead to pregnancy and consequently a drop out case. The students will also motivated both intrinsically and extrinsically to move on with their studies. Rewards motivate students to work harder. A student who is a poor performer in class is motivated to discover his talent outside the classroom. This will also reduce drop out cases.

Owing to the numerous benefits of child friendly schools, heads of schools should embrace the qualities of these schools so as to improve on the performance of their learners.

Need for the Study

The researcher found that the model of Child Friendly School is being adopted worldwide and many studies have also been carried out to find out how successful this model has been. The researcher decided to not conduct an independent study to evaluate the effectiveness of the model but rather conduct a review study to see what the results of the studies done so far in the field indicates and reach to a conclusive remark. Thus researcher conducted this study to get a bird eye view of the outcome of the implementation of the Child Friendly School Model.

Research Methodology

The present study is a review study. A systematic review study is a summary of the literature that uses explicit and reproducible methods to systematically search, critically appraise, and synthesize on a specific issue. The purpose of a review study is to gain an understanding of the existing research and debates relevant to a particular topic or area of study, and to present that knowledge in the form of a written report. The researcher tried to cover the studies undertaken worldwide on the child friendly school model over the last 12 years. A brief description of the studies has been presented in this paper with the results of the studies. In the last of the paper an effort has been made to present a gist of all the studies in a form of conclusion.

Review of Studies done on Child Friendly School Model Worldwide:

Oluremi (2012) evaluated the school learning environment in Nigerian's primary schools. Areas of study include, classroom environment, provision of infrastructural facilities, Teacher/Pupils interaction in the classroom setting. Results showed that 25% of the selected schools were not child friendly. This was because they lacked infrastructural facilities such as toilet facilities, chairs, desks and tables. Most classrooms were not friendly to pupils with disabilities. Based on the findings, it was recommended that all education stakeholders in the primary education sector should made classroom environment attractive and pleasant for pupils. This would enhance teaching and learning and improve teacher productivity.

The purpose of the research work of Weshah (2012) was to report on a Child-Friendly School (CFS) initiative pilot project in Jordan, which aims at initiating the creation of CFS and to raise stakeholders' awareness of the importance of this project in promoting and implementing Child Rights Conviction (CRC) in Jordan. The observed outcomes indicated that the stakeholders; principals, teachers, and supervisors at the targeted schools adopted what is so-called CFS environment. It enhances their awareness, knowledge, skills and dispositions towards child-rights. Evidence obtained from teachers' materials showed that they started planning lessons and strategies to translate the principles of CRC into their own classrooms.

Mandiudza (2013) found that The phenomenal, massive and quantitative expansion of the Zimbabwean education system of 1980 resulted in significant challenges related to scarcity of resources. This study explored barriers to the promotion and development of Child Friendly Schools (CFS) a model developed to deal with all aspects affecting quality education in schools. The study found out that the absence of teaching and learning resources and ignorance of the convention on the rights of children contributed to the poor conditions in schools, conditions that thwart learning, not only at school but even at home, in the community and society at large. It was also established that most students are not aware of their rights; thought schooling was good as it is and were therefore not complaining. The research study recommended that the government has to intervene as a matter of urgency to see that these poor schools are adequately funded. There is need for all stakeholders to work together for the good of the schools thereby promoting quality by creating a conducive atmosphere for the teaching and learning process. This will enhance the creation of child friendly schools.

The research study of Shakya (2017) examines the level of implementation of UNICEF Child-Friendly School model, positive initiatives as well as challenges of Sunrise Boarding school, it is a private school located in Kathmandu, Nepal. The element consisting health promoting school, and the interview pointed out the unavailability of general health facilities, doctor or nurses and not enough first-aid boxes in the school although free health camp and blood donation program are organized. The personal hygiene is maintained well. The findings offer approaches for organizing awareness programs, workshops, maintaining child-friendly infrastructure and information dissemination regarding school management committee, disabled-friendly environment, and reproductive health.

Outcome of the study conducted by Maria (2019) revealed that public schools in Enugu State, Nigeria do not have healthy and health-seeking environments. School children do not receive medical attention in the school, there are no adequate first Aid supplies, and sick-bays are not available in the school among other problems

The study conducted by Istaryatiningtias (2020) was intended to elaborate on the role of the school committee in addressing and promoting the implementation of the child-friendly school model to create a positive school climate and atmosphere. The research has revealed that the school committees, both in public and private schools, bring a vital contribution to help the schools in terms of supporting and controlling the implementation of the child-friendly school model with several different perspectives. The participation of the school committee is highly needed in monitoring the activity of the learning process toward the quality of school life and in bridging the communication between schools and students' parents, particularly in promoting the model of child-friendly school.

The research work of Asyifa & Djohaeni (2021) is motivated by the number of child friendly schools in West Java, especially in Cianjur Regency. The results showed that kindergartens in Cianjur sub-district had diverse readiness and more than 59% of kindergartens in Cianjur sub-district according to the category were ready to be child-friendly schools.

The objective of the study conducted by Munene (2022) was to establish the influence of school policy and guidelines on promotion of child-friendly schools' model in public primary schools in Meru county, Kenya. The findings revealed that school policy and guidelines significantly and positively influenced promotion of CFS model (r (286) = 0.16, $P< 0.05$). The study therefore recommended that teachers needed more specific training on learners' gender dynamics and unique learning needs of both boys and girls with the aim of achieving truly gender responsive and supportive learning environments. Further, the Ministry of Education through the Kenya Institute of Curriculum Development ought to develop a specific training module focusing on the components of

CFS, with the aim of enhancing teacher specific skills towards holistically promoting quality education. School Leadership Practices, School Policy and Guidelines, Child-Friendly Schools, Effective School Management, Quality Learning Outcomes

The study done by Marno & Fitriah (2023) aimed to analyze about; 1) the profile of child-friendly schools in Indonesia, 2) the child-friendly school management model, and 3) the challenges of implementing child-friendly-based management models. The results showed that the management of child-friendly schools was carried out according to the process, namely planning, organizing, implementing, and supervising the implementation of safe, comfortable, healthy schools, free from acts of violence and discrimination, free to express opinions and participate in making decisions according to their capacity achievement of educational goals. Although the management model developed has different approaches and styles, it refers to a holistic management model that integrates the Total Quality Management Model and the Total Transformative Learning Model. Its main characteristics are sustainable development, growing awareness, and how collegial works. Meanwhile, the challenges faced in implementing Child-Friendly Schools are related to efforts to raise awareness of school residents and parents in forming a mindset according to the Child-Friendly School concept.

Conclusion

The above review of the studies carried out in different countries of the world revealed that educational institutions are willing and interested to implement the Child Friendly School Model in a positive way. Countries of the world are framing policies to provide a guideline make a conducive environment for establishing Child Friendly Schools. It has been observed that there is a need of providing training to concerned peoples and creating awareness among stakeholders regarding different elements of Child Friendly School Model. Need to upgrade schools to become child friendly have also been pointed out.

In a nutshell it can be said that dream of making schools child friendly can be easily realized if Government make proper policies and implement it in effective manner with proper cooperation of all the stakeholders.

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Underemployment: Threat to Human & Nation Progress

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Abstract

India is the leading nation with youngest population in the world, the country tops the list with 356 million young people as the country of world's largest youth population. Yet making the best use of this Human Capital is always a challenge for the country. The country and its men so far focused on addressing the unemployment, ignoring the fact of existing Underemployment among major section of its population. Underemployment emerges when people are placed in jobs or roles which are relatively substandard to their Knowledge, Skills and Academics. This is common and increased problem in the industrialized urban regions as well as rural India. Though the ultimate aim of any eco system or society is to make the best use of its resources, investments in various forms viz. mentors, material and financial, the system withdraws its rigour by just placing the potential workforce in some or the other job roles. The subsequent part of capturing the optimum returns from this nurtured, trained and developed Human capital is ignored. The work has given scope to distinguish between the unemployment and Underemployment, causes for Underemployment. Methods of realization of the Underemployment,the subsequent benefit to the nations if addressed i.e. utilizing the human capital in a systematic and rational manner were discussed under principal findings. The secondary data considered for the study are the significant works by prominent government and corporate bodies of India.

Introduction

Unlike any other nation the India has an edge of its growing youth segment against entire population and thus will realize its aspiration to be an economy with US$ 5 trillion. Another demographic dividend assures that India is the nation leading with youngest population in the world, the country tops the list with 356 million young people as the country with world's largest youth population. Besides this the Indian Human Resource is not just high in number but known for their superior output and workmanship across the globe.

Yet making the best use of its Human Capital is always a challenge for the growth and development of the country. The country and its men so far focused on addressing the unemployment, ignoring the fact of existing Underemployment among major sections of its Human Capital.

The Underemployment is also termed as:

- Disguised Unemployment
- Inadequate Employment

The Underemployment is understood to be a situation of inadequate employment with respect to the duration and productivity of work. In order to address labour market issues, the concept needs to be incorporated into the labour force framework and thus based on some classification criteria which are comparable to those used to assign persons in employment, unemployment or out of labour force categories. Three criteria which are inherent in this framework are (i) working or not working but having a job, (ii) willing to work and (iii) able to or capable of work. Whereas unemployment refers to persons who did neither work nor had a job during the reference period but were willing to and available for work, the underemployed consists of those personnel who worked or had a job during the stipulated period but were willing or available to change their current work situation in order to increase their duration or productivity of work.

In order to measure under-payment, employees would be asked how much they earn in their present employment as compared to previous one and how they feel they are being paid in relation to people in similar positions. Income-based Underemployment exists when the worker's income is less than what he expects and seeks to change his current work situation to increase his income. In income linked Underemployment women are more vulnerable in agricultural and unorganized sectors.

Thus, it is essential to check the awareness of individuals on their Underemployment and initiate a

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thought process among them to reach an optimum level in their career. This assures growth and development of Individuals, their employers, respective organizations, industry and ultimately the nation as a whole.

Objective

The objective of the paper is to offer a holistic understanding on what is Underemployment, causes and advantages if handled rationally.

Review of Literature

Underemployment is a low-quality employment situation where employees are underrated and underutilized. It is correlated to the inadequacy in work opportunities in terms of hours, reward, rank or use of expertise.

Many studies have been done in the area of unemployment and underemployment issues, some of which with different objectives and place are stated here. The coverage of studies ranges from basic attributes to consequences of Underemployment with supporting examples and numerical data.

Few significant studies are cited here: Abhishek, Bharat and Puntambekar, 2020, pp. 3395-3406.

Have surfaced a study elucidating that there is Lack of Training or Practical Learning for Students is most responsible cause for unemployment and under-employment in Katihar District, Bihar. Further there are Less Industries/Jobs in the town followed by Lack of Facilities/Institutes for Students for the development of their full potential.

Similarly (Niti Ayog, 2017, p.3) the reports highlights that Indeed, unemployment is the minor problem of India. The Indeed the more severe problem is underemployment. A job that a worker can discharge is often taken up by two or more workers. Hence, those in a workforce are employed, yet they are stuck in low-productivity and grave low-wage jobs.

On the other had (Corporate Finance Institute, 2015) Unfolds an interesting aspect that technology snatches the job of a workman who have been handling a work that has since become automated. The vending machines and ATMs are the classical example in this context.

Effect of Underemployment are also classified like:

Poverty levels

When individual is forced to take up jobs with a mismatch of their skills, with inadequate income, families do not consume as many goods and services as before. With this economic crunch the families forgo their comfort of decent standard of living.

Structural unemployment

The on-the-job training will no longer upgrade the skills of workmen as they drop out of their basic domain. Only a few will alter their skills while a large number fade off from job market. This scenario is termed as structural unemployment.

Psychological problems

When the workman is unable to balance his income Vs expenditure that meagerness leads to stress and anxiousness as a result of Underemployment. Under-employment ruins the bondage of life partners and family. Thus, there is an impact on mental and emotional wellbeing.

According to the study government policies like high minimum wage, high unemployment compensation contributes to unemployment.

Causes for Underemployment

Looking from Indian context there are several factors which contribute to the problem Under-employment that is seen in society, leading to a great underutilization of human capital.

A bare classification of such contributors:

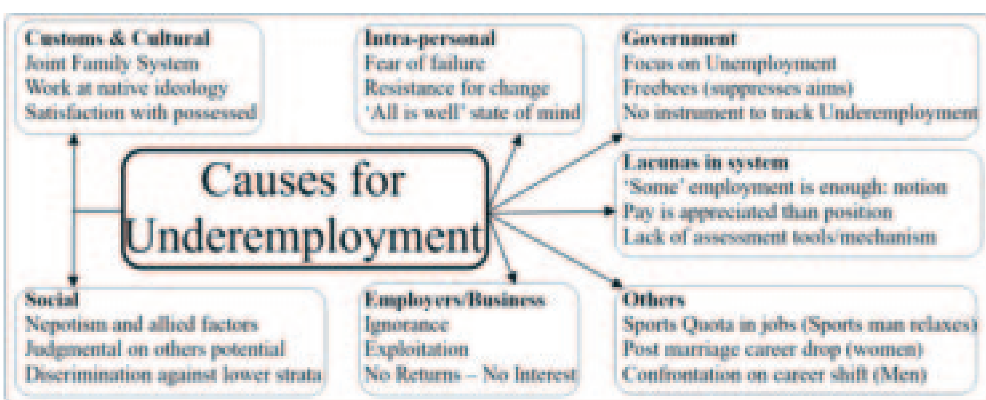

Figure-1: Causes of Underemployment

The occurrence of Underemployment happens when being qualified than required for a job, being involuntarily employed in a position that is inappropriate for the field of study or field of interest. Often, this kind of occupation pays comparatively lower than the industry standards.

Underemployment has many hidden prices which are usually not realised. It is harmful not only to the individual who is experiencing the situation but also for the family, friends, working organisation and economy at large. Thus, it can be a chronic threat to mental health.

Hence it is high time to educate not only employed and unemployed but all walks of citizens to distinguish between unemployment and Underemployment. In the absence of this sensitization many citizens are likely to hollow their careers lurking in jobs and trades with meagre pay and benefits.

Unemployment Vs Underemployment

Unemployment	Underemployment
Impacts micro unit viz. Individual/family	Macro level impact viz. institution/society
Immediate threat	Chronic threat
The pain is high and rapid	Pain of Underemployment is less felt and the impact is chronic in nature
Individual/Family suffers mainly	Entire society suffers due to scarcity of rightly skilled men at right place
Ends once the individual is placed in a job or trade	Ends only when the individual reaches the suitable stage for his/her potential
Gets attention imme-diately, so gets handled soon	Doesn't get attention so problem continues for a long time, sometimes even life time
Economic loss at individual/marginal level	Economic loss at macro level against the Human resource nurturing cost
Measures are in place by Govt and NGOs	No constructive measures so far

Threat to Human Growth

A stronger 'Work identity' is related to the mental wellbeing of an individual. Men or women who has a stronger work identity experiences less job-related stress but when work identity is weak or low, they experience a higher degree of job-related stress and depression. Jobs which provide better opportunity to workers to use their expertise are considered to be mentally healthier than those which do not provide such opportunities. The Underemployed people, in short run, had an increased risk of depression, stress and lower self -esteem and in long run it affected their relationships with family, friends and employees.

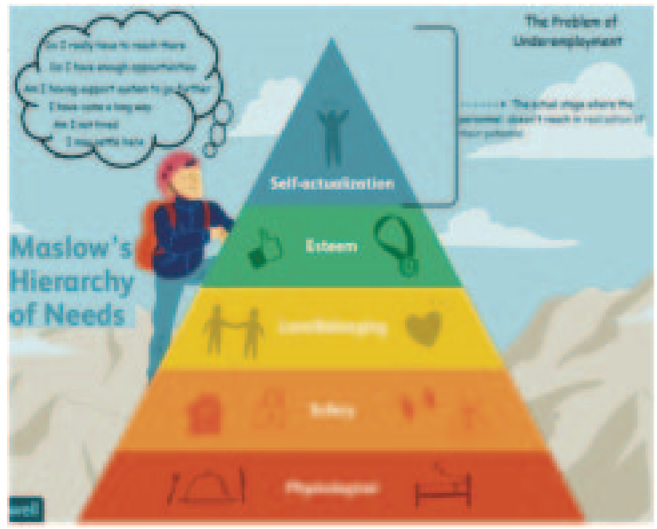

Figure-2: Maslow's Hierarchy of Needs

From the above depiction "Self-actualization" is the highest level in Maslow's hierarchy, and refer to the realization of a person's potential, seeking personal growth and peak experiences. Maslow (1943) describes this level as the desire to accomplish everything that one can, to become the most that one can be.

The underemployed workmen are engaged in roles which are substandard against not only their goals and aspirations but also relatively lower against their Knowledge, Skills and Academics. Where a worker is considered overqualified in terms of education, skills, knowledge, capabilities, work experience, and exposure exceed the required level for his job there is a greater scope for below gaps to occur.

Threat at interpersonal level

Underemployment can also hamper the relationships of employed with their family, friends and at workplace too. It can cause high turnover among employees, low standard of living, poor social status and greater marital discord. Inadequate engagement conditions viz. prolonged hours of work hamper the bondage at family specifically marital life and progress of because it dilutes the intimacy with their partner and children. A worker may feel odd for missing out of work events or major interactions. It reduces the job satisfaction, organizational commitment. Output of part time employees is normally inferior against the permanent employees. Thus, if employees don't enjoy their work, they will feel frustrated andcontribute less to their personal and organizational goals.

Impact of Underemployment on National Progress

According to NITI Aayog 'not unemployment but a severe "under-employment" is the main problem faced by the country'. Underemployment leads to no job growth, business stagnation, high poverty and mental ill-healthas it is a social problem.

Poverty levels

When workmen are forced to take up jobs that are lower against their skills, they obviously receive an income that is below their pay grade. The reduced earnings suppress the affordability of families to buy goods and services. This reduction in demand leads to slow business growth, pushing the market economy towards a recession due to poor Gross Domestic Product (GDP) and marginal to no job growth. Many families who once maintained a comfortable standard of living suffer with financial struggle.

Structural unemployment

With Underemployment, the workmen who no longer work in their preferred domain lack the ability to improve their skills with the 'on the job training'. A few people acquire skills in allied industries while others drop out of the workforce altogether. This phenomenon is a structural unemployment.

Psychological problems

Underemployment contributes to poor mental health. The stress and anxiety are a result of not being able to make ends to meet, which creates a sense of inadequacy. Relationships with the spouse can also suffer as a result of Underemployment in typical Indian scenario. Thus,Underemployment seriously affects an individual's mental and emotional health.

Youthful workers in the labor force tend to experience more Underemployment as a result of switching jobs and moving into and out of the labor force. Many public policies can also discourage the creation of employment, such as a high minimum wage and high unemployment benefits are associated with terminating workers. As employment is the primary source of income for a person and henceit influences economic growth. It is considered a lagging economic indicator. High Underemployment suggests a low GDP and low demand for labour.

Research Methodology

The paper focuses on more than a few studies on Underemployment and its consequences at individual and nation level, covering social, economic and allied aspects. To understand the objectives mentioned above the required secondary data is obtained from publications of individuals and institutions from both academic and business domain. Few studies, books, journals, newspapers, publications, and blogs/websites helped in value addition to the study.

Findings

Underemployment among the middle-aged and youth is not just increasing, but it is also gaining the acceptance of their stakeholders. People from diverse social or working-class backgrounds are reported to be Underemployed. Since the Economic Recession in 2008, more recently the post pandemic era of Covid-19 both middle aged professionals and youth find themselves in the same predicament of Underemployment. What distinguishes these classes is how they respond to Under-employment. The middle-aged working group understood these conditions to be 'momentarily adversity' rather than 'forever problematic'. In contrast, the young graduates are 'confused' that their graduate degrees did not deliver returns as assured by their academic stalwarts. One more dimension to the issue is that 'wait out and see' strategy. Indeed, it is easier for upper- and middle-class young people because their resources are primarily parental resources-which helps them to make a strategic move rather than caught into an Underemployment with meagre Pay & Benefits. On the other hand, the insight of the middle-aged professionals is different who identifies their Underemployment as involuntary as they come from middle-class or just higher middle-class backgrounds. A section of this middle-aged workforce has a ray of hope that their access to social networks with knowledge of the job market will be handy for a better tomorrow.

Benefit to Institutions and Nation if Underemployment handled

The intent of this study is to create awareness among diversified stakeholders on impact of Underemployment. Hence the study is advantageous to several groups ranging from individuals, working professionals, business establishments, policy makers and country at large.

Glimpse of such advantageous to stakeholders are seen here:

Individuals	To self-assess whether they are caught with Underemployment, rationally self-check the reasons and shortfalls on their part, exploring options to come out, gauging the gaps and addressthose issues and finally to tap the opportunitiesthey deserve
Entrepreneurs	Make a SWOC analysis whether their operations can be expanded with existing human capital, find avenues on cost effectiveness
Business Houses	• To comb for the potential workmen in their organizations • Estimate how their talents can be better utilized with reward • Rationalize roles of under potential Vs potential • Retain the talented with low cost (external talent is expensive) • Enhance employer brand ultimately become the market leader • Catch the next level of success
Tradesmen (Rural, Urban)	Be aware of market value of their Products, services Make an optimum comparison (Demand Vs Supply) Adopt automation like options, finally raise business turnover
Society	Will enjoy the availability of better professions and artisans, tradesman with competitive praising, quality and offering
Governments	Availability of better talents will be surfaced and dearth of skilled men will be reduced for difference activities of Governments
Nation	The resources spent on developing Human Resources viz Men, Material and Money will give required results for the country and the high expenditure and low output scenario will be controlled

Observations

Besides the reasons at surface such as intrapersonal, institutional and lacunas in system the 'extended careers' too causes the Underemployment. As a result, the Underemployment will not be a mere momentary issue but forms a vicious circle. This is ceasing the growth opportunities for youngsters and fresh graduates who are invariably caught by Underemployment for survival and career start. Thus, the younger generations are not finding adequate employment and embrace the opportunities come their way with lower pay & benefits. Although it is a temporary relief from unemployment, in long run it is leading to Underemployment. Therefore, if the issue is not addressed within a generation, it spreads over to the successive generations.

Conclusion

The study provides awareness to the individuals on the definite scope they have to further develop their careers by realizing the Underemployment they are clutched to. Improving required academics, skills and openness to come out of comfort zone is required to grab the trendy opportunities. Employers at all spheres to realize the potential of the Human capital before investing further. A periodical HR audit using a dynamic MIS system is the need of the hour.

An effective application of Social Work methods gives scope to rightly handle this malaise Underemployment. A systematic approach i.e. creating the awareness, utilizing the validated facts and mobilizing the institutions and masses to invest their efforts will yield results for the betterment of individual and nation at large.

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Improving The Quality of Life of Persons with Disability: Need for Social Work Intervention

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Abstract

QoL measures happiness, life satisfaction, and overall well-being, as defined by WHO as an individual's perception of life within cultural and value frameworks, considering objectives, expectations, standards, and concerns. (2016) 2009; (Harding) 2001; (Soares *et al.*) Social workers offer support and guidance for disabilities, including emotional support, counseling, stress management, and healthcare access. They connect healthcare providers and patients, addressing disabled individuals' unique needs. Social workers conduct assessments to understand their strengths and create personalized care plans. Social workers fight for rights, combat discrimination, ensure equal healthcare, foster inclusivity, offer counseling, improve well-being, and provide access to healthcare and therapy for disabled individuals. Education on self-care and adaptive strategies empowers them. Employment and social inclusion fight isolation, while assistive technology enhances independence and mobility. Advocating for accessibility, transport, and workplace adjustments is vital for inclusivity. The HRQoL for disabled individuals varies greatly in daily activities, social and family well-being, etc. More research is required for HRQoL improvements, including cultural, demographic, social, and psychological factors. Social work interventions enhance disabled individuals' HRQOL by addressing diverse needs, advocating inclusivity, service accessibility, emotional well-being, and overall quality of life enhancement. Social workers are vital in improving the health and well-being of disabled individuals, alongside other experts. Social workers support disabled individuals to live fulfilling lives and improve their overall well-being and quality of life.

Introduction

QoL measures happiness, life satisfaction, and overall well-being (CDC, 2000). WHO defines QoL as an individual's perception of their life within cultural and value frameworks in relation to their objectives, expectations, standards, and concerns (WHOQOL Group, 1995). HRQoL is limited to disease- or intervention-related factors. According to the International Society for Quality-of-Life Research (2015), HRQoL refers to the functional impact of a medical illness and its treatment on a patient, covering psychological state, physical function, social interaction, and somatic sensation. Another definition was 'optimum mental, physical, role, and social functioning, including relationships, health, fitness, life satisfaction, and well-being' (Theofilou, 2013, p.156). HRQoL is recognized as subjective and complex (Wallander & Koot, 2016). It relates to physical, individual, and social factors (Gaspar *et al.,* 2009; Harding, 2001; Soares *et al.*). The systems disabled people live in may impact their values, beliefs, attitudes, and quality of life (Schalock, 2004). Four HRQoL definitions exist, making it difficult. HRQoL is "how well a person performs in their life and their perceived well-being in physical, mental, and social health dimensions". Functioning is performing tasks; well-being is subjective feelings; and quality of life includes all factors impacting an individual's life. Only health affects HRQoL, excluding economic and political factors. The third HRQoL concept is health, which refers to how illness or treatment affects one's well-being. HRQoL is often defined as the subset of health that affects well-being frequently. The final definition emphasizes health. HRQoL refers to health-related quality of life, which involves assigning values to different health states.

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Objectives of The Study

- To analyze and describe the health-related quality of life of people with disabilities.
- To study the social work intervention in improving the health-related quality of life of persons with disabilities.

Review of Literature

In practice, 'quality of life' refers to different concepts of living well. It can be categorized into two groups. One common distinction in public health research is between life's opportunities and outcomes. According to Ruut Veenhoven, pre-conditions for good health, like nutrition and professional care, are not usually considered the same as health itself. Another distinction is between external and inner qualities. The first case involves the environment, the second involves the individual, and this distinction is commonly used in public health.

The WHO defines health as a state of complete well-being, including physical, psychological, and social aspects, rather than just the absence of illness or disability (WHO, 1948, 1958). This definition expands the usual medical idea of treating or easing illness. Fries and Spitz (1991) created a model that prioritizes "health status" and "patient outcome," assuming that these elements make up "quality of life." This aims to narrow down the concept of quality of life and make it easier to use in clinical trials. Health status is a snapshot of one's quality of life, while patient outcome is a final assessment made after treatment or time. This paradigm includes five dimensions: desire for longevity, normal functioning, freedom from pain and symptoms, avoidance of treatment complications, and economic stability.

Disability is linked to quality of life (QOL), as it affects independent physical functioning. Numerous studies indicate a lower QOL for disabled individuals. Integrated and specific procedures can restore the quality of life for the disabled by involving them in the developmental process and ensuring their rights as equal members of society.

Disabled individuals often lack a voice and access to healthcare, assistive technologies, and rehabilitation. The level of social isolation they face depends on their specific circumstances and the nature and severity of their impairment. Rehabilitation can enhance functioning, but not quality of life. Disabled individuals must overcome barriers to reach their potential. Studies show that people with locomotor disabilities have a lower quality of life than those without disabilities. Social, cultural, and attitudinal barriers have made these people feel excluded and constrained. It greatly affected people's quality of life, despite the 2006 National Policy for Persons with Disabilities, which acknowledged the value of disabled individuals. However, little has changed in the way the state treats disabled people in India (Gosh, 2012).

Disabled individuals often face various burdens, such as physical, social, economic, and psychological challenges, along with health-related issues. Co-morbidity leads to increased disability and complicates health care and rehabilitation (World Report on Disability, 2011). Walking problems, secondary impairments, pain or fatigue, poor physical fitness, and a sedentary lifestyle can disrupt independent adult life. Tasks like moving around, managing the household, and engaging in recreational activities are often limited due to the disability (Roebroeck *et al.,* 2009).

Disabilities require extra expenses for healthcare, assistive devices, transportation, diet, and personal assistance, increasing family spending (Mohapatra, 2004). Due to higher costs, disabled individuals and their households are often poorer than non-disabled individuals with similar incomes (Zaidi & Burchardt, 2005). Households with disabled members are more likely to face material hardships such as food insecurity, inadequate housing, limited access to water and sanitation, and insufficient healthcare (Mitra, Posarac, & Vick, 2011).

Locomotor disability greatly affects quality of life. The World Report on Disability (2011) highlights inequality in healthcare, education, and employment for disabled individuals. Many do not receive needed disability services and face exclusion from everyday activities. A positive QOL after disability is vital for rehabilitation. But when people return to the community, a negative or low QOL may also occur. Furthermore, as the age of people with disabilities increases, many experience changes in their health and functioning, which challenges their hard-won QOL (Bryan, 2000).

Health Promotion Disciplines That Can Be Unreachable to People with Disabilities

Health Domain	General Population	Barriers to People with Disabilities
Exercise	Walking is the most common public fitness recommendation for physical exercise Access to all areas of fitness facility	Inability to walk or difficulty walking because of painful joints (i.e., hip pain) Access to certain areas of the fitness facility is restricted.
Nutrition	Choice in eating certain types of foods Obtaining certain nutrients through consumption of vitamins and nutritious types of foods	Certain bottles and jars are difficult to open if one lacks strength or dexterity. Limited income or gastrointestinal impairment prevent certain foods from being bought or consumed
Sleep	Secondary conditions associated with a disability have no effect on regular sleep.	Associated (e.g., spasms, incontinence) and secondary conditions (e.g., depression, severe obesity) may adversely affect sleep patterns Painful joints may decrease ability to sleep in certain positions and may detract from restful sleep
Social relationships	Accessible and convenient transportation Strong social skills	Lack of accessible transportation Difficulty forming social connections because of limited social connections
Relationships with family members	Relationships between family members grow independently	Financial and/or physical dependence ononeor more family members strains relationships.
Substances	Accessible smoking cessation programs	Materials used in smoking cessation program are inaccessible to people with cognitive disabilities or low reading levels
Medications	A limited number of medications used to manage health	Multiple medications lead to further health problems (i.e., obesity) and higher risk of overmedication
Hygiene	Simple remedies to maintain good hygiene	Incontinence increases complexity in maintaining good hygiene (i.e., odor, skin irritation, increased pressure sore risk)
Self-efficacy	Opportunities for personal growth enhance self-efficacy	Attitudinal barriers (i.e., low expectations) reduce self-efficacy
Stress	Exercise and proper nutrition are additional health behaviors that can be utilized to manage this condition.	Limited opportunities to use other forms of health promotion to manage stress
Continuous learning through-out the life span	Opportunities to continue lifelong education through various work-related continuing education incentives	Limited opportunities to work results in minimal educational growth
Medical care access	Accessible medical care installations and affordable health care plans	Limited medical installation access (i.e., physician offices, equipment such as examination tables, mammography machines) A lower employment rate may lower quality health insurance

Empowering the Person and Enabling the Environment: Solutions for Overcoming Health Promotion Barriers

Health Domain	Empowering the Person	Enabling the Environment
Exercise	Seek accessible fitness centers for wheelchair users	Universal design and equipment changes (i.e., adjust height of equipment to accommodate limited range of motion in hips or knees)
Nutrition	Teaching people how to make healthy and acceptable food choices instead of expensive or unpleasant ones Education about the availability of assistive devices for grocery shopping	Residential facility staff education for healthy food choices when ordering and preparing food The presence of nutritious food options in supermarkets; the financial and structural accessibility of these foods (via store shelves and food positioning)
Sleep	Increased understanding of medications to treat symptoms Implement scheduled nighttime bathroom visits or limitations on nighttime beverage intake	Generate quiet and comfortable environment (i.e., temperature, bedding, ability to transfer independently in and out of bed to restroom at night)
Social relationships	Determine your areas of interest and seek participation in activities where others with similar interests may attend.	Find accessible public transportation routes or schedule individual pick-up times
Relationships with family members	Self-direct own care through personal assistant Educate people about limitations associated with certain conditions	Determine living relationships that minimize conflict and are convenient for all
Substances	Educate program leaders on how to make their materials more accessible in terms of both content and format.	Create and distribute accessible materials (i.e., large print, audio, and Braille) in various community locations
Medications	Inform physician of medication side effects	Increased awareness of medication side effects with clear labeling
Hygiene	Set up a bladder evacuation schedule or work with a caregiver to reduce incontinence episodes. To reach difficult areas for washing, use assistive devices (such as long-handled sponges).	Ensure accessible cleansing equipment is available and that the individual or caregiver is knowledgeable about the use of this equipment or device.
Self-efficacy	Empowerment through increased access to community and programs of interest	Positive support from staff
Stress	Set aside time in the morning to stretch and meditate while watching a video made for people who use wheelchairs.	Accessible buildings to healthy services such as fitness centers, grocery stores, and spas
Continued learning throughout the life span	Seek access to local independent living centers to determine educational opportunities regarding work and health	Improvement in structured or regular communication with independent living centers
Medical care access	Educate medical office staff on ways to make building and equipment more accessible Consult with independent living centers and disability rights organizations about health care plan options.	Increase wheelchair accessibility to health-care provider offices. Access to adjustable-height examination tables and other diagnostic equipment

Research Methodology

The current paper focuses on several studies on the health-related quality of life of people with disabilities. To examine the aforementioned objectives, the necessary secondary data is collected from both published and unpublished sources. To improve the study, books, journals, and seminar papers, content analysis, newspapers, publications, and websites are used.

Social Work Intervention

Social work intervention is vital for enhancing the HRQOL of disabled individuals by addressing their diverse needs. Social workers assess individuals to understand their challenges and strengths. They support disabled people by protecting their rights, ending discrimination, making environments accessible, and promoting disability rights. Social workers provide emotional support and counseling to help individuals and families navigate the emotional challenges of disability. They assist with stress, depression, anxiety, healthcare access, and medication management. They facilitate communication between healthcare providers and disabled patients.

Rehabilitation is vital for improving HRQOL, and social workers link individuals to services like therapy to enhance physical functioning and independence. Education and skill-building are key. Social workers educate individuals and families on self-care, pain management, and adaptive strategies, empowering them to manage their health. Employment provides stability, purpose, and inclusion. Social workers help disabled individuals with employment, the job market, accommodations, and social inclusion. They develop skills, establish networks, and engage in community activities. Assistive technology fights social isolation and promotes belonging. Social workers help people access devices and tools to enhance independence, mobility, and quality of life. Advocating for accessibility includes creating ramps, accessible transportation, and workplace accommodations under disability rights.

Community engagement through volunteering, advocacy, and organizations fosters inclusion and value in individuals' communities. Preventative care and wellness promotion involve social workers educating on preventive care, healthy lifestyles, and regular check-ups. Research and policy advocacy drive the evolution of social work to better serve disabled individuals through evidence-based practices and policy changes.

Social work intervention is essential in improving the health-related quality of life (HRQOL) of disabled individuals due to several significant reasons:

1. **Holistic Approach:** Social workers treat handicapped people holistically, addressing their physical, emotional, social, and environmental health. This holistic approach emphasizes that many variables affect health and well-being.
2. **Advocacy:** Social workers lobby for handicapped people's equitable access to healthcare, social services, and opportunities. They fight prejudice and advance disability rights.
3. **Support in Coping:** Disability may cause stress, worry, and sadness. Social workers advise and comfort families facing these issues.
4. **Access to Services:** Social workers link handicapped people to healthcare, rehabilitation, and support groups. They guide patients through complicated healthcare systems and find resources.
5. **Customized Care:** To comprehend handicapped people's needs and obstacles, social workers examine them. They tailor treatment to individual strengths and weaknesses.
6. **Rehabilitation Support:** Social workers facilitate access to rehabilitation services, such as physical and occupational therapy, which are crucial for improving physical functioning and independence.
7. **Education and skill-building:** Social workers educate individuals and their families about managing their conditions. They teach self-care techniques, pain management, and adaptive strategies.
8. **Employment Support:** Social workers assist people who want to work with obtaining jobs, workplace modifications, and vocational training. Work provides financial security and meaning.
9. **Promoting Social Inclusion:** Social workers assist people in establishing social skills, networks, and community activities to overcome isolation and promote social inclusion.
10. **Assistive Technology:** Social workers connect individuals with disabilities to assistive technology and devices that enhance their independence, mobility, and overall quality of life.
11. **Advocacy for Accessibility:** Social workers create disabled-friendly surroundings. Advocate for

wheelchair ramps, accessible public transit, and disability rights-compliant workplaces.

12. **Community Engagement:** Social workers promote community engagement via volunteering, lobbying, and locally organized events. This makes community members feel appreciated.

13. **Preventative Care and Wellness Promotion:** Social workers promote preventive care, healthy living, and frequent checkups. These habits improve health.

