SPECIAL ISSUE - The 500th Anniversary of Conversion of St. Ignatius of Loyola

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Dear Readers!

Greetings from the team of RRE.

It is our joy to bring out this eighth special issue while we reach the completion of the celebration of 500th year of the conversion of St. Ignatius of Loyola. Ignatius of Loyola, S.J., venerated as Saint in the Catholic Church, was a Spanish Catholic priest and the ologian;along with two of his friends, founded the religious order of the Society of Jesus, and became its first Superior General, in Paris in 1541. The members of the Society, known as Jesuits, are best known for their significant role in education, theology, missionary work and publishing, with a strong emphasis on social justice and human rights. They run many prestigious secondary schools and universities around the world and publish leading intellectual journals. St. Xavier's College of Education, one of the Jesuit institutions of Madurai Province of India is known for its service to the Society through its formation of prospective teachers.

SXCE began its teacher education service in 1950 and today equipped with autonomy, it has created a new curriculum, relevant to the times and pivotal to the development of students. For an effective transaction in the classroom, the three elements namely,the content, the pedagogy and the interactive group of the teacher and students are to be focused. Though the elements of content and interaction of the participants are essential, the pedagogy ultimately influences the outcomes of the transaction. The olden days had witnessed the methods of lecturing and dictations, but today, the learners are very much concerned about the use of modern technology and innovations.

Which means, the teacher educators as well as students have to update themselves with recent discoveries of technology that are very much learner-centred. The place of ICT, especially the virtual reality not only at the time of corona season, but even during the normal times should be recognized. A lot of apprehension is expressed about the readiness of the teacher educators in using the modern technology in transacting the content with students. Regular in-service programmes and training schedules are to be prepared and organised; later, the uninterrupted usage of interactive boards and other facilities are to be encouraged among the faculty followed by the prospective teachers. Coupled with sincere monitoring and usage of ICT, the teaching community will not only be acknowledge for its involvement in the new methodology but also the intensity of commitment for the sake of students which enhance the image of the institution. Let the teaching community take a promise to frequently use the technology so that the future teaching community may be really resourceful. We wish every faculty the best of luck and thank our staff for bringing this special issue on time.

Continue to write to us about the elements to be rectified and we keenly await your encouraging word. Your feedbacks are also welcome in written format about the various articles in our journal so that this journal remains as the excellent one. My special thanks to our Prof. Dr.Antonyraj and his assistant N. Rajkumar for their unending effort to make this special issue appear on the desks of every library.

Thanking you in anticipation…

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CONTENTS

EXECUTIVE FUNCTION AND SOCIAL COMPETENCE OF PRESCHOOLERS : A REVIEW

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ABSTRACT

Executive Function is a set of cognitive resources that facilitate the regulation, control, and coordination of a wide range of behaviors. Theorists generally agree upon 3 core domains that fall under the purview of executive function – working memory, inhibitory control, and cognitive flexibility. In recent years, a strong link has been reported between executive functions and social competence among children in clinical populations. However, executive function research in relation to social competence among the typically developing preschool population seems to be relatively scarce and cannot be overlooked. The present paper reviews current research on executive function and its interaction with socio-emotional competence during the preschool developmental period. Lastly, the review proposes important implications and directions for future research.

Keywords : *Executive function; social competence; preschoolers.*

Introduction

The past decade has witnessed increased effort in understanding the link between executive function and the development of social competence of preschoolers. The present review introduces the core concepts of executive function and social competence and further proceeds to review studies suggesting a link between executive function and social-emotional development. It also identifies the emerging trends and finally concludes with implications for further research in the area.

Executive functions and their components

Executive Functions have been defined variously by theorists and researchers. Executive functions are responsible for coordinating the activities involved in goal completion (Anderson, 2002). Executive functions are the attention-regulation skills that make it possible to sustain attention, keep goals in mind, refrain from responding immediately, resist distraction, tolerate frustration, consider the consequences of different behaviors, and plan for the future (Zelazo, Blair, & Willoughby, 2016). "Executive function" is an umbrella term that encompasses three core executive function processes – inhibitory control, working memory, and cognitive flexibility.

Response inhibition or inhibitory control is considered foundational for executive functions (Miyake et al., 2000). Inhibitory control refers to the ability of the child to suppress or withhold aresponse. During the preschool years, there is the rapid development of this component and by the time a child is 4, they are able to successfully perform tasks that require them to use both, simple as well as complex inhibitory processes. Further improvement is seen between the ages of 5 to 8 and particularly for tasks that combine inhibition and working memory (Best &Miller, 2010).

Research on executive function in children has varied definitions with respect to working memory. For some, working memory is understood as information retention, which is called simple working memory, while others emphasize the distinction between short-term or passive information storage and more complex cognitive processes such as updating and manipulation of the information held in memory (complex working memory). Basic working memory processes i.e. maintaining information in an active

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state are established during the first year of life. Complex working memory tasks are those that require a greater amount of processing such as the maintenance and manipulation of information. The trajectory of working memory is linear from preschool through adolescence (Best & Miller, 2010).

Cognitive or mental flexibility encompasses the capability of the child to shift between mental states or rules according to situational demands (Miyake et al., 2000). This ability is to a large extent dependent on inhibition and working memory. Cognitive flexibility sees a surge during the preschool period of 3 -7 years (Diamond, 2006). Preschool-aged children can handle shifts between simple task sets and later can handle unexpected shifts between increasingly complex task sets (Best & Miller 2010).

Social Competence in Young Children

Social Competence could be conceptualized as a multidimensional construct that takes on different meanings in a developmental context. Researchers agree that the critical components essential to social competence are self-regulation; interpersonal knowledge and skills; articulating one's own ideas and needs; expressing an emotion; cooperating, negotiating, gauging social situations accurately; adjusting behavior to meet the demands of different social situations; developing and sustaining friendships; and comprehending the context and appropriateness in social interactions (McCay& Keyes, 2002).

Development of social competence in childhood has become an area of interest for researchers, mainly because greater social competence is generally related to peer acceptance, emotional health, and capability as established in schools such as school readiness, interpersonal relationships, and social adjustment. There is a positive association between the lack of social competence, such as empathy, cooperation, and conflict resolution skills on the one hand, and children's negative behaviors and problems in their social interaction skills on the other hand (Gouley, Brotman, Huang,&Shrout, 2008; Qin &Yong, 2002).

Over the years, a number of differing definitions of social competence have been proposed. In recent years, there has been agreement among researchers that social competence does not refer to anyone's skill or behavior but rather is a combination of cognition, affect, and behavior that comes together in a coherent way so as to facilitate the handling of developmentally relevant social tasks. In general, researchers agree that social competence involves the ability to initiate communication and maintain one's relationships with peers satisfactorily.

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Research Exploring the Link between Executive Functions and Social Competence

Both executive function and social competence are multidimensional constructs. The following section presents a review of studies that suggest a link between executive function domains and various dimensions of social competence.

Comparative studies between typically developing preschoolers and clinical populations

A number of studies have found that children who experience executive function difficulties also experience problems in socio-emotional functioning. They are distractible, impulsive, have problems related to delay of gratification, cannot concentrate, and understand mental states as well as consequences of actions(Hughes, 2002; Kusché, Cook, & Greenberg, 1993; Morgan & Lilienfeld, 2000). Given this evidence, the importance of executive functioning skills for planning, implementing, and inhibiting behavior can not be overlooked if children are to function effectively in social situations (Riggs, Jahromi, Razza, Dillworth-Bart, & Mueller, 2006).

Raaijmakers et al., (2008) found that aggressive preschool children had difficulty in tasks involving inhibition than typically developed control children, with boys having more difficulty in the inhibition factor than girls. In general, boys exhibited greater impairment in executive function than girls. Studies that have attempted to compare preterm born preschoolers to full term preschoolers have shown an overall lower score on a battery of executive function tasks, poorer parent-rated executive function, and poorer scores on social competence scales (Alduncin, Huffman, Feldman, &Loe, 2014), suggesting that executive functions are associated with several abilities required for day to day functions (Augusti, Torheim, &Melinder, 2014). However, even in preschool children without associated pathologies, i.e., typically developing preschoolers, a positive relationship

has been identified between social skills and executive functions (Benavides-Nieto, Romero-López, Quesada-Conde, &Corredor, 2017).

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Specific executive function tasks and social functioning of preschoolers

With respect to specific executive function tasks, Cole, Usher, and Cargo (1993) found that young male and female preschoolers who experienced difficulties in executive function tasks also had difficulty controlling disruptive behavior. These children specifically had difficulty performing rapid-alternating stimulus-naming, block sort, and visual search tests. Speltz, DeKlyen, Calderon, Greenberg, and Fisher (1999) found that preschool boys who were referred to a clinic for behavior problems showed deficits in tasks tapping motor planning and verbal fluency. The gift and snack delay tasks are common measures of preschoolers' ability to delay gratification, with recent research supporting a link between executive function and children's performance on these tasks. Children's executive ability to plan and inhibit responses and control attention may directly influence their ability to control their behaviors in accordance with social demands, such as when they are expected to delay gratification (Peake, Hebl, &Mischel, 2002). Jahromi and Stifter (2008) studied preschoolers' executive function through tasks such as day/night Stroop and stick tapping and found that preschoolers with low executive function scores had increased negative expressions and use of aggressive coping strategies, and were more impulsive.