14. **Research and Policy Advocacy:** Social workers are researching and advocating for disability-friendly social and healthcare policies.

Specific ways in which social work interventions can improve the health-related quality of life of disabled individuals include:

1. **Assessment:** Assess impaired people's needs, capabilities, and difficulties thoroughly. Customized care plans start with this evaluation.

2. **Advocacy:** Promote handicapped people's rights to healthcare, social services, and accommodations. Reduce prejudice and promote disability rights.

3. **Emotional Support:** Provide counselling and emotional support to assist disabled people and their families in dealing with stress, despair, and anxiety.

4. **Access to Healthcare:** Aid handicapped people in getting regular checkups, expert treatment, and medication management. Make sure doctors understand impaired people's needs.

5. **Rehabilitation Support:** Help people enhance their physical function and independence by providing physical and occupational therapy.

6. **Education and skill-building:** Educate individuals and their families about managing their conditions. Teach self-care techniques, pain management, and adaptive strategies.

7. **Employment Support:** Help people find jobs, navigate the labour market, and get workplace accommodations. Employment is essential for financial security and purpose.

8. **Promoting Social Inclusion:** Help individuals develop social skills, build social networks, and engage in recreational and community activities to combat isolation and promote social inclusion.

9. **Assistive Technology:** Connect individuals with disabilities to assistive technology and devices that enhance their independence, mobility, and overall quality of life.

10. **Advocacy for Accessibility:** Advocate for accessible and accommodating environments, including wheelchair ramps, accessible public transportation, and workplace accommodations under disability rights laws.

11. **Community Engagement:** Promote community engagement via volunteering, advocacy, and local events. This makes people feel appreciated in their communities.

12. **Preventative Care and Wellness Promotion:** Educate individuals about the importance of preventative care, a healthy lifestyle, and regular health check-ups, which contribute to overall well-being.

13. **Research and Policy Advocacy:** Researchers and advocates can influence social and healthcare policies. Evidence-based practices and policy changes may help disabled people.

14. **Case Management:** Ensure disabled people receive the support and services they need by coordinating care. Medical appointments, medication compliance, and progress monitoring may be involved.

15. **Financial and Legal Matters:** Provide financial advice on disability benefits, financial planning, and legal support for guardianship and advance care planning.

16. **Self-Advocacy and Empowerment:** Assist disabled individuals in advocating for their rights and needs. Empower them to play an active role in making decisions about their own care.

17. **Volunteering:** Connect disabled individuals with volunteer opportunities and support networks to build social connections and provide valuable assistance.

Observations

- Social workers conduct comprehensive assessments to understand the needs and strengths of disabled individuals, forming personalized care plans.
- They advocate for their rights, eliminate discrimination, promote equal access to healthcare and social services, and create an inclusive environment.
- Social workers provide counseling and emotional support, enhancing emotional well-being. Access to

healthcare services, physical therapy, and rehabilitation services enhances physical functioning and independence.

- Education on self-care techniques, adaptive strategies, and medication management empowers disabled individuals. Employment and social inclusion strategies combat isolation, while assistive technology improves independence and mobility.
- Advocating for accessible environments, public transportation, and workplace accommodations is crucial for creating an inclusive environment.
- Community involvement, preventative care, and wellness promotion contribute to holistic well-being.

These key findings highlight the significant and multifaceted role of social work interventions in improving the HRQOL of disabled individuals by addressing their diverse needs and promoting their overall well-being.

Suggestions

- To require a wide range of modifications and adjustments (reasonable accommodation) for health care access. Provide information, training, and peer support to help disabled people improve their health.
- Boost community-based rehabilitation (CBR) to help disabled people use services. Identify groups that need targeted services or care coordination to improve health care access.
- Develop disability health care standards, frameworks, and enforcement. Engage disabled people in audits and policymaking.
- Nutritional interventions and basic immunizations for mothers and infants. Innovations in early intervention may change disabled people, families, and communities. Health research can identify and support disability health promotion programs.
- Educate persons with disabilities, their families, and advocates in an ongoing manner about state-of-the-art wellness and prevention activities.
- Consider health literacy when making health and wellness information accessible to persons with disabilities.
- Provide more health promotion and wellness training for people with disabilities, their families, personal attendants, and advocates, focusing on the whole person rather than just the disability.
- Advocate for health systems to plan and develop disability-related health information using all media, computer-based, internet, and adaptive or assistive technologies.
- Involve disabled people in formative research, message development and testing, strategy and channel selection, and effectiveness evaluations in health care and wellness promotion communication research.
- Develop, implement, evaluate, and disseminate strategies to practically apply research findings to disability health promotion.
- The physical and emotional capacities of persons with physical disabilities must be respected. This can be accomplished by implementing disability awareness programs.

More research on disabled social issues will help social workers fill the health care, social, and rehabilitation gaps in social systems. Camping and seminars will raise awareness of social discrimination and disabled isolation and educate professionals, policymakers, and the community.

Conclusion

The health-related quality of life for disabled people is very different. Daily activities, social well-being, family well-being, etc. are HRQoL. It's neglected in health care. This needs much more research. Improvements in HRQoL require cultural, demographic, social, and psychological factors. In summary, social work intervention helps disabled people improve their HRQOL by addressing their complex needs. Includement, access to services, emotional well-being, and quality of life are promoted. In helping disabled people improve their health and well-being, social workers are crucial. Disabled people can improve their health and well-being with these social workers and other expert intervention strategies. Social workers address individual well-being issues in a holistic manner. They work hard to empower disabled people so they can live fulfilling lives and improve their HRQOL and quality of life.

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AI-Powered Educational Eutopia: Realizing the Vision of NEP 2020 for Equity, Access and Well-being of Students

*Dr. Jooli Sonker, Dr. Waseem Zahra

Abstract

The National Education Policy 2020 of India envisions a holistic approach to education that focuses not only on academic success but also on the overall well-being and success of students. This research paper explores the synergy between AI and the goals of NEP 2020, specifically focusing on how AI can contribute to student success using the PERMA model (Positive emotions, Engagement, Relationships, Meaning, and Accomplishments). Through a comprehensive review of literature, case studies, and policy analysis, this paper illustrates how AI can facilitate the cultivation of positive emotions, increase student engagement, foster meaningful relationships, and promote a sense of accomplishment, all essential components of student success. Furthermore, it discusses the ethical considerations and challenges associated with AI integration in education and offers recommendations for harnessing AI's potential to realize the goals of NEP 2020 for student success.

Introduction

A future in which education and artificial intelligence are seamlessly incorporated into the educational system to create the best possible learning environment for pupils is referred to as an "AI-powered educational eutopia." Eutopia, a place of perfect happiness, as a realistic desire (as opposed to utopia, which is an unachievable concept); the place where human civilization, the environment, etc., are so idealized that there is total contentment. In this idealistic world, artificial intelligence (AI) equips pupils to become lifelong learners, critical thinkers, and problem solvers

India's National Education Policy (NEP) 2020 outlines a transformative vision for education, emphasizing equity, well-being, and access for all students. The policy advocates a holistic approach, encouraging overall growth, mental health, and physical fitness. It addresses the digital divide and supports the integration of artificial intelligence (AI) in education, recognizing its potential to revolutionize learning. NEP 2020 promotes a flexible educational system, allowing students to choose paths based on interests and aptitudes, aiming to reduce stress. AI in education includes tools like intelligent tutoring systems and adaptive learning platforms to create personalized and dynamic learning environments. Overall, NEP 2020 envisions technology, including AI, as crucial for achieving educational excellence and inclusivity.

Thus, AI-powered educational eutopia is inspiring, but it needs to be pursued carefully, responsibly, and with a clear understanding of the crucial role that human teachers and mentors play in the growth and well-being of students. The possibility for a truly transformational and inclusive educational experience lies in the harmonic fusion of AI and human expertise.

Review of Related Literature

The text discusses the challenges faced by children in the modern educational landscape, emphasizing the negative impact of academic stress on mental well-being. It underscores the need to reassess education goals, incorporating happiness and well-being, in line with global initiatives such as UNESCO's framework for learner well-being. The latter part explores the evolution of artificial intelligence (AI) in education, citing its potential to transform learning experiences. Reference to studies by Layard and Helliwell (2015), Luckin *et al.* (2016), Perez *et al.* (2017), Anderson *et al.* (2018), EDUCAUSE Review (2019), Eynon and Malmberg (2019), and Lenz *et al.* (2020) supports the positive impact of AI on assessment, feedback, accessibility, and administrative efficiency. The conclusion emphasizes the urgency of AI-powered education to align with National Education Policy (NEP) 2020 goals, aiming to nurture happiness and well-being in students for a positive and healthier society (UNESCO, 2016; Layard and Helliwell, 2015).

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Need of the Study

The National Education Policy 2020 envisions a transformative role for technology and artificial intelligence (AI) in education, aiming to enhance educational quality and prepare students for the challenges of the twenty-first century. To achieve this vision, the policy emphasizes effective planning, infrastructure development, and teacher training. Key issues that need attention include bridging the digital gap, promoting digital literacy, updating the curriculum with AI-powered tools, prioritizing student mental health, ensuring accessibility for diverse learning needs, implementing monitoring and assessment tools, supporting research and innovation in AI for education, and educating the public about the benefits and challenges of AI in education. Addressing these issues aligns with the NEP 2020's focus on justice, access, and student well-being to create an AI-powered educational environment.

Research Methodologies Data collection

This study was entirely theoretical in nature. The research's data were gathered from secondary sources and qualitatively analysed. Texts, research articles, journals, and e-papers were used to gather the data.

Methodology - Analytical

Objectives

1. To examine the utilization of artificial intelligence's applications in enhancing educational equity and accessibility.
2. To comprehend the effectiveness of Artificial Intelligence applications in the PERMA model for student well-being.

Objective 1 : The Role of AI-powered educational tools in enhancing equity and accessibility

With the rapid development in information technology and the need to acquire equity and accessibility global trends in education are shifting towards using digital pedagogies. The Technological Pedagogical Content Knowledge (TPCK or TPACK) model is a framework used in education to understand how technology, pedagogy (teaching methods), and subject matter knowledge intersect and inform effective teaching. It was developed by Punya Mishra and Matthew J. Koehler in 2006 and is an extension of Lee Shulman's Pedagogical Content Knowledge (PCK) framework.

The TPCK model emphasizes the integration of technology into teaching and learning to enhance educational outcomes. The TPACK framework emphasizes that effective teaching with technology requires a deep understanding of how all three knowledge domains (technology, pedagogy, and content) interact. Teachers need to balance and integrate these knowledge components to design meaningful and impactful learning experiences for their students.

There are numerous AI-powered apps and platforms designed to assist students in their learning journey by offering personalized, interactive, and efficient learning experiences. Here are some AI apps for students:

- **ChatGPT** is an AI-powered natural language processing tool that help us to communicate with the chatbot in a variety of ways that are human-like.
- **Copy leaks** is a plagiarism detection tool, that will automatically examine content for plagiarism, even if it is unintentional, and present a thorough report.
- **Duolingo:** Duolingo uses AI to personalize language learning courses. It adapts to the learner's pace and provides instant feedback.
- **Khan Academy:** Khan Academy offers personalized math and science lessons for students of all ages. The platform uses AI to assess student performance and tailor content accordingly.
- **Coursera:** Coursera uses AI to recommend courses based on a user's interests and goals. It also offers AI-powered assessments and feedback.

In conclusion, by adapting learning experiences to individual needs, supplying tools for accessibility, and boosting educational quality overall, the integration of AI in education has the potential to increase educational equity and accessibility. AI can be a potent tool for building a more open and fair educational system when used carefully. Remember that the effectiveness of these apps can vary depending on the student's learning style and needs. It's essential to choose the ones that align with your specific learning goals and preferences.

Objective 2: To comprehend the role of Artificial Intelligence tools in the PERMA model for student well-being.

In summary, the PERMA model's use of AI to promote student well-being is context-dependent, so a balanced assessment that takes into account both quantitative and qualitative data is required for a whole understanding. The use of AI in education with an emphasis on student welfare may result in more individualized, interesting, and fulfilling learning experiences, which will eventually help students develop academically and personally.Here are some popular online courses and platforms where you can find courses related to well-being:

Coursera: "The Science of Well-Being" by Yale University: This course explores the science of happiness and offers practical strategies for improving well-being.

"Mindfulness and Well-being" by Monash University: Learn about mindfulness techniques to enhance your well-being.

edX: "Positive Psychology" by the University of Pennsylvania: This course delves into the science of positive psychology and strategies for increasing happiness and well-being.

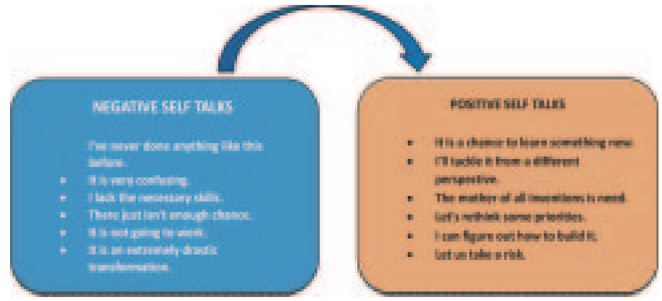
Udemy: "The Science of Happiness" by UC Berkeley: Explore the science behind happiness and well-being and learn practical exercises to improve your mood.

Stanford Online: "Compassion Cultivation Training (CCT)" by Stanford University: This course teaches compassion and empathy skills to enhance well-being and mental health.

PositivePsychology.com: PositivePsychology.com offers various online courses, including "Positive Psychology Practitioner Certification" and "Character Strengths Coaching," to promote well-being and personal growth.

When choosing an online course for well-being, consider your specific areas of interest and the format that best suits your learning style. Many of these platforms offer free courses, while others require payment or offer a combination of free and paid content. Remember that well-being is a holistic concept, so exploring a variety of courses can help you develop a comprehensive approach to improving your overall quality of life.Let's understand it through, PERMA theory. According to Seligman's theory, happiness requires positive emotions, engagement, relationships, meaning, and accomplishment.

Positive thoughts or emotions: Focusing on positive thinking is more than just maintaining an upbeat attitude throughout the day (regardless of how we may be feeling on the inside); it also entails learning to view the challenges and opportunities that life presents us with in a constructive and positive light.

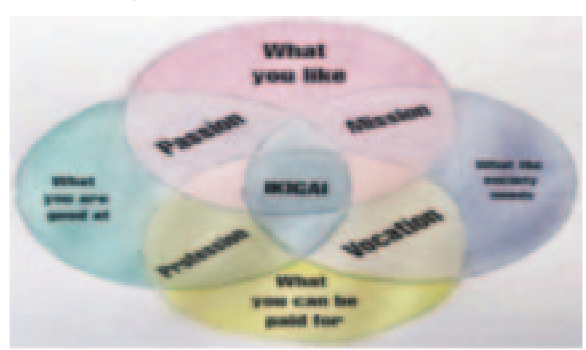


Switch your self-talk from negative to positive

Engagement (Flow): According to Higgins (2006), engagement refers to attitudes toward, involvement with, and level of interest in leisure, hobbies, or work. A key concept is the concept of flow, which is characterized by the appearance of time standing still, the loss of self-awareness, and intense present-focused attention. Students enter the "flow" state of being when they begin to focus solely on the activity at hand and fully interact with the current moment (Seligman, 2011).

Relationship: As social creatures, humans are unable to survive without preserving their social networks. One internalizes societal norms and ideals through the process of socialization. A happier existence depends on having strong social ties. Strong interpersonal bonds are more common among those who are content. According to Jemmott and Locke's Direct Effect Theory, (1984), social interaction enhances health and well-being independent of stress level. When under stress, many students may seek out the social and emotional support of their family and friends.

Meaning (purpose of life): It emphasizes that having a sense of purpose is linked to a higher quality of life. The Japanese concept of ikigai, akin to the French notion of raison d'être, is highlighted as a psychological theory that can aid students in discovering their purpose. The idea is that everyone possesses their own unique ikigai, and while some have already found it, others are still searching. The passage encourages individuals to diligently explore within themselves to uncover their distinctive ikigai or life's purpose.



Accomplishment: When they succeed in achieving their life goals, they are ecstatic, proud, and proud of themselves. Additionally, people feel more effective and happier when they set and accomplish goals for themselves. Their lives gain purpose and a sense of progress as a result of it, inspiring them to set new goals for themselves (Agota Kun, 2020). Thus, despite the pressures of today's fast-paced world, one can achieve the condition of undisturbedness like an ocean by applying the implications of the P.E.R.M.A. components of happiness.

Conclusions

In a nutshell incorporating AI into the educational system in line with NEP 2020's vision has the potential to revolutionize education in India by making it more egalitarian, accessible, and favourable to students' overall wellbeing. It is an exciting chance to build a better future for the nation's future generation. Additionally, cooperation between the government, educational establishments, EdTech businesses, and civil society is essential to guarantee that everyone may benefit from AI-powered education, regardless of their socioeconomic background or geographic location.

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Cognitive Status of Middle Aged Professionals in India: A Cross-sectional Study

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***Prof. (Dr.) Rakesh Kumar Tripathi*[3], *Dr. Akanksha Singh*[4], *Garima Singh*[5]**

Abstract

Cognition, often regarded as the cornerstone of human intelligence, encompasses a myriad of mental processes that contribute to our ability to perceive, think, learn, and remember. This multifaceted construct plays a pivotal role in shaping our experiences and interactions with the world, influencing every aspect of our daily lives. This study explored the cognitive status of 180 middle-aged professionals aged 45-60 years, working across banking, marketing and teaching sectors in India. Montreal Cognitive Assessment (MOCA) was used to assess the cognitive status of professionals. Results indicate that Marketing Professionals scored 24.05 (mean score), Banking Professionals scored 27.00 (mean score) and Teaching Professionals scored 25.81 (mean score). Professionals from banking sector had significantly higher level of cognitive functioning and status as compared to teaching and marketing professionals.

Introduction

Cognition is an umbrella term that encompasses a spectrum of mental processes involved in acquiring, processing, storing, and utilizing information. At its core, cognition refers to the set of interrelated activities that enable individuals to comprehend the world around them, solve problems, make decisions, and engage in adaptive behaviors. This intricate web of mental processes includes perception, attention, memory, language, problem-solving, and executive functions, collectively orchestrating our cognitive abilities (Cerhan *et al.,* 1998).

Definition and Components of Cognitive Functioning

Cognitive functioning encompasses a complex array of mental processes that collectively define our ability to perceive, process, and utilize information. These processes, often working seamlessly in conjunction, include memory, attention, and executive function, forming the foundational components of cognitive abilities.

Memory: Memory involves the encoding, storage, and retrieval of information. From recalling past experiences to learning new skills, memory is integral to our ability to navigate the world and build on accumulated knowledge.

Attention: Attention is the cognitive mechanism that enables us to focus on specific stimuli while filtering out irrelevant information. It is a crucial aspect of cognitive processing, allowing for the selective allocation of mental resources.

Executive Function: Executive function refers to higher-order cognitive processes responsible for goal-setting, planning, decision-making, and problem-solving. It involves the coordination of various cognitive skills to achieve a specific objective.

Cognitive Functioning and its Function in Everyday Life

Cognition plays role in every aspect of our existence. From the moment we wake up in the morning until we sleep at night, cognitive processes shape our perceptions, thoughts, and actions (Lyon *et al.,* 2021).

a. **Learning and Adaptation:** Cognition is at the forefront of our ability to learn and adapt. Whether we are acquiring a new skill, grasping a novel concept, or adjusting to changes in our environment, cognitive processes facilitate the assimilation of new information and the modification of our behavior in response to experiences.

b. **Decision-Making and Problem-Solving:**

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Decision-making is an integral part of daily life, from choosing what to wear to making complex career choices. Cognitive functioning enables us to assess information, weigh options, and make decisions aligned with our goals. Similarly, problem-solving skills, rooted in cognitive processes, empower us to overcome challenges and find effective solutions.

c. **Communication:** Language, a central component of cognition, is the bedrock of communication. Our ability to express thoughts, feelings, and ideas, as well as comprehend the expressions of others, relies heavily on cognitive processes such as semantic memory, syntactic comprehension, and pragmatic understanding. (Bara, 2011)

d. **Memory and Recall:** Memory, anessential component of cognitive functioning, influences our ability to recall past events, learn from experiences, and build a cohesive sense of self. From remembering a grocery list to recalling important life events, memory processes shape the narratives of our lives. (Schacter & Addis, 2007)

e. **Emotional Regulation:** Cognition plays a vital role in emotional regulation, influencing how we perceive, understand, and respond to emotions. Cognitive processes contribute to our ability to empathize, manage stress, and navigate inter-personal relationships. (Phelps, 2006)

f. **Work and Productivity:** In the professional realm, cognitive functioning is instrumental in executing tasks, solving problems, and maintaining focus. Whether in a boardroom, a classroom, or a laboratory, cognitive abilities are essential for productivity and success. (Ones *et al.,* 2012).

The Significance of Cognitive functioning in middle-aged professionals

Cognitive abilities, encompassing a spectrum of mental processes such as memory, attention, problem-solving, and decision-making, are foundational to effective professional performance. Middle-aged professionals, often at the zenith of their careers, encounter complex challenges that demand cognitive prowess. The ability to process information swiftly, retain critical details, and make sound decisions becomes increasingly crucial in navigating the intricacies of professional responsibilities. (Lövdén *et al.,* 2020).

a. **Decision-Making and Problem-Solving:** The professional landscape is rife with scenarios requiring adept decision-making and problem-solving skills. Middle-aged professionals, occupying leadership roles or specialized positions, must navigate strategic decisions, troubleshoot challenges, and innovate to stay ahead. Cognitive abilities underpin their capacity to evaluate options, anticipate consequences, and devise effective solutions.

b. **Adaptation to Change:** In an era of rapid technological advancements and evolving industries, the capacity to adapt is paramount. Cognitive flexibility, a facet of cognitive functioning, enables middle-aged professionals to embrace change, learn new technologies, and pivot their strategies. The ability to synthesize new information and apply it to existing knowledge is a hallmark of cognitive agility.

c. **Communication and Leadership:** Cognitive functioning also influences communication and leadership skills. Middle-aged professionals in managerial or leadership roles rely on their cognitive abilities to articulate ideas, influence decision-makers, and foster collaboration. Effective communication, rooted in cognitive processes such as language and social cognition, is essential for leadership success.

d. **Task Execution and Time Management:** As professionals juggle multiple tasks and responsibilities, cognitive abilities contribute to efficient task execution and time management. Memory and attentional processes play a crucial role in prioritizing tasks, managing workloads, and meeting deadlines. Middle-aged professionals with robust cognitive functioning can optimize their productivity and contribute meaningfully to organizational goals.

Cognitive functioning in Middle-Aged Professionals

Review of Cognitive Changes During the Middle-Aged Years: Middle age, typically spanning from around 40 to 65 years, marks a stage of life characterized by unique cognitive changes. While certain cognitive abilities, such as crystallized intelligence (accumulated knowledge and experience), tend to remain stable or even improve, others may exhibit signs of decline. Fluid intelligence, which involves problem-solving and adaptability, may show gradual declines during this period. (Powell, 2011)

Cognitive changes in middle age often manifest as a slowing of information processing speed and slight declines in certain aspects of memory, particularly working memory. However, these changes are nuanced, and individuals vary widely in the extent and nature of cognitive shifts experienced. (Fondell *et al.,* 2018)

Common Cognitive Challenges in Middle Age

Recognition of Typical Cognitive Issues Faced by Middle-Aged Individuals:

a) **Mild Cognitive Impairment (MCI):** Some individuals may experience a subtle decline in cognitive abilities beyond what is considered typical for aging but not severe enough to qualify as dementia. This state is known as Mild Cognitive Impairment (MCI) and can impact memory, attention, or other cognitive domains.

b) **Attentional Changes:** Middle-aged professionals may notice shifts in attentional capacities, such as increased susceptibility to distractions or difficulties in maintaining sustained focus.

Impact on Professional and Personal Life: The cognitive challenges faced in middle age can have significant implications for both professional and personal spheres. In professional settings, individuals may find that certain cognitive demands, such as multitasking or rapid information processing, become more taxing. In personal life, cognitive changesmay influence daily activities and relationships(Kazmi, 2021).

Unique Cognitive Challenges Faced by Middle-Aged Professionals

Balancing Work and Personal Life Demands: Middle-aged professionals often find themselves navigating the delicate balance between demanding careers and personal responsibilities. With family commitments, potential caregiving roles, and other personal obligations, the challenge lies in managing time, attention, and cognitive resources effectively.

The cognitive challenge here involves maintaining focus and productivity at work while addressing personal responsibilities. Striking this balance requires cognitive flexibility, effective time management, and resilience in the face of competing demands.

Coping with Changing Job Roles and Responsibilities: Middle age is frequently characterized by evolving job roles and responsibilities. Professionals may encounter shifts in organizational structures, changes in leadership, or the need to acquire new skills to stay relevant in dynamic industries. Adapting to these changes demands cognitive agility and a willingness to learn.

Cognitive challenges arise as professionals navigate transitions, acquire new knowledge, and integrate fresh skills into their existing repertoire. Resilience in the face of change and the ability to embrace continuous learning become critical cognitive attributes.

Objectives

1. To assess the cognitive status of middle-aged professionals.
2. To compare the cognitive status among banking, teaching, and marketing professionals.

Hypotheses

H1: Middle-aged professionals will score high on cognitive status.

H2: Cognitive status will differ among banking, teaching, and marketing professionals.

H3: There will be a significant difference in cognitive status among banking, teaching, and marketing professionals.

Methods

One hundred and eighty middle-aged professionals in the age range 45-60 years from the banking (60), teaching (60), and marketing (60) sectors who gave written informed consent were included. The study employed a cross-sectional research design, and the data was collected using purposive sampling and snowball sampling techniques based on defined inclusion and exclusion criteria.

Inclusion criteria: Male and female middle-aged professionals working in various banking, marketing, and teaching sectors.

Exclusion criteria: Middle-aged professionals having any kind of serious medical or psychiatric condition and undergoing treatment for the same.

Tools

The semi-structured sociodemographic data sheet comprised informed consent and basic socio-demographic data related to age, gender, religious faith, marital status, qualification, work experience, working hours, and annual income.

Montreal Cognitive Assessment (MoCA)

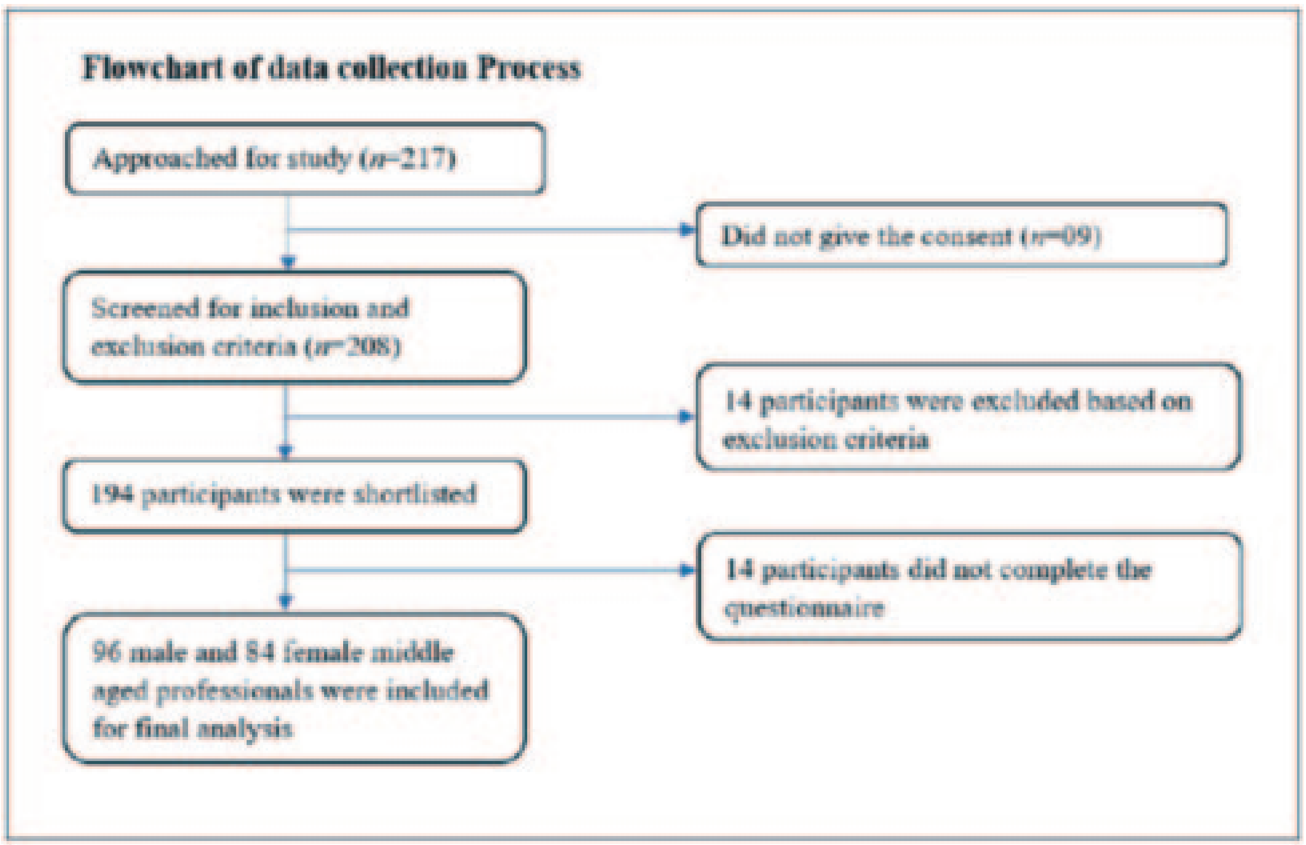
MoCA (Nasreddine Z, 2017) is a brief, 30-question test that helps healthcare professionals detect cognitive impairments at early stages, facilitatingearly assessment and intervention.

Components of the MoCA and Their Significance: The MoCA comprises a set of tasks that evaluate different cognitive domains:

- **Visuospatial and Executive Functioning:** Assessing the ability to perceive spatial relationships and execute tasks requiring planning and organization.
- **Naming:** Evaluating language and semantic memory by naming specific items.
- **Memory:** Testing short-term memory recall and recognition.
- **Attention:** Assessing sustained attention and working memory through tasks like serial subtraction.
- **Language:** Examining language skills, including sentence repetition and verbal fluency.
- **Abstraction:** Evaluating abstract reasoning abilities through interpretation of proverbs.
- **Delayed Recall:** Testing the ability to recall previously presented information after a delay.

Each component plays a crucial role in providing a comprehensive overview of an individual's cognitive functioning, making MoCA a versatile tool in cognitive assessment.

Procedure



Result

Table 1 shows the frequency and percentage of the sociodemographic variables. In the present study, out of the total 180 sample, 60 participants worked in the banking sector, 60 participants worked in the marketing sector, and the remaining 60 participants worked in the teaching profession. The demographic details relating to age, gender, religious faith, marital status, qualification level, working hours, years of work experience, and income slab for each of the group show the difference in terms of frequency and percentage.

Table 1. Frequency and Percentage of Socio-demographic Variables.

Demographics		Banking Professionals n = 60		Teaching Professionals n = 60		Marketing Professionals n = 60	
		f	%	f	%	F	%
Age	45-50 years	30	50%	25	41.7%	29	48.3%
	51-55 years	18	30%	17	28.3%	21	35%
	56-60 years	12	20%	18	30%	10	16.7%
Gender	Male	32	53.3%	20	33.3%	44	73.3%
	Female	28	46.7%	40	66.7%	16	26.7%
Religious faith	Hindu	44	73.3%	48	80%	40	66.7%
	Islam	16	26.7%	12	20%	20	33.3%
Marital Status	Unmarried	16	26.7%	8	53.3%	28	46.7%
	Married	44	73.3%	7	46.7%	32	53.3%
Qualification	Graduate	36	60%	60	100%	44	73.3%
	Postgraduate	24	40%	0	0	16	26.7%
Working hours	6-8 h	32	53.3%	60	100%	36	60%
	9-10 h	28	46.7%	0	0	24	40%
Work experience	0-5 years	36	60%	44	73.3%	32	53.3%
	6-10 years	24	40%	16	26.7%	28	46.7%
Income	Below 5 lakhs	32	53.3%	60	100%	44	73.3%
	5-10 lakhs	28	46.7%	0	0	16	26.7%

Abbreviations: f = frequency; % = percentage.

Table 2 shows descriptive statistics forCognitive Status among Middle-aged Professionals from Banking, Teaching and Marketing sectors.

Marketing Professionals					
	N	Minimum	Maximum	Mean	Std. Deviation
Cognitive Status	60	21.00	27.00	24.05	1.38
Banking Professionals					
Cognitive Status	60	25.00	29.00	27.00	0.88
Teaching Professionals					
Cognitive Status	60	25.00	28.00	25.81	1.08

It was found that middle-aged professionals from Marketing sector scored 24.05 (mean value), Banking professionals scored27.00 (mean value) and Teaching Professionals scored 25.81 (mean score).

Results indicated that professionals from Marketing sector showed mild cognitive impairment as compared to professionals from teaching and banking sectors.

Table 3 shows level ofCognitive Status among Middle-aged Professionals from Banking, Teaching and Marketing sectors.

Marketing Professionals		
Level of Cognitive Status	Frequency	Percentage
Normal	12	20.0
Mild	48	80.0
Total	60	100.0
Banking Professionals		
Level of Cognitive Status	Frequency	Percentage
Normal	58	96.7
Mild	2	3.3
Total	60	100.0

Teaching Professionals			
Level of Cognitive Status		Frequency	Percentage
Normal	26	43.3	
Mild	34	56.7	
Total	60		100

Table 3 depicts the level of Cognitive Status among 180 middle-aged professionals. Results indicated that 80% of Marketing Professionals showed mild cognitive impairment. For Banking Sectors, it was found that 96.7% Professionals reported normal Cognitive Status. Further, 56.7% Teaching Professionals showed mild Cognitive Impairment as compared to Marketing and Banking Professionals.

Discussion

The study highlights the cognitive status of middle-aged professionals in India, key domains of cognitive functioning and its implications in their day-to-day professional activities (Lee *et al.,* 2006). The findings indicate that cognitive status of banking professionals is comparatively higher than teaching and marketing professionals, the reason for this difference may be attributed to work environment, organisational factors, occupational stress, health status of the professionals (Kazmi *et al.,* 2023). The findings also emphasizeupon the importance of early assessment which helps in identification of cognitive impairments (Fisher *et al.,* 2017). Further, there is a need to address the factors impacting the cognitive health in the middle-aged workforce in India (Kazmi, 2023).

Implications: By addressing the cognitive status of middle-aged professionals in India, this research contributes valuable insights that can inform interventions, policies, and practices aimed at fostering cognitive well-being and maximizing the potential of this crucial demographic in the Indian workforce.

It also suggests avenues for future research to further enhance our understanding of cognitive aging in diverse cultural and professional contexts.

Acknowledgement

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Statement of Ethics

The approval was granted by Institutional Ethics Committee of Amity University Uttar Pradesh Lucknow Campus.

Informed Consent

Written informed consent was taken from professionals to participate in the study. Participants were briefed about their voluntary participation and confidentiality of their responses. No incentive was provided for their participation.

Declaration of Conflicting Interests

The authors declared no potential conflicts of interest with respect to research, authorship, and/or publication of this article.

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Impact of Dialectical Behaviour Therapy on Premenstrual Syndrome among Young Girls: A Pilot Study

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Abstract

Dialectical behavior therapy (DBT) is an evidence-based psychotherapy that is a modified type of cognitive behavioral therapy (CBT). The main goals are to teach people how to live in the moment, develop healthy ways to cope with stress, regulate their emotions, and improve their relationships with others. Clinical experience regarding the utility of dialectical behavior therapy for the reduction of issues in young adults associated with anger issues, and crying spells has been observed. Therefore, the present study aims to explore DBT, for the benefit of young girlssuffering from Premenstrual syndrome PMS.

Aim: To find the effectiveness of Dialectical behavior therapy on premenstrual syndrome among young girls.

Method: A pre-test-post-test quasi-experimental design without a control group was used in the study. The Brief Psychiatric Rating Scale (BPRS) was used for screening and 8 in which 4 cases were selected for intervention.The premenstrual syndrome scale (PMSS) was used for pre and post-assessment.

Results: Based on pre and post score on GHQ and PMSS there is a reduction in symptoms of premenstrual symptoms of young girls who have receiveddialectical behaviour therapy.

Dialectical Behaviour Therapy

The American Psychological Association (APA) defines Dialectical behavioural therapy (DBT) as a flexible psychotherapy that comprises elements of behaviour therapy, cognitive behaviour therapy (CBT), and mindfulness. The term "dialectical" refers to the combination of two opposing ideas. The first of these ideas is accepting the reality of a person's life and behaviours. The second opposing idea is the change of situations and dysfunctional behaviours.