Hot and cool executive functions in relation to socio-emotional competence

Studies on executive function have mainly focused on the cognitive dimension. The work of Zelazo and Müller (2002) has taken the study of executive function on a different trajectory from a purely cognitive conceptualization to distinguishing between cool and hot executive function. Cool executive function is evoked under relatively abstract, non-affective situations, and hot executive function is evoked under motivationally significant, affective conditions (Zelazo& Müller, 2002; Zelazo& Carlson, 2012).

Denham, Bassett, Sirotkin, Brown, and Morris (2015) found that among preschoolers, hot executive control (more emotional, fast-acting, and early developing) predicted social competence, whereas cold executive control uniquely predicted classroom adjustment. Studies focusing on hot and cool aspects of executive functioning among preschoolers found that age predicted executive functioning components and social-emotional readiness; working memory and inhibitory control were important predictors for academic readiness, whereas delay of gratification predicted social-emotional readiness. An interesting finding of the study was that social-emotional readiness predicted academic readiness. These findings provide support for the notion that hot and cool aspects of executive functioning are related to social-emotional and academic school readiness.

Specific executive function domains and preschoolers' socio-emotional competence

Studies focusing on working memory in typically developing preschoolers have found an association between poor central executive working memory and specific social impairments such as physical aggression, relational aggression, and impaired conflict resolution skills; poor storage of verbal items was linked only with greater peer rejection, and spatial storage was not associated with any measures of social impairment(McQuade, Murray-Close, Shoulberg, &Hoza, 2013). The study suggests the importance of working memory in developing and sustaining peer relationships. With respect to the domain of working memory, de Wilde, Koot, & van Lier (2016) in a longitudinal study found that children who had lower working memories exhibited greater conflict in their relationship with teachers, decreases in teacher-child warmth one school year later, and decreases in likeability by peers within the same year in school. These findings suggest the existence of a developmental link between children's working memory and socio-emotional factors.

Inhibitory control has been found to play an important role in how teachers rated preschool children on socio-emotional competence, i.e. children who demonstrated better inhibitory control tended to be evaluated higher on social skills and lower on internalizing behaviors (Rhoades, Greenberg, & Domitrovich, 2009). Inhibitory control was strongly related to the theory of mind, suggesting that inhibition *13.*

may be a crucial factor that possibly affects the emergence and development of the theory of mind or mental state knowledge (Carlson &Moses, 2001). Two longitudinal studies of preschoolers over a two-year period found that inhibitory control was an important predictor of behavior and social competence (Nigg, Quamma, Greenberg, &Kusché, 1999) and also related to decreases in both externalizing and internalizing behavior problems over a two-year period (Riggs, Blair, &Greenberg, 2003). Preschoolers' inhibitory control has also been found to be a better predictor than verbal working memory of prosocial skills (Hubert, Guimard, &Florin, 2017). Inhibitory control competencies and social-cognitive abilities play an important role in the early development of prosocial action (Paulus et al., 2015). Inhibitory control has also been positively associated with later cooperative behavior, peer liking, perceived social integration, positive school attitudes, and school competence (Chen, Chen, Li, &Wang, 2009).

Conclusion

In conclusion, there is growing research to suggest that executive function skills are critical cognitive operations that mediate cognitive-socio-emotional interaction. The present review makes evident the concurrent associations between deficits in executive functioning and problematic functioning in a number of social-emotional domains. It also highlights the longitudinal relationship between preschoolers' executive function skills and subsequent social-emotional competence and suggests that the components of executive function impact the formation of positive peer relationships and academic achievement following preschool enrollment.

Our understanding of the link between executive function and social competence has improved significantly over the last few years through a number of cross-sectional studies. As longitudinal research in this area is still uncommon, future research from a longitudinal perspective remains crucial in determining the relations between executive function and social-emotional functioning that develop over time. Given the evidence associated with low levels of executive function and decreased socio-emotional competencies, early detection of difficulties in both areas becomes critical to promoting early social and academic success and school adjustment. Effective coping within classroom settings require executive function skills such as controlled motor activity, careful attending to lessons, and following directions, implicating executive function in children's school adjustment. Therefore, it is important to consider executive function as an important variable in designing social interventions.