Dialectical behaviour therapy emerged from attempts to apply standard behaviour therapy to the treatment of highly suicidal individuals. In essence, DBT was a trial-and-error clinical effort based on the application of behavioral principles and social learning theory to suicidal behaviors. DBT was developed in the 1970's by Dr. Marsha Linehan. DBT was the first psychotherapy to formally incorporate mindfulness.

Young Adults

In medicine and the social sciences, a young adult is generally a person in the years following adolescence, sometimes with some overlap. Definitions and opinions on what qualifies as a young adult vary, with works such as Erik Erikson's stages of human development significantly influencing the definition of the term; generally, the term is often used to refer to adults in approximately the age range of 18 to 40 years, with some more inclusive definitions extending the definition into the early to mid 40s.The young adult stage in human development precedes middle adulthood.

In the literary business, the term young adult is very often used informally or in a marketing sense for the readers of young adult literature, books targeted at children down to ages 11 or 12 This broad extension of young adult to minors has been disputed, as they are not considered adults by the law or in most cultures, outside of religion (such as the Bar or Bat Mitzvah in Judaism), and the tradition of biological adulthood beginning at puberty has become archaic.

Premenstrual Syndrome

A combination of physical and psychological disturbances that occur before woman's menstrual cycle after which normally end with the onset of the menstrual flow.

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It is characterised by psychological (anxiety, depression, hostility, poor concentration, confusion, social disturbance, and interpersonal conflicts) and physical (insomnia or hypersomnia, headache, pelvic pain and discomfort, breast tenderness, joint pain, and feeling overwhelmed) symptoms that recur regularly beginning 7-14 days before the onset of menstruation (Berek, Berek & Novak, 2012).

Anxiety

According to the APA, around 40 million people in the United States have an anxiety disorder. It is the most common group of mental illnesses in the country. However, only 36.9% of people with an anxiety disorder receive treatment. American Psychological Association (APA) defines anxiety as "an emotion characterized by feelings of tension, worried thoughts, and physical changes like increased blood pressure. "Knowing the difference between typical feelings of anxiety and an anxiety disorder requiring medical attention can help a person identify and treat the condition.According to the Anxiety and Depression Association of America (ADAA), around 40 million people in the United States have an anxiety disorder. It is the most common group of mental illnesses in the country. However, only 36.9% of people with an anxiety disorder receive treatment.

The American Psychological Association (APA) defines anxiety as "an emotion characterized by feelings of tension, worried thoughts, and physical changes like increased blood pressure." Knowing the difference between typical feelings of anxiety and an anxiety disorder requiring medical attention can help a person identify and treat the condition.

In this brief research the researcher aims to explore the effectiveness of Dialectical Behaviour Therapy on Anxiety of young adults. Though DBT is well accepted, Implementation of this therapy is limited. DBT were used to treat adolescents with cystic fibrosis to improve functioning in emotional and social domains (Casier *et al.,* 2011), anxiety and increased school attendance (Gauntlett-Gilbert, Connell, Clinch, & McCracken, 2013). While searching for review of literature researcher was only able to find few research regarding the implementation of DBT in India. Research conducted using Dialectical behaviour therapy is mainly implemented in pain, depression and anxiety, especially among the non-Indian population of adolescents. So the researcher intended to test the efficacy of BDT on the Indian population and secondly on Young girls.

Methodology

Aim : The purpose is to study the effectiveness of Dialectical Behaviour Therapy on premenstrual syndrome among young girls.

Objective : The objective of the study is to examine the level of premenstrual syndrome amonggirls, before and after the intervention (Dialectical Behaviour Therapy).

Hypothesis : The hypothesis of the study is:

There will be decrease in the level of premenstrual syndrome among young girls after the intervention (Dialectical Behaviour therapy).

Variables : The dependent variable of the study is premenstrual syndrome among girls. The independent variable under the study was the effectiveness of Dialectical behaviour Therapy.

The research design

The quantitative data was gathered in the beginning and after the completion of all the intervention sessions. Thus, the researcher used a 'before and after without control' design to test the efficacy of Dialectical behaviour therapy be on premenstrual syndrome amongyoung girls. Sample Method Purposive Sampling Nature of Sample eight participants were screened for the study. four were excluded to and due to not met inclusion criteriatotal number of participant four for the present study.

Inclusion Criteria The inclusion criteria for the sample include:

1. Individuals with mild to moderate level of premenstrual symptoms on the selected scale
2. Individuals aged 16 to 28 years of age
3. Individuals of both gender
4. Willingness of the participant to undergo therapy intervention

The exclusion criteria for the sample include:

1. Individuals with minimal level of premenstrual scale on the selected scale
2. Individuals with any diagnosed psychiatric illness in the past
3. Individuals under any psychotropic medication

Tools

1. Socio-demographics and clinical characteristics
2. BPRS was used as screening tool
3. Pre-and-post-therapy self-ratings of the 40-item Subjective Well-being Index (SUBI).

4. Post-therapy we assessed efficacy of therapy by examining number of sessions attended and the number of dropouts.
5. Premenstrual Rating scale.

Semi-structured proforma for socio-demographic and clinical details. A specifically designed semi-structured proforma was used to record the socio-demographic data like name, age, gender, education, marital status and clinical details like any psychiatric illness, physical illness, medication for appetite, etc.

Brief Psychiatric Rating Scale: The Brief Psychiatric Rating Scale (BPRS) was published in 1962 as a sixteen-question questionnaire by Drs. John Overall and Donald Gorham, later enhanced it by adding two additional categories (Excitement and Disorientation), resulting in the 18-item scale used widely to assess the effectiveness of treatment. The BPRS is a rating scale which a clinician or researcher may use to measure psychiatric symptoms such as depression, anxiety, hallucinations, psychosis and unusual behaviour. The scale is one of the oldest, most widely used scales to measure psychotic symptoms. It should be administered by a clinician who is knowledgeable concerning each of the symptom domains, and severe mental health disorders. It is particularly useful in gauging the efficacy of treatment in patients who have moderate to severe psychoses. The rater enters a number for each symptom construct that ranges from 1 (not present) to 7 (extremely severe).

Premenstrual Syndrome Scale (PMSS) by. P. Padmavathi *et al.*, 2013 domain and 40 item scale 3 domain) Physiological domain 16 items psychological domain 12 items behavioral domain 12 items total40 ItemsGood reliability and validity and the coefficient alphas were 0.89 and 0.85 for the anger and anxiety subscales. Internal consistency - .81 Construct Validity- .97

Paired Samples Statistics

		Mean	N	Std. Deviation	Std. Error Mean
Pair 1	PRETESTV	30.0000	4	5.94418	2.97209
	POSTTESTV	5.0000	4	1.82574	.91287

Paired Samples Correlations

		N	Correlation	Sig.
Pair 1	PRETESTV & POSTTESTV	4	-.461	.539

Paired Samples Test

		Paired Differences					t	df	Sig. (2-tailed)
					95% Confidence Interval of the Difference				
		Mean	Std. Deviation	Std. Error Mean	Lower	Upper			
Pair 1	PRETESTV - POSTTESTV	2.500E1	6.97615	3.48807	13.89939	36.10061	7.167	3	.006

Procedure

The quantitative data was gathered by administrating standardized scales.

The procedure for the study is as follows:

Approval of research topic, variables and sample population

↓

Informed consent obtained from the participants

↓

purposive Sampling done

↓

Only those participants who met the criteria for the study, that is, the inclusion and exclusion criteria for the study were selected. (N=8)

↓

Baseline assessment was done, to eliminate people with psychotic symptoms(N= 4)
Conducted Dialectical Behaviour Therapy - 10 sessions, each session for one hour

↓

After the completion of the therapeutic intervention, post-test was administered on the selected scale. (N= 4)

↓

Statistical Analysis by SPSS was done.

Results

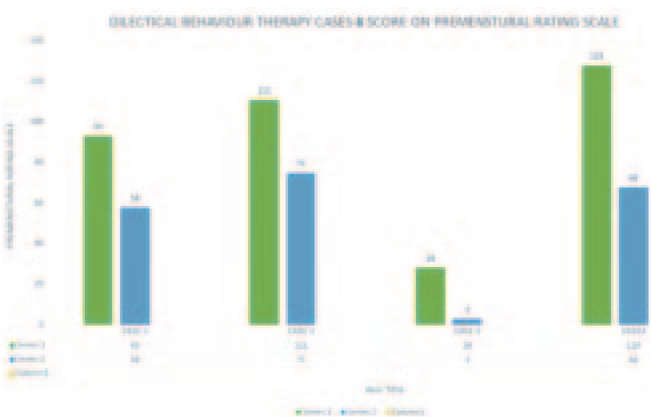
Data Analysis : To test the hypotheses, statistical analysis of data was carried out using paired t test. Statistical analysis of data was carried out using SPSS IBM for windows. The null hypothesis was set to be rejected when $p < 0.05$. A total of 4 subjects were selected to participate in the study after the screening. The participants ranged in age from 18 to 26 years, with a mean age of 21 years. There were 4 females.

Results of the paired t-test indicate that there is a significant large difference between before (M=90, SD= 43) and After (M=51,SD=32.8) T(3)=5.3, P=.013

Dialectical Behaviour Therapy has reduced symptoms among young women with premenstrual symptoms.

Results

	Mean	Std.Deviation	t value	P value
Pre Test(n=4)	90.000	43.7	5.3	.013
Post Test(n=4)	51.200	32.8		



Discussion

DBT has been adapted to address various mental health issues, including anxiety. While DBT is not typically considered a first-line treatment for anxiety disorders, it can be a valuable addition, especially for individuals who struggle with emotion regulation and interpersonal difficulties. Here's how DBT principles can be applied to anxiety related to premenstrual syndrome. Dialectical Behaviour therapy can be beneficial for managing anxiety, but it's important to note that it might not be the sole or primary treatment for anxiety disorders. It is often used in conjunction with other therapeutic approaches and, in some cases, medication. If you're considering DBT for anxiety in premenstrual syndrome, it's recommended to consult with a mental health professional who can assess your specific needs and develop an individualized treatment plan.

The prime objective of this study was to evaluate the impact of Dialectical Behaviour Therapy on premenstrual syndrome among young girls. The participants of this study had undergone 10 sessions of individual therapy which extended to a period of 10 weeks, excluding Pretest and Post-test sessions.

The findings of the present study showed a reduction in the premenstrual syndrome among young girls. The Levels of anxiety at the post-test (Mean=51) reduced as compared to the pre-test (Mean=90).

A randomized controlled trials by Heather A. Mac Pherson, Mary A. Fristad, *et al.* (2013) shows result that DBT has been adapted for adolescents with various psychological disorder (i.e., borderline personality disorder, eating disorder, trichotillomania, externalizing disorder) and problem behavior (suicide ideation and behavior, nonsuicidal self-injury). Theoretical underpinning of DBT suggests that this treatment is likely to be beneficial for adolescents with a broad array of emotion regulation difficulty, particularly under regulations of emotions resulting in behavioral excess.

A.S Klein. J.B. Skinner. *et al.* (2013) conducted research, which was about Targeting the Binge eating through components of Dialectical behavior therapy. Women with full- or subthreshold variations of either binge eating disorder or bulimia nervosa were randomly assigned to 15 sessions in 16 weeks. Group-based DBT or individually supported self-monitoring using adapted DBT diary cards (DC). Results show that with both abbreviated DBT based treatments, substantial improvement in core binge eating symptoms is possible.

Thus the present study also shows improvement in premenstrual syndrome among young girls.

Summary

Premenstrual syndrome has the potential to progress into more problematic psychological disorders and serious health complications including anxiousness, restlessness, crying spells. Behaviours associated with anxiety may include problems with body image, impulsivity, and self-harm. These symptoms are related premenstrual syndrome anxiety is assumed to have stemmed from insecure attachment manifested through a deficit in emotional regulation and managing daily chores. An appropriate intervention, in time, would be a remedy to prevent Emotional Behaviour in premenstrual syndrome to progress into eating disorders and other psychological disorders. Therefore, it is suggested that Dialectical behaviour therapy sessions can be an effective intervention to reduce symptoms, improve affect regulation and enhance mood regulation capacity. DBT showed significant improvement in reduction in Emotional Behaviour of young girls. The absence of a control group makes it difficult to attribute these changes entirely to Mentalization-Based Treatment. A long-term intervention may foster genuine mentalization and break the cycle ofAnxiety, affect regulation. More studies investigating the impact of DBT onEmotional Behaviour are needed.

Strengths and Limitations

Since there is a scarcity of research concerning Dialectical Behaviour therapy and premenstrual syndrome and furthermore for emotional Behaviour. The present study provides a new insight to the therapists to have a different treatment method to work with premenstrual syndrome and to even prevent its potential progress to eating disorders. It added credit to Dialectical behaviour therapy which is a growing field of knowledge and yet to be explored more, to find its usefulness in various areas. The other strength of this study is, that pre and post-test assessments were made using structured tools and appropriate statistical methods. Another strength is that the post-test assessment was obtained as a follow-up assessment with a gap of 2 weeks, which helped assess the sustainability of the impact of the therapy. However, there are unquestionable limitations to this study. Firstly, the study was limited by its comparatively small sample size which potentially limits the generalizability of the result. Secondly, the study design did not include a control group so, it was difficult to attribute that result to intervention certainty since there was nothing to compare the outcome.

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Fostering Employee Resilience and Organizational Commitment: The Mediating Role of Employee Engagement

*Amrita Bedi, **Dr. Mamata Mahapatra

Abstract

Aim: The study aims to understand the mediating role of employee engagement on employee resilience and organizational commitment among working employees. ***Method:*** Data was collected using the Brief Resilience Scale, Utrecht Work Engagement Scale, and Organizational Commitment Scale on 122 employees from educational and service sectors. All the demographics were taken via offline and online modes. ***Result:*** The SPSS-27 has done all the data calculation work from where a significant relationship was found between employee resilience, employee engagement, and organizational commitment at $p<0.01$ level of confidence. ***Conclusion:*** In today's competitive and helter-skelter climate, organizations need to adapt and transform quickly due to increased competition, technical breakthroughs, and changes in worker demographics in overall performance. Employee engagement mediates this relationship, suggesting that fostering resilience and commitment can enhance work engagement. Resilience is crucial for managing stress, delays, disputes, and crises, and recruiting resilient individuals can help reduce staff absenteeism and attrition.

Introduction

"It is not the most powerful or the cleverest of the species that endure, but rather those that are most adaptable to change". -Charles Darwin

The preceding announcement is vital in today's competitive and chaotic climate, which necessitates organizations' constant adaptation and transformation (Allvin *et al.,* 2011). Organizations must transition faster than ever before due to increased competition, growing technical breakthroughs, variations in worker socio-economic, and the spread among worldwide comprehensive provisions and levels. Contemporary administrations need a collective of resilient and engaged personnel, as well as adaptable and creative capacities (Lee *et al.,* 2013). Given the constantly changing and varied aspects of employment, resilience may assist employees in instantly adjusting to altering expectations and doing successfully even in tough and expressively demanding circumstances (Fredrickson *et al.,* 2003). A rise in the number of Quality management enablers and Quality management procedures led to an improvement in organizational effectiveness. Leadership, management of people and processes, policy and strategy, and quality management systems are all critical in the service sector (Kumar *et al.,* 2023). Howard (2008) stressed the importance of resilience in safeguarding employees from the negative consequences of unfavorable workplace settings. Grant *et al.* (2012) have emphasized the need for resilience for individuals who work in expressively demanding than complicated jobs. Despite the fact that service organizations require a highly strong and motivated staff, and present a complex operating environment, little research has been conducted on the link between organizational commitment, employee resilience, and employee engagement. Next, this study proposes to understand the mediating role of employee engagement on employee resilience and organizational commitment among banking sector employees.

Relationship between employee resilience and organizational commitment

Resilience, defined as an optimistic reaction to anxiety, is critical in assisting individuals in navigating and enduring difficult working situations (Luthar, 1993). This resilience creates not just pleasant feelings, but also a deep emotional connection to the organization. King (1997) went on to emphasize the importance of a person's tenacity in committing to their profession and organization, citing career resilience as a component linked to emotional career commitment. Resilience also leads to a fulfilling work life, which has been demonstrated to be an important component in individuals' organizational commitment (Wrzesniewski *et al.,* 2003). Furthermore, Youssef (2007)

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and Vohra & Goel (2009) found that resilience has a favorable influence on organizational performance and commitment. To fill this void, it is hypothesized that there is a strong link between staff resilience and organizational commitment. This viewpoint is based on the concept that resilience not only helps people manage stress, but also promotes a deeper and more long-lasting commitment to their job (Allen & Meyer, 1990; Solinger *et al.,* 2008). Despite the fact that various studies have discussed various types of commitment resulting from resilience, it is important to recognize that these components can coexist within an individual's psychological orientation towards the organization (Toor & Ofori, 2010; Mansfield *et al.,* 2012; Ramlall, 2009; Shin *et al.,* 2012). As a result, the hypothesis of this study is that there is a substantial association between employees' resilience and organisational commitment.

Relationship between work engagement and employee resilience

Work participation is a current bound in both study and practice (Bakker *et al.,* 2014; Ghadi *et al.,* 2013; Quinones *et al.,* 2013). It is the influence of job engagement on a variety of employee attitudes and behaviours (Kimberley *et al.,* 2015; Quinones *et al.,* 2013; Yalabik *et al.,* 2015). Schaufeli *et al.* (2002) conceptualise employee assignation as a explicit, gratifying, work-related position of attention, which Kahn (1990) initially theorised and Maslach *et al.* (1997) operationalized. Whilst there is a well-established relationship between psychological qualities and workplace engagement, research on the function of employee resilience in producing employee engagement is deficient (Wefald & Downey, 2009). Previous research has found that both workplace and personal resources have an impact on work engagement (Xanthopoulou *et al.,* 2009). However, the relationship with employee resilience is still unknown. Positive characteristics of resilient people include optimism, curiosity, and openness (Block & Kremen, 1996; Waugh *et al.,* 2008). This optimism adds to a greater willingness to accept obstacles at work, so strengthening job engagement. Furthermore, research shows that resilient individuals excel at developing excellent relationships and shared sustain at job (Fredrickson *et al.,* 2003), both of which are important elements related with job engagement (Christian *et al.,* 2011; Kahn, 1990). As a result, resilient folks who are ready to deal with adversity, form meaningful professional connections, and keep hopeful viewpoints are further probable to be involved at work. As an outcome, the study proposes a link between employee resilience and employee job engagement.

Mediation effect of employee engagement

The studies stated above have suggested a probable association between employee engagement and employee resilience to some extent, but the mechanism by which engagement influences resilience and commitment has not been examined. According to the research review, organizational commitment might be positively affected by resilience (Vohra & Goel, 2009; Youssef & Luthans, 2007), and improved staff promise can raise the probability of engagement (Kim, 2014; Lehmann-Willenbrock *et al.,* 2013). Nevertheless, it is especially interesting to investigate if employee involvement influences (mediates) the link between resilience and commitment. While investigating possible moderating factors in the association among engagement (as part of mental centre) and commitment, Norman *et al.* (2010) advocated for study into mediators in the indicated connection to better grasp how developing positive conceptions influence organisational phenomena. Therefore, this study hypothesizes that employee engagement facilitates the association among employee resilience and organizational commitment. The probable association among resilience, organisational commitment, and employee engagement is depicted in Figure 1. The mediation model displays (a) resilience's direct influence on organizational commitment and (b) employee engagement's mediating effect on resilience-organizational commitment relationships.

Figure 1: Relationship between Resilience, Organizational Commitment and Employee Engagement

Method

Aim

The aim of the research seeksthe importance of employee engagement in mediating employee resilience and organizational commitment among employees.

Objectives

1. Investigating the link between employee resilience, employee engagement, and organizational commitment among employees.
2. Examining the mediating role of employee engagement in employee resilience and organizational commitment relationship among employees.

Hypotheses

H1: Employee resilience has a significant association with employee engagement and organizational commitment among employees.

H2: Employee engagement among employees mediates the link between employee resilience and organizational commitment.

Data Collection

A small orientation toward the rationale of the research was provided to the individuals so that each knew what to expect from the questionnaire. Before handing or passing out the questionnaires to the respondents, the researcher ensured that everyone understood the primary objective of the research in simple terms. The researcher was faced with not optimal responses to be included in the study for various reasons- incomplete responses and incomplete demographic details. Therefore, for the final analysis, 122 working men and women with an age ranging from 25 to 50 years were considered. For this research, the sample comprises individuals residing in India. He/she must be from India.

Research Design

The study intends to use a confirmatory approach, employing convenience sampling methods. Based on the literature evaluation, the study considers employee engagement to be an independent variable, whereas employee resilience and organizational commitment are dependent factors. Furthermore, one theory proposes that employee engagement serves as a mediator in the link between employee resilience and organizational commitment.

Tool Used

S. No	Name of the scale	Authors & Years	Items
1.	Brief Resilience Scale	Smith *et al.* (2008)	5
2.	Utrecht Work Engagement Scale	Schaufeli and Bakker (2006)	17
3.	Organizational Commitment Scale	Dhar *et al.* (2001)	8

Result

After scoring the data, SPSS-27 was used for analysis. The descriptive analysis included the calculation of mean and SD, whereas inferential statistics included correlation analysis, linear regression analysis, and PROCESS macro model 4 by Andrew F. Hayes (2013). After these calculations, interpretations, and conclusions have been made.

Table 1: Sociodemographic Characteristics of Participants

Characteristics		N	%
Gender	Male	100	81.97
	Female	22	18.03
Age	25-35 years	18	14.75
	36-45 years	89	72.95
	46-55 years	15	12.29
Work Experience	3-5 years	40	32.79
	5-10 years	57	41.80
	10 years<	31	25.40

Table 3.2: Psychometric properties of scales used

S. No	Scales used in the study	Items	Reliability
1.	Brief Resilience Scale	5	0.80
2.	Utrecht Work Engagement Scale	17	0.86
3.	Organizational Commitment Scale	8	0.87

(0.91-1.00: Excellent; 0.81-0.90: Good;
0.71-0.80: Good & Acceptable)

Table 3.3: Descriptive statistics and Correlations between Employee Resilience, Employee Engagement and Organizational Commitment

Variables	N	SD	1	2	3	4	5	6
Employee Resilience	3.51	0.54	0.170	-0.110	0.205*	1.00		
Employee Engagement	43.0	8.51	0.216*	0.26	0.294**	0.375**	1.00	
Organizational Commitment	31.61	6.76	0.256**	-0.004	0.276**	0.474**	0.393**	1.00

Note. N=122; * $p<0.05$; ** $p<0.01$; 1=Age; 2= Gender; 3= Work Experience; 4= Employee Resilience; 5= Employee Engagement; 6= Organizational Commitment

Table 3.4: Total Effects

	β	SE	R^2
ER>OC	5.925**	1.005	0.225
ER>EE	5.916**	1.333	0.141

Note. ** $p<0.01$; β =unstandardized coefficient; SE= standard Error; ER= Employee Resilience; EE= Employee Engagement; OC=Organizational Commitment

Table 3.5: Direct Effects in mediated relationships

	β	SE
EE	0.199*	0.067
ER	4.750**	1.050

Note. ** $p<0.05$; * $p<0.01$; β = unstandardized coefficient; SE= standard Error; ER= Employee Resilience; EE= Employee Engagement

Table 3.6: Indirect Effects

	β	SE	Bootstrap 95%
ER-EE-OC	1.1745*	0.509	0.35-2.34

Note. Bootstrap sample size=5000; * $p<0.01$; β = unstandardized coefficient; SE= standard Error; ER= Employee Resilience; EE= Employee Engagement; OC=Organizational Commitment

Discussions

The study found a considerable association between employee resilience, organizational commitment, and work engagement among employees in India. In an increasingly uncertain environment, it is vital for organizations to develop their people's abilities in order to improve individual and organizational outcomes. The study's goal is to better understand the role of worker engagement in regulating employee resilience and organizational commitment among banking industry personnel. To achieve this, correlation analysis, linear regression analysis, and PROCESS macro model were undertaken. There is table 3.2. which clearly claims that all the scales are good to be used for the sample participating in this study. In general (Table 3.3), a strong correlation exists between organizational commitment and employee resilience (.474); also, employee engagement and employee resilience (.375). Therefore, H1 supported a substantial association among employee resilience with employee engagement and organizational commitment among banking sectors at p=0.01 level. Employee resilience is essential for functioning in the 'rampageous practise world' (Blasdel, 2015; Winwood *et al.,* 2013). Organisations must now design specialised involvements for promoting employee resilience and increasing job engagement (Cooke *et al.,* 2016; Hodliffe, 2014; Youssef & Luthans, 2005). Employee resilience has recently emerged as a critical characteristic that is garnering growing consideration among organisational behavior experts and experts. Resilience was recognised as a need for endurance in a dynamic situation at a recent APA conference (Davies, 2016). Based on Frederickson's broaden-and-build (2001) and management of supply theory (Hobfoll, 1989, 2001), the study discovered substantial academic and experiential indication of the importance of education organizations in developing employee resilience and job assignation (Xanthopoulou *et al.,* 2009).

Table 3.5 explains the indirect effects of Employee resilience, employee engagement, and organizational commitment has a value of B=1.1745 and SE=0.509 which explains a optimistic association among employee resilience, organizational commitment, and employee engagement. Specifically, an increase in both employee resilience and organizational commitment is associated with an increase in employee engagement. Therefore, H3-supported employee engagement mediates the association among employee resilience and organizational commitment.

Significant associations between resilience, organisational commitment, and employee engagement add to the growing body of research that supports the relationship between psychological ideas and group-specific behaviour among workers, and thus provide organisations with guidance on how to encourage and sustain group-specific conduct among workers. According to a POB study (Gupta & Singh, 2014; Luthans, 2002), resilience enhances an employee's capacity to manage stress, tardiness, conflicts, crises, and so on. The nature of the job in the manufacturing business is fairly conventional and boring, which frequently leads to boredom, tension, and burnout. Furthermore, difficulties such as staff absenteeism and turnover are fueled by issues like as safety, the possibility of industrial accidents, and occasionally difficult working circumstances (such as a high-temperature zone and excessive noise). Resilience helps people deal with challenges, anxiety, obstacles, and hardship at work by strengthening their coping mechanisms (Martin, 2005).

Conclusion

In today's competitive and chaotic climate, organizations need to adapt and transform quickly due to increased competition, technical breakthroughs, and changes in worker demographics. Employees must be resilient to swiftly adjust to changing expectations and perform successfully in tough situations. According to research, extremely resilient people have stronger coping and adaptability skills when confronted with difficulty, such as work-related strain. The purpose of this research is to better understand the role of employee engagement in mediating employee resilience and organizational commitment among banking industry employees. Employee resilience, organizational commitment, and job engagement were shown to be significantly related among Indian bank workers in the study. Resilience is crucial for managing stress, tardiness, disputes, and crises, and recruiting resilient individuals can help reduce staff absenteeism and attrition in the banking sector.

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Elements of Child Sexual Abuse Determining Psychological Well-being among Indian Adults

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Abstract

Child sexual abuse (CSA) is an unfavorable childhood experience with many adverse influences on the adult well-being. This study aimed at exploring the association between CSA victimization and adult well-being. This study provided a brief overview on CSA, to heighten the awareness of practitioners on this utmost important and widespread social problem. Different natures of CSA victimization were investigated, to examine if the wellbeing varies based on the nature of the child sexual abuse. The questionnaires were forwarded through Google Forms to adults (any person who is above the age of 17) from the southern region of India. Participation in this study involved completion of two questionnaires. Statistical analyses included Mann Whitney U test, Kruskal Wallis H test and Spearman correlation. 471 respondents have participated in this study. Out of the 471 participants, 187 were men and 284 were women. 19.10% CSA prevalence was found among the participants, with 60 males and 30 females reported being victimizedby sexual abuse as a child. CSA prevalence was higher among male participants than females. Compared to the non-victimized group, the victimized group showed poor well-being. There was no difference in well-being based on the victim's gender, but found difference in well-being based on the victim's relationship with the abuser. The CSA victimization showed a correlation with poor adult well-being. CSA victimization is associated with poor well-being. This association varies by different nature of abuse.

Introduction

Adverse Childhood Experiences (ACEs) are potentially traumatic events that occur in childhood (0-17 years). ACEs may have a detrimental effect on education, employment prospects, and financial stability (Centers for disease control and prevention, 2023). The adverse childhood experiences might include; physical abuse, verbal abuse, physical neglect, emotional neglect, mental illness, substance abuse, imprisonment, witnessing abuse, losing a parent to separation, divorce or death, and sexual abuse (Integrative Life Center, 2023).

Child sexual abuse (CSA) adversely influences a number of adult developmental outcomes that span: psychological disorders, psychological wellbeing, sex life problems, physical health and socioeconomic wellbeing (Fergusson *et al.,* 2013; Sigurdardottir *et al.,* 2014; Mullen *et al.,* 1993). The psychological disorders caused by CSA include depression, PTSD, substance abuse, eating disorders, and personality disorders (Cukor & McGinn, 2006; Sigurdardottir *et al.,* 2014; Downing *et al.,* 2021; Glod, 1993; Wilson, 2010; Xavier *et al.,* 2021). CSA-induced psychological well-being issues include sleep difficulties, thoughts of self-harm, suicidal tendency, over-sensitivity, higher psychological distress, lower self-esteem, anxiety issues, and problematic interpersonal relationships (Sigurdardottir *et al.,* 2014; Richter *et al.,* 2018; Dube *et al.,* 2005; Gallop *et al.,* 1995). The physical health related repercussions of CSA include poor general health (Downing *et al.,* 2021). Sexual problems of CSA victimization include sexual shame and sexual distress (Bigras *et al.,* 2021; Gallop *et al.,* 1995). The lasting consequences of CSA victimisation also influences human capital and economic wellbeing (Henkhaus, 2022).

According to Wilson (2010), the long-term consequences of childhood sexual abuse must be assessed and addressed by healthcare professionals, since it is crucial for both individual and societal reasons. Over the past few decades, there has been a rise in research and studies on child sexual abuse (CSA) in India. This study will provide a brief overview of CSA to heighten the awareness of practitioners on this utmost important and widespread social problem.This study will also examine the association between self-reported CSA and the level of adult well-being based on the nature of CSA among the participants.

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Hypotheses

- There will be gender difference in CSA victimization
- CSA victims will differ from non-victims in their level of wellbeing
- There will be gender difference in well-being among CSA victims
- There will be significant difference in victim's adult well-being based on their relationship with the abuser
- There will bea significant difference in adult well-being based on the frequency of the abuse.
- There will be a significant relationship between CSA victimizationand adult wellbeing

Method

Participants' Characteristics and Sampling Procedure : Using a cross-sectional design, the researchers collected data through an anonymous, online survey. The data was collected between March 2023 and July 2023. 490 adults from the southern region of India participated in this survey. Due to missing data, 19 responses were excluded, which resulted in a final sample of 471 participants, aged 18 to 54 (M= 28.08, S. D= 6.477). Out of the 471 participants, 187 were men (39.7%) and 284 were women (60.3%). Among the total participants, 60 (66.66) males and 30 (33.33) females reported being victimizedby sexual abuse as a child. The participant completely made the decision to take part in the study.

Measures

Child Sexual Abuse Victimisation: A questionnaire on child sexual abuse (Halperin *et al.,* 1996) was used to measure child sexual abuse victimization among participants. The questionnaire contained 20 questions with multiple-choice options.

Adult Wellbeing Scale: The adult well-being scale (Snaith *et al.,* 1978) contains a total of 18 multiple choice questions, which cover four aspects of well-being namely: depression, anxiety, and inwardly and outwardly directed irritability.This scale has been validated within clinical and nonclinical populations with an internal consistency of α = .90 (Hudson, 2010).

Method of Analysis

Data were analyzed with SPSS (version 25) software. Mann-Whitney U test and Kruskal Wallis test were used to evaluate the difference in wellbeing based on different natures of CSA. Spearman correlation was performed to evaluate the association between CSA victimizationand adult well-being.

Results

From table 1 prevalence of CSA victimizationwas found to be 19.10%. Males showed a higher prevalence (12.7%) than females (6.36%) in CSA victimization.

Table 1: Prevalence and gender difference of CSA victimization

Sample characteristics	Total number of participants		Number of victims		Prevalence of CSA victimization
	n	%	n	%	%
Male	187	39.7	60	66.66	12.7
Female	284	60.3	30	33.33	6.36
Total	471		90		19.10

Table 2 presents the nature of abuse victims experienced. When the abuse happened for the first time, 25 (27.7%) participants were under the age of 6 years. 20% of participants were victimized CSA between the age of 6 and 8 years, and 20% of participants had victimized CSA between the age of 8 and 10 years old. 12 (12.2%) participants were abused sexually when they were between the age of 10 and 12 years. Nine (10%) participants reported being abused between the age of 12 to 14 years. Five (5.5%) participants reported being victimized between the age of 14 and 16 years, and four (4.4%) participants reported they had been abused between 16 to 18 years of age.

Among the 90 victims of CSA, 17 (18.8%) victims disclosed the abuse at the time of the abuse. Among those who have disclosed the abuse, only one participant reported being helped, 2 reported they were not believed, 4 victims were asked to keep it a secret, 2 participants were told "nothing can be done about it" and 8 participants reported nothing changed after the disclosure. Most of the CSA victims disclosed the abuse to their friends, mother, father, or someone teaching a life class.

Twenty-three participants reported they got abused by another child (a person below the age of 18), 26 were victimized by a person who is in early adulthood, 10 participants reported being abused by a middle-aged adult, and 5 participants got abused by an older adult.

Table 2: Characteristics of self-reported CSA

Characteristics of abuse	n	%
Age of the victim when the abuse happened the first time		
Under 6 years old	25	27.7
Between 6 and 8 years old	18	20

Between 8 and 10 years old	18	20
Between 10 and 12 years old	11	12.0
Between 12 and 14 years old	9	10
Between 14 and 16 years old	5	5.5
Between 16 and 18 years old	4	4.4
Age of the offender		
Below 18 years of age	23	6.0
Early adulthood	26	6.8
Middle adulthood	10	2.6
Late adulthood	5	1.3
Disclosure	Yes	No
Did you ever talk to anyone about the abusive event/s when it was happening?	17	73
Result of disclosure		
You were helped	1	16
You were not believed	2	15
Nothing changed	8	9
You were asked that it should be kept secret	4	13
You were asked that nothing be done	2	15
Who did you talk to about this (or these) event/s?		
Mother	6	
Father	1	
Someone teaching a life class	2	
Friend	8	

Table 3 shows the analysis of well-being based on CSA victimization. Mann Whitney U test was performed to evaluate whether the well-being varies based on CSA victimization. The result indicated that there is a significant difference in well-being based on CSA victimization. Participants who have not been victimized CSA showed higher well-being (Mean=213.74, n=381) than of CSA victims (Mean=330.23, n=90), U=8664.50, z= -7.45, p=<.001, with a moderate effect size r= 0.34. Here, a higher score in well-being denotes low well-being.

Table 3: Wellbeing based on CSA victimization

Child sexual abuse victimisation	n	Mean	Mann-Whitney U	z	p
Victimized	90	330.23	8664.50	-7.452	.001
Not victimized	381	213.74			

From table 4, no difference was found in well-being between male victims (Mean=49.57, n=60) and female victims (Mean=43.47, n=30), U=778.00, z=-1.06, p=.288.

Table 4: Wellbeing based on the victim's gender

Gender of victims	n	Mean	Mann-Whitney U	z	p
Male	60	49.57	778.00	-1.062	.288
Female	30	43.47			

Table 5 shows the difference in well-being based on the victim's relationship with the abuser. Kruskal Wallis test revealed a statistically significant difference in well-being across the three conditions (abuser as a stranger, abuser as a known person, and abuser as an incester), X^2(2, N=90) =75.07, p=<.001. Wellbeing was higher for the group of victims abused by strangers (Mean=17.00) in comparison with the wellbeing of victims abused by known people (Mean=56.50) and victims abused byincesters (Mean=85.00).

Table 5: Difference in wellbeing based on victim's relationship with the abuser

CSA perpetrator	n	Mean	Kruskal-Wallis H	df	p
Stranger	33	17.00			
Known people	46	56.50	75.07	2	.001
Incestor	11	85.00			

Games Howell post hoc analysis (Table 6) revealed that the difference in well-being between CSA victims abused bystranger and known people as abuser (2.44, 95% CI, 2.04 to 2.85) was statistically significant (p=<.001) as the difference in well-being between known people as abuser and abuser involving in incest (2.06, 95% CI, 1.79 to 2.33) as well as the difference in well-being between victims abused by stranger and an incestor (4.51, 95% CI, 1.79 to 2.33).

Table 6: Games Howell post hoc results of differences in well-being based on victim's relationship with the abuser

Variable (I)	Variable (J)	Mean Difference(I-J)	Sig	95% confidence interval	
				Lower bound	Upper bound
Stranger	Known people	-2.44*	.001	-2.85	-2.04
	Incest	-4.51*	.001	-4.83	-4.19
Known people	Stranger	2.44*	.001	2.04	2.85
	Incest	-2.06*	.001	-2.33	-1.79
Incest	Stranger	4.51*	.001	4.19	4.83
	Known people	2.06*	.001	1.79	2.33

Table 7 shows the difference in well-being based on the frequency of abuse. Kruskal Wallis test revealed a statistically significant difference in well-being across the five conditions (abuse happened only once, 2-5 times, 6-10 times, over 10 times, and could not remember the frequency of abuse), $X^2(4, N=90) = 23.684$, $p=<.001$. Well-being was higher for the group of victims who got abused only once (Mean=28.84) in comparison with the well-being of victims who got abused 2 to 5 times (Mean=47.60), 6 to 10 times (Mean=54.98), over 10 times (Mean=59.69) and victims who cannot remember the frequency of the abuse (Mean=74.00).

Table 7: Difference in well-being based on the frequency of abuse

Frequency of abuse	n	Mean	Kruskal-Wallis H	*df*	*p*
Once	31	28.84	23.68	4	.001
2 - 5 times	24	47.60			
6-10 times	20	54.98			
Over 10 times	13	59.69			
Cannot remember	2	74.00			

Games Howell post hoc analysis (Table 8) revealed that the difference in well-being of victims who got abused once to victims who got abused 6-10 times was statistically significant (1.99, 95% CI, 3.02 to 0.95, p=<.001). The difference in well-being of victims who got abused once to victims who got abused more than 10 times was also statistically significant (1.66, 95% CI, 3.03 to 0.30, p=.012).

Table 8: Games Howell post hoc results of difference in well-being based on the frequency of abuse

Variable (I)	Variable (J)	Mean Difference(I-J)	Sig	95% confidence interval	
				Lower bound	Upper bound
Once	2-5 times	-1.07	.146	-2.37	.22
	6-10 times	-1.99*	.001	-3.02	-.95
	Over 10 times	-1.66*	.012	-3.03	-.30
2 - 5 times	Once	1.07	.146	-.22	2.37
	6-10 times	-.91	.353	-2.32	.48
	Over 10 times	-.58	.832	-2.22	1.04
6-10 times	Once	1.99*	.001	.95	3.02
	2-5 times	.91	.353	-.48	2.32
	Over 10 times	.32	.962	-1.12	1.78
Over 10 times	Once	1.66*	.012	.30	3.03
	2-5 times	.58	.832	-1.04	2.22
	6-10 times	-.32	.962	-1.78	1.12

Table 9 shows the result of a relationship between CSA victimization with adult well-being among victims. There was a positive correlation between the severity of abuse and adult well-being (r_s=.477, p=<.001, N=90).

Table 9: Correlation between CSA victimization and adult well-being

	1	2
1.Adult well-being	-	.477**
2.CSA victimisation	-	-

Note. ** Correlation is significant at the 0.01 level (2-tailed).

Discussion

The prevalence of CSA victimization among the participants was 19.10%. A similarprevalence rate was found in a previous study (Hébert *et al.,* 2019). Despite the higher number of female participants in the current study, males reported a higher prevalence of CSA victimization than females, this is consistent with what has been found in aprevious study (Selengia *et al.,* 2020). The prevalence rate varies across studies. A possible explanation is that not everybody who got abused report or disclose their abusive experiences.

Many victims recall being younger than 6 years old when the abuse occurred for the first time. This demonstrates the significance of raising awareness among children of all ages.This study found that most of the CSA perpetrators were in their emerging adulthood and childhood. Thus, the myth that children are abused only by old people proved false in this study. Results from this study showed that children often get abused by their own peers or people of their own age. Children might not be aware that this is an offense, or the childwho victimized CSA might hold a belief or be told that it is a way of showing affection, so they tend to replicate it. The findings of thepresent study signify the need for creating awareness about CSA among children which will help to prevent both the victimisation and the perpetration.

Findings of this study found that only 20% of the victims disclosed the abuse, and among those who disclosed, only one person was helped. This shows that there is a lack of awareness about the importance of disclosure among the victims, further,the caretakers or other people have no knowledge about how sucha sensitive, frightening issue should be handled. A very important finding of the study was that victims of abuse tend to disclose their CSA experience mostly to their friends. This again points out the need for making children aware of CSA, because a child who is aware of CSA might not only help himself or herself but also another child.

The victims of incest showed poor well-being compared to victims abused by known people or strangers. The myth that children are abused only by strangers is proved false in this study.Participants who had not been victimizedby CSA possessed moderately higher well-being than those of CSA victims. Though CSA victimizationhas a significant association with adult well-being, there could be otherfactorsthatresult in poor well-beingof a person. Attempts should be made to study the association of CSA with adult well-beingwhile controlling other factors of ACEs.

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Effectiveness of Acceptance and Commitment Therapy on Well-being of Young Adults: A Pilot Study

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Abstract

Acceptance and Commitment therapy is a type of behavioural therapy that focuses on changing the response of people towards performance and also their relationship to events. ACT aims to develop and expand psychological flexibility. Psychological flexibility encompasses emotional openness to adapt thoughts and behaviours to better align with individual values and goals. ***Aim:*** To find the effectiveness of acceptance and commitment therapy on the well-being of young adults. ***Method:*** A pre-test-post-test quasi-experimental design without a control group was used in the study. The Brief Psychiatric Rating Scale (BPRS) was used for screening, and 5 young adults were selected. The subjective well-being Index was used to assess the well-being of young adults. ***Results:*** On the basis of pre and post scores, Acceptance and Commitment Therapy have a significant impact on the well-being of young adults.

Introduction

Young Adulthood is a critical period of development, with long-lasting implications for a person's economic security, health, and well-being. These transitions carry new risks but also present great opportunities to positively influence the immediate and future health (emotional and mental). There are a lot of factors which affect mental health like social and academic aspects, technology (social media) and identity issues. Young adulthood is a stage where different type of psychiatric issues arise. Young adults with the onset of psychotic or mood disorders by age 20 have the greatest risk of developing other mental disorders over the following 15 years(1,2). Also, There are a lot of key role transitions in young adulthood–leaving home, completing school, entering the workforce, forming a romantic partnership, and transitioning into or moving toward parenthood. So its very important to focus on the general health and well-being of young adults.

Well-being can be understood as how people feel and how they function, both on a personal and social level, and how they evaluate their lives as a whole (New Economics Foundation, 2012). The degree of positive feelings experienced, such as happiness, and the perceptions of one's overall life (whether the individual is satisfied or not) is emotional well-being (Dodge, Daly, Huyton, & Sanders 2012; Magyer & Kayes, 2019). According to Magyer and Keyes (2019), Psychological well-being is based on eudemonic well-being and includes modalities of positive functioning where the individuals realise their potential terms of autonomy and personal growth. The World Health Organization defines positive mental health as "a state of well-being in which the individual realizes his or her own abilities, can cope with the normal stresses of life, can work productively and fruitfully, and is able to make a contribution to his or her community". So, it's always important to focus on well-being.

Acceptance and Commitment Therapy (ACT) focuses on the issue of psychological inflexibility, which becomes more prevalent when people get reliant on traditional control mechanisms to deal with unpleasant experiences without realising that these ostensible solutions are, in the end, inefficient (Hayes *et al.,* 1999). Clients in ACT concentrate on strengthening their self-awareness, acceptance of challenging situations and touch with the present time rather than attempting to control or avoid thoughts or feelings. Clients work on untangling their thoughts, feelings, and behaviours and separating themselves from their problems. Clients also identify their beliefs and engage in activities that align with those behaviours that serve those ideals, so bringing them forward life in a more cherished direction (Hayes *et al.,* 2006).

In this brief research the researcher aims to explore the effectiveness of Acceptance and Commitment

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Therapy on well-being of young adults. Though Acceptance and Commitment Therapy is well accepted, Implementation of this therapy is limited. Acceptance-based techniques were used to treat adolescents with cystic fibrosis to improve functioning in emotional and social domains (Casier *et al.,* 2011), anxiety and increased school attendance (Gauntlett-Gilbert, Connell, Clinch, & McCracken, 2013). While searching for review of literature researcher was only able to find few researches regarding the implementation of acceptance and commitment therapy in India. Research conducted using Acceptance and Commitment Therapy is mainly implemented in pain, depression and anxiety, especially among the non-Indian population of adolescents. So the researcher intended to test the efficacy of ACT on the Indian population and secondly on Young Adults.

METHOD

Purpose

The purpose is to study the effectiveness of Acceptance and Commitment therapy on well-being of Young Adults

Hypothesis

The application of Acceptance and commitment Therapy will significantly increase well-being of young adults

Participants and Procedure

The researcher used a 'before and after without control' design to test the efficacy of Acceptance and Commitment Therapy on well-being of Young adults. Accidental Sampling Method was used. Seven participants were screened and two dropped out due to health and personal reasons. The remaining five participants were selected for the research.

The pilot study sought to recruit a minimum of 5 and a maximum of 10 youth aged 18-25 years. Inclusion criteria were: (i) Young adults age range- 18 to 25yrs (ii) Capable of providing written informed consent (iii) Young adults who scored low in Brief Psychiatric Rating Scale (BPRS) (iv) Young adults who have scored below the middle value i.e below 80 in subjective well-being Inventory

Exclusion Criteria were (i) Young adults who scored high BPRS (ii) Young adults who are diagnosed with chronic illness (Cancer, Asthma, Multiple sclerosis) (iii) Young adults who are educated below 10th std. (iv) Young adults who have scored above the middle value i.e above 80 in subjective well-Being Inventory

Individuals who met eligibility criteria, gave written informed consent, and completed the baseline assessment procedure were offered the opportunity to commence therapy.

Measures

1. Socio-demographics and clinical characteristics
2. BPRS was used as screening tool
3. Pre-and-post-therapy self-ratings of the 40-item Subjective Well-being Index(SUBI), General Health Questionnaire (GHQ)
4. Post-therapy we assessed efficacy of therapy by examining number of sessions attended and the number of dropouts.

Semi-structured proforma for socio-demographic and clinical details: A specifically designed semi-structured proforma was used to record the socio-demographic data like name, age, gender, education, marital status and clinical details like any psychiatric illness, physical illness, medication for appetite, etc.

Brief Psychiatric Rating Scale: The Brief Psychiatric Rating Scale (BPRS) was published in 1962 as a sixteen question questionnaire by Drs. John Overall and Donald Gorham, later enhanced it by adding two additional categories (Excitement and Disorientation), resulting in the 18-item scale used widely to assess the effectiveness of treatment. The BPRS is a rating scale which a clinician or researcher may use to measure psychiatric symptoms such as depression, anxiety, hallucinations, psychosis and unusual behaviour. The scale is one of the oldest, most widely used scales to measure psychotic symptoms. It should be administered by a clinician who is knowledgeable concerning each of the symptom domains, and severe mental health disorders. It is particularly useful in gauging the efficacy of treatment in patients who have moderate to severe psychoses. The rater enters a number for each symptom construct that ranges from 1 (not present) to 7 (extremely severe).

Subjective well-being Index: The subjective well-being of young adults was measured by using the subjective well-being scale developed by Dr. H.Sell and Dr. R.Nagpal (1992). This scale consists of 11 components. (General well-being positive effect, Expectation-achievement congruence, Confidence in coping, Transcendence, Family group support, Social support, Primary group concern, Inadequate mental mastery, Perceived ill-health, Deficiency in social contacts, General well-being). Each statement has 3 alternative answers, very good, quite good, and not good excluding 14, 27, and 29 items having an extra option, not applicable with scoring of 3, 2, and 1 for positive and reverse scoring pattern for negative item

Procedure

The quantitative data was gathered by administrating standardized scales.

The procedure for the study is as follows:

Approval of research topic, variables and sample population

↓

Informed consent obtained from the participants

↓

Accidental Sampling done

↓

Only those participants who met the criteria for the study, that is, the inclusion and exclusion criteria for the study were selected. (N=7)

↓

Baseline assessment was done, to eliminate people with psychotic symptoms (N=5)

↓

Conducted Acceptance and Behaviour Therapy - 10 sessions, each session for one hour

↓

After the completion of the therapeutic intervention, post-test was administered on the selected scale. (N=5)

↓

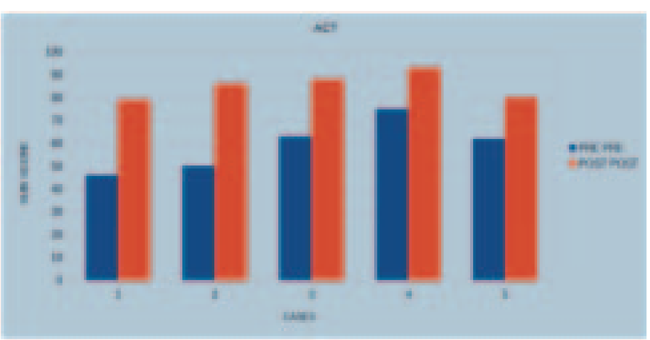
Statistical Analysis by SPSS was done.

Results & Discussion

Data Analysis

To test the hypotheses, statistical analysis of data was carried out using paired t test. Statistical analysis of data was carried out using SPSS IBM for windows. A total of 5 subjects were selected to participate in the study after the screening. The participants ranged in age from 18 to 26 years, with a mean age of 21 years. There were 3 females and 2 males.

Impact of Acceptance and commitment Therapy on well-being (Subjective Well-being Index)



Graph 1: Subjective Well-being Index Scores pre and post

	Mean	Std.Dev.	t value	p value
Pre Test	59.2	11.5	6.97	0.02
Post Test	85	5.8		

Results of paired t test indicate that there is significant large difference between before (M=59.2, SD=11.5) and After (M=85, SD=5.8) T(4)=6.97, P=0.02. It was found that Acceptance and Commitment Therapy have positive impact on well being of young adults. Stenhoff *et al.* (2020) conducted a meta-analyses study and revealed that Subjective Well-being post-treatment scores (across different SWB measures) were significantly higher for ACT intervention groups in comparison to control groups, in all but one study. It was also found that ACT interventions show evidence of enhancing SWB in clinical and non-clinical populations. However, the study also pointed that further RCTs that consistently use the same standardised measure(s) of SWB are necessary to facilitate further meta-analysis of the research. The findings of the present study showed that there is an increase in the well-being of Young Adults (Pre test mean: 59.2 & Post test mean: 89).

Conclusion

Acceptance and commitment therapy (ACT) is a novel technique for behavioural therapy that employs mindfulness, acceptance, and cognitive diffusion skills to enhance psychological flexibility and prevent behavioral changes in favor of chosen values (Arch *et al.,* 2008). The prime objective of this study was to evaluate the effectiveness of Acceptance and Commitment Therapy on well-being of Young Adults. Research evidences on Indian population related to Acceptance and Commitment Therapy is very limited. The participants of this study had undergone 10 sessions of individual therapy which extended to a period of 10 weeks, excluding Pretest and Post-test sessions.It was found that ACT have significant impact on well-being and general health of young adults. Clients who receive ACT are able to start life meaningfully, because the goal of ACT is to create psychological flexibility in a way that enhances clients' ability to fully connect with the present and change or maintain behaviour toward valuable goals. (Hayes *et al.,* 2011). So acceptance and Commitment therapy can be used to increase the well-being of Young Adults. How ever due to limited sample size further investigations are needed in this research.

Strength & Limitation

This research was mainly focused on the wellbeing of Young Adults which is comparitatively a neglected field. Usually studies are focused on core mental health issues and this research is just focused on well-being. Though

Acceptance and Commitment therapy is established the the researches related to Indian Population is quite less and also post-test assessment was obtained as a follow-up assessment with a gap of 2 weeks, which helped assess the sustainability of the impact of the therapy. However, there are unquestionable limitations to this study. Firstly, the study was limited by its comparatively small sample size which potentially limits the generalizability of the result. Secondly, the study design did not include a control group so, it was difficult to attribute that result to intervention certainty since there was nothing to compare the outcome.

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Factors Affecting Intervention and Therapy of Children with Autism Spectrum Disorder in Assam

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Abstract

Autism Spectrum Disorder among children has become a cause of concern at present time as number of affected cases has been growing much. Although, it is a lifelong condition; with intensive therapy, intervention and treatment, affected individuals can lead a better life. Like physical health, utilisation of mental health care also depends upon various socio-economic factors. This paper tries to find the various economic and non-economic factors which influence the utilisation of intervention and therapy for the affected children in Assam based on primary data. Data has been collected about 189 children from the age group 3-15 years age group from their parents from different parts of the state. Data has been analysed both in terms of bivariate and multivariate analysis. Karl Pearson correlation coefficient has been used to the find the correlation between the variables. As this is a discrete choice model, multinomial logit model has been used to find out the factors responsible for parents' decision to use intervention and therapy in terms of average hours per day.This study has identified the economic condition of the household to which the children belong and direct and indirect cost of therapy and intervention are the major economic factors that actually guide the decision regarding the use of therapy and intervention. Among non-economic factors, age of the ASD children, location of the residence, severity of symptoms, parental satisfaction from the utilisation of therapy and intervention for their ASD children have been found as crucial factor that guides the decision to use therapy and intervention.

Introduction

Autism Spectrum Disorder (ASD) among children has become a cause of concern at present time as number of affected cases has been growing. This can affect an individual's ability to learn, communicate, and perform daily tasks. According to Lord *et al.* (2018), the degree of severity of symptoms can vary in individuals. However, the ability to communicate with others is affected in all forms of ASD (Salari *et al.,* 2022). Providing access to education, therapy, and resources can help individuals with ASD reach their full potential. Therefore, therapy and intervention are highly essential from an early age. Earlier diagnosis and intervention resulted in a better relief of the core symptoms of a case of developmental disability and consequently improved life quality (Hyman, 2020). While speaking about intervention and therapy of ASD kids, a high number of trained occupational therapists, speech therapists, psychologists, special educators and doctors specialising in ASD are essential.

Literature Review

According toTakantseva *et al.* (2023),ASDis one of the most disabling developmental disorders, imposing an extremely high economic burden. The delay in the detection of ASD symptoms and the diagnosis means that affected children are more prone to miss opportunities for timely interventions during periods of optimal neuroplasticity (Courchesne, 2019). A study by Carlon (2013) identified that the factors affecting the intervention and treatment decisions of the parentsare recommendations from others, the availability, accessibility, and cost of interventions, the availability and use of other interventions, and research evidence. According to Sridhar (2022), age, cognitive ability, ethnicity and parental education are the factors that havea potential impact on the hours of treatment. Another study by Saez (2023) identified that accessibility of treatment, trust of practitioners, and alignment on factors such as parental values and the child's specific needs are the factors that affect parents' decisions in regard to utilising therapy and intervention for their ASD children. However, parents' involvement and perception of a child's positive progress are essential to ensure adherence and strong parent-therapist coordination (Bowker *et al.,* 2010; Stadnick *et al.,* 2012).

So, there is a good number of studies at international level regarding factors affecting parental decisions to utilise therapy and intervention. As the studies in the

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context of India are extremely limited, this paper tries to focuson the impact of economic and non-economic factors on the utilisation of intervention and therapy for children with ASD with special reference to Assam.

Research Methodology

Parents of clinically diagnosed ASD children between 3-15 years coming to Guwahati for therapy and interventions from different parts of Assam are included in this study. In Guwahati city, most of the private therapy centers and government sector therapy institutes like the National Institute of Public Cooperation and Child Development (NIPCCD) and Composite Regional Centre (CRC) of Gawahati Medical College located A total of 300 questionnaires were distributed. However, only 189 completed questionnaires were received back based on which analysis has been done. In Assam, service provided by the government sector is extremely negligible and quality is quite poor as per the respondents. These institutions hardly provide services of 45 minutes to one hour twice or thrice a week which is extremely negligible against the requirements of the ASD kids. In the private sector underqualified people are providing services and theper-hour service requires Rs 800 to 1000 which is extremely high as therapy and intervention for ASD is not a short-term project.

Research Questions

i) Whether socio-economic and demographic factors have an impact on the utilisation of intervention and treatment among ASD children in Assam?

ii) Whether severity and parental satisfaction have an impact on the utilisation of intervention and treatment among ASD children in Assam?

Variables

The dependent variable (HOURS) is a discrete choice variable having three categories: one hour of therapy and intervention per day=1, two hours of therapy and intervention per day=2, three hours or more than therapy and intervention=3. Explanatory variables: (a) income of the household in terms of Monthly Per Capita Expenditure (MPCE) (b) age of the ASD child (AGE) (c) years ofeducation (EDU) of the parent (d) location from which the family of the ASD child belongs (LOCATION=1 if the child's residence is within 50 km radius from Guwahati; otherwise 0) (e) severity (SEVERE=1 ifthe ASD symptoms are severe; otherwise 0) (f) Parental Satisfaction (SATISFACTION=1 if the parents are satisfied from the therapy and intervention; otherwise 0) (g) Caste (CASTE=1 for general, 2 for OBC, 3 for SC, 4 for ST) (h) Gender of ASD child (Male=1, Female=0) (i) Number of neurotypicalSiblings (CHILD)(i) Therapy fee, travel and other expenditures related to therapy (COST).

In this study, average MPCE is Rs 5172.88 as shown in Table 1. However, the average cost of therapy and intervention is Rs 8231.34 per month. As the standard deviation of the variables MPCE and COST are very high, log transformation has been taken. 56 percent of the sample ASD children are from areas within 50 km radius of Guwahati city. The rest of the children are from different parts of the state. Average years of education of the parents of sample ASD children is 13.99 years; Regarding the parental feedback, only 45% are satisfied with the therapy and intervention provided. Another interesting observation of the study is that 59% of children are male children. This may be because male children are more prone to ASD or female affected children do not get the same care from their parents.

Table 1: Descriptive Statistics

	Minimum	Maximum	Mean	Std. Deviation
HOURS	1	3	1.87	.815
MPCE	1800	15600	5172.88	2786.825
MPCE (log Transformed)	7	10	8.42	.508
AGE	2.3	15.0	7.370	3.4962
EDUCATION	8	18	13.99	3.155
LOCATION	0	1	.56	.498
SEVERITY	1	2	.53	.878
SATISFACTION	0	1	.45	.499
CASTE	0	4	1.73	.969
GENDER	0	1	.59	.492
CHILD	0	1	.36	.481
COST	2000	30000	8231.34	5889.00986
COST (log-transformed)	7.44	10.50	9.0984	.80023

Source: Field study

Statistical Analysis

Bivariate statistical analysis has been done in this study in terms of Pearson's correlation coefficient (r). Among all the explanatory variables, except gender (GENDER), caste (CASTE), and number of neurotypical children (CHILD), all explanatory variables are correlated response variables that is hours of therapy or intervention.

Table2: Pearson's Correlation Coefficient

		Hours	Ln MPCE	Age	Edu	Location	Severity	Satisfaction	lnCOST
HOURS	Pearson Correlation	1	.694**	-.441**	.227**	.369**	-.808**	.731**	.518**
	Sig. (2-tailed)		.000	.000	.002	.000	.000	.000	.000
	N	187	187	187	187	187	187	187	187
Ln MPCE	Pearson Correlation	.694**	1	-.143	.078	.207**	-.581**	.454**	.408**
	Sig. (2-tailed)	.000		.051	.286	.005	.000	.000	.000
	N	187	187	187	187	187	187	187	187
AGE	Pearson Correlation	-.441**	-.143	1	-.052	-.333**	.374**	-.462**	-.163*
	Sig. (2-tailed)	.000	.051		.476	.000	.000	.000	.026
	N	187	187	187	187	187	187	187	187
EDU	Pearson Correlation	.227**	.078	-.052	1	.342**	-.118	.201**	.202**
	Sig. (2-tailed)	.002	.286	.476		.000	.107	.006	.006
	N	187	187	187	187	187	187	187	187
LOCATION	Pearson Correlation	.369**	.207**	-.333**	.342**	1	-.486**	.340**	.190**
	Sig. (2-tailed)	.000	.005	.000	.000		.000	.000	.009
	N	187	187	187	187	187	187	187	187
SEVERITY	Pearson Correlation	-.808**	-.581**	.374**	-.118	-.486**	1	-.693**	-.386**
	Sig. (2-tailed)	.000	.000	.000	.107	.000		.000	.000
	N	187	187	187	187	187	187	187	187
SATISFAC-TION	Pearson Correlation	.731**	.454**	-.462**	.201**	.340**	-.693**	1	.341**
	Sig. (2-tailed)	.000	.000	.000	.006	.000	.000		.000
	N	187	187	187	187	187	187	187	187
lnCOST	Pearson Correlation	.518**	.408**	-.163*	.202**	.190**	-.386**	.341**	1
	Sig. (2-tailed)	.000	.000	.026	.006	.009	.000	.000	
	N	187	187	187	187	187	187	187	187

Source: Field Survey

In the next stage, multivariate analysis has been done in terms of a multinomial logistic regression model to find out the relation between explanatory variables and the dependent variable.

Assuming the first category (one hour of therapy and intervention) as the reference category,

$$P_i(Y_i = 1) = \frac{1}{1 + \sum_{j=2}^{M} e^{\beta_j X_i}} \quad \text{.................................} \ (1)$$

A parent will choose $k=m$ if and only if it maximises his/her utility.

In other words, if Y_i is a random variable whose value (k=1, 2, 3) indicates the choice made by sample parent i, the probability of choosing alternative 1 over 2, 3 is

$$Pr(Y_i = 1) = Pr(U_{i_1} > U_{i2}, U_{i3}) \text{.................................} \ (2)$$

Therefore, the log risk ratio equation for j=two hours of therapy(2) and three hours of therapy (3)over one hour of therapy will be

$$log\{\frac{Pr(Y_i = J)}{P_r(Y_i = 1)}\}$$

$$= \beta_0 + \beta_1 \, ln\, M\,PCE + \beta_2 AGE + \beta_3 EDU + \beta_4 LOCATION + \beta_5 SEVERITY$$
$$+ \beta_6 SATISFACTION + \beta_7 \ln COST \text{..} \ (3)$$

Results of the Multivariate Analysis

In this study, the likelihood ratio chi-square is 131.712 with the p-value <0.0001 tells how the model is better fit with the explanatory variables. Good Pseudo R-Square values have been found in terms of Cox and Snell as well as Nagelkerke value as shown in Table 3.

Table 3: Pseudo R-Square

Cox and Snell	0.686
Nagelkerke	0.708
McFadden	0.401

Source: Field survey

Now, from Table 4(a), it has been clear that log risk ratio between two hours of therapy and intervention andone hour of therapy and intervention isa statistically significant with all the explanatory variables included for running the multinomial logistic model in SPSS except variables AGE, EDU and LOCATION. However, these variables have not been dropped from the model as its exclusion reduces the value of Pseudo R-square.

From Table 4(a), it has been observed that a unit increase lnMPCE will increase the log risk ratio of utilising two hours therapy and intervention over one hourby 3.864. In other words, the higher the capacity to pay, the higher the possibility of utilising two hours therapy and intervention for ASD children over one hour. The variable SEVERITY shows that one degree of increase in severity of symptoms of ASD leads to a reduction in the log risk ratio between utilising two hours of therapy and intervention for ASD children over one hour in Assam by 4.251. This is because parents often lose hope when the degree of severity of their ASD children is higher and therapists are also reluctant to provide service. Another psychological factor i.e., parental satisfaction from the improvement of their ASD children plays a significant role in choosing two hours of therapy and intervention over one hour. One more variable capturing the capacity to pay of the household to which the sample children belong i.e., COST shows that the cost of therapy and treatment along with travel costs and other costs related to food and lodging have appeared as a serious problem for economically poor families.

Table 4(a): Choosing Between Hours of Therapy and Intervention

Variables	Estimated Coefficients/values (β_)
lnMPCE	3.684** (12.316)
AGE	-6.678 (3.438)
EDU	-0.210 (4.738)
LOCATION	-12.913 (2.622)
SEVERITY	-4.251** (12.933)
SATISFACTION	1.167*** (6.539)
ln COST	-5.461*** (13.513)
Intercept	-3.91** (3.495)

Source: Field survey

Notes: a) Values in the bracket represent Wald Chi-square test; b) *** and ** represent significance at 1% and 5% respectively;

Therefore, the log risk ratio between two hours and one hour of therapy and intervention will be

$$log\{\frac{Pr(Y_i = 2)}{P_r(Y_i = 1)}$$
$$= -3.91 + 3.684\, ln\, M\, PCE - 4.251 SEVERITY + 1.167 SATISFACTION$$
$$- 5.461 \ln COST \ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots (4)$$

In case of the log risk ratio between utilisation of three hours of therapy and intervention and one hour of the same, all the explanatory variables except EDU are statistically significant. Every unit increase in ln MPCE results in the log risk ratio of utilising three hours or more than therapy and intervention over one hour by 8.032. Another explanatory variable, AGE shows that as the age of the ASD children progresses, the probability of choosing three hours or more than therapy and intervention declines in comparison to one hour. The co-efficient variable LOCATION is 6.731. This means, if the residence of the ASD child is within 50-kilometer radius of Guwahati city, the log risk ratio of utilising three hours or more of therapy and intervention increases in comparison to just one hour of therapy. The variable SEVERITY shows that unlike physical health care where the greater the degree of severity, the greater the care and treatment, in case of mental health where the higher the degree of severity lesser the care and intervention provided to the children. The coefficient of the SATISFACTION implies that if the parents become satisfied with the therapy and improvement of their children, there is more probability of choosing therapy and intervention for three hours or more. The coefficient of another variable ln COST is- 4.491. So, one unit increase inln COST decreases the log risk ratio between three hours of therapy over one hour of the same by 4.491 units. Higher the cost of therapy and intervention, lesser is the probability of utilising therapy and intervention and vice-versa.

Table 4(b): Choosing Between Hours of Therapy and Intervention

Variables	Estimated Coefficients/values (β_)
ln MPCE	8.032**(11.320)
AGE	-6.153**(8.438)
EDU	-.210(4.738)
LOCATION	6.731*(5.316)
SEVERITY	-8.201**(8.330)
SATISFACTION	7.107**(6.530)
Ln COST	- 4.491**(13.513)
Intercept	-5.91** (3.401)

Source: Primary Data collected from field survey

Notes: a) Values in the bracket represent Wald Chi-square test; b) ***, **, and * represent significance at 1 percent, 5 percent and 10 percent respectively;

Log *risk ratio* equation for choosing between three years and more andone hour in the study area is

$$log\{\frac{Pr(Y_i=3)}{P_r(Y_i=1)}\} = -5.91 + 8.032 lnMPCE - 6.153 AGE + 6.731 LOCATION - 8.201 SEVERITY + 7.107 SATISFACTION - 4.491 ln\ COST \quad \ldots\ldots(5)$$

Conclusion & Future Implication

This study has found in Assam, there is a serious deficiency in field of health care utilisationin terms of therapy and interventionfor the ASD children. As the support provided by the government sector is extremely negligible, the private sector set up has been grown in urban areas only with the motive of profit without having professional manpower and staff. So, it become difficult for the rural poor to have the benefit of therapy and intervention for their ASD children. This study has identified that economic condition of the household to which the ASD children belong and both direct cost and indirect cost associated with the therapy and intervention plays a significant role in utilisation of therapy and intervention for ASD children. In the early years of life from the diagnosis, ASD children get more therapy and intervention but when children get older, both their parents and therapist become unenthusiastic to provide support. Besides parental satisfaction from the improvement of the children plays a crucial role in the decision about how much therapy and intervention is provided to the children. There is large rural-urban disparity in regard of utilisation of intervention and therapy due to lack of proper provision. Those children whose residence are at Guwahati city or nearby gets more therapy and intervention. However, this study has not found any significant gender and caste related differences in the utilisation of therapy and intervention in case of ASD children.

So, this is highly essential to set up strong government sector provisions in each district with full-time staff with professional degrees with proper infrastructure so that this underprivileged group of children can get the opportunity to lead a normal life. At the same time, strict monitoring of the private sector is required so that they maintain strict guidelines regarding the price they charges and in the recruitment of therapist. Parental training programme at the government initiative may be highly effective to support the ASD children in more effective way.

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Vesting Employees with Perceived Participation in Decision Making: Path to Organisational Justice

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Abstract

Routine activities at workplace are certain to influence the psychology of employees, one amongst them being their sense of participation in organisational processes. In the globalization era where factors as Image Projection and Corporate Social Responsibility of organisations have gained importance, their management have actively been trying to perform well on these parameters. Therefore, in a structure where management is intentional of ensuring that perception of fairness is ascertained at the level of employees, it becomes vital to discover factors which would drive to such perception. Decision Making, be it to day-to-day or major, is an integral part of an organisation, and runs from top to bottom. The present research aims to find if employees who perceive to be in that integral process deliver an added advantage to management, that is to report that justice is well ensured and complied at their workplace.

This research was conducted on 105 employees from Education, Social Security, Banking & Finance, Manufacturing and IT and data was collected using Psychological Participation Index (Singh & Pestonjee, 2019) and Organisational Justice Scale (Colquitt, 2001). It found a high correlation (.88) between perceived Decision Making and Organisational Justice. Furthermore, the R-squared was Distributive (.79), Procedural (.46), Interpersonal (.43) and Informational (.65). Other major findings through descriptive statistical analysis were also found in terms of perception of participation and justice while studying the data from the demographic perspective.

Introduction

The idea of employee involvement in decision-making has drawn a lot of attention in the dynamic environment of modern enterprises. Understanding how workers feel about participating in decision-making processes and how it affects organisational fairness is the subject of a growing corpus of study. In order to clarify the complicated interactions between workers' feelings of involvement and organisational fairness, this article synthesizes data from many research evaluations. Employee involvement in different organisational decision-making processes is included in the multidimensional phenomena known as participation in decision-making. Reviews of the research frequently stress the value of both actual engagement and workers' perceptions of it. Cotton *et al.* (2018) highlights the role of perception in employee engagement. Employees who perceive their participation as genuine and valued are more likely to feel engaged in their work. They view their roles as more meaningful and exhibit higher levels of commitment to the organization. Empirical studies, including those reviewed by Chen and Wang (2019), have pointed out that employees' perception of participation enhances their sense of psychological empowerment. When employees believe that their input matters and has an impact on decisions, they experience increased self-efficacy and control over their work. Greenberg and Colquitt (2020), have indicated a strong link between employees' perceptions of participation and their overall well-being. Positive perceptions are associated with reduced stress and improved mental health, while negative perceptions can lead to feelings of frustration and alienation.

Organisational Justice

Distributive justice, procedural justice, and inter-actional justice are the three primary parts of organisational justice, which is a crucial feature of workplace dynamics.

1. Perceived justice in outcomes or rewards is referred to as distributive justice. Employees want to believe that awards and resources are distributed fairly. Research reviews by Colquitt *et al.* (2019) have consistently shown that employees who perceive their participation in decision making as fair tend to have a higher sense of distributive justice.

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2. Procedural justice centers on the fairness of the decision-making process itself. Employees value transparent, consistent, and unbiased procedures. Studies synthesized by De Cremer and Tyler (2017) indicate that employees who participate in decision making tend to perceive procedural justice more positively.
3. Interactional justice involves the quality of interpersonal interactions within the organization. Research reviews by Ambrose and Arnaud (2019) have found a strong correlation between employees' perceptions of participation and interactional justice. Active involvement in decision making often leads to respectful and considerate treatment, reinforcing positive perceptions.

Huong, Zheng, & Fujimoto (2016) investigated the relationship between the four dimensions of organisational justice and employee well-being in the Australian tourism sector on 121 participants. After identifying important components of perceived organisational justice using factor analysis, multiple regression analysis is used to evaluate the degree and direction of the effects of various organisational justice dimensions on worker well-being. The findings are consistent with the widely held belief that employee well-being and organisational fairness are related. To be more precise, informational justice has the most impact on the well-being of tourist employees, with distributive, procedural, interpersonal, and interpersonal justice following suit.

The Interrelationship Between Participation and Organisational Justice

The intricate relationship between employees' perception of participation and organisational justice is a central theme in the literature. Cropanzano *et al.* (2018) suggest that the relationship between participation and organisational justice is bidirectional. Not only do positive perceptions of participation lead to a sense of justice, but a perception of justice also enhances employees' willingness to participate actively in decision-making processes. Kirkman *et al.* (2019) stress the impact of cultural norms on the link between participation and organisational justice in their assessments of cross-cultural studies. Participation is perceived in certain cultures as a more organic route to justice, whereas in others it could be considered in a different light. For implementation to be successful, it is important to comprehend these cultural differences.