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Sociocultural context is another important consideration. Most research on executive function has been conducted in the western context. The link between executive function and social functioning has not been comprehensibly explored within the Indian context, much less so from a developmental perspective. Therefore, research in the area could contribute significantly to the understanding of the role of executive function skills in the socio-emotional development of the Indian preschool population.

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MATHEMATICS ANXIETY AND NUMERICAL ABILITY AMONG HIGH SCHOOL STUDENTS IN NAGALAND

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ABSTRACT

The present study investigated the relationship between mathematics anxiety and numerical ability among high school students of classes 9 and 10 in Nagaland, India. A totalof1151 (of 569 male and 582 female) respondents were selected through a simple random sampling method. The investigator constructed and validated the Mathematics Anxiety Self-Test(MAST) and Numerical Ability Test(NAT) questionnaires. The data were analyzed using the Pearson product-moment correlation and Independent-sample-test. The findings revealed a significant negative correlation between mathematics anxiety and numerical ability and a significant difference between male and female students on mathematics anxiety.

Keywords : *Mathematics, Anxiety, Numerical Ability, Fear.*

Introduction

The term 'anxiety' is used as a synonym for fear, although Freud (1895) suggested that fear is the 'reaction to a known specific danger' while anxiety is the 'reaction to an unknown one. 'These two states(Fearand Anxiety) overlap, but they also differ. Fear is often associated with fight or flight, thoughts of immediate danger, and escape behaviors. Anxiety is more commonly associated with muscle tension and vigilance in preparation for future threats and avoidant behaviors.

Background of the study

Dreger and Aiken (1957) introduced the concept of mathematics anxiety to describe students' difficulties and their attitude towards mathematics. Since then, mathematics anxiety has become a global problem among students. Though mathematics anxiety is a worldwide phenomenon, it has become a grave concern for Indian society (Khatoon & Mahmood, 2010). Inthepast50ormoreyears, mathematics anxiety has become one of the most researched topics among researchers, psychologists, and educationists. Researches show that gender is one of the significant factors of mathematics anxiety, even though there is no consensus regarding gender difference in mathematics anxiety (Recber et al.,2018).

Significance of the study

There is a lack of good research on mathematics anxiety in India, even more so in the North East Region. In Nagaland, there is a scarcity of research on mathematics anxiety among High School Students. The prolonged school administrative experience made the investigator aware that students find mathematics a challenging subject. The results of class 10 students in the Nagaland Board of School Education (NBSE) examination showed that more students failed in mathematics than in the other subjects. Hence, this study could be an eye-opener for the parents and the school management to become aware of mathematics anxiety.

Objectives of Study

1. To study the relationship between mathematics anxiety and numerical ability.
2. To find out the gender difference in mathematics anxiety and the numerical ability of students irrespective of classes.

Hypotheses

1. Mathematics anxiety would be negatively related to the numerical ability of the students.
2. Male and female students would differ in their mathematics anxiety.

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3. Male and female students would differ in their numerical ability.
4. Students of classes 9 and 10 would differ in their mathematics anxiety.
5. Students of classes 9 and 10 would differ in their numerical ability.

Methodology

Sampling method and Data collection

The total population of this study was 1152 students selected through a simple random sampling method from the three districts of Nagaland. It consists of 563 (48.87%) male and 589(51.12%) female students of classes 9 and 10 from the 12privateschools. The investigator selected four out of 13 private schools from Wokha, five out of 18 schools from district Kohima, and three out of 9 private schools in Dimapur districts through a random sampling method.

Tools Used

The investigator has constructed and validated Mathematics Anxiety Self-Test and Numerical Ability Test. The revised reliability of MAST through the test and re-test method was 0.79, Cronbach's alpha reliability was 0.90, and KMO and Bartletts Test was 0.936. The reliability coefficient of the numerical test (NAT) was 0.95.

Results and Analysis

Table 1

Relationship between mathematics anxiety and numerical ability

Variables	N	Mean	S.D.	'γ' value	P value
Mathematics Anxiety	1152	67.86	13.12	-0.132**	0
Numerical Ability	1152	9.99	3.13		

(Significant at the 0.01 level (2 tailed). p<.01 & .05)**

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Table1 shows the relationship between mathematics anxiety and the numerical ability of male and female students of classes 9 and 10. The 'γ'-value (-0.132) indicates that numerical ability correlates negatively with mathematics anxiety in classes 9&10 students. since the value is less than 0.05(P<.01&.05), hypothesis1, stated as" Mathematics anxiety would be negatively related to numerical ability," is accepted, it clearly shows that mathematics anxiety decreases when numerical ability increases and vice versa.