The study evaluations offer insightful information that has application for enterprises. Employers ought to aggressively solicit and promote employee input into decision-making. Making platforms and channels for feedback and input is essential to ensuring that workers see their participation as relevant. Organizations need to make investments in fair and transparent decision-making procedures. The three pillars of procedural justice that consistently, impartially, and inclusively adhere to are also essential to its good perceptions. It's crucial to foster a culture of respect and trust inside the business. To improve interactional justice, leaders and managers should communicate with employees in a polite and thoughtful manner while making decisions. International businesses should be aware of how other cultures see participation and fairness. The success of participation programs can be increased by adapting strategies to cultural situations.

A complicated and significant facet of organisational life is how employees perceive their involvement in decision-making. Reviews of the literature frequently show a strong correlation between employees' opinions of organisational fairness and their perceptions of engagement. The effects of this interaction on employee engagement, wellbeing, and overall company effectiveness are significant. Businesses that value and foster a sense of fairness and involvement will probably profit from a motivated, devoted, and content staff. As a result, a crucial area of research and application in modern organisational management is the relationship between employees' impression of involvement and organisational fairness.

The study by Judge & Colquitt (2004) investigated whether work-family conflict acted as a mediator in the link between stress and organisational justice. Stressors such as procedural, interpersonal, informational, and distributive unfairness were examined in connection to the stress levels of 174 faculty members working at 23 U.S. institutions. The findings showed that work-family conflict acted as a mediating factor between the impacts of procedural and interpersonal justice, which were shown to have the strongest associations with stress. Participants appeared to be able to better handle the intersection of their job and family life when justice was present, and this was linked to reduced stress levels. Even after adjusting for work satisfaction and the existence of work-family policies inside the firm, these outcomes persisted.

In conclusion, it is critical to involve employees in creating their work environment, as seen by the substantial association found between organisational fairness and their impression of decision-making involvement. A peaceful, engaged, and effective workforce is fostered along with an organisational culture of equality and trust when workers believe their opinions are heard and decisions are made equitably.

Method

Aim: To find the predictive relation between Employees' perceived participation in Decision Making and dimensions of Organisational Justice.

Objectives:

1. To study Psychological Participation and its dimension Decision Making
2. To study Organisational Justice and its dimensions
3. To study the relation between Decision Making and dimensions of Organisational Justice

Hypotheses:

H1: There will be a moderate to high positive correlation between Decision Making and Distributive Justice

H2: There will be a moderate to high positive correlation between Decision Making and Procedural Justice

H3: There will be a moderate to high positive correlation between Decision Making and Interpersonal Justice

H4: There will be a moderate to high positive correlation between Decision Making and Informational Justice

H5: Participation in Decision Making will lead to perception of facets of Organisational Justice

Variables

1. **Decision Making:** The degree to which the employee perceives their participation in decision making processes of their organisation. The cognitive process by which people or groups of persons choose a certain path of action or option from several possibilities while taking the available knowledge, goals, preferences, and restrictions into consideration is known as decision making.
2. **Organisational Justice:** The degree to which the employee perceives justice and fairness at their workplace. It has been studied from four dimensions:
   a. **Distributive Justice:** The degree to which employee perceives fair allocation of the workload and benefits at their workplace. It implies that tasks and duties are fairly distributed amongst employees.

   b. **Procedural Justice:** The degree to which employee perceives their organisational processes as fair, just and transparent. It is concerned with the perception to the level they perceive that the same set of guidelines are followed for all employees. Tom Tyler made significant contributions to the area in the late 1980s and early 1990s with his research on "The Social Psychology of Procedural Justice." He maintained that elements like voice, neutrality, and polite treatment are examples of procedures that have an impact on people's perceptions of fairness.

   c. **Interactional Justice:** It is the degree to which employee perceives fairness in their interactions with their supervisor. From the perspective of Tool, Interactional justice has been divided into Interpersonal Justice and Informational Justice, where the former refers to fairness in communication while the later refers to fairness in access to concerned information among employees.

Sample Description: 105 participants. Aged between 21 to 40 years. The data included 57 Males and 48 Females. Data was collected from organisations in domains of Manufacturing (22 Samples), IT (19 Samples), Banking & Finance (23 Samples), Social Security (17 Samples) and Education (24 Samples). Data was collected both in Online (54 Samples) and Offline (51 Samples).

Tools

1. ***Organisational Justice Scale (Colquitt, 2001):*** This is a 20 item, 5-point Likert scale measure which has items of distributive justice (4 items), procedural justice (7 items) and interactional justice (9 items). The scale measures perceived organisational justice at the workplace of its respondent. The Cronbach's alpha of the scale is 0.96.
2. ***Psychological Participation Index (Singh and Pestonjee, 2019):*** This is a 15-item measure, based on a 5-point Likert scale. The dimensions of it are Decision Making (5 items), Autonomy (5 items), Involvement (2 items) and Opinion-Seeking (3 items). The reliability of the index was calculated using Cronbach's (1951) alpha coefficient (r=0.83). The internal validity of the items has been calculated by point bi-serial coefficient of correlation (rphi=0.133). Concurrent Validity and inter-correlations among the four dimensions were also obtained.

Statistics Used: Descriptive Statistics, Correlation & Regression Analysis.

Results

Table 1: Descriptive Statistics

Dimensions (Score Range)	A		B		C		D		E		F		G	
	M	SD	M	SD	M	SD	M	SD	M	SD	M	SD	M	SD
DM (5-25)	18.9	4.9	20.3	4.2	18.3	5.6	19.4	3.9	19.0	5.3	19.5	4.4	18.5	5.4
DJ (4-20)	13.6	4.2	14.7	4.6	13.2	5.3	13.9	4.5	14.0	4.9	14.0	4.8	13.8	4.6
PJ (7-35)	25.5	9.0	28.4	7.2	25.0	8.9	28.0	7.8	26.0	8.6	27.4	7.7	25.2	9.0
IPJ (4-20)	14.5	4.2	14.9	3.7	13.9	4.5	14.8	4.2	14.0	4.4	14.5	4.1	14.2	4.4
IFJ (5-25)	18.2	5.7	19.5	5.0	17.8	6.5	19.1	5.4	18.1	5.9	18.9	5.5	18.0	5.9
OJ (20-100)	71.8	19.4	77.5	16.7	69.6	22.1	75.8	17.2	72.1	21.0	74.7	18.6	71.2	20.5

Note: M=Mean; SD = Standard Deviation; DM = Decision Making; DJ = Distributive Justice; PJ=Procedural Justice; IPJ = Interpersonal Justice; IFJ = Informational Justice; OJ = Organisational Justice; A = Manufacturing; B = IT; C = Banking & Finance; D = Social Security; E = Education; F = Male; G = Female.

Table 2: Correlation Coefficients (all at 0.01 level)

Dimensions	Decision Making	Distributive Justice	Procedural Justice	Interpersonal Justice	Informational Justice
Decision Making	1	0.69	0.72	0.85	0.81

From the above table it is observed that H1, H2, H3 and H4 are accepted.

Table 3: Regression Coefficients with Decision Making as predictor

Criterion	R	R^2	SE	F (1,103)	Significance F
Distributive J.	.89	.79	2.12	399.43	.00
Procedural J.	.68	.46	6.14	89.85	.00
Interpersonal J.	.65	.43	3.15	79.19	.00
Informational J.	.80	.60	3.35	195.36	.00

Note: J. = Justice.

Hence, H5 is also accepted

Discussion

In today's workplace, employee involvement in decision-making processes is becoming a more important concern. This study explores the relationship between workers' perceptions of decision-making involvement and how it relates to the idea of organisational fairness in general. Since it directly affects employee morale, job satisfaction, and overall organisational performance, understanding this link is essential for firms looking to foster a fair, equal, and inclusive work environment. The current study is done to understand the relation between Employees' perceived participation in Decision Making and facets of Organisational Justice. Data was collected from 105 participants, aged between 21 to 60 years. The data included 57 Males and 48 Females. Data was collected from organisations functioning in domains of Manufacturing (22 Samples), IT (19 Samples), Banking & Finance (23 Samples), Social Security (17 Samples) and Education (24 Samples). Data was collected both in Online (54 Samples) and Offline (51 Samples).

There exists significant positive relationship between decision making and distributive justice (r=0.69). This might be because of various factors such as:

Transparency and Inclusion: The perception of equitable resource allocation among employees is higher in situations when decision-making procedures are open, inclusive, and transparent. Employee trust in the system may be increased by including them in decision-making processes or by giving them transparent justifications for choices.

Just Resource Allocation: Just decision-making procedures can result in just resource distribution. Employees are more likely to believe that decisions are fair if they are made impartially and without partiality, using objective standards.

Compliance with Organisational Principles: Distributive justice is supported when decision-making is in line with an organization's declared ideals of equity and fairness. When choices are in line with the organization's values, employees are more likely to accept them as fair.

There exists significant positive relationship between decision making and procedural justice (r=0.72) at 0.01 and 0.05 levels. This might be because of the factors such as:

Consistency: A crucial component of procedural fairness is consistency in the processes used to make decisions. The concept that every person is treated equally is reinforced when choices are made using uniform, standardized procedures, which improves the employees' impression of fairness.

Impartiality: The concept of impartiality and procedural justice are closely related. Employees are inclined to view processes as just when they are developed without prejudice, bias, or favoritism.

Voice: Procedural fairness is enhanced when workers are given the chance to voice their concerns or thoughts during the decision-making process. Employee trust in the fairness of the processes is strengthened when they have a voice in decisions that impact them.

There exists significant positive relationship between decision making and Informational justice (r=0.81) at 0.01 and 0.05 levels. This might be because of the factors such as:

Information Access: Giving staff members the necessary information gives them the ability to contribute productively to decision-making processes. Employee perceptions of the processes' informational justice are more likely to be favorable when they have access to the required information.

Openness to Inquiries and Feedback: Informational justice is enhanced by decision-making procedures that welcome inquiries and input from staff members. Employees' faith in the accuracy of the information given is strengthened when they feel that their questions are encouraged and that their concerns are taken seriously.

Sufficient Justification: Those who make decisions ought to give sufficient justifications for their choices. Employee views of informational fairness are strengthened when they are given thorough justifications for decisions made.

Limitations of Research

1. Limited and small Sample Size to draw solid inference about those type of organisations
2. Categorization of Sample on basis of govt, private and semi govt and subsequent analysis could have been done if sample size was larger i.e., sufficient in every category.

Conclusion

From the study performed, it can be concluded that when employees are vested with the belief that they are part of the decision making process at their workplace, it yields to them the belief that their employer is just and a fair management is followed at their organisation. This is hence conclusive with the statement that management can utilize employee participation in as a tool in image projection of organisation and establishment of a just system.

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A Systematic Content Analysis of Editorials of two Leading English Dailies to Comprehend their Agenda-Setting Function in the Changing Mediascape

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Abstract

Newspapers are valuable sources of Information. The newspaper editorials represent the institutional opinion of a newspaper. The present study is a content analysis of the editorials of the two newspapers to assess the subject of focus of the editorials, the purpose, and the direction of the content.

Ninety-nine editorials were analyzed during the period of General Elections (March 10–May 25, 2019) of two leading Indian dailies (The Times of India (TOI) & The Hindu). The coding was done in accordance with the study's code guidebook to determine the focus & content of the of the topics, tone, and amount of coverage to the BJP, the Congress and the other large parties in an attempt to uncover the framing & political agenda-setting functions of the editorials in the present mediascape as the editorials reflects the opinion of the newspaper and to a great extend shapes the opinion of its readers as established by researchers in the field of political communication.

The content analysis revealed the predominance of national political events in the editorial agenda. It indicated that despite the geographical and ideological differences of the two newspapers, both offered similar amount of coverage of the elections and the related issues. The conclusion drawn was that while coverage was similar, there is a difference in the tone and direction of the editorials with respect to the various political parties and political candidates' stances on various issues.

Introduction

The democratic trajectory in former colonial states has been marked by inconsistency, but India stands out as an exception, maintaining a robust democratic system despite initial challenges in the 1950s, including low literacy, industrialization, and living standards (Hasan, 2010; Kohli, 1988). Elections in India are celebrated as a political festival, embodying the essence of democracy, reflecting the collective will of the people (Roy, Sopariwala, 2019).

The role of independent media, often referred to as the fourth estate, is vital in fostering a democratic and pluralistic society in India (Ravi, 2017). The media landscape, evolving since the seventeenth century, played a crucial role in covering 16 Lok Sabha elections until 2019, adapting to the changing dynamics of the political landscape (Benoit *et al.,* 2005). Newspapers, as a significant information source, shape public opinion through agenda setting, influencing what issues are considered important (Cohen). However, amidst the information overload, mass-communication consumers face confusion and often rely on expert voices to navigate complex narratives, with editorials subtly guiding readers' interpretations and actions (Hulteng, 1973; Stonecipher, 1979; Jaworski & Galasinski, 2002).

Agenda-setting remains a vibrant and essential field in communication studies, evolving over the past 25 years to generate new research inquiries and integrate diverse perspectives into the realms of mass communication and journalism (McCombs, 2013). Understanding the forces underpinning agenda-setting is pivotal for grasping contemporary shifts in democracy (McCombs, 2013). The theory investigates how mass media shapes public agendas, influencing political behavior during elections (Cohen, 1963). This has spurred numerous studies on media's role in framing issues for audiences.

The press, as a political watchdog, plays a crucial role in democratic functioning, especially during elections

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where voters rely on media presentations to make informed choices (McCombs, 2018). Empirical evidence indicates a reciprocal relationship between political party campaigns and election coverage, suggesting mutual influence (McCombs, 2018). Editorials, extending beyond news reporting, serve as a platform for newspapers to address readers directly, interpreting news and shaping public opinion (Reah, 2002; MacDougall, 1973; Hulteng, 1973).

Review of Literature

The contemporary understanding of democratic setups is crucially illuminated by the agenda-setting theory, a productive and vital framework in communication research over the past quarter-century (McCombs, 1991). This theory explores the impact of media coverage on shaping public thoughts and perceptions. Cohen, in "Media & Foreign Policy" (1963), emphasizes the press's significant role in influencing what its audience thinks about, asserting that it goes beyond mere information provision. According to Cohen, the press is remarkably successful in directing readers' focus and shaping their worldview.

Agenda-setting theory has primarily been applied to election campaigns, suggesting that influencing the electorate's perception of an issue's importance can sway their political preferences (McQuail and Windahl, p.105). However, research on agenda-setting faces challenges, including a tendency to overlook interpersonal communication's role and the ambiguity of whether the media intentionally sets the agenda or responds to the public's agenda.

During elections, the press plays a potent role in setting the agenda by selecting which campaign topics receive extensive coverage. This editorial discretion, influenced by the newspaper's stance, significantly shapes public perception of the most important issues (Cohen, 1963). Gulati, Just, and Crigler (2004) argue that this journalistic shift has introduced a structural bias in election coverage, favoring certain topics and candidates over others (Gulati *et al.,* 2004, p. 239). Understanding the evolving dynamics of democracy and media through the lens of agenda-setting theory provides valuable insights into contemporary democratic processes.

When Graber (1976) replicated this study to examine the 1972 presidential campaign, her initial results were confirmed. "Shared coverage patterns meant that in both elections the kinds of issues and presidential qualities which made news in Washington or New York also made news in Raleigh or Topeka…in basically similar proportions" (Graber, 1976, p. 500). 7 Surprisingly, Graber (1971) could not attribute this uniformity to an access of news wire stories. In the 20 newspapers examined, only an average of 22% of campaign stories came from wire sources in 1972, a drop from 30% in 1968 (Graber, 1976, p. 501). Graber (1971) does point out that a majority (56%) of all campaign news in 1968 could be directly linked to the presidential and vice-presidential campaign efforts (Graber, 1971, p. 511).

Additionally, "newspaper personnel apparently shared a sense of what is newsworthy and how it should be presented" (Graber, 1971, p. 512).

Framing & Second-Level Agenda Setting Theories Incorporating both theories of agenda-setting and framing is important in a communication setting because of their complimentary nature. As McCombs and Ghanem (2001) point out, framing examines the influences that are shaping the media agenda, while agenda-setting focuses on the impact of those frames on the public. "The convergence of these two research traditions will yield greater unity in our knowledge of how the media's 8 pictures of the world are constructed and, in turn, how the public responds to those pictures." (McCombs & Ghanem, 2001, p.68) More specifically, while the theory of agenda-setting tells us what to think about, the theories of framing and second-level agenda setting go a step further, stating that the press tells us how to think. "To frame is to select some aspects of a perceived reality and make them more salient in a communication text, in such a way as to promote a particular problem definition, casual interpretation, moral evaluation, and/or treatment recommendation for the item described" (Entman, 1993, p. 52).

Model Framework

Entman (1993) defines framing with four functions: defining problems, diagnosing causes, making moral judgments, and suggesting remedies. This concept, applied by reporters, wields significant influence over political candidates and public perception. Farnsworth and Lichter (2003) emphasize reporters' power to shape public opinion by choosing what to cover, amplifying alternative voices, or investigating claims. Patterson (2002) adds that framing affects public engagement, with inviting portrayals encouraging involvement and disheartening ones leading to disengagement.

Noelle-Neumann's (1974) "spiral of silence" theory posits that individuals hesitate to express minority opinions due to fear of reprisal, with the media shaping perceived majority opinions. Entman (1993) asserts that views outside established frames or majority opinions become non-newsworthy. Scholars link framing to second-level agenda setting, influencing public perception of public figures' attributes (Golan & Wanta, 2001).

Examining the impact of agenda setting theory on election discourse, this study analyzes editorials in two national dailies-liberal Times of India and conservative The Hindu. The newspapers' independent stances provide varied perspectives on election issues, contributing to a comprehensive understanding of the political landscape.

Objectives

- Examine the primary subjects that editorials in two leading Indian newspapers, The Times of India (TOI) and The Hindu, focused on during the period of General Elections
- Investigate the overall direction taken by editorials in terms of the stance and perspective adopted toward political events, candidates, and parties during the General Elections.
- Examine coded editorials to identify patterns in framing and political agenda-setting functions, aiming to understand how editorials shape public opinion, especially concerning political issues, and contribute to the media landscape's present dynamics.
- Analyze the tone and direction of editorials concerning different political parties and candidates, aiming to identify any disparities in how these newspapers portray and discuss political issues during the General Elections.

Methodology

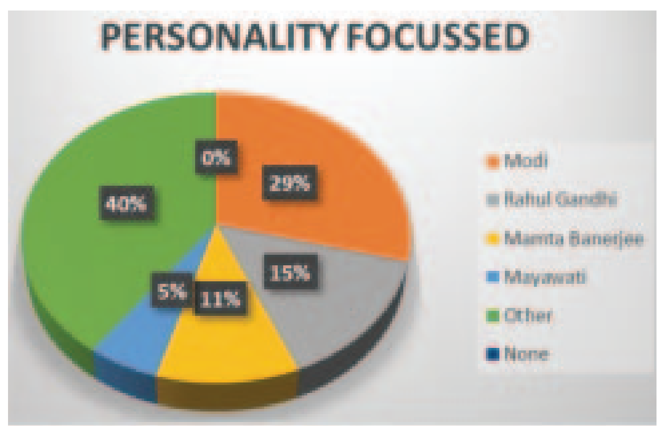
In this study analysis of newspaper editorials related to India's General Elections 2019 was carried out. The researchers examined 99 editorials from two prominent English national dailies: The Times of India (57%) and The Hindu (43%). The data collection spanned 76 days, starting from the announcement of India's Election Commission's poll code of conduct to two days after the election results on May 25, 2019. Utilizing a code guidebook, the researchers coded the editorials to discern their focus, content, tone, and coverage of major political parties such as the BJP, the Congress, and others. The objective was to unveil the framing and political agenda-setting functions of the editorials, as they reflect the newspapers' opinions, significantly influencing readers' perspectives. The selection of The Times of India and The Hindu, the most widely read national dailies in Northern and Southern India, was deliberate, and all political genre editorials during the specified period were systematically chosen, coded, and analyzed to provide insights into the media's role in shaping political opinions.

Data Tabulation & Analysis

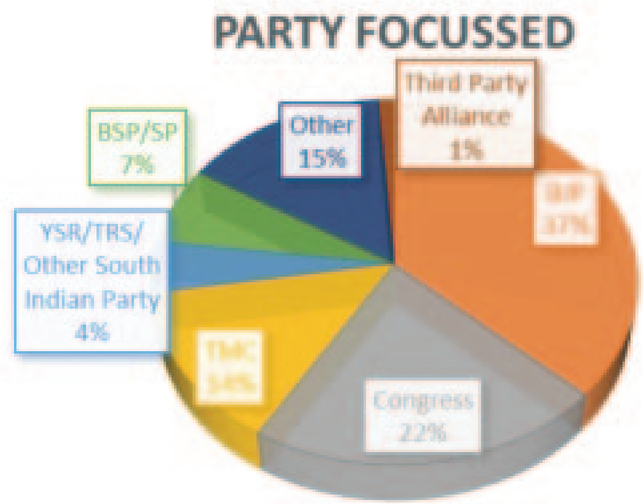
Analysis of "The Times of India"

Political genre editorials primarily cover elections (31%), wins/defeats (16%), and political comments (25%). Topics like election commission, nationalism, terrorism, international relations are minimal, and articles on economic slowdown/measures constitute 5.45%.

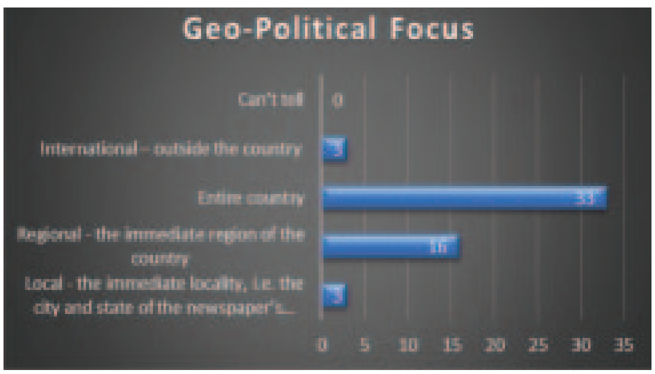
One-third of the articles centered on Modi (29%), with 14.5% featuring Rahul Gandhi, 10.90% discussing Mamata Banerjee, and 5.45% focusing on Mayawati.



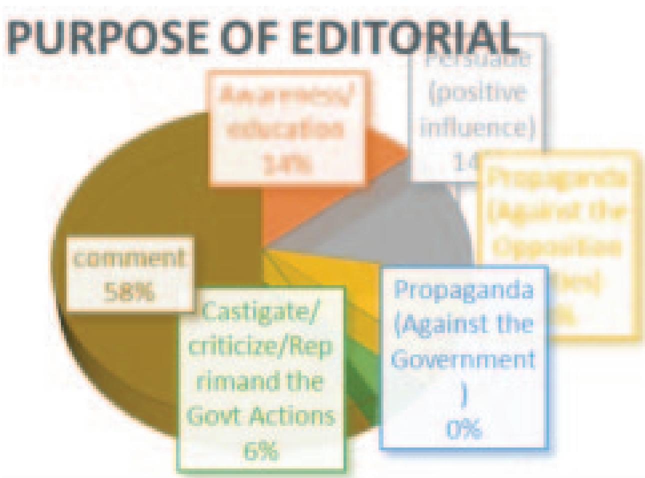
The BJP dominated editorial coverage with 58%, while Congress, TMC, BSP/SP, YSR/TRS/Other South Indian parties, and third-party alliance received 34%, 21.8%, 10.9%, 7.27%, 1.81% respectively; 23.63% of editorials were not party-focused.



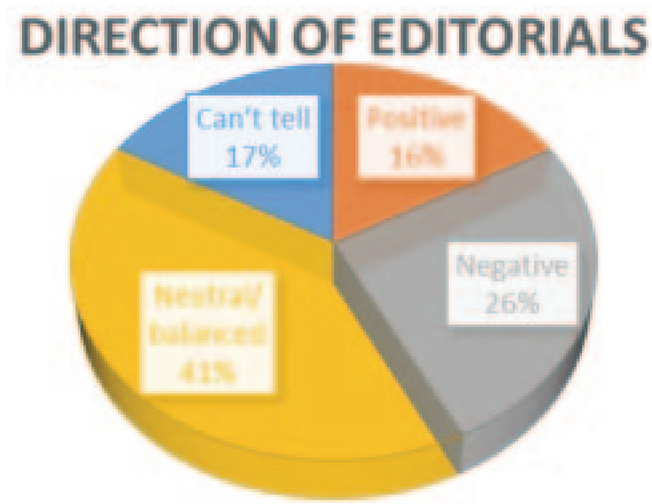
Thirty-three editorials centered on national politics, while sixteen addressed regional politics. Additionally, three editorials each discussed local and international perspectives.



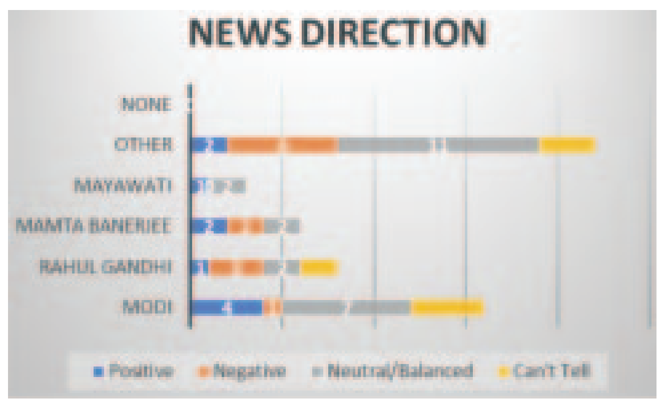
Over 58% of analyzed editorials focused on general political commentary, 14% aimed at raising awareness, another 14% sought to persuade or positively influence readers, 8% had an agenda against opposition parties, and 6% criticized government actions.



The direction of more than forty percent of the editorials were neutral, twenty six percent were negative, followed by 14 percent positive and in the case of seventeen percent of the editorials, it was difficult to indicate the direction.



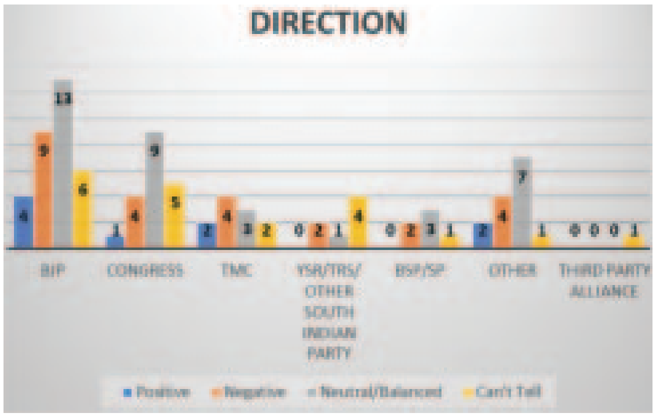
The analysis of editorials reveals that Narendra Modi garnered the most attention with 16 pieces, only 6.25% being negative, while Rahul Gandhi received half the coverage, 37% of which was negative, and Mamata Banerjee had over 33% negative tone in her 6 editorials; other political leaders covered in 22 editorials had negative coverage exceeding 27%.



The majority of editorials focused on the BJP, with 12.5% portraying a positive perspective, 40.6% expressing a neutral or balanced viewpoint, and approximately 28% taking a negative stance on the party's actions. Following this, coverage of the Congress party revealed a predominance of neutral editorials at 47.4%, while only 5.3% were positive and 21.1% were negative. The remaining editorials had an ambiguous tone.

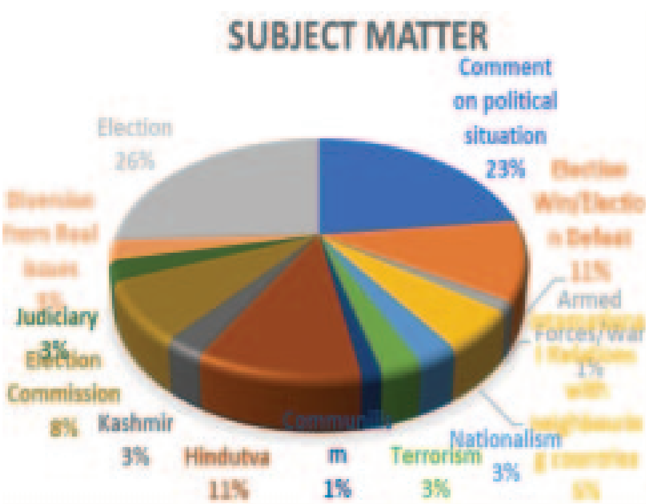
Regarding the TMC, 18.2% of the total editorials conveyed a positive tone, 36.4% criticized the party, and

27.3% maintained a neutral stance. Conversely, there were no positive editorials about the SP/BSP, with 33.3% criticizing these parties and 50% adopting a neutral stance. A single editorial addressed the Third-Party Alliance, and its direction was challenging to discern.

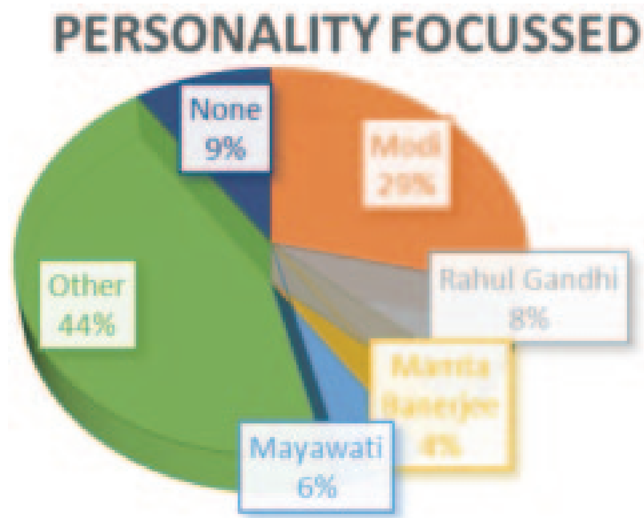


Content Analysis of "The Hindu"

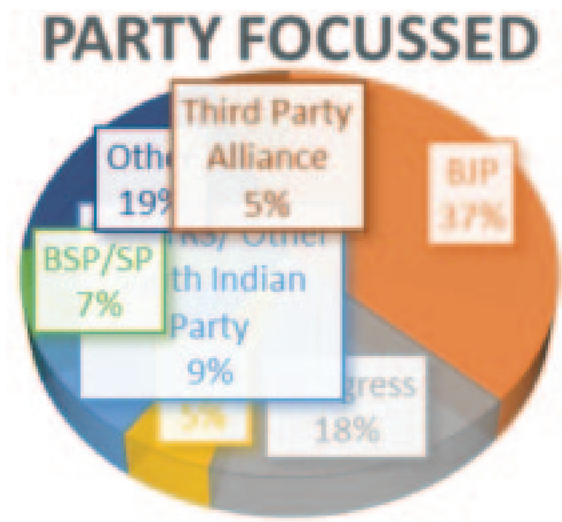
In "The Hindu" editorial, election-related content constituted 26%, political commentary on the country's situation was 23%, election commission scrutiny was 8%, wins and defeats garnered 11%, Hindutva was discussed in 11%, and various other topics like international relations, terrorism, nationalism, judiciary, Kashmir, and societal issues each comprised smaller percentages.



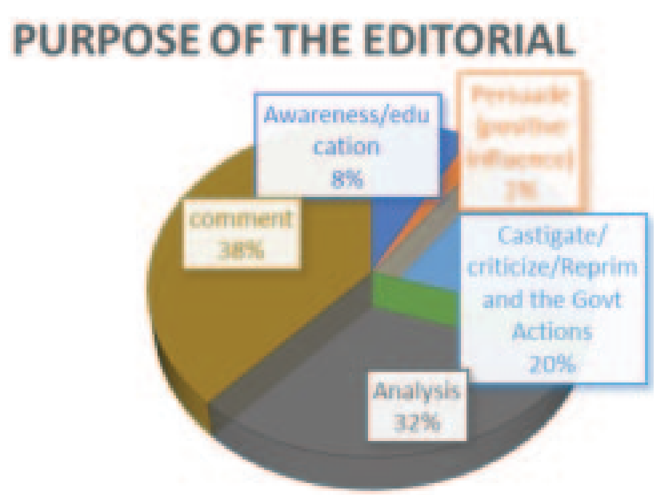
Out of the total editorials analyzed, twenty nine percent were focused on Narendra Modi, eight percent on Rahul Gandhi, six percent about Mayawati and four percent were focused on Mamta Banerjee. More than forty percent were focused on other personalities and nine percent did not talk about any individual.



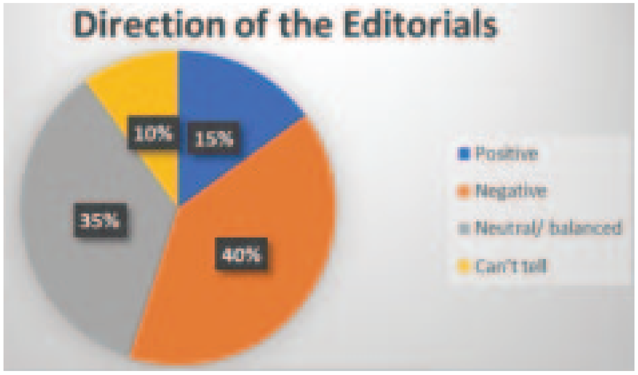
In thirty seven percent of the editorials, the focus was on BJP, followed by other (19%), congress (18%), YSR/TRS (9%), BSP/SP (7%), TMC (5%)



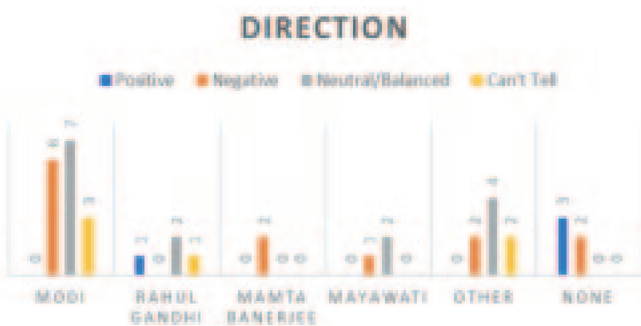
Around 70% of the editorials were political analysis and comment, 20% castigated the govt actions, 8% were educational and 2% were meant for persuasion.



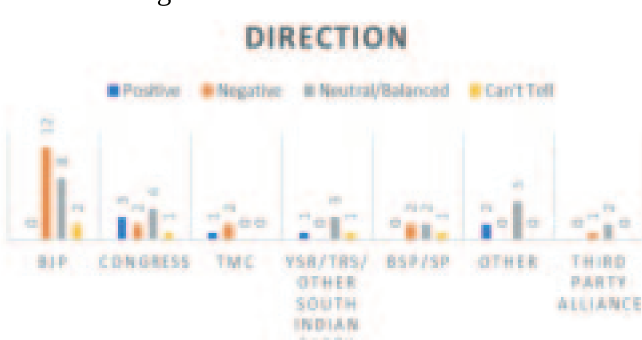
35% of the editorials were balanced, 40% were negative and 15% were positive, in case of 10% of the editorials, the direction is difficult to comprehend.



Most editorials on party leadership centered around Narendra Modi (40% negative, 46% balanced, 13% challenging), while only 10% focused on Rahul Gandhi (25% positive, 75% neutral, 25% challenging). All editorials on Mamata Banerjee were negative, one positive editorial on Mayawati, and two negative. Of the editorials discussing other personalities, over 30% were negative, around 48% neutral, and 18% positive, while 12.5% did not focus on specific personalities.



Around 57.1% of editorials focused on BJP had a negative tone, 38% were balanced, and 4.7% were difficult to decipher. For Congress, 30% of editorials were positive, 20% negative, 40% neutral, and 10% ambiguous. TMC had 1 positive and 2 negative editorials, while editorials on south Indian parties were mostly balanced (60%), 20% positive, and 20% ambiguous. For BSP/SP, 50% were negative and 50% were balanced.



Discussion

"The Times of India" Newspaper

The Times of India's analysis reveals a predominant focus on elections, political commentary, and electoral outcomes, with economic issues receiving moderate attention. Narendra Modi is the most covered personality, with one-third of articles dedicated to him, followed by Rahul Gandhi and Mamata Banerjee. The Bharatiya Janata Party (BJP) is the central theme, receiving 58% of total coverage, followed by the Congress party (34%), TMC (21.8%), and BSP/SP (10.9%). National politics garners the highest attention, with a balanced approach to regional, local, and international perspectives. Editorials mostly adopt a neutral stance (40%), with 26% being negative, 14% positive, and 17% challenging to determine. Modi receives the most coverage with a low negative tone, while Rahul Gandhi and Mamata Banerjee face higher negative percentages despite less attention. The BJP's coverage is diverse, including a notable percentage of negative editorials, while Congress sees a higher proportion of neutral coverage. TMC faces both positive and negative criticism, and SP/BSP receives no positive coverage.