Table 2

Mean difference between male and female students on mathematics anxiety

Variable	Gender	N	Mean	S.D.	Calculated 't' value	p value
Mathematics Anxiety	Male	569	65.98	13.08	5.32	.000**
	Female	582	69.96	12.26		

(Significant at the 0.01 level (2tailed). p<.01&.05)**

Table 2 shows the mean difference between classes 9 and 10 in their mathematics anxiety levels. There is a significant mean difference between male and female students of grades 9 and 10 in their mathematics anxiety levels since the P-value is less than 0.05 (P<.01 & .05). The mean value indicates that more females (69.96%) have mathematics anxiety than males (65.98%). Hence, hypothesis 2, "male and female students would differ in their mathematics anxiety," is accepted.

Table 3

Mean difference between male and female students in numerical ability

Variable	Gender	N	Mean	S.D.	Calculated 't'	p-value
Numerical Ability	Male	569	9.94	3.05	0.38	0.70
	Female	582	9.87	3.18		

(Not significant at the 0.05. P>.01 & .05)

Table 3 shows the mean difference between male and female students in their numerical ability. There is no significant mean difference between male and female students of classes 9 and 10 in their numerical ability. The P-value is greater than 0 .05 (P>.01& .05); thus, no significant difference between male and female.

students of classes 9 and 10 in their numerical ability. Hence, hypothesis 3,"male and female students would differ in their numerical ability", is not accepted.

Table 4

Mean difference between class 9 and class 10 students on mathematics anxiety

Variable	Class	N	Mean	S.D.	Calculated 't' Value	p-value
Mathematics Anxiety	Class 9	562	67.97	12.62	0.06	0.96
	Class 10	589	67.93	12.98		

(Not significant at the 0.01. P>.01 & .05)

Table 4 shows the mean difference between classes9 and10 students on mathematics anxiety. The P-value is greater than 0 .05 (P>.01& .05), showing no significant difference between classes 9 and 10 students on their level of mathematics anxiety. The mean value of table 4 showsthatthe students of classes 9 and 10 have the same level of mathematics anxiety. Hence, hypothesis 4, "Classes 9 and 10 students would differ in their mathematics anxiety," is not accepted.

Table 5

Mean difference between class 9 and class 10 students on numerical ability

Variable	Class	N	Mean	S.D.	Calculated 't' Value	p-value
Numerical Ability	Class 9	562	9.63	3.18	2.9	0.003
	Class 10	589	10.18	3.01		

(Significant at the 0.01 level (two tailed) p<0.01 & 0.05)

Table 5 indicates the mean difference between classes 9 and 10 students on numerical ability. The P-value is less than 0 .05 (P<.01 & .05), which shows that class 9 and class 10 students differ significantly in their numerical ability. Hence, hypothesis 5, "classes 9 and 10 students would differ in their numerical ability," is accepted. Further, the analysis shows that class 10 students have a better numerical ability than class 9 students.

Findings and Interpretations

The study explored the relationship between mathematics anxiety and numerical ability among male and female students of classes nine and ten in the three districts of Nagaland. The findings (table 1) revealed that mathematics anxiety is negatively related to numerical ability, showing that mathematics anxiety would be high when the numerical ability is low. Statistical analysis of the data (table 2) showed a significant difference between male and female students of classes 9 and 10 regarding the level of mathematics anxiety. The p-value?0.05, in tables nos.4 and6, clearly shows that the mean values of male and female students in classes 9 and 10 are different regarding mathematics anxiety. The present findings of the study reveal that female students exhibit higher mathematics anxiety levels than males. These findings are similar to the findings of Shishigu (2018), Ballado (2014), Else-Quest, et al. (2010), Khatoon and Mahmood(2010), Luo et al.(2009), Karmiand Venkatesan(2009),Yuksel-Sahin,(2008), Baloglu and Kocak (2006), which revealed that there exists gender difference and females show more mathematics anxiety than males. The data analysis of table no.3 shows no significant difference in the numerical ability of class 9 males and females and class 10 male and female students. The P-valuefoundintable3ismore than0.05, indicating that male and female students of classes 9 and 10 do not differ in their numerical abilities. It only shows that the students of classes 9 and 10 are equipped equally with numerical ability, and there is no difference in their numerical ability. But while comparing classes 9 and 10, the data analysis of table 5 shows that (p-value is ? .05), there exists a significant difference in the numerical ability. Class 10 students have high (10.18) numerical ability than class 9 students (9.63).

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Educational Implications

1. The mathematics anxiety self-test results could make the parents, teachers, and management aware that mathematics anxiety is a reality. It is an indication that students who suffer from fear of mathematics/mathematics anxiety need immediate help to improve their academic performance.
2. The mathematics anxiety self-test results could help the teachers develop practical and useful strategies to alleviate their students' mathematics anxiety.

3. The mathematics anxiety self-test results are an excellent help for the school counselors to deal effectively with the referral cases from the parents, management, and teachers regarding the students/ wards suffering from mathematics anxiety. They can even assess students' mathematics anxiety regarding cognitive, behavioral, somatic, and social

Conclusion

Finally, the findings revealed both male and female students of classes 9 and 10 differed in mathematics anxiety, indicating that females have more mathematics anxiety than males. But they do not differ in their numerical ability. Further, comparing classes 9 and 10students, class 10 students were found to have high numerical ability than class 9 students. The results of mathematics anxiety could help the management plan for psychosocial interventions to reduce students' mathematics anxiety through focus group tutorials, cooperative learning, cognitive behavioral therapy, and desensitization methods combined with relaxation training. Mathematics anxiety is a learned behavior (Austin et al., 2001); hence, better teaching methods, training in study skills and motivation, time management, and training in self-efficacy could help the students to unlearn this learned behavior.

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INTELLIGENT QUOTIENT LEVEL AND ACADEMIC STRESS AMONG HIGHER SECONDARY SCHOOL STUDENTS IN GUJARAT

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ABSTRACT

The study investigates the relationship between high and low level of IQ and academic stress among students in Gujarat by analyzing the primary data collected from 1000 students of XI and XII from aided and un-aided schools in Anand district. The study results indicate that the low IQ level of students in higher secondary school has more stress than the high IQ level of students. Across the streams also, it was observed that the low IQ level in all three-stream(arts, science, and commerce) students have more stress than the high IQ level students. The same results were repeated in a rural-urban area where low IQ level of rural as well as urban area students has more stress than the high IQ level students.

Keywords : *Intelligent Quotient, Academic Stress, students.*

Introduction

In today's highly competitive world, the intelligence of the students influences academic achievement. It is responsible for the result of the academic carrier as well as success in life. To the large extent, it clears the possibility and chances of admission of a particular student to a preferred stream of education as well as a particular college/university/institution of his/her choice. While the parents always expect better results and thus pressurize the students to perform better, the students are exposed to different other kinds of pressure causing enormous stress. Most of the time, these expectations may exceed the available resources of the students, which create a stressful situation for student as demand is related to the accomplishment of an desired targets. Intelligence is a notion that has affected the life of every individual in all spheres of life.It is the concept that describes human competence in education and the fundamental issues of quality of life and personal achievements. Higher secondary school education is an important stage that could result in an increased incidence of psychological problems in the academic life of any student. Therefore, extreme stress during this stage increases frustration, depression/hopelessness, and nervousness/anxiety, which could ultimately have adverse effects on the result of the success (Waghacharve, et al., 2013).

In today's highly ruthless competitive world, students face different kinds of academic problems including repeated assessment stress, a dearth of interest in attending the classes, and difficulty in understanding the subject. Most importantly, the examination stress is the feeling of uneasiness/tension over the performance in the different examinations, which eventually results in under-performance of students compared to their ability (http://www.iitr.ac.in). In fact, academic stress is one of the major sources of stress among adolescents which may lead to low self-respect. Most psychological/ mental problems such as depression and feelingsofcommitting suicide occur as a result of low self-respect/self-esteem (Nikitha, et al, 2014). Stress makes a significant contribution to the guess/prediction of subsequent student behavior and performance and thus acts as a destructive forecaster of the academic performance of the student. So, one can define academic stress as it is related to the degree of achievement of an academic goal. Studies revealed that high IQ students face high academic stress. Sarmany (1994) studied the load and stress among students and observed that students with low-Grade Point Average(GPA) used less effective stress coping strategies and assumed test situations as being significantly more stressful girls showed higher

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levels of stress than boys. Also, GPA and actual duration of sleep were significant negative correlated. Lal (2014) analyzed the data from 200 students of high school in the Hisar district of Haryana (India) and found that IQ and demographic factors are not key factors in academic stress among high school students.