"The Hindu" Newspaper

The data analysis underscores a comprehensive focus on electoral processes, exhibiting a keen interest in political developments. Coverage spans analysis, commentary, and reporting on various election facets, including candidates, campaigns, and electoral issues. A detailed examination of the Election Commission indicates scrutiny of its functioning and impact on fair elections. The attention to Hindutva and international relations reflects a nuanced approach to religious, cultural, and global aspects in political discourse. Security, nationalism, judiciary, and specific regions like Kashmir are covered, showcasing a diverse range of political topics. The analysis extends to personalities, with Narendra Modi taking center stage. Party-focused analysis emphasizes significant attention on the BJP, suggesting its prominent role. Regional and geopolitical focuses highlight editorial commitment to providing a well-rounded view of events. Editorials primarily serve political analysis and comment, maintaining a neutral or well-rounded stance, with prevalent negative viewpoints suggesting a critical sentiment. Opinions on individual personalities and parties vary, with a majority leaning towards negativity for Narendra Modi and the BJP, while Congress exhibits a more balanced viewpoint, and regional parties present mixed perceptions, reflecting the complexity of political dynamics.

Conclusion

Based on the findings and discussions for "The Times of India" and "The Hindu" newspapers, several conclusions can be drawn:

The analysis of two prominent Indian newspapers, "The Times of India" and "The Hindu," reveals a substantial emphasis on politics and elections. Both publications dedicate the majority of their editorials to political developments and commentary. "The Times of India" focuses significantly on national politics, with Narendra Modi and the Bharatiya Janata Party (BJP) receiving the most coverage, followed by other regional parties. In contrast, "The Hindu" provides a more diverse perspective, covering a range of political figures, including Modi and Rahul Gandhi, as well as a variety of political issues and parties.

The newspapers exhibit a strong geo-political focus on Indian affairs, with limited coverage of international events. Both papers cover national, regional, local, and international perspectives, but "The Times of India" has a specific focus on northern India, while "The Hindu" maintains a comprehensive view. The purpose of editorials in both newspapers is primarily political analysis and commentary, aiming to inform and shape public opinion. The editorial direction is notably neutral, with negative editorials being more prevalent, indicating a critical sentiment towards political figures and parties.

The media's influence on public perception is acknowledged, as the prominence of certain political figures and parties in coverage may shape how they are perceived by the audience.

These newspapers play a crucial role in shaping public opinion by providing a diverse range of perspectives on political issues, with a particular focus on Indian politics and elections. The editorial choices and coverage patterns may impact how readers perceive political figures, parties, and national and international issues.

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Impact of Loneliness and Social Isolation on Mental Health

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Abstract

Loneliness and social isolation are critical for health and wellbeing. Both are recognized as social problems and denote a significant health burden. Social isolation is a well-established social determinant of health, and its ill effects have been well-recognized for decades. Loneliness is a subjective, distressing emotional state resulting from the perceived discrepancy between an individual's desired and actual social relationships. Social isolation, on the other hand, refers to the objective lack of social connections and interactions. Both conditions are increasingly prevalent in modern society, partly due to technological advancements and changing social norms. The research indicates that loneliness and social isolation have adverse consequences on mental health. Individuals experiencing prolonged loneliness or social isolation are at a higher risk of developing various mental health disorders, including depression, anxiety, and even severe conditions like schizophrenia. Additionally, there is evidence that these psychosocial stressors can exacerbate existing mental health issues. Several mechanisms underlie the relationship between loneliness, social isolation, and mental health. The absence of social support and meaningful relationships can lead to chronic stress, which in turn affects the neurobiological and physiological systems involved in mental health regulation. Furthermore, loneliness and social isolation can lead to maladaptive coping strategies, such as substance abuse, which can further deteriorate mental health. In our current study, we aim to extend previous research by investigating the unique impact of loneliness and social isolation on mental health and psychological wellbeing of young adults.

Introduction

Loneliness and social isolation are pervasive challenges in contemporary society, with profound implications for mental health and well-being. The increasing prevalence of these phenomena has prompted a surge in research aimed at unraveling their intricate dynamics and understanding their impact on individuals' psychological states. As the world becomes more interconnected digitally, paradoxically, feelings of isolation and disconnection are on the rise, necessitating a comprehensive exploration of the multifaceted relationship between loneliness, social isolation, and mental health.

Background:

The World Health Organization (WHO) identifies mental health as a fundamental aspect of overall well-being, acknowledging the intricate interplay between mental, physical, and social health. Loneliness, often described as the subjective perception of social isolation, has been recognized as a significant risk factor for mental health issues. Social isolation, characterized by an objective lack of social connections, further exacerbates the negative consequences on psychological well-being. According to a meta-analysis by Holt-Lunstad, Smith, & Layton (2010), social isolation and loneliness are associated with a 50% increased risk of premature mortality, emphasizing the gravity of these issues.

The advent of the digital age and the proliferation of social media platforms, while facilitating virtual connections, have paradoxically contributed to a sense of social disconnectedness. This phenomenon is reflected in studies such as those by Primack *et al.* (2017), which highlight the association between high social media use and increased feelings of social isolation among young adults. Additionally, societal shifts, such as urbanization, changing family structures, and an aging population, play pivotal roles in shaping the prevalence of loneliness and social isolation.

Objectives:

This research endeavors to shed light on the intricate relationship between loneliness, social isolation, and

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mental health, adopting a multidisciplinary approach that integrates insights from psychology, sociology, and neuroscience. The objectives of this paper are to examine the definitions and dimensions of loneliness and social isolation, explore their psychological and sociological impact, investigate neuroscientific insights into the phenomenon, and identify potential interventions and strategies to alleviate the negative consequences on mental health.

By addressing these objectives, this research aims to contribute to a more nuanced understanding of loneliness and social isolation, offering insights that can inform public health initiatives, clinical interventions, and community-based strategies to foster social connectedness and promote mental well-being. Through a comprehensive exploration of these issues, this paper endeavors to provide a foundation for future research and the development of effective interventions to address the pervasive challenges posed by loneliness and social isolation in contemporary society.

Definitions and Dimensions

Loneliness is subjectively experienced as a lack of meaningful social connections, while social isolation represents an objective absence of social interactions. Dimensions include emotional loneliness (lack of intimate relationships) and social loneliness (lack of broader social connections) (Holt-Lunstad *et al.,* 2010; Primack *et al.,* 2017).

Psychological Impact

Loneliness and social isolation are linked to various mental health issues, including depression, anxiety, and increased stress levels (Holt-Lunstad *et al.,* 2010). The subjective experience of isolation amplifies these effects, emphasizing the need for tailored interventions. Individuals experiencing emotional and social loneliness may face distinct challenges, with emotional loneliness potentially contributing to a sense of emptiness, and social loneliness heightening feelings of exclusion and disconnection (Holt-Lunstad *et al.,* 2010).

Numerous studies, including meta-analyses by Holt-Lunstad, Smith, & Layton (2010), consistently link loneliness and social isolation to an increased risk of depression and anxiety. The research underscores the importance of social connections in maintaining positive mental health.

A longitudinal study by Kuiper *et al.* (2015) found a correlation between social isolation and cognitive decline in older adults. Their findings suggest that the absence of regular social interactions may contribute to cognitive deterioration over time.

Research by Hawkley & Cacioppo (2010) indicates a strong association between loneliness, social isolation, and adverse physical health outcomes. Their work emphasizes the interconnectedness of mental and physical health, highlighting the need for a holistic approach to well-being.

Contributing Factors:

Studies by Primack *et al.* (2017) highlight the paradoxical role of technology in exacerbating social isolation. Excessive use of digital devices, while providing virtual connections, may contribute to a sense of loneliness and hinder meaningful social interactions.

The research of Klinenberg (2016) explores the impact of urbanization on social connections, revealing that the shift toward urban living can contribute to increased loneliness. The anonymity of city life may impede the development of strong community ties.

The work of Victor *et al.* (2005) emphasizes the impact of life transitions on social connections. Major life events, such as retirement or the loss of a spouse, can disrupt social networks and contribute to feelings of loneliness.

Sociological Impact

Societal factors such as urbanization, changing family structures, and an aging population contribute to the prevalence of loneliness and social isolation (Holt-Lunstad *et al.,* 2010). Urbanization can lead to increased physical proximity but decreased social interactions. Changes in family structures, including more individuals living alone, can contribute to social isolation. An aging population may face increased risks due to factors like retirement and loss of social networks. Understanding these factors is crucial for developing effective interventions that address the root causes of loneliness and social isolation (Holt-Lunstad *et al.,* 2010; Primack *et al.,* 2017).

The prevalence of loneliness and social isolation has significant sociological implications, reflecting shifts in social structures. Traditional community ties and extended family networks are often supplanted by more individualistic lifestyles. Sociological analyses by Durkheim (1897) and Putnam (2000) have underscored the importance of social integration in maintaining social order and cohesion.

Loneliness and social isolation can manifest differently across generations. For instance, the sociological impact of social media on younger generations has led to new forms of social connectedness but has also been associated with feelings of isolation due to the paradoxical nature of virtual relationships. Older generations, on the other hand, may experience social isolation due to changes in family structures and community dynamics.

Societal factors, including income inequality and access to resources, play a role in the experience of loneliness. The work of Wilkinson and Pickett (2009) suggests that societies with higher levels of income inequality may experience greater social fragmentation, contributing to increased feelings of isolation among certain demographic groups.

Cultural norms and values impact the perception and expression of loneliness. Sociological studies by Hofstede (1980) and Triandis (1995) have explored cultural dimensions that influence social interactions, shedding light on how individualistic or collectivist cultures may shape the experience of loneliness.

Urbanization has transformed the sociological landscape, affecting community dynamics and interpersonal relationships. The seminal work of Simmel (1903) explored the consequences of urban life on social interactions, highlighting the potential for increased anonymity and reduced community cohesion in densely populated urban areas.

The rise of digital societies has introduced new sociological dynamics. The impact of online communities, social media, and virtual interactions on social bonds is a burgeoning area of sociological inquiry. Scholars like Turkle (2011) have explored the implications of digital technologies on face-to-face communication and interpersonal relationships.

Sociological analyses of social integration policies reveal their role in mitigating loneliness. Countries with robust social welfare systems and inclusive policies may be better equipped to address social isolation by fostering a sense of belonging and community.

Societal attitudes toward mental health and social connectedness contribute to the stigma surrounding loneliness. Sociological research, such as that by Link and Phelan (2001), highlights how societal perceptions influence the way individuals experiencing loneliness are perceived and treated.

Understanding the sociological impact of loneliness and social isolation is crucial for developing comprehensive strategies that address the root causes within the broader societal context. Sociological perspectives provide insights into the complex interplay between individual experiences and broader social structures, informing interventions and policies aimed at fostering social cohesion and well-being.

Neuroscientific Insights

Neuroscientific research sheds light on the neural mechanisms underlying loneliness and social isolation. Brain regions associated with social pain, such as the anterior cingulate cortex and the insula, are activated, reinforcing the idea that these experiences are deeply ingrained in human biology (Cacioppo *et al.,* 2015). Understanding the neuroscientific basis of loneliness and social isolation provides valuable insights into the profound impact these experiences have on individuals' mental health.

Interventions and Strategies

Identifying potential interventions is crucial for addressing the mental health implications of loneliness and social isolation. Community-based programs that facilitate social connections, mental health awareness campaigns to reduce stigma, and technology-mediated interventions aimed at fostering virtual communities are explored as potential strategies (Holt-Lunstad *et al.,* 2010; Primack *et al.,* 2017). These interventions should be tailored to address the specific dimensions of loneliness and social isolation and consider the sociological factors contributing to these phenomena.

Conclusion

This research paper provides a comprehensive exploration of the impact of loneliness and social isolation on mental health. By addressing the defined objectives, it contributes to a nuanced understanding of these phenomena, offering insights for public health initiatives, clinical interventions, and community-based strategies. The findings aim to lay the groundwork for future research and the development of effective interventions to tackle the pervasive challenges posed by loneliness and social isolation in contemporary society.

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Hyperlocal Journalism in Indian Languages: An Opportunity for Increasing Civic Engagement

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Abstract

Online hyperlocal journalism in Indian regional languages has enabled grassroots communities' involvement in issues affecting small towns and villages. Hyperlocal news outlets use platforms like websites, Facebook pages, and YouTube to connect with their audience. Since 2016, hyperlocal journalism has expanded, primarily in district towns. This study examines the awareness of hyperlocal news publishers in fostering civic engagement and how they are leveraging their platforms to enhance civic and government participation. Interviews with 12 hyperlocal digital news publishers in Bengali language show the potential of hyperlocals in building well-informed communities despite mainstream media neglecting grassroots news coverage.

Introduction

India's regional language community newspapers are being replaced by hyperlocal digital news publications due to the rise in digital news consumption. These platforms, typically operated at the district or sub-divisional level, consist of a website, Facebook page, or YouTube channels. Some journalists produce original news stories, while others consolidate content from other sources. Non-journalistic initiatives by citizens also share local community information. Digital platforms offer greater reach, are more economical, and have less entry-barriers than traditional printed newspapers, making them popular choices for digital news publishers.

Digital news channels are reshaping local news coverage filling the void left by the mainstream media in terms of local news coverage and fostering community engagement. They enable enhanced interactivity and facilitate dialogue between community members and news publishers. These channels also benefit the local government by effectively delivering administrative information. They can enhance a democratic setup by ensuring people are well-informed and actively involved in government operations. The growing internet usage in rural India and the demand for local news have made hyperlocal online news increasingly important.

Mainstream media has struggled to establish a sense of community around regional Indian language newspapers for the past two decades despite publishing localised editions. They primarily focused on generating advertisement revenue and events in national or state capitals. As a result, the importance of hyperlocal digital news providers is increasing as mainstream media reduces costs and local news gathering infrastructure.

This paper, through in-depth interviews of the news publishers of hyperlocal digital news platforms in Bengali from the Eastern Indian state of West Bengal, attempts to look at their functioning as a facilitator of better civic engagement at the grassroots level.

Literature Review

Media is undergoing significant changes in news gathering, production, distribution, and consumption due to technological innovations, social media, audience interactions, competition, commercialization, and trust-deficit between media and audience (Franklin 2014, van der Wurff & Schoenbach, 2014). The trend of people increasingly consuming news via social media platforms and mobile devices is causing significant changes. Sheller (2015) argues that new smartphone interfaces are altering news consumption, communication, and social interactions. This change is influenced by economic, regulatory, and cultural forces, and is affecting news packaging, presentation, and location-related aspects. Technology has always impacted journalism, but this change is complex (Pavlik 2016) but the change in current journalistic practices can be traced to a "complex convergence of economic, regulatory and cultural forces (Fenton 2010)."

Online media has disrupted traditional media's two-way communication between news publishers and

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audiences, altering the news hierarchy and facilitating interactions among the audience (Hermida *et al.,* 2012). Skogerbo & Krumsvik (2015) argue Social media, as part of a public sphere in a networked society, contributes to the change by opening up communication channels between citizens and their representatives, thereby enhancing the public sphere in a networked society.

Hyperlocal news platforms, based on web or social media, are transforming media ecosystems. According to Metzgar *et al.* (2011), these geographically-focused, community-driven organizations provide original news stories, addressing coverage gaps and encouraging civic engagement. They are unique due to their location, community-orientation, grassroots reporting, and civic engagement, making them a valuable tool in the changing media landscape.

De Meulenaere (2016) suggests that the definition of hyperlocal journalism may be limited to grassroots news organizations. He suggests news platforms that are intentionally set up for journalistic purposes, employing paid or voluntary journalists and fostering local civic engagement. Hyperlocal journalists run Facebook pages, created by citizens at the local level without professional structure, bringing together individuals and information about a particular urban neighbourhood. These virtual groups must also be considered part of hyperlocal journalism. Radcliffe (2012) defines hyperlocal journalism as online news or content services focusing on a specific small community, but William & Harte (2016) argue that this definition excludes print media operating at the grassroots level for an extended period.

India is experiencing a rise in internet users and cheap data, with the user base now extending beyond English-speaking populations. The rise of regional language access on the web has influenced society, economy, and politics, synchronizing with the decentralisation and de-Americanisation of the world-wide web and the rise of the global South. This has diluted the monopoly of English-speaking elites over information, allowing non-English speakers to access and participate in discussions in their regional language. Google-Kantar (2023) study reveals that most Indian language content is around news and entertainment. Almost 60 per cent of the internet users want to consume regional news in regional language.

In India, the media business structure is structured in a way that despite national or state-capital-centric newspapers trying to reach small towns and villages, they do not build a community around them, instead focusing on corporate advertisers' demands and acting accordingly (Neyazi 2011, Vincent & Mahesh, 2007). Advanced technology is emerging in local communities, with web or mobile-driven news outlets like CGNet Swara, Gaon Connection, LocalPlay, Lokal, and Circle serving tribal communities in Chhatisgarh, Himachal Pradesh, and Uttar Pradesh, focusing on small towns and regional languages (Pai, 2018). In West Bengal too such hyperlocal digital news outlets are operating from district towns (Chatterjee & Pal, 2021). So far, the population of such outlets has not been mapped. Nonetheless, they are covering local issues in local Bengali language.

Research Question

This paper attempts to find out the nature of the functioning of such digital news outlets in Indian language to understand the role they play in increased civic engagement. This study aims to answer the following research questions mainly from the news publishers' perspective:

RQ1: How are the digital news platforms covering civic issues?

RQ2: How are they ensuring the participation of their audience while dealing with civic issues?

RQ3: Are they aware of the role it can play in increased civic engagement?

Methodology

West Bengal was chosen as the study location to investigate civic engagement with hyperlocal digital news portals in Indian language using purposive sampling. The area was chosen due to its historical significance as the birthplace of the first English, Bengali, and Hindi newspapers, and its demographic and topographical features. 12 hyperlocal digital news portal publishers were selected based on their geographical locations in Bengal, with four from each region.

In-depth interviews with news publishers were conducted in July and November 2023 using semi-structured telephonic or Zoom interviews. These qualitative methods, which provide diverse perspectives on issues (Boyce & Neale, 2006), were chosen due to time constraints, allowing for a comprehensive understanding of the research questions.

After the interviews were conducted and the answers were transcribed, a thematic analysis of the transcriptions led to identification of the main points answering the research questions.

Findings and Discussions

The interviews suggest hyperlocal digital news publishers primarily focus on their geographical location, building strong networks with national and regional news channels and newspapers. They have strong connections with civil society sources, police, and administrative officials, and social media channels have made this bonding easier. They highlight civic issues, connecting with community members and government officials. The interactivity features of digital media also provide an advantage in addressing issues on the ground through virtual channels. Thematic analysis of interviews answers research questions.

i) Nature of the digital news platforms

Hyperlocal digital news publishers like Banglar Samay and Bankura24x7 focus on issues related to their district, such as Siliguri town in Darjeeling and other six North Bengal districts or Bankura24x7 covers news originating from the Bankura district. They believe mainstream media would not yield much audience attention, so they focus on district-centric local news. They have a network of reporters in different administrative blocks who provide information as incidents occur.

"We are a small team that has voluntarily united to operate this news website. We recognised a necessity for a digital news platform that would exclusively focus on district news and cater to the needs of the local people. Therefore, we have introduced Bankura24x7," states Amitabha Das, the chief editor.

Both media publishers acknowledge that they prioritise coverage of incidents or events occurring within the district. The coverage encompasses a wide range of general news, including crime, fire, and road accidents. Newsgathering also encompasses the extensive reporting on political events and government projects or pronouncements.

"Our analysis has revealed that our audience displays a greater inclination towards incidents and events, particularly those categorised as breaking news. We receive a significant number of views on articles that are related to breaking news. Consequently, we typically refrain from publishing feature stories on our website or Facebook page," says Prasenjit Raha, editor-in-chief of BanglarSamay.

They emphasise more on live coverage or using videos for their stories, either on social media or their websites. "When we cannot reach the spot, we ask the people or our readers to record a video and send them to us. Videos are important to catch audience attention within a short span of time," says Amitabha.

BanglarSamay, a digital news platform in India, primarily distributes its stories on its Facebook page, with over 90% of its audience coming from social media. They report in Bengali, thereby bringing readers closer to their stories.

ii) Coverage of civic issues

Hyperlocal media primarily covers civic issues in their district, such as drainage problems, garbage accumulation, and government schemes. They also assist local administration in disseminating administrative information to a wider audience. For instance, during the Covid-19 lockdown, local officials and media outlets imposed restrictions on the district's residents. the news publishers admit that the local Superintendent of Police or the District Magistrate continuously fed strictures regarding the lockdown through their media.

"They know people of the locality will read our stories on social media platforms. So they have directly or subtly pushed the guidelines regarding lockdown and dos and don'ts to keep safe during the Covid-19 outbreak," says Amitabha.

Police also keep a tab on our coverage to maintain law and order during the any important festival or celebrations. They would identify stories regarding any threat of mob gathering or any unrest breaking out and would send forces to the area immediately.

Kumaresh Roy, who runs Ghatal News from a small sub-divisional town in Western part of Bengal, also had a similar experience when he received calls from the local police station asking him to report on a murder incident with certain information. "Those were unofficial requests to expose the people who were allegedly involved in the political murder. The police wanted to see the reaction to the news, says Kumaresh.

However, the coverage does not restrict to disseminating the administrative information or any incident that took place. During the Durga Puja festival, BanglarSamay team had taken up a special coverage on starving vagabonds, beggars and footpath dwellers in the Siliguri town. "We had found that many people who stay on the footpath and mostly depend on the roadside restaurants to have meals donated by their owners were starving. So we wanted to bring that to the notice of the community and help these people in distress. We sent out our reporters and showed how these underprivileged people were living. We got a huge response from our audience," says Prasenjit.

This kind of coverage brings a human touch to their stories, and without doing a proper feature or human interest story, the news publishers could draw audience attention to their site or Facebook Page. In another district in the Western part of Bengal, Purulia Barta did a story on an old lady who was deprived of any government benefits. Within a day after the story was published, the local administrative officials reached her home to help her with the government schemes.

In normal time, the hyperlocals do cover issues like water-logging in a particular area, unavailability of civic amenities as and when they get any such stories. These are the stories which are genuinely hyperlocal in nature and the mainstream media operating from Kolkata, the state capital, would not cover. "In Bankura, we have forests, and the elephants often come to the residential areas. So we have opened a helpline to help people in deciding about their movement depending on the movement of the elephants," says Amitabha. They keep a watch on the movement of the elephants keeping communication open with the forest department and alert people regarding the same.

iii) Audience participation

Hyperlocal journalists have built a community around their news platforms, reacting to stories and contributing to the newsgathering process. BanglarSamay received a significant response from citizens of Siliguri regarding starvation issues. The stories appealed to help underprivileged people with dry food, opening phone lines and receiving responses on Facebook pages.

"We were overwhelmed. People came to our office or asked us to collect dry food from their places for distribution among these hapless people. The response reached such a state that we were forced to do stories to say we did not need any more food," says Prasenjit.

The Facebook page's interactivity and WhatsApp group's two-way communication facility facilitate direct communication with the audience. The publishers receive information from remote districts, mainly young people and students, through text or videos or even audio messages. The issues like poor road conditions, lack of drinking water supply, are often raised by the audience in their interactions. They also receive raw information about fire incidents or accidents from readers. The publishers inform reporters covering specific patches, ensuring a continuous flow of user-generated content.

Digital communities differ from physical ones, so news platforms connect people outside their district. People from the district like Murshidabad living in Maharashtra or Kerala for work or other purposes, use the hyperlocal news publishers' Facebook page to ask for information about their native village as they monitor the page regularly to remain connected to the village they are originally from.

iv) Role in increasing civic engagement

News publishers, we interviewed seem unaware of their role in increasing civic participation and building a democratic community through their news platform. They aim to increase audience traction on their Facebook page or website through stories, page views, and video videos. Despite their role as hyperlocal media organizations reporting on local issues, they are not conscious of their significant role in the community.

As Subhish Das of USP News claims, "Yes, we often get calls from our sources and the police regarding certain issues they want us to highlight in our media. The mainstream news media will not pick them up. We are the only communication channel that can be utilised by both the administration and the civic society. However, I am not sure, if we at all can contribute much to the society with our limited resources."

Conclusion

From the stories and experiences the digital publishers shared, it can be concluded that the hyperlocal media has the potential to increase civic engagement in a democratic society. The interactivity and proximity features of the hyperlocal media can facilitate the process. Both the journalists reveal that they are working with greater audience participation, but they need to channelise this in building a participatory community.

These hyperlocal journalists lack training both in technical issues as well as their role in community building. Better training and coordination among these hyperlocal media outlets may change their approach towards the journalism they are practising. So far, they are replicating the mainstream media in a localised manner with some grassroots elements embedded in it.

This study has many limitations. Further research with broader sample size and quantitative approach can reveal more in-depth insights regarding the role of hyperlocal media in bringing more civic engagement. However, this study shows there is considerable potential for the Indian language hyperlocal digital media to aid the process.

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Scrutinizing Uttar Pradesh Tourism Website with The Use of e-SQ

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Abstract

This article investigates the gap in the Uttar Pradesh Tourism website, focusing on the state of Uttar Pradesh, India. The study uses quantitative methodology using the Theory of Reasoned Action (TRA) and the Technology Acceptance Model (TAM). Data collection is done through questionnaires from 300 respondents, and analysis is done by Principal Component analysis andone-way ANOVA. The research reveals that more and more consumers are searching for information and planning their destinations through private websites rather than Uttar Pradesh Tourism Government websites.

Introduction

The integration of web 2.0 in contemporary tourism has transformed the traditional approach of moving between destinations without prior knowledge of language, culture, and places of interest. Travelers now rely on state websites, e-brochures, and various social media platforms to access destination information, emphasizing the pivotal role of websites in delivering high-quality information and maintaining service excellence using e-SQ dimensions and SERVEQUAL and WEBQUAL models. With the new age of technology in e-tourism and the use of e-SQ in the tourism sector, researchers have also focused on the Theory of Reasoned Action (TRA) (Ajzen and Fishbein 1980; Fishbein and Ajzen 1975) and the Technology Acceptance Model (TAM1 and 2) (Davis 1989). With the help of these theories, it will be easy to assess the gap between travellers and the tourism website and their attributes towards customer satisfaction and their revisits to the website.

Framework for website efficacy

David (1995) evaluated the website through eight different parameters that are: control, details, organisation mission and vision, format, Information channels, Proposed format, technical profundity, Price, help desk, or communication method.

Later, a study by Harris (2010) identified eight criteria for evaluating websites, encompassing quality control, customer satisfaction measurement, visitor intent and needs, timeliness, reasonability, misinformation, and global perspectives; these criteria are crucial for both customers seeking information and Destination Management Organizations (DMOs).

This was analysed by Chowdhary and Sharma (2014), delineates crucial factors for effective website operation, including content quality, interactive customer support through a help desk, user-friendly navigation, visitor tracking, multilingual accessibility, and customer testimonials to foster trust.

Technological Compliance:

The Theory of Reasoned Action (TRA) (Ajzen & Fishbein, 1980; Fishbein & Ajzen, 1975) is a theoretical model for our study, and TRA is applicable in Information technology and forms the Technology Acceptance Model (TAM) (Davis, 1989). The Technology Acceptance Model (TAM) posits that user behavioral intentions (BI) towards a website are shaped by the user's attitude (A), influenced by the technological aspects and offerings of the website, considering factors such as Perceived Ease of Use (PEoU) and Perceived Usefulness (PU). However, TAM acknowledges that website quality perception involves external factors beyond these two qualities. TAM 3, an extension of TAM, incorporates trust and perceived risk, highlighting their significant impact on users, particularly in the context of tourism websites.

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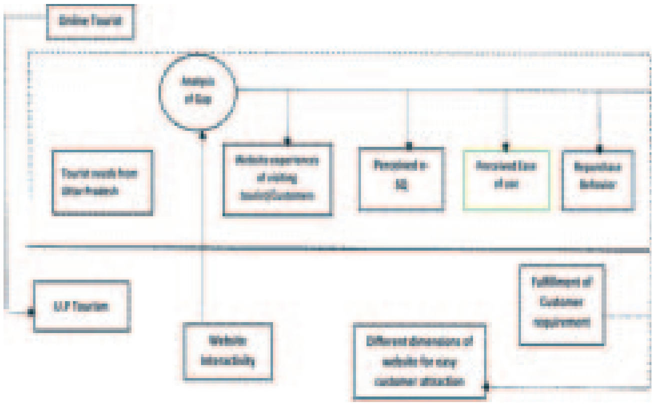

Figure 1: Conceptual Framework for Uttar Pradesh Tourism E-SQ

Source: Developed by the Authors

Method and Result

Conceptual Construct:

According to Loiacono, Watson, and Goodhue (2007), different elements are discussed as follows:

Website Information: According to Franz & Robey (1984); Good Hue & Thompson (1995), and Su *et al.* (1998), using a tourism website is considered by the user to be fit for providing desired information and content on the website.

Tailored Information: According to Ghose & Dou (1998), the information provided on the website should be tailored according to the in-depth information a customer needs for example, services regarding hotels, tour packages, and other relevant information other than the company profile.

Quality of Information: as stated by Hanna and Miller (1997), the tourism industry's tangible aspects empower customers to choose destinations based on information, emphasizing the importance of authentic, reliable, and sufficient website content, to alleviate concerns about service-related risks. (Bailey & Pearson, 1983; Wang & Strong, 1996; Strong *et al.,* 1997; Katerattanakul & Siau, 1999).

The three pieces of information that are important for the websites are explained in detail:

Accuracy: While visiting a website, a customer is supposed to have accurate information about the services or places he wants to visit. The information provided should be trustworthy, so that customers should not have negative feedback about the website and can re-visit it.

Relevance: With the content of the information provided on the website, the customer could be able to find the solution to the query they have regarding the tourism destination they have selected, and if they need more help, then proper communication can be made with people for help.

Updated Contents: The website should post the content that is updated from time to time so that the viewer can get the right information while visiting the website, and this also enables the creation of trust and satisfaction among the customers.

Trust: The assessment of electronic service quality (e-SQ) often involves the framework of building customer trust through ensuring secure transactions, providing accurate information, and delivering reliable packages on the website. (Doney and Cannon, 1997; Hoffman *et al.,* 1999).

Ease of Use: It is very important for the website that it offers user-friendly informative tabs so that it is easy for the user to generate or search for the information needed on the website (Davis, 1989; Benbunan-Fich, 2001)

Response Time: The duration a website takes to respond to customer queries, known as response time, significantly influences customer satisfaction, quality assessment, and positive customer profiling; a slow response time may prompt customers to seek alternatives. (Kaynama, 2000; Xie, Wang, & Goh, 1998; Kettinger & Lee, 1997; Parasuraman, Zeithaml, & Berry, 1988; Shand, 1999; Seybold, 1998).

Visually Appealing: A website's visual feature is much needed for customer engagement, as if the website is appealing, it will attract the customer to search for it. (Park & Gretzel, 2007). According to Liu & Arnett (2000), visual appeal is an important feature as it makes browsing enjoyable.

Emotional Appeal: The emotional appeal holds significant importance in the context of a state tourism website for Uttar Pradesh, particularly featuring religious and historical attractions, emphasizing the need for emotional connection to effectively address customer needs and provide solutions, ultimately fostering customer loyalty. According to Castaneda and Munoz-Leiva, (2007), emotional appeal also influences the customer to revisit the website.

Competitiveness: The government-operated tourism website prioritized surpassing competitors by adopting a customer-centric approach to outperform private tourism websites in the market, emphasizing the need for more comprehensive and accurate information. (Seybold, 1998; Rogers, 1982).

Safe Online Transaction: Ensuring customer satisfaction in websites is crucial as users prioritize secure online transactions, convenience, safety, reliability, and efficiency, emphasizing the necessity of a secure, user-friendly environment for both shopping and checkout processes.

Research Objectives:

The major factors that contribute to the e-SQ of any website are as follows:

1. Recognition and fulfilment of the wants of online consumers.
2. Website profiling for customer information.
3. Precise evaluation of the e-SQ of the tourism website.

Hypothesis Formulation:

According to Khalifa and Liu, 2002; Khalifa *et al.,* 2002; Khalifa and Shen, 2005; Zeithaml *et al.,* 2002, e-SQ is an important feature to increase the quality of the website by increasing customer engagement and customer satisfaction. Customer satisfaction is all about creating engagement and retention for the online customer (Wolfinbarger and Gilly, 2003; Edvardsson, 1996).

As stated by Grönroos (2000).The available e-services encompass customer information processing, effective communication channels, and ensuring transaction safety, covering user interface, technological assistance, and navigation aspects. Therefore, it can be hypothesised that:

H1: Uttar Pradesh Tourism has a significant positive relation with website e-SQ about their trustworthiness and credibility.

It can be asserted that customer behavior towards the website's e-SQ underlines the need for customer perception towards the digital world and how well consumer needs are met by the tourism website. (Zeithaml *et al.,* 2002; Parasuraman *et al.,* 2005; Iliachenko, 2006; Nandankar *et al.,* 2023). Therefore, it can be hypothesized that:

H2: Customers' perceptual experience is positively affected by the ability to control Uttar Pradesh tourism websites.

Consequently, the assessment of the e-SQ website ought to be determined by the degree to which it satisfies the online requirements of its customers (Zeithaml *et al.,* 2002; Ariff *et al.,* 2013; Rodriguez *et al.,* 2020). Therefore, it can be hypothesized that:

H3: Uttar Pradesh Tourism website customized navigation tool has a positive impact on online consumers.

H4: Customers' emotional experience is positively affected by the ability of the on Uttar Pradesh tourism website to respond promptly.

Sample and Measurement:

Data was gathered from 285 respondents, of whom 15 were found to be duplicates, who provided valid responses to the survey through an online method using Google Forms. To analyze the data, an exploratory factor analysis was conducted to confirm the data's reliability. A reliability test will be done. A test will be conducted to identify potential disparities in perception among the participants, considering their demographic characteristics and browsing habits on the Internet. Furthermore, a regression analysis method was employed to examine whether the identified factors could have an impact on the frequency at which the participants bought tourism-related products online. The methodological steps used for the study are explained in figure (2) below:

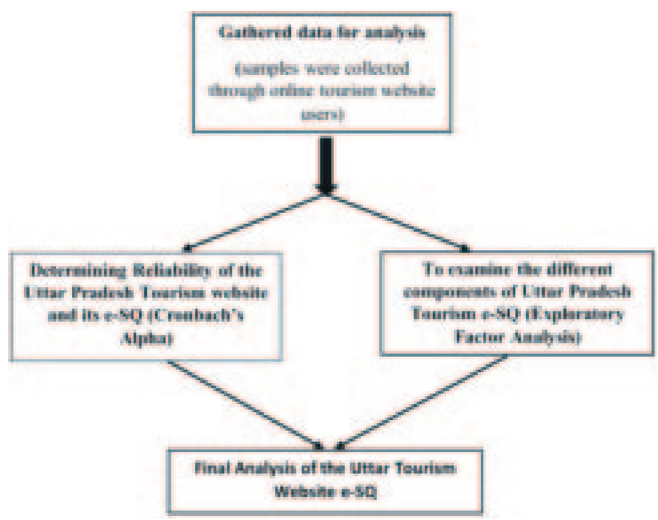

Figure 2: Research Model

Result Analysis

To examine the trustworthiness of the data reliability test using Cronbach's Alpha. To assess the different items which are used for Uttar Pradesh Tourism website e-SQ using Standard Deviation and Mean (Table 1). The online customers' perception for the different navigation tools is analyzed through item total statistics and reliability (Table 2). As Cronbach's Alpha significant value is 0.9139. It can be accessed from table 2, that all the items (Appendix A) have a high internal consistency.

Table 1: Item Statistics

Item	Mean	STD DEV
Uttar Pradesh information	7.4523	2.2262
Tourist Places recommendation	8.1407	1.8990
Help/Desk/Chat Desk	5.3618	2.3224
Tourism Destination information	8.1969	1.7800
Connecting to Different Types of Tourism	7.9095	1.9337
Online Booking	7.4573	2.3392
Package Personalization	7.7236	2.1079
Interactive website	7.9397	2.0686
Online Reservation and Payment	7.9397	2.0686
Website Map	5.6432	2.4697
Location Feature	5.9347	2.3891
Local Search engine	7.5678	2.0111
User-Friendly Interface	7.2362	2.2696
Customer Personal information	5.5276	2.5560
Website Easy Navigation	5.5276	2.3949
Safe Transaction and Credibility	5.6583	2.6312
Browser Efficacy/ Friendliness	5.7839	3.1652
Multimedia Use in Website	7.7387	2.3830

Table 2: Reliability statistics

Item	MEAN IF DELETED	VAR. IF DELETED	ITEM TOTAL CORREL.	ALPHA IF DELETED
Uttar Pradesh information	133.0012	761.3233	0.4862	0.9145
Tourist Places recommendation	133.5657	746.7838	0.5334	0.9117
Help/Desk/Chat Desk	134.1256	752.0356	0.3718	0.9143
Tourism Destination information	133.2664	741.5489	0.616	0.9093
Connecting to Different Types of Tourism	133.3729	738.6601	0.592	0.9135
Online Booking	133.0252	735.4893	0.5515	0.9106
Package Personalization	133.7488	736.1775	0.6477	0.9075
Interactive website	133.5427	733.784	0.6344	0.9097
Online Reservation and Payment	133.3327	729.8776	0.6477	0.9087
Website Map	133.8392	727.57	0.6118	0.9095
Location Feature	134.1477	733.4934	0.6527	0.9077
Local Search engine	133.0546	730.624	0.6414	0.9085
User-Friendly Interface	134.2682	733.3588	0.6331	0.9083
Customer Personal information	134.5548	725.3434	0.6175	0.9087
Website Easy Navigation	134.8548	733.4171	0.5941	0.9091
Safe Transaction and Credibility	134.8241	716.5071	0.5609	0.9099
Browser Efficacy/ Friendliness	134.0985	720.6743	0.4865	0.9119
Multimedia Use in Website	133.8330	738.7247	0.6111	0.9098
Reliability Statistics Mean inter-item correlation = .3779 Cronbach Alpha = .9289 Standardized item Alpha = .9277				

An exploratory factor analysis was used to investigate whether the suggested set of items for the e-SQ of the tourism website can be classified into several larger categories or dimensions. The result of the analysis is shown in Tables 3 and 4.

Table 3: Percentage of Variance

	Factor1	Factor2	Factor3	Factor4
Percentages of Variance Accounted for	22.90751	14.45120	12.31170	11.38761

Table 4: Factor Rotation

ITEM	FACTOR 1	FACTOR 2	FACTOR 3	FACTOR 4
Uttar Pradesh information	0.77951	0.17902	0.12820	0.01427
Tourist Places recommendation	0.70693	0.12909	0.17508	-0.08134
Help/Desk/Chat Desk	0.67970	0.24797	0.18789	-0.16171
Tourism Destination information	0.61562	0.10085	0.19551	-0.18569
Connecting to Different Types of Tourism	0.60037	-0.01986	0.14080	-0.42343
Online Booking	0.52505	0.30928	0.28540	-0.19502
Package Personalisation	0.48645	0.48553	0.21021	-0.11711
Interactive website	0.26129	0.83115	0.12084	-0.08127
Online Reservation and Payment	0.29028	0.78087	0.17436	-0.11956
Website Map	0.26129	0.83115	0.15134	-0.43469
Location Feature	0.29028	0.78087	0.17436	-0.11956
Local Search engine	0.21152	0.63517	0.05134	-0.43469
User-Friendly Interface	0.08764	0.01527	0.74784	0.15551
Customer Personal information	0.13998	0.21474	0.70706	0.09491
Website Easy Navigation	0.49803	0.09074	0.60979	-0.10575
Safe Transaction and Credibility	0.46144	0.14477	0.50936	-0.16218
Browser Efficacy/ Friendliness	0.03913	0.46672	0.24897	-0.51912
Multimedia Use in Website	-0.11855	0.11596	0.38597	-0.54366

The results obtained from the factor analysis of the different four factors are determined by 60% of the total variance. The significant value should be greater than 0.5. It can be seen from the table that portal interactivity and website information play a major role. Whereas multimedia use and technicality of the website were kept to the lowest consideration.

To analyse the purchase behaviour of online customers from Uttar Pradesh tourism websites, ANNOVA was used. This will help the researcher in analysing the dependent variable (online consumer behaviour) and independent variable (different dimensions of the e-SQ of the U.P. tourism website). The result of the regression analysis found that there is no significant relationship between the examined variables. However, some of the dimensions, like Tourist destination Information (F-ratio: 4.1578) and website interactivity (F-ratio: 3.3450), The results of the analysis are given in Table.

Table 5.1: Whole Model: Summary of fit

R square	0.013367
Adj R square	-0.01007
Root Mean Square Error	0.989919
Mean of Response	2.147364
Observations (or Sum Wgts)	175

Table 5.2 Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	4	2.16189	0.547989	0.5491
Error	177	173.41507	0.979750	Prob>F
C.Total	181	175.56593		0.6989

Table 5.3 Parameter Estimate

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	2.0546787	0.439318	4.69	<.0001
INTERACTIVITY	-0.037611	0.069128	-0.56	0.5867
WEBSITE DESIGN	-0.011899	0.057722	-0.14	0.9685
INFORMATION	-0.004012	0.06428	-0.16	0.9613
TECHNICAL ASPECTS	0.0734239	0.055217	1.36	0.1843

Out of 17 items loaded for component factor analysis, whose significant value should be <0.5. The four factors that are put forth are website design, website interactivity, perceived information, and technical aspects of the website. From the result, it can be concluded that chat/help desk, multimedia features on the website, and customer information did not load, so they can be eliminated. Overall, it can be suggested that the U.P. tourism website has an acceptable level of validity.

Table 6: Principle Component Analysis: Factor Extraction Matrix

ITEM	FACTOR 1	FACTOR 2	FACTOR 3	FACTOR 4
Uttar Pradesh Information	0.31	**.663**	.226	-.295
Tourist Places recommendation	.251	.001	**.822**	-.067
Help/Desk/Chat Desk	.431	.079	**.768**	.142
Tourism Destination Information	.159	.279	**.779**	.296
Connecting to Different Types of Tourism	.418	.054	.455	**.665**
Online Booking	**.516**	.008	.488	.248
Package Personalization	**.697**	.312	.366	-.222
Interactive website	**.249**	.666	.014	-.018
Online Reservation and Payment	**.177**	.528	.211	.548
Website Map	**.033**	.922	.133	.117
Location Feature	**.177**	.813	.028	.268
Local Search engine	**.654**	.362	.222	.225
User-Friendly Interface	**.786**	.186	.266	.285
Customer Personal Information	**.911**	.168	.223	.124
Website Easy Navigation	**.911**	.167	.322	.278
Browser Efficacy/ Friendliness	**.236**	.422	-0.81	.299
Multimedia Use in Website	**.525**	.533	.226	.176

Conclusion and Discussion

The current study investigates the website e-SQ in the context of tourism operations. Tourism is one of the sectors that may benefit substantially from the usage of Internet marketing tactics to find target consumers due to its information-intensive characteristics, and tourist companies have increasingly recognised the necessity of providing better e-SQ to customers (So *et al.,* 2016).

The e-services that potential buyers of tourism services consider most important on tourism websites are related to website interactivity and information. These include tourist destination information, safety and security, customised packages, website interactivity, and direct links to different types of tourism, listed in order of decreasing importance. The capacity of a tourism website to furnish appropriate and up-to-date information about services and other pertinent details to a consumer is considered a crucial quality standard. The degree to which the visual and design aspects of a website are attractive and enjoyable for the user is known as website design. Informativity, on the other hand, pertains to the website's ability to present information that is pertinent to the user's objectives.

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Content Analysis of the Curriculum of Business Journalism Programs in India

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Abstract

Journalists covering business require special skills and competencies, identifying the extent these competencies are covered in a business journalism program in an academic setting is the purpose of this research. India has seen growth in business coverage in media keeping pace with the increasing appetite for business news, information and analysis of audiences with an increase in special business media outlets. This study is to compare the curriculum of business journalism programs in India with a professional competency model. It presents the results of a curriculum analysis of 4 Business Journalism Programs offered in India that offer Postgraduate Programs of Business Journalism. The curriculum analysis is grounded in examining the professional competencies curriculum concerning professional competencies modelled on the competencies framework provided by Cheetham and Chivers (2005) Lei Guo and Yong Volz (2020), adapted in this paper for business journalism. The paper uses content analysis and compares the curriculum as published, with the analysis finding similarities and differences, and identifying best practices of these institutions' curricula for business journalism identifying competencies namely Knowledge, Functional, Behavioural, and ethical, to identify common themes, differences and good practices in their curricular design and delivery.

Introduction

Business journalism involves media coverage of financial, business, and economic news, including reports on companies, industries, markets, local economies, and the global economy. This coverage is prevalent in newspapers, magazines, television, and online news platforms, with variations in emphasis and depth depending on the country or region. For example, in the United States, business journalism often focuses on the stock market and Wall Street, while in Europe, the emphasis may shift towards government economic policies and regulations.

The term "Business Journalism" gained prominence in India with the initiation of economic liberalization in 1991, resulting in an increased demand for information about the economy, finance, and business. Business coverage has expanded across general and specialized media, with newspapers, TV channels, and websites offering exclusive business news. The growth in business news, analysis, economic policy reviews, and reporting has underscored the need for enhanced journalism skills and a deeper understanding of the business and economic landscape. Scholars emphasize that effective business journalism requires specialized skills and proficiency in comprehending broader economic scenarios, industry specifics, and business analyses (Roush 2012).

Despite the proliferation of business media outlets and surge of digital media platforms, there is a notable absence of a specialized, structured approach to training and education in business journalism.The current research investigates whether media institutions have adjusted their curricula to meet the evolving demands of business journalism. It explores whether institutions offering business journalism programs have incorporated the necessary competencies for aspiring business journalists into their curriculum. The study employs the professional competency model developed by Cheetham and Chivers (2005), refined through empirical evidence across various professions, including academia and industry. The analysis evaluates each curriculum based on these competencies, offering insights into commonalities and best practices in business journalism education. In this study, "business journalism" encompasses economic, business, and financial journalism, while "competency" refers to the amalgamation of knowledge, skills, and traits essential for job performance.

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Literature Review

Laurence Solkin's (2020) analysis of journalism education literature from the past two decades highlights the ongoing debate between the profession and craft of journalism. Journalism education has shifted towards an 'industry-informed' model, anticipating technological and employment advancements. O'Donnell's methodology emphasizes practical exercises to prepare students for ethical, legal, and professional challenges, fostering a deep understanding of journalism ethics and media law (O'Donnell, 2001).

Deuze (2006) notes that much journalism education literature starts at the curriculum level, requiring universities to address the evolving skills demanded by the industry. There is a particular gap in business journalism training, as observed by Kitchener (2005) and Ludwig (2002). Despite journalism courses covering media law, there is a lack of comprehensive training in business and financial journalism (Murphy, 2013).

Journalism often follows a general education approach, unlike other communication-related fields, where professionals are encouraged to develop a distinct 'brand' identity (Murphy, 2013). The question arises whether business, finance, and economics intricacies can be effectively taught within journalism schools. Ludwig (2002) expresses concern about the limited resources available for journalists to understand these complex fields.

In the modern context, journalism is transitioning from a trade to a profession, demanding a more specialized education. Business journalism, particularly, is seen as requiring data analysis skills (Berners-Lee, 2010). Hearn and Bridgstock (2010) advocate for interdisciplinary collaboration, integrating economics into journalism training.

Colm Murphy (2013) highlights the scarcity of specialized training in business journalism but mentions some universities providing master's degrees in the UK and elective subjects in the US. However, the required competencies for business journalism need a specific understanding. Competency in journalism is evolving to adapt to the changing media landscape (Godkin, 2008).

A study on Spanish universities reveals a lack of balance between theory and practice in journalism curricula (Carles, Laura, and Elvira). Lei Guo and Yong Volz explore journalistic competency in broadcasting, finding four components: cognitive/knowledge, functional, personal/behavioural, and ethical competence.

The rapid digitization of society has introduced new demands, prompting both students and educational institutions to recognize the need for a broader range of competencies aligning with market needs. In India, there are limited options for business journalism courses, emphasizing the need for more comprehensive programs.

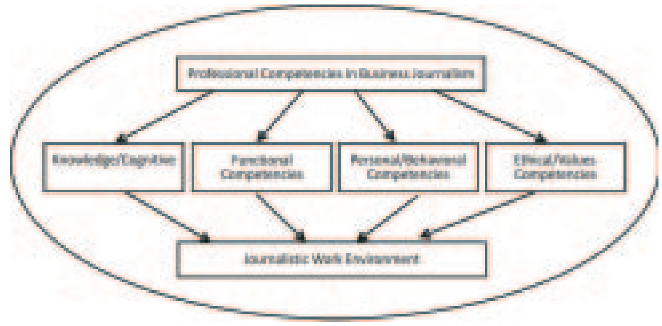


Figure-1: Adapted from Competencies for Professions-Cheetham and Chivers (2005)

In the study conducted by Cheetham and Chivers (2005), a holistic approach was taken to define and categorize professional competence into four distinct dimensions. These dimensions encompass:

Cognitive Competence: This dimension represents the "know-why" aspect of professional competence, encompassing both formal and informal tacit knowledge.

Functional Competence: Functional competence pertains to the practical skills that an individual working within a particular occupational area should possess and be able to demonstrate.

Personal/Behavioural Competence: This dimension characterizes the enduring qualities and traits of an individual about their effectiveness in job performance.

Values/Ethical Competence: Values and ethical competence relate to an individual's adherence to appropriate personal and professional values in their work.

Building upon this comprehensive model, this study seeks to investigate the specific professional competencies required in the field of business journalism.

Research Method-Concept of Content Analysis

The research employs content analysis as its primary research method. Content analysis is a systematic process for summarizing and reporting on written data, with the primary goal of extracting key content and its underlying messages. It offers a well-defined set of procedures for the rigorous analysis, examination, and validation of written data content.

Content analysis entails a methodical examination of the content within a specific body of material, such as curricula, to identify commonalities, disparities, and underlying themes (Adamu, 2014). It comprises a range of techniques that prove invaluable for the analysis and comprehension of textual collections. Content analysis aids in drawing valid inferences from data in their specific context by condensing the messages present in the provided content. It allows for a close engagement with the text and offers flexibility in exploring specific categories and relationships. Moreover, content analysis serves as a valuable tool for uncovering trends and patterns within curriculum documents.

Focus of the Study

i. **Q1.** How many courses explicitly or implicitly mention knowledge competencies?

ii. **Q2.** How do courses explicitly or implicitly mention learning functional competency

iii. **Q3.** How many courses explicitly mention the development of behavioral competencies?

iv. **Q4.** How do course sexpress the development of ethical competencies?

v. **Q5.** What are the similarities and differences in the way these competencies are covered in the curriculum?

vi. **Q6.** What are the best practices expressed in the curriculum?

Data and Procedure

Specialised Business journalism programs are very few in India, as compared to the number of general journalism and mass communication programs. While some universities offer business journalism as a course. The programs offered are in the post-graduation category, the curricula of the four offered programs have been considered for the analysis, namely, the Asian School of Journalism, Bennett University, The BSE Institute, Delhi University from India.

Table-1

Sl. No	Name of Institution/UniversityName of the Program	Mode of Delivery	Duration of the Program
1	Asian School of JournalismPG Diploma in Business Journalism	Offline	1 Year
2	Bennet UniversityPG Diploma in Business Journalism	Offline	1 Year
3	The BSE InstitutePG Diploma in Financial Journalism	Online	9 Months
4	Delhi UniversityPG Diploma in Business Journalism and Corporate Communication	Offline	1 Year

Data Analysis

The primary aim of applying content analysis to the curriculum was to identify both the commonalities and distinctions that define the approach universities take in designing business journalism courses. This analysis was intended to gauge how effectively the curricula, crafted by different universities, align with essential attributes such as functional skills, professional capabilities, journalistic values, and personal development-factors crucial for the success of aspiring business journalists.

Initially, the researcher conducted a methodical review of the curriculum to determine if all four traits were encompassed by the universities in their course structure. The scrutiny extended to evaluating the breadth and depth of knowledge covered, analysing the practical skills imparted in terms of functional skills, understanding the emphasis placed on personal development and soft skills, and assessing the guidance provided on journalistic ethics and values. The researcher then examined how these individual traits were integrated into the curricula established by the five universities, ultimately aiming to align them with the overarching course objectives.

This comprehension contributes to the ongoing discourse surrounding the definition of a high-quality business journalism curriculum and how universities and institutes can effectively equip students with the requisite skillsets for success in the field of business journalism.

Asian School of Journalism

The postgraduate diploma program at the Asian School of Journalism, administered by a trust founded by Asianet and Kasturi and Sons media groups (owners of The Hindu and The Business Line), was introduced in collaboration with Bloomberg in 2017. This partnership included the installation of Bloomberg terminals and certified training, allowing for a comprehensive evaluation of the school's curriculum.

The curriculum extensively covers critical areas such as business understanding, operational insights, financial health analysis, capital markets, and global trade and commerce. It underscores adherence to regulations, economic principles, and the application of analytical tools, including quantitative methods. The integration of advanced technology and the resolution of business-related issues are integral aspects.

Ethical values are prominently featured, with the curriculum mandating exposure to higher ethical standards in business journalism. The inclusion of a technology and law course helps students grasp ethical considerations related to data security and confidentiality.

In summary, the curriculum is comprehensive, with the aim of equipping students with crucial knowledge, skills, and values for success in business journalism. It achieves a balance between theoretical understanding and practical skills, offering hands-on experience and exposure to real-world applications to foster the development of well-rounded business journalists.

Bennett University

Bennett University is owned by the Times of India group and has an eminent industry advisory board. The curriculum for the Post Graduate Diploma in Business Journalism offered by Bennett University is well designed. It covers fundamental components that can provide a springboard to success in the business journalism space for the students.

The curriculum is crafted to guide students in grasping essential business principles, economics, financial markets, and digital journalism. It encompasses legal and ethical dimensions of journalism, laying the foundation for success in the realm of business journalism.

Emphasizing practical application, the hands-on curriculum hones skills in writing, reporting, digital journalism, and data journalism, enabling students to master functional competencies crucial for their professional journeys. The inclusion of a mandatory dissertation requires students to apply these skills in real-world scenarios.

In terms of personal development, the curriculum addresses communication, team-building, leadership, and presentation skills, aiming to cultivate attributes vital for success in any profession. The "Career Services" module, covering activities such as CV writing and interview preparation, further supports students in their career preparation endeavours.

With a dedicated module on "Ethics in Journalism," the curriculum underscores the commitment to instilling ethical values in students. In its entirety, the curriculum is comprehensive, poised to shape students into well-rounded business journalists prepared for successful careers.

BSE Institute

The BSE Institute is a 100% subsidiary of BSE Limited that offers an Executive Programme in Financial Journalism, the curriculum of which features the following:

The curriculum aims to impart a vast knowledge base to students, focusing on critical aspects of financial journalism, including fundamentals of financial, business, and economic journalism. It covers topics such as financial markets, banking, global trade and finance, the Indian banking structure, stock markets, and the roles of regulatory bodies like the RBI. Students are exposed to the Constitution of India and its media-related provisions.

With a strong functional orientation, the curriculum entails analyzing business financials, understanding business constitutions, interpreting P&L statements, balance sheets, and cash flow statements. Practical journalism skills are emphasized, including tracking major economic events, interpreting stock tables, utilizing data for analysis, and incorporating advanced coding and data journalism relevant to the digital era. The curriculum also highlights the importance of building knowledge bases and sources, evaluating data, and effectively filing stories based on data.

In terms of personal development, components within the curriculum focus on fostering creativity and critical thinking. This includes developing story ideas, identifying story formats, and localizing global headlines.

The course "Press Law and Ethics" serves as a guide for students to navigate the ethical considerations inherent in journalism, ensuring objective reporting. This ethical grounding is seen as crucial, particularly in the realm of financial journalism where accuracy and integrity are paramount.

Overall, the curriculum is positioned to provide students with a solid foundation, essential for the career growth of business journalists.

University of Delhi

The University of Delhi, a public central university located in Delhi, offers a unique program that combines business journalism and corporate communication. This one-year program includes an internship at its conclusion. The curriculum comprises several key components.

The curriculum is designed to lead students to a comprehensive understanding of business journalism, business laws, fundamental business concepts, and business operations, with a specific emphasis on reporting about the economy. It includes practical elements, such as instructing students in writing for business media and analysing case studies.

Regarding functional skills, the curriculum concentrates on practical abilities, including financial analysis and corporate budgeting. It seeks to enhance students' writing skills, enabling them to generate concise news reports, feature articles, and conduct interviews with business leaders.

While personal development is not explicitly outlined, the curriculum's overall tone implies a focus on acquiring personal skills like critical thinking and effective communication.

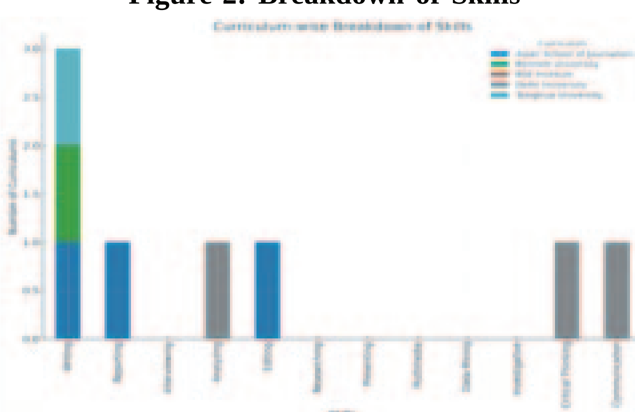
Values are integrated into topics such as corporate governance and business laws, emphasizing the significance of ethical conduct and regulatory compliance. The curriculum underscores the necessity for concentrated training in values and ethics within the realm of business journalism.

In summary, the curriculum is extensive, delving deeply into both knowledge and functional aspects. However, there is a suggestion that attributes and values associated with personal development need emphasis to complement the curriculum. This emphasis is crucial as it can significantly contribute to the success of students in their professional endeavours.

Analysis of curriculum based on the skills reckoned and the teaching methods

The researcher analysed the curricula in terms of the skills reckoned to draw inferences. The following Figure-2 reveals the breakdown of the skills. The skills are plotted on the X-axis and the number of curricula the skill figures in, is plotted on the Y-axis.

Figure-2: Breakdown of Skills



Breakdown of Skills

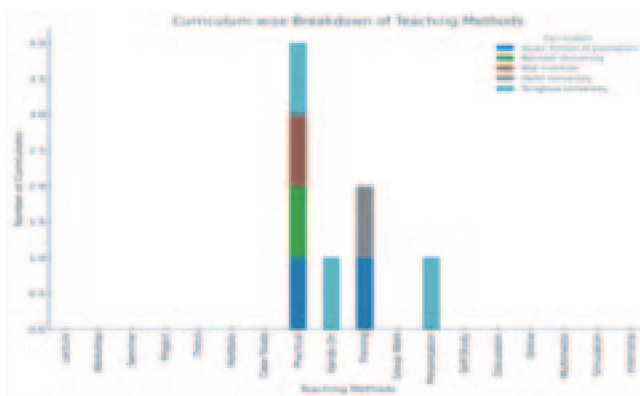
It is clear from the Figure that the "Writing" skill is covered by three curricula (Asian School of Journalism, Bennett University). The "Reporting" skill is covered only by the Asian School of Journalism curriculum. The "Analysing", "Critical Thinking", and "Communication" skills are covered only by the Delhi University curriculum. The "Editing" skill is covered only by the Asian School of Journalism curriculum.

Skills like "Interviewing", "Researching", "Presenting", "Multimedia", "Data Mining", and "Investigating" are not covered by any of the curricula. The table linked to the Figure is attached to the annexure for reference.

Teaching methods

Based on keywords, the researcher analysed the curriculum from the perspective of teaching methodology. The following Figure 3 reveals the plot of the teaching methods against the relevant curriculum. Apparently, 'Practical' is the most common teaching method across the curricula.

Figure 3: Teaching Methods



The "Practical" method is incorporated into four of the curricula (Asian School of Journalism, Bennett University and BSE Institute), the "Training" method into two curricula (Asian School of Journalism and Delhi University), Other methodology items like workshops, case studies, self-study, simulation, discussion, and internships are not found in any of the curricula, giving rise to a gap. The table relating to the foregoing Figure is furnished in the annexure for reference.

The following tables compare the five curricula across aspects. The outcome of the comparison reveals that while all five cover the knowledge and functional skill aspects well, there is variation in the degree of emphasis they place on personal development and values.

Table-2: Similarities across the five curricula in terms of core aspects

Curriculum	Knowledge	Functional	Personal	Values
Asian School of Journalism	Provides a solid foundation in business journalism, including understanding of companies, finance, and financial markets.	Emphasizes practical skills such as reporting, writing, and editing.	Emphasizes cultivating sources, honing news judgement, and developing original piece of journalism.	Ethical standards are a key part of the Bloomberg Training.
Bennett University	Covers a wide range of topics, providing a broad understanding of financial journalism.	Emphasizes on practical skills, with courses on writing news reports, features, and interviews.	Includes components that could contribute to personal development, such as building knowledge bases and sources.	Includes a course on "Ethics in Journalism," which suggests a focus on ethical considerations.
BSE Institute	Covers a range of topics that are essential for a career in Financial Journalism.	Provides practical skills such as reading and understanding annual reports, financial results, and budgets.	Encourages the development of story ideas, identification of story formats, and localization of global headlines.	Includes components that indirectly instill a sense of ethical conduct and adherence to regulations.
Delhi University	Provides a broad knowledge base on key areas of financial journalism.	Includes training in analyzing company structures, profit and loss statements, balance sheets, and cash flow statements.	Requires students to develop personal skills such as critical thinking, analytical ability, and communication skills.	While covering topics such as corporate governance and business laws may indirectly instill a sense of ethical conduct and adherence to regulations.

Table-3: Scope of improvement across five curricula in terms of core concepts

Curriculum	Knowledge	Functional	Personal	Values
Asian School of Journalism	More emphasis on global economic trends and their impact.	Add more courses on digital media, social media, and data-driven journalism.	Additional focus on leadership and team management skills.	Explicit course on journalism ethics and law.
Bennett University	Inclusion of more recent topics like cryptocurrency and blockchain.	Additional training on specialized business journalism tools and software could be beneficial.	Include courses on personal branding and networking in the journalism industry.	More emphasis on the ethical implications of digital journalism and data privacy.
BSE Institute	Courses on emerging trends in business journalism, such as the impact of AI and big data.	More hands-on workshops or industry collaborations to provide practical experience.	More emphasis on soft skills such as negotiation, leadership, and interpersonal communication.	Courses on ethics in financial journalism and understanding bias.
Delhi University	Deeper focus on technology businesses, startups, and entrepreneurial ecosystem.	Include more training on digital journalism tools and multimedia storytelling.	More emphasis on creativity and critical thinking skills.	Include more detailed modules on journalistic ethics and responsible reporting.

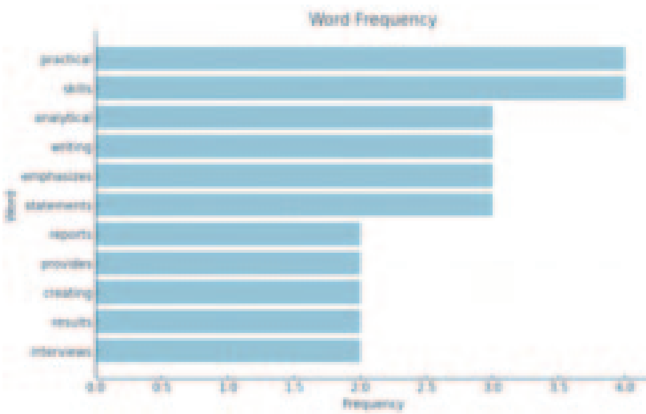
Analysis using keyword frequency

The most frequent words in the descriptions of the curricula are depicted in the below table and graph.

Table-4: Word Frequency

Word	Frequency	Word	Frequency
Practical	4	Provides	2
Skills	4	Creating	2
Analytical	3	Results	2
Writing	3	Interviews	2
Emphasizes	3		
Statements	3		
Reports	2		

Figure-4

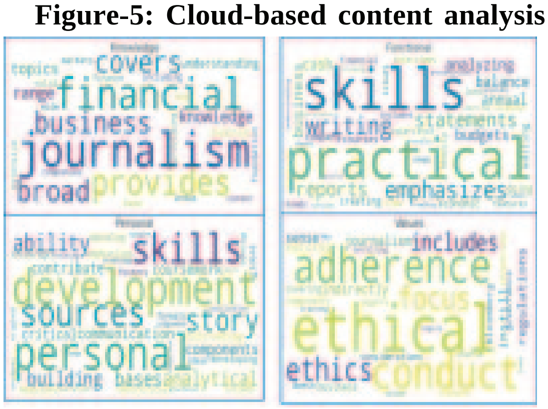


It can be inferred that the curricula focus on providing practical skills, with a higher emphasis on writing and reporting. The less frequently used methods point to the wide range of skills figuring in the curriculum, like understanding financials, using digital tools, etc.

Content analysis using "word cloud"

The researcher carried out a simplified version of content analysis to interpret the frequency of occurrence of words in the description of the four aspects. He carried out the analysis across five curricula, as the following figure reveals.

Figure-5: Cloud-based content analysis



The figure illustrates word clouds for the four components (Knowledge, Functional, Personal, and Values) across various curricula. Each word cloud visually represents the most frequently used words under the descriptions of each component, with the size of the words corresponding to their frequency. These word clouds serve as a graphical summary of the curriculum content, emphasizing the most recurring words in the descriptions of the primary four components. This provides a concise overview of the key themes or topics. For instance, in the 'Knowledge' word cloud, common words include 'business,' 'journalism,' and 'financial,' aligning with expectations for a Business Journalism curriculum. Similarly, the 'Functional' word cloud features words like 'practical,' 'skills,' and 'writing,' essential elements of a journalism course.

Significant Findings and Discussion

The curriculum across universities and institutions may differ owing to the nuanced approach the universities and institutions take towards the framing of the curriculum. The nuanced approach may have been warranted by the educational philosophies they profess and by the requirements of the business journalism industry operating across the regions of the country. Hence the researcher undertook an analysis of the curricula designed by the universities. A set of similarities and differences obtained across the curricula emerged as a result. They are captured in the following paragraphs and tables.

Similarities

A common thread running through the curricula is an attempt on the part of the institutions to comprehensively expose the students to the business journalism. The focus exclusively is on laying the foundations for the career advancement of business journalism students. All of the curricula cover the basics of journalism. Three institutions are supported by business groups that have major media interests that include publications and broadcasting. Asian College of Journalism is supported by The Hindu group, BSE Institute by the Bombay Stock Exchange, and Bennett University by the Times of India Group. University of Delhi is a pure-play academic University.

Differences and Best Practices.

The visual representations showcase the most frequently used words within each component, with word size corresponding to their frequency. These word clouds offer a graphical summary of the curriculum content, highlighting the most prevalent words in the descriptions of the primary four components. This succinctly outlines the primary themes or topics. For example, in the 'Knowledge' word cloud, prevalent terms include 'business,' 'journalism,' and 'financial,' aligning with expectations for a Business Journalism curriculum. Similarly, the 'Functional' word cloud includes words like 'practical,' 'skills,' and 'writing,' which are fundamental aspects of a journalism course.

Conclusion

Recognizing the current status of the business journalism industry and the skills in demand, there is a acknowledged necessity for enhancement across universities and institutes. Integrating these improvements into the curriculum becomes imperative to ensure students are well-prepared for career advancement. Comparing curricula is intricate, involving not just content analysis but also considering factors like teaching methods, student backgrounds, faculty qualifications, and available resources, among others. Additional approaches that can enrich curriculum development encompass:

Engagement with Industry Professionals: Universities and institutes should initiate discussions with professionals in the business journalism field to gain insights into the most relevant and needed skills in the job market. This ensures that the curriculum remains applicable and pragmatic.

Student Feedback and Outcomes: It is crucial to collect feedback from program graduates. Understanding their ability to secure jobs through the program and their satisfaction levels can provide valuable insights. This feedback aids in identifying current industry needs and potential areas for improvement by universities and institutes.

Educational Research: Continuous research into evolving pedagogy is essential to ensure the curriculum aligns with changing trends in the business journalism space. The design should be adaptable to industry dynamics across various parameters.

Continuous Review and Improvement: Regular and systematic reviews of the curriculum, covering content, teaching methods, assessment techniques, and student feedback, are essential to prevent obsolescence. Annual reviews conducted consistently, and prompt follow-up actions should be initiated based on the findings.

In summary, incorporating insights from industry professionals, gathering student feedback, staying abreast of educational research, and implementing continuous reviews are crucial steps for enhancing and adapting business journalism curricula to meet the evolving demands of the industry.

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AI: Unlocking New Insights in Education and Engineering Contexts

*Mohd Dawood, **Zoya Javed

Abstract

With the potential to combine cognition, machine learning, emotion detection, and human AI, AI is a multidisciplinary technology that is gradually making advancements. For nations all around the world, the advancement of AI has emerged as a key development strategy for maintaining security and boosting national competitiveness. Critical thinking, teamwork, and creative thinking are examples of 21st century skills. These skills are essential for success in today's global society, and AI-enabled tools and models can be important in developing them. Interactive learning tools driven by AI can aid in the development of these skills by providing stimulating learning opportunities that promote exploration and problem-solving. India has recently experienced a significant paradigm shift in terms of its educational system. A call to action rather than a prediction of the future is what we call the Fourth Industrial Revolution. It is a goal to develop, disseminate, and manage technology in a way that supports a robust, more cooperative, and long-lasting framework for social and economic development, based on shared values like the welfare of all people, respect for human dignity, and stewardship of coming generations. This paper explores the evolution of AI and additionally highlights how J. McCarthy's Proposal for the Dartmouth Summer Research Project on AI, which was presented at Dartmouth College, Hanover, New Hampshire, contributed to the evolution of the concept of AI. This paper also reveals the philosophical underpinnings of AI. Examining how AI can be used in education and the mechanical engineering context is the goal of this study. The world is being overtaken by (AI), whether it be in the agricultural, automotive, educational, or transportation sectors. India has a very large potential for AI. AI will be solidifying its role as a game-changer in India in the upcoming years. Apart from this, AI has notable risks because every excellent attribute has a criticism. Anything that goes beyond its intended application may cause crashes and malfunctions or provide meaningless outputs, which can be quite challenging. Therefore, there is a need for more education on how to use AI appropriately and effectively in whatever domains an individual would like to employ that particular tool. Regarding security, usability, dependability, extensive interaction, improvements, design, and evaluation, a new approach to AI applications is required. It is critical to carefully assess the potential advantages and adverse effects of AI before adopting any readily accessible AI tools.

Introduction

On August 31, 1955: The study was based on the hypothesis that any facet of learning or additional aspect of intelligence might, in principle, be so thoroughly characterized that it can be reproduced by a computer. According to this study, it was mentioned in the proposal that an effort will be made to figure out how to enable machines to use language, create abstractions and concepts, solve problems that are currently relevant to the field of human beings, and improve.

Name of the study: "A Proposal For The Dartmouth Summer Research Project On AI", by J. McCarthy, Dartmouth College, M. L. Minsky, Harvard University, N. Rochester, I.B.M. Corporation, C.E. Shannon, Bell Telephone Laboratories. In their article, they mentioned some aspects of the AI problem which are shown in below figure 1:

Figure 1

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A Catalyst for The Development of The Area of AI: Dartmouth Workshop 1956: A summer workshop organized by John McCarthy, held in 1956 with a duration of 8 weeks at Dartmouth College, Hanover, New Hampshire, is largely regarded as the catalyst for the development of the area of AI. Those who attended had long held key positions in the field of AI research. The 1956 Dartmouth workshop is often regarded as the genesis of AI since it gave the field its name, mission, first significant achievement, and important contributors.

John McCarthy's philosophical perspective on AI 1979: McCarthy wrote an article titled "Ascribing Mental Qualities to Machines" in 1979. He wrote: "Machines as simple as can be said to have beliefs, and having beliefs seems to be a characteristic of most machines capable of problem-solving performance."

According to him, the fields of philosophy and AI overlap each other in many ways.

- He said heuristics isanother aspect of AI that philosophers have not examined. Heuristics is concerned with how to explore the options and make a decision in light of the facts and a goal. On Contrarily, AI is less concerned with morality/ethics and aesthetics.
- According to him, not all philosophical theories generate solutions to the AI dilemma. Beyond that, however, considering AI seriously raises certain philosophical concerns.
- He mentioned that considering AI seriously implies some philosophical points of view.