However, no study has been focused on academic stress across the IQ levels of students in Gujarat. The present study intends to fill up the research gap. The main objective of the study was to investigate the relationship between high and low levels of IQ and academic stress among higher secondary school students in Gujarat.

Data and Methodology

The present study was undertaken in the Anand district of Gujarat state. The study is based on the primary data collected from the 1000 students (boys and girls) of three streams (Science, Arts, and Commerce) of higher secondary schools (XI and XII). A stratified random sampling technique was used for the selection of sample students. To fulfill the objectives of the study, the survey method was used. The data were collected from randomly selected students from 13 schools in the Anand district having seven schools in an urban area and the remaining six schools from rural areas. The hypotheses of the study were as follows:

a) There will be no significant difference between the mean scores of academic stress in relation to high IQ level and low IQ level students of higher secondary school.
b) There will be no significant difference between the mean scores of academic stress in relation to high IQ level and low IQ level of science stream students of higher secondary school.
c) There will be no significant difference between the mean scores of academic stress in relation to high IQ level and low IQ level of commerce stream students of higher secondary school.
d) There will be no significant difference between the mean scores of academic stress in relation to high IQ level and low IQ level of arts stream students of higher secondary school.

Results and Discussion

Descriptive Analysis of Comparison of IQ level of students of higher secondary school in relation to their Academic Stress Scores.

Table 1

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Comparison of the high IQ level and low IQ level of students of higher secondary school in relation to their Academic Stress Scores

IQ Level	N	Mean	SD	SED	t ratio	Sig.
Low	263	171.7	44.194	2.725	3.252	0.001
High	277	159.5	42.978	2.582		

Source : Survey data.

The comparison of the high IQ level and low IQ levels of students of higher secondary school in relation to their Academic Stress Scores are given in Table 1. The table indicates that the t value obtained from the mean score of low and high IQ levels of students in school is 3.252. The significance value obtained in this case is 0.001 which is less than 0.05, so there is no significant difference between the mean scores of academic stress in relation to high IQ and low IQ level students of higher secondary school is rejected. From the mean value of low IQ level and high IQ level of students in higher secondary school in relation to their academic stress scores, it is clear that the low IQ level students have more stress than the high IQ level students.

Table 2

Comparison of the high IQ level and low IQ level of science stream students of higher secondary school in relation to their Academic Stress Scores

IQ Level-Science	N	Mean	SD	SED	t ratio	Sig.
Low	56	175.61	38.162	5.1	2.815	0.005
High	174	157.57	42.775	3.243		

The comparison of academic stress of the students of science stream and level of IQ presented in Table 2 indicates that the 't' value obtained from the mean score of low and high IQ level of science stream students of higher secondary school is 2.815. The significance value obtained in this case is 0.005 which is less than 0.05, so there is no significant difference between the mean scores of academic stress in relation to high IQ and low IQ level of science stream students of higher secondary school is rejected. From the mean value of low IQ level and high IQ level of science stream students of higher secondary school in relation to their academic stress scores, it is clear that the low IQ level of science stream

students has more stress than the high IQ level of students.

Table 3

Comparison of the high IQ level and low IQ level of commerce stream students of higher secondary school in relation to their Academic Stress Scores

IQ Level-Commerce	N	Mean	SD	SED	t ratio	Sig.
Low	127	168.4	41.335	3.668	0.591	0.555
High	83	164.8	44.045	4.835		

Table 3 indicates that the 't' value obtained from the mean score of low and high IQ level of commerce stream students of higher secondary school is 0.591. The significance value obtained in this case is 0.555 which is greater than 0.05, so there is no significant difference between the mean scores of academic stress in relation to high IQ and low IQ level of commerce stream students of higher secondary school is not rejected. From the mean value of low IQ level and high IQ level of commerce stream students of higher secondary school in relation to their academic stress scores, it is clear that the low IQ level of commerce stream students has more stress than the high IQ level of students.

Table 4

Comparison of the high IQ level and low IQ level of arts stream students of higher secondary school in relation to their Academic Stress Scores

IQ Level-Arts	N	Mean	SD	SED	t ratio	Sig.
Low	80	174.11	52	5.814	1.64	0.103
High	20	153.6	40.054	8.956		

The results of the analysis of the IQ scores of arts stream students and their academic scores presented in Table 4 indicates that the t value obtained from the mean score of low and high IQ level of arts stream students of higher secondary school is 1.644. The significance value obtained in this case is 0.103 which is greater than 0.05, so there is no significant difference between the mean scores of academic stress in relation to high IQ and low IQ levels of arts stream students of higher secondary school is not rejected. From the mean value of low IQ level and high IQ level of arts stream students of higher secondary school in relation to their academic stress scores, it is clear that the low IQ level of arts stream students has more stress than the high IQ level of students.