Some of his philosophical points of view which he listed as his prejudices are as follows:

i. **Meta philosophy:** He addresses that the best way to answer the question "How do I know?" is to investigate "How does it know", acquire the most appropriate response that science and philosophy at the time allow, and then assess how well that answer holds up to doubts about one's sources of knowledge.

ii. **Epistemology:** He stated we must distinguish between what can be learned in a specific scenario with specific possibilities to observe and what can be learned about the structure of humans and machines through scientific investigation over time and experimentation with many different individuals.

iii. **Sense data:** In his perspective, sense data plays a significant role even if the commonsense world is not constructed from sense data. He believed that the fundamental ideas of physical theories, which are now widely acknowledged, are far removed from observation.

1980: In 1980, John Searle, a philosopher, in his famous Chinese Room Argument in response disagreed with McCarthy and asserted that machines cannot have beliefs, merely because they are not sentient/ conscious.

First AI winter (1974-1980): AI research was currently experiencing an "AI winter" marked by decreased funding and enthusiasm. AI faced criticisms and financial losses in the 1970s.

Problems faced by the researchers in the 1970s were:

- Limited computer power
- Intractability and the combinatorial explosion
- Commonsense knowledge and reasoning
- Moravec's paradox
- The frame and qualification problems

Boom (1980-1987): A form of AI program known as "expert systems" was embraced by corporations all around the world in the 1980s, and knowledge-based AI research shifted its focus to this area. The fifth-generation computer project was actively financed by the Japanese government during those same years.

Second AI winter (1987-1993): Economic Bubble: In the 1980s, the business world's interest in AI peaked and then crashed in the manner of an economic bubble. It was thought that the technology was unviable because so many businesses failed. Nevertheless, despite the critiques, the field carried on with its advancements.

AI (1993-2011): During this time, AI started to be effectively utilized in the technological sector, but somewhat covertly or behind the scenes. Growing computer power played a role in some of the accomplishments, while other parts came from concentrating on isolated, particular problems and pushing them to the highest levels of scientific accountability.

Deep learning, big data and artificial general intelligence: 2011–present

The New York Times claimed that interest in AI had reached a "frenzy" by 2016 when the market for AI-related products, hardware, and software had surpassed $8 billion. The use of big data for numerous applications in economics and ecology started to spread into other disciplines as well.

Three Evolutionary Stages of AI: A Modern Approach

Kaplan and Haenlein structure AI in 3 stages as shown in figure 2:

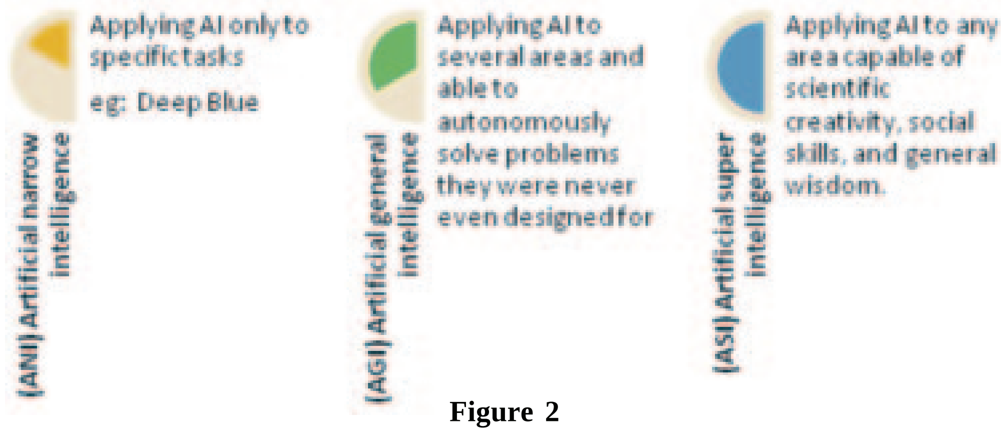


Figure 2

Goals of AI

Figure 3 (*Source:* Developed by the researcher (Zoya Javed) from the Visual Paradigm)

AI in Education

Learning:

1. **AI Enables Adaptivity in Learning:** With the help of AI, technology may be better able to meet students where they are, capitalize on their strengths, and help them expand their knowledge and skill sets. For instance, an excellent instructor may come up with creative ways to get a student engaged by establishing a connection to their previous knowledge.
2. **Intelligent Tutoring Systems:** The effort has expanded beyond mathematical difficulties to other significant concerns beyond step-by-step problem solving as a (R&D) field arose to promote ITS. AI can keep students informed, as is the case with "open learner models"-a category of AI-enabled systems that offer facts that assist in students' self-reflection and monitoring.
3. **Asset-oriented:** Technology aims to identify a student's weaknesses and then offers education to fill that particular gap. Teachers focus on students' domains of expertise; they identify the capabilities or "assets" a student possesses and use them to advance their knowledge.
4. **From neurotypical to neurodiverse learners:** Neurodiverse learners are students who access, process and interact with the environment in more unconventional ways than "neurotypical" pupils.

2 broad Perspectives about AI in Education

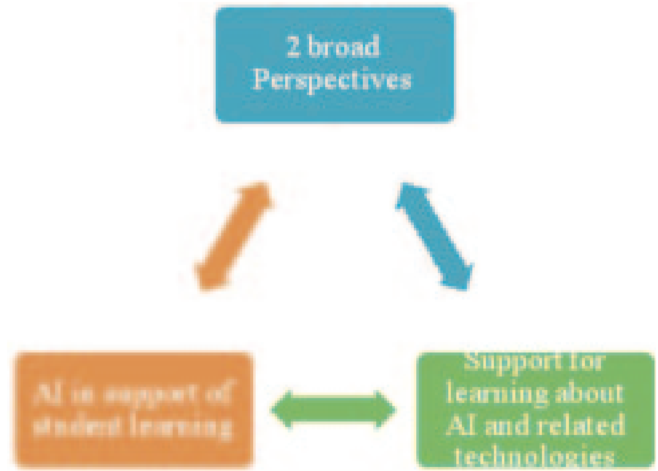


Figure 4

Teaching with AI

1. In the article "How AI will impact K-12 teachers?", the researcher mentions that there is no doubt that receiving a quality education has lifetime benefits.

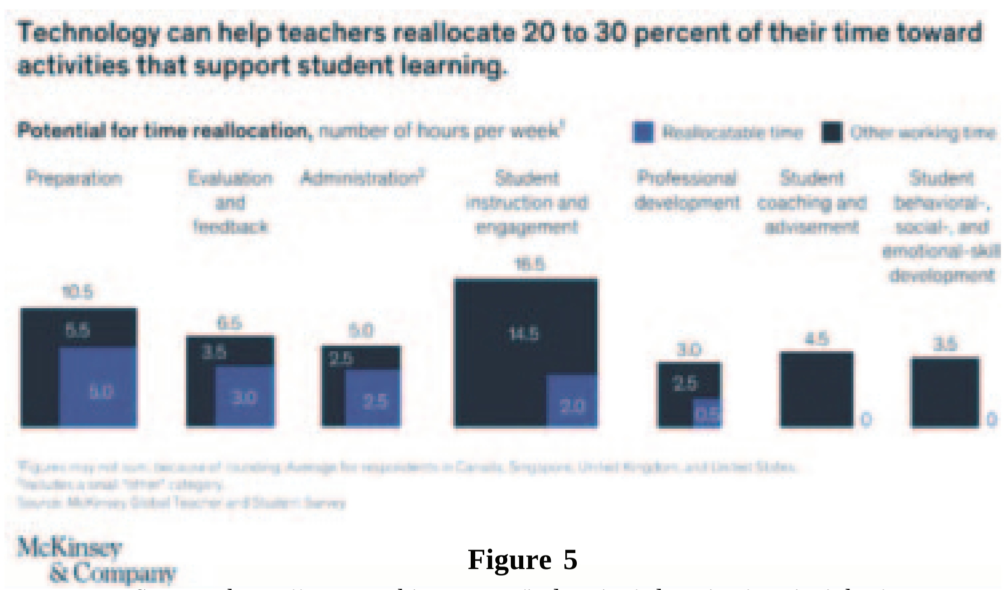


Figure 5

Source: https://www.mckinsey.com/industries/education/our-insights/how-artificial-intelligence-will-impact-k-12-teachers

According to research, even having a good kindergarten teacher can influence a student's likelihood of completing college and increasing their lifetime earnings. Technology, when used correctly, can facilitate good teaching, but it will never replace teachers.Making teacher professional development more productive and fruitful: A teacher can potentially record her class using new technologies, and an AI algorithm could suggest key points from the discussion that should be reviewed with a professional development coach.Additionally, new tools for classroom simulation can help teachers polish their abilities in actual classroom settings.

2. AI could support teachers by providing recommendations that are tailored to their contexts and methods of teaching, as well as assistance with modifying relevant content to meet their specific classroom requirements.

Where to save time with technology?

This article claims that the area with the greatest automation potential is one that teachers deal with before they even enter the classroom: "Preparation". According to this study, teachers in the four countries put in an average of 11 hours per week on preparation tasks. Researchers estimated that effective use of technology could cut the time to just six hours. The teacher still needs to be present in the classroom to encourage academic achievement, but the function of the teacher only changes from instructor to facilitator and coach.

What will instructors do with the extra 13 hours per week that technology has opened up?

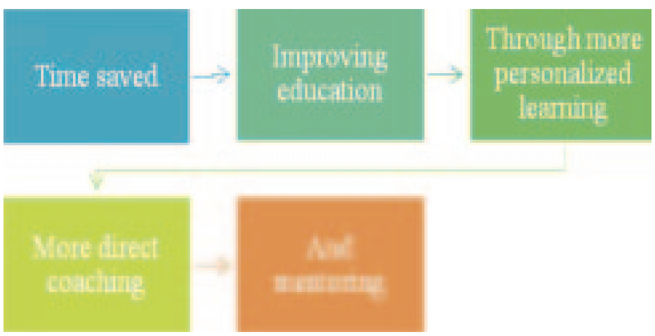


Figure 6

Challenges of control: Balancing humans

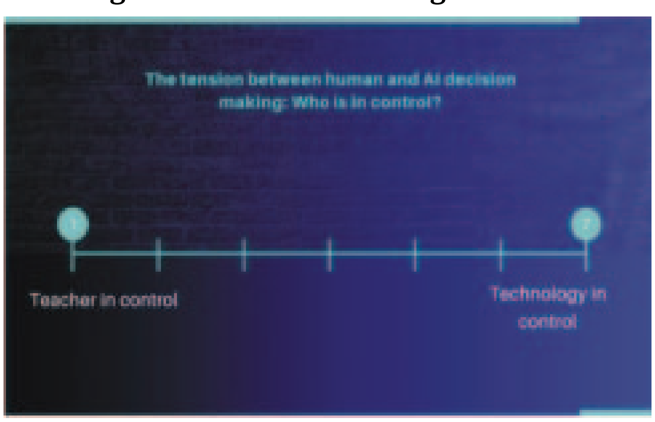


Figure 7

The teacher is totally in charge and there is no usage of AI in the classroom, as seen in the left section of the above image 8. The scenario that is described in the right section-where there is no teacher present and the technology is totally in charge-is rarely one that is preferred. The middle ground presents multiple alternatives and is not uniform. Molenaar examined products and made the following suggestions:

- The technology just provides the teacher with information as well as recommendations.
- The instructor assigns the technology a certain set of tasks.
- A broader range of authority is delegated to the technology by the teacher, who establishes specific guidelines for alerting, monitoring, and regaining control.

Re-thinking Teacher Professional Development

The contexts in which teachers receive training are crucial to their capacity to perform proficiently in present and emerging technological environments because teachers serve as crucial agents in these contexts. Few individuals who are preparing to become teachers in a recognized pre-service program learn about the efficient use of technology for education in schools and educational settings; those who do have the opportunity to explore technology, hardly ever consider the frameworks that influence its implementation in the classroom and educational leadership.

Three types of teacher loops that are central to education

1. **Safety:** Teachers have to educate students on safe AI use, supervise their use, and offer human alternatives in case something goes wrong when they engage in extensive interactions with chatbots powered by AI.
2. **Dependability:** Teachers have begun to use chatbots to plan individualized lessons for their students. To understand effective prompts, analyze AI-generated lesson plans for errors, and avoid the human tendency to place too much dependability on AI systems and too little belief in human judgment, teachers must engage in loops with other teachers.
3. **Evaluation:** Before AItechnologies are used in classrooms and if improvements are required, instructors must be involved in the design and evaluation of the systems.

Desirable characteristics of AI models for education

1. **Alignment of the AI Model with Teachers' Vision for Learning:** When deciding whether to

utilize AI in educational systems, decision-makers must assign priority to educational goals, the fit with what is known about how people learn, and compatibility with research-based best practices.

2. **Data Privacy:** It's crucial to understand the AI systems to protect the security and privacy of students, teachers, and other human data.
3. **Protections against algorithmic discrimination:** Those who create and use AI in education make a considerable effort to reduce prejudice and advance fairness in AI models.
4. **Systems that are safe and effective:** The usage of models based on AI in education is founded on evidence of their effectiveness and works for a variety of learners in a variety of educational environments.
5. **Accountability:** AI Models Supporting Transparent, Accountable, and Responsive Use of AI in Education by Incorporating Humans in the Loop to Ensure that Educational Values and Principles are Prioritized

Machine learning in mechanical design and optimization in mechanical engineering

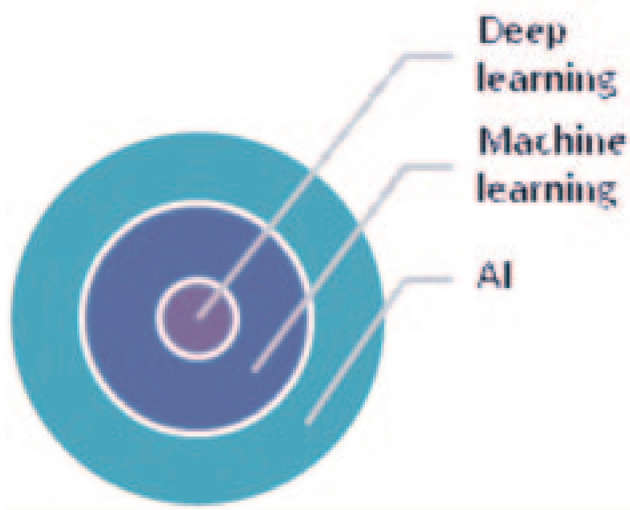


Figure 8

In Mechanical Engineering, Machine Design is a very crucial branch of Engineering Design, thus significant possibilities for this kind of method are in mechanical engineering. Older engineers have learned a lot through numerous case studies and productive processes.

According to Schreiber *et al.*, 2020, the design, development, building, and operation of engines, power plants, and machinery are all included in mechanical engineering. They deal with a significant number of moving and repositioning mechanisms. Machine design or utilization of energy, which involves the production, distribution, and applications of heat in engines, boilers, refrigeration, and air conditioning, is a typical method of mechanical engineering categorization.

The Way Machine Learning Works

The machine learning algorithm-training system consists of 3 parts (figure 9):

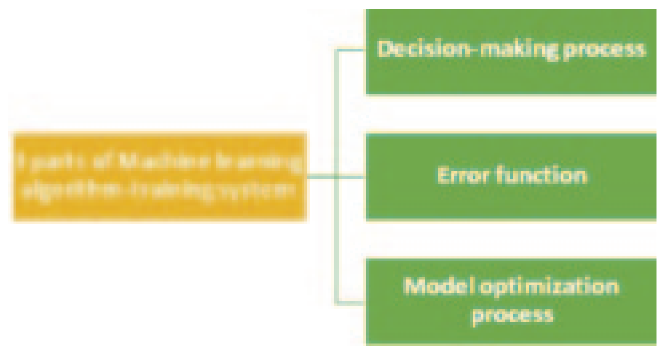
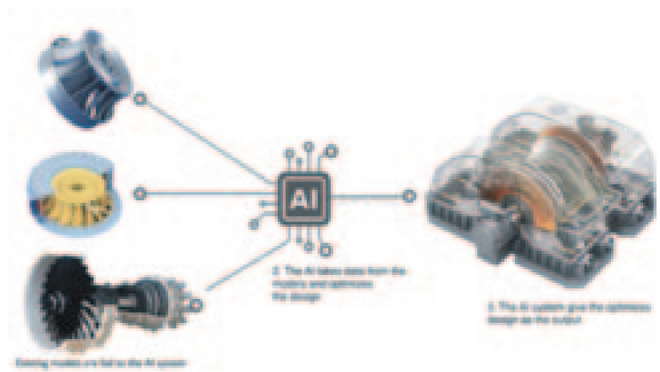


Figure 9

AI use case in mechanical engineering

1. **Turbomachinery Explorer:** To help engineers design and manage their machines with greater efficiency, these models can be used to forecast how turbomachines would function under various operating situations. After training with high-quality data, AI may create space exploration and perform performance maps in close to real-time.

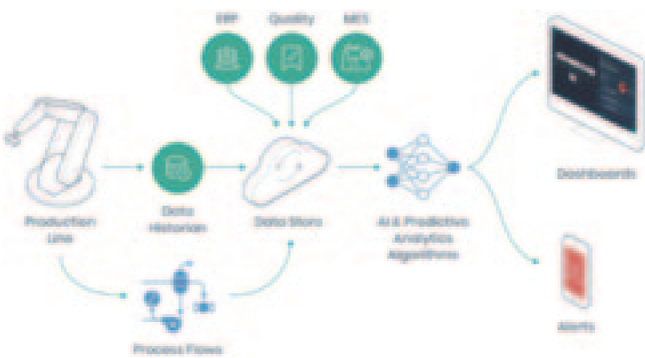


Source: https://skill-lync.com/blogs/technical-blogs/design-applications-of-machine-learning-and-ai-in-mechanical-engineering

2. **Heat Exchanger:** A group of scientists and engineers from the UK called Physics-X worked with Neural Concept to create an AI predictive model. The performance of multiple heat exchanger designs with varying topologies may be predicted by the model in real-time.

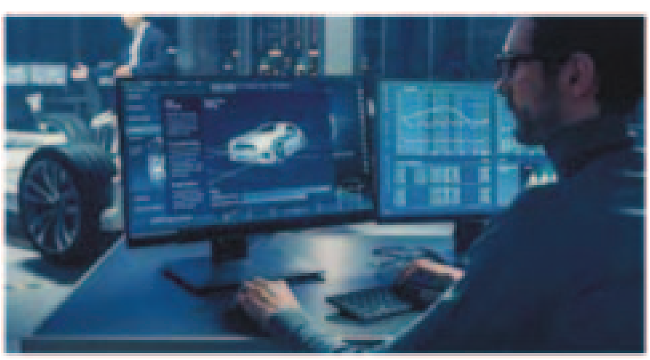
Source: https://www.mdpi.com/1996-1073/12/23/4441

3. **Predictive Maintenance:** Many industrial manufacturing companies develop an MVP that employs AI to forecast when a machine or asset is most likely to break down so that appropriate action can be taken. Predictive maintenance can identify trends in the system and recommend the ideal time to carry out maintenance by analyzing data from sensors and other sources.



Source: https://www.aegasislabs.com/predictive-maintainence/

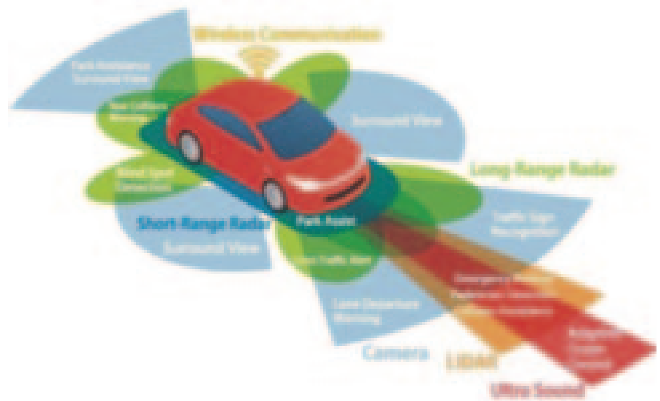
4. **Racing :** Engineers employ AI and ML to provide companies with the competitive edge they require. Data from previous races is analyzed to help choose the optimum route and boost efficiency, including wind speed, temperature, and grip levels. AI and ML can also be used to analyze the performance of



Source: https://www.sphinxworldbiz.com/blog/reshaping-manufacturing-engineering-with-artificial-intelligence-and-machine-learning/

the automobile, bike, boat, and team members, enabling better training and preparation for upcoming competitions.

5. **Autonomous Vehicles:** The AI software in the automobile connects to all the sensors and gathers data from the internal cameras and Google Street View. Using deep learning, the AI mirrors human perception and decision-making processes and regulates driver control systems like steering and braking. Self-driving cars can drive independently with little to no human interaction and while obeying traffic rules because of the growing execution of AI technology such as machine learning, deep learning, big data, etc.



Source: https://www.researchgate.net/figure/Autonomous-vehicle-AI-based-components_fig1_344626518

Role of AI in Mechanical Design

Figure 10

CAD: The automated process of combining computer technologies and specialized software is known as CAD. Automated decision-making, a process where AI algorithms are applied to data collection, processing, modeling, and utilization in support of automated choices, is a process where AI is frequently embedded inside CAD.

CAM: With CAD, every engineering procedure begins. drawings that engineers create in 2D or 3D. These are referred to as models in CAD and contain a particular set of physical characteristics. The information is transmitted to a machine through the physically formed part after the model is created for machining. It is necessary to have a machine language that can translate machining data into the predetermined G-code language. Once the G-code has been put onto the machine and the operator has pressed the start button, it is time for the machine to begin executing the job. Using G-code, basic materials are transformed into final products.

GDNT: Stanley Parker came to comprehend the drawbacks of dimensioning component features using tolerance nominal dimensions in 1940. He discovered that certain parts that had been destroyed or rebuilt because they had not been manufactured according to the drawing fit into their parts and performed as planned.

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समसामयिक गतिविधियाँ / Current Events

1. दिनांक 10 जुलाई से 12 जुलाई, 2023 तक ''**परामर्श कौशल प्रशिक्षण कार्यक्रम**'' विषय पर तीन दिवसीय कार्यशाला का आयोजन किया गया जिसमें विद्या भारती के आचार्यों ने प्रतिभाग किया।

2. दिनांक 3 अगस्त, 2023 को भारतीय शिक्षा शोध संस्थान के प्रथम तल पर स्थित लज्जाराम तोमर सभागार में ''**साधारण सभा एवं संचालन समिति**'' की बैठक का आयोजन किया गया।

3. दिनांक 5 अगस्त, 2023 को भारतीय शिक्षा शोध संस्थान में ''**वैज्ञानिक दृष्टिकोण**'' विषय पर एक दिवसीय कार्यशाला का आयोजन किया गया जिसमें विद्या भारती के लगभग 100 शिक्षकों ने प्रतिभाग किया।

4. दिनांक 24 अगस्त, 2023 को भारतीय शिक्षा शोध संस्थान में **"Value Inculcation Strategies"** विषय पर एक दिवसीय कार्यशाला का आयोजन किया गया जिसमें विद्या भारती के प्राचार्यों एवं नेशनल कालेज के छात्र-छात्राओं ने प्रतिभाग किया।

5. दिनांक 27 सितम्बर से 27 अक्टूबर, 2023 तक Rameshwaram Institute of Education & Training, Lucknow के **M.Ed III Semester** में अध्ययनरत् विद्यार्थियों को एक माह Internship कार्यक्रम के अन्तर्गत संस्थान की गतिविधियों, क्रियाकलापों, निर्देशन एवं परामर्श तथा पुस्तकालय में तकनीकी ज्ञान से परिचित कराया गया।

6. दिनांक 12 अक्टूबर से 11 नवम्बर, 2023 तक Gautam Buddha Degree College, Lucknow के **M.Ed III Semester** में अध्ययनरत् विद्यार्थियों को एक माह Internship कार्यक्रम के अन्तर्गत संस्थान की गतिविधियों, क्रियाकलापों, निर्देशन एवं परामर्श तथा पुस्तकालय में तकनीकी ज्ञान से परिचित कराया गया।

7. दिनांक 30 नवम्बर से 30 दिसम्बर, 2023 तक University of Lucknow, Lucknow ds M.A. (Education) III Semester में अध्ययनरत् विद्यार्थियों को एक माह Internship कार्यक्रम के अन्तर्गत संस्थान की गतिविधियों, क्रियाकलापों, निर्देशन एवं परामर्श तथा पुस्तकालय में तकनीकी ज्ञान से परिचित कराया गया।

8. दिनांक 02 दिसम्बर, 2023 को संस्थान के पूर्व अध्यक्ष स्व. डॉ. शंकर शरण श्रीवास्तव का जन्मदिवस समारोह तथा उनके शिष्य डॉ. सी.एस. शुक्ला द्वारा लिखित दो पुस्तकों '**सूक्ष्म-शिक्षण**' एवं '**शान्ति शिक्षा**' के विमोचन का कार्यक्रम आयोजित किया गया।

9. दिनांक 22 दिसम्बर, 2023 को ''**मुद्रा स्फीति**'' विषय पर एक व्याख्यान का आयोजन किया गया जिसमें मुख्य वक्ता के रूप में प्रो. वैशम्पायन, भूतपूर्व कुलपति, छत्रपति शाहूजी महाराज विश्वविद्यालय एवं बुन्देलखण्ड विश्वविद्यालय उपस्थित थे।

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शोध आलेख प्रकाशनार्थ भेजने के पत्र का प्रारूप

प्रेषक : ....

....

....

सेवा में, दिनांक : ....

मुख्य सम्पादक,
भारतीय शिक्षा शोध पत्रिका,
भारतीय शिक्षा शोध संस्थान,
सरस्वती कुंज, निरालानगर,
लखनऊ - 226020 (उ.प्र.)

विषय : शोध पत्रिका में प्रकाशनार्थ शोध आलेख का प्रेषण।

महोदय,

मैं/हम आपकी शोध पत्रिका में प्रकाशनार्थ शोध आलेख प्रेषित कर रहा/रहे हैं। इस सम्बन्ध में आवश्यक विवरण निम्नवत् हैं-

1. शोध आलेख का शीर्षक ....

....

2. लेखक/लेखकों के नाम, पद, पत्राचार का पता, फोन, ई-मेल पता -

नाम	पद	पत्राचार का पता	फोन/मो.	ई-मेल
....	....	....	....	....
....	....	....	....	....
....	....	....	....	....

3. शोध आलेख शोध पत्रिका के नवीनतम अंक में प्रकाशित **'लेखकों के सूचनार्थ'** के दिशा-निर्देशों के आधार पर तैयार किया गया है। शोध आलेख के सम्बन्ध में यदि कोई स्पष्टीकरण वांछित है तो लेखक से उसकी जानकारी ली जा सकती है। इसके लिए लेखक सदैव तैयार है।
4. यह शोध आलेख हमारे अपने अनुसंधान कार्य पर आधारित है। इसमें व्यक्त विचार, निष्कर्ष आदि हमारे हैं। ये भारतीय शिक्षा शोध संस्थान अथवा विद्या भारती की नीतियों के परिचायक नहीं हैं। यदि हमारे शोध आलेख में प्रकाशित किसी सामग्री से कापीराइट नियम का उल्लंघन होता है तो इसके लिए हम स्वयं उत्तरदायी होंगे। प्रकाशक अथवा सम्पादक मण्डल इसके लिए किसी भी प्रकार से उत्तरदायी नहीं होगा।
5. इस शोध आलेख का अन्यत्र प्रकाशन नहीं कराया गया है और न ही इसे कहीं अन्यत्र प्रकाशनार्थ भेजा गया है।
6. इस पत्र के साथ शोध आलेख की टंकित पाण्डुलिपि (दूसरी भाषा में सारांश, केवल शोध पत्र का) की एक प्रति उसकी सीडी, शोध पत्र में प्रयुक्त उपकरणों की छाया प्रतियाँ प्रेषित हैं।
7. इस शोध आलेख की एक प्रति हमारे पास सुरक्षित है।

   आशा है आप इस शोध आलेख को अपनी शोध पत्रिका में प्रकाशनार्थ स्वीकार करेंगे।
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1. भारतीय शिक्षा शोध पत्रिका का प्रमुख उद्देश्य शिक्षा के विभिन्न आधारों से सम्बन्धित भारतीय संस्कृति संदर्भ में किये गये सैद्धांतिक एवं प्रयोगात्मक अध्ययनों को प्रकाशित करना है। इसमें विद्याभारती पर किये गये तथा विद्यालयी शिक्षा को उन्नत बनाने वाले अध्ययनों को वरीयता दी जाती है।
2. शोध पत्रिका में हिन्दी एवं अंग्रेजी, दोनों भाषाओं में शोधपत्र प्रकाशित किये जाते हैं। इसमें एक भाषा में प्रकाशित शोधपत्र का सारांश दूसरी भाषा में भी प्रकाशित किया जाता है।
3. सामान्यतया शोधपत्र अनुसंधान आधारित (Research based), पुनरीक्षण लेख (Review Articles), सैद्धांतिक विषयों पर आधारित निबन्ध (Essays based on theoretical issues) आदि हो सकते हैं। इसके लेखन में यथा आवश्यकता अग्रांकित शीर्षकों का प्रयोग किया जाना चाहिए- भूमिका (Introduction), उद्देश्य (Objectives), प्रक्कल्पना (Hypothesis), शोध पद्धति (Method), शोध का अभिकल्प (Design), प्रतिदर्श (Sample), प्रयुक्त उपकरण (Tools used), सांख्यिकीय प्रविधि (Statistical Techniques), प्रदत्त-विश्लेषण (Data Analysis), परिणाम (Result), प्राक्कल्पनाओं का सत्यापन सहित विवेचन (Discussion), अध्ययन का निहितार्थ (Implications of the Study), सन्दर्भ (References)। शीर्षकों में आवश्यकतानुसार उपशीर्षक भी बनाये जा सकते हैं।
4. शोधपत्र सामान्यतया 2500-3000 शब्दों से अधिक का नहीं होना चाहिए। इसके साथ एक संक्षिप्त सारांश दूसरी भाषा में लगभग 250-300 शब्दों में संलग्न किया जाना चाहिए।
5. सभी चित्रों (Figures), तालिकाओं (Tables) को अलग कागज पर तैयार करें। इन पर पाण्डुलिपि में प्रदर्शन के क्रम से चित्र-1 / तालिका-1 आदि से प्रदर्शित कर दें। प्रत्येक चित्र / तालिका पर उसका अपना शीर्षक (Caption) अवश्य अंकित किया जाना चाहिए। तालिका में खड़ी लाइनों का प्रयोग न करें।
6. सन्दर्भ शीर्षक के अन्तर्गत केवल आलेश में प्रस्तुत सन्दर्भों का ही उल्लेख करें। इसके लिए लेखकों की रचनाओं, प्रकाशन वर्ष, प्रकाश आदि के विवरण सहित, लेखकों के नामों को वर्णानुक्रम (Alphabetically) में प्रस्तुत करें। आलेख की पाण्डुलिपि में इसे उचित स्थान पर अग्रांकित रूप में दें, जैसे (वर्मा, 1990, पृ. 40)।

पुस्तक (Books)

* श्रीवास्तव, (डॉ.) शंकर शरण एवं राय, (डॉ.) कमला, (1991-92), **शिक्षण के मूल तत्व,** वाराणसी : श्रीराम प्रकाशन
* वही पृ.-98
* श्रीवास्तव एवं राय (1991-92), पूर्व चर्चित पृ.-102

सम्पादित पुस्तक (Edited Book)

* तोमर, (डॉ.), जगतपाल सिंह, (2006), **शिक्षक होने का तात्पर्य,** एस.एस. श्रीवास्तव एवं अन्य द्वारा सम्पादित, **शिक्षक सशक्तिकरण में,** लखनऊ : भारतीय शिक्षा शोध संस्थान

जर्नल (Journal)

* गुप्ता, आर.पी. (2007), **सेक्स एजुकेशन : ह्वाई (Why)? ह्वेन एण्ड हाऊ (When and How)?**, भारतीय शिक्षा शोध पत्रिका, 26(2), पृ. 23-29

अप्रकाशित शोध प्रबन्ध / अन्य (Unpublished Thesis/ Others)

* दत्त, (डॉ.), विभा, (1981), **ए क्रिटिकल स्टडी ऑफ एसेन्डेन्स-सबमिशन ऑफ इण्टरमीडिएट स्टूडेन्ट्स (ब्वायज एण्ड गर्ल्स),** अप्रकाशित पीएच.डी. शोध प्रबन्ध, लखनऊ विश्वविद्यालय।

  श्रीवास्तव, (डॉ.), कान्ति मोहन, (1991), **परीक्षा परिणाम का प्रभावी प्रस्तुतीकरण,** आलेख प्रस्तुत, भारतीय शिक्षा शोध संस्थान द्वारा आयोजित अखिल भारतीय शोध गोष्ठी (तृतीय), नई दिल्ली में।

* **राम-सा सत्य है राम का अस्तित्व** शीर्षक समाचार, दैनिक जागरण (नगर सं.), लखनऊ, 14.09.2007

7. तैयार शोधपत्र की पाण्डुलिपि डबल स्पेस देकर (कोटेशन, फुटनोट, सन्दर्भ एवं सारांश सहित) ए-4 साइज के सफेद कागज पर एक ओर पर्याप्त हाशिया देकर टंकित होना चाहिए। पाण्डुलिपि के प्रथम पृष्ठ पर शोधपत्र का मुख्य शीर्षक तथा लेखक-लेखकों के नाम के पश्चात् विभिन्न-शीर्षकों में आलेख की विषयवस्तु प्रस्तुत की जानी चाहिए।

8. शोधपत्र के मुख्य शीर्षक के साथ अन्य शीर्षक एवं उसके अन्तर्गत उपशीर्षक दर्शाने के लिए टंकित पाण्डुलिपि के हाशिए में पेंसिल से मु.हे. (M.H.) तथा उप.हे. (S.H.) अंकित कर दें। इसका क्रमांक भी अंकित कर दें। किसी शीर्षक को रेखांकित न करें।

9. शोधपत्र एवं सारांश की टंकित पाण्डुलिपि की एक प्रति एवं उसकी सीडी, शोधपत्र में प्रयुक्त उपकरणों की छाया प्रतियाँ इस प्रमाण पत्र के साथ भेजी जानी चाहिए कि यह शोधपत्र कहीं अन्यत्र प्रकाशित नहीं है।

10. शोध टिप्पणी के अन्तर्गत शोध संस्थान के विभिन्न प्रकोष्ठों एवं अन्य शोधकर्ताओं द्वारा किये गये शोधों का सारांश प्रकाशित किया जाता है। इसके लिए किये शोध सारांश हिन्दी अथवा अंग्रेजी में अधिकतम लगभग 1500 शब्दों में भेजा जा सकता है। इसकी पाण्डुलिपि शोधपत्र की भांति तैयार की जानी चाहिए, किन्तु इसमें शोध टिप्पणी के मुख्य शीर्षक के अतिरिक्त अन्य शीर्षक, चित्र, तालिका, सन्दर्भ आदि देने की आवश्यकता नहीं है।

11. शोधपत्र/शोध टिप्पणी के प्रकाशनार्थ प्राप्त होने के सामान्यतया चार माह के भीतर उसके प्रकाशन हेतु स्वीकृति की सूचना लेखक को प्रेषित कर दी जाती है। यदि शोधपत्र/शोध टिप्पणी के सम्बन्ध में कोई सूचना इतनी अवधि में न मिले तो इसका तात्पर्य है कि रचना प्रकाशन हेतु स्वीकृत नहीं की गई है।

    शोध पत्रिका में प्रकाशनार्थ प्रेषित शोधपत्र/शोध टिप्प्णी की एक प्रति लेखक बन्धु अपने पास अवश्य सुरक्षित रख लें। अस्वीकृत होने पर इसके वापस भेजे जाने की व्यवस्था नहीं है।

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References should be cited alphabetically and set out as follows:

Royall, R.M. (1970). On finite population sampling theory under certain linear regression models. *Biometrika*, 57: 377-389.

Sharma, K.K. & Rana, R.S. (1991). Robustness of sequential Gamma life testing procedure. *Microelection Reliab*, 30: 1145-1153.

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भारतीय शिक्षा शोध संस्थान के प्रकाशन

I. साहित्य

1. **परम्परागत भारतीय शिक्षा व्यवस्था एवं प्रबंधन**—पृष्ठ सं. 510, मूल्य 500 रु. मात्र, आजीवन सदस्यों हेतु मूल्य 350 रु. मात्र।
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भारतीय शिक्षा शोध संस्थान

भारतीय शिक्षा शोध संस्थान
सरस्वती कुंज, निराला नगर, लखनऊ-226020
फोन नं.: 0522-2787816 ई-मेलः sansthanshodh@gmail.com

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