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Table 5

Comparison of the high IQ level and low IQ level of rural area students of higher secondary school in relation to their Academic Stress Scores

IQ Level-Rural	N	Mean	SD	SED	t ratio	Sig.
Low	109	167.07	44.437	4.256	2.06	0.04
High	167	156.92	36.868	2.853		

The 't' value obtained from the mean score of low and high IQ levels of rural area students of higher secondary school is 2.060 (Table 5). The significance value obtained in this case is 0.040 which is less than 0.05, so there is no significant difference between the mean scores of academic stress in relation to high IQ and low IQ levels of rural area students of higher secondary school is rejected. From the mean value of low IQ level and high IQ level of rural area students of higher secondary school in relation to their academic stress scores, it is clear that the low IQ level of rural area students has more stress than the high IQ level of students.

Table 6

Comparison of the high IQ level and low IQ level of urban area students of higher secondary school in relation to their Academic Stress Scores

IQ Level-Urban	N	Mean	SD	SED	t ratio	Sig.
Low	154	174.9	43.877	3.54	1.98	0.049
High	110	163.31	50.816	4.85		

The comparison of the high IQ level and low IQ level of urban area students of higher secondary school in relation to their Academic Stress Scores given in Table 6 indicates that the t value obtained from the mean score of low and high IQ level of urban area students of higher secondary school is 1.981. The significance value obtained in this case is 0.049 which is less than 0.05, so there is no significant

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ONLINE LEARNING CHALLENGES ENCOUNTERED BY STUDENTS OF RURAL COLLEGES DURING PANDEMIC IN RELATION TO THEIR ACADEMIC ANXIETY

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ABSTRACT

The paper aims to analyze the online learning challenges encountered by students of rural colleges affiliated with Manonmanaiam Sundaranar University, Tirunelveli. The descriptive method employs both questionnaires and informal interviews to collect data from a sample of 356 students drawn through a simple random sampling technique from 8 colleges located in rural areas. The closed questionnaire was developed and validated by Lenin Selvanayagam (2021) and the Academic Anxiety Scale developed and validated by Sonal Sharma (2019) were the research instruments used in this study. The data were analyzed using mean, SD, t-test, and correlation. The finding revealed that the students of rural colleges encountered online learning challenges and the challenges strongly induced their academic anxiety.

Introduction

COVID-19 has flipped the education system which has shaken up its foundation. In today's uncertainties, it is vital to understand the students' online learning experience in times of the COVID-19 pandemic. Online learning provided several benefits to students who prefer to have a flexible schedule and anywhere learning. Pandemic has radically changed not only the way of life of everyone worldwide but also the education discourse where the students can find their courses and books online and interaction with teachers and peers is limited without face-to-face interaction. The psycho-social issues intervene in their learning experience too. The learning challenges such as adaptability, technical, computer knowledge issues, time management, self-motivation issues, distraction issues, online learning style issues, communication issues virtual engagement issues, and feedback issues are some of the issues faced by the students of all levels especially in higher education during online learning. Though there were many studies enquired in this area all over the world, limited information is available regarding the challenges faced by the rural students of Manonmanaiam Sundaranar University College students and their mental health problems since students moved from physical spaces that provided them with much-needed social interactions and kept seated in front of the digital screen hours together.

Review of Related Literature

Barrot, J.S. et.al (2021) students' learning experiences and mental health had been greatly affected by pandemics. COVID-19 has vehemently impacted the quality of students' learning. Gül Özüdogru (2021) undertook a study to analyze the problems faced by pre-service teachers in the distance education during the pandemic in a state university in Turkey and brought to the limelight the problems such as lack of time spared for live courses, absence of internet, technical problems and lack of communication between students and instructor. Abdul Hamid Arribathi et. al (2021) study revealed that the learning anxiety drastically increase to 77.75% for the regular student group and 81.05% for non-regular students. Roy Martin Simamora (2020) revealed that the students while studying online they encountered problems related to economic conditions and anxiety during online learning. Maha Mouchantaf

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(2020) was a comparative study to find the view of language teachers teaching online and face-to-face education in Lebanon. Heba Bakr Khoshaim et.al (2020) lime lighted that the anxiety level of university students during the pandemic surfed in Saudi Arabia and found 35% of the students experienced anxiety levels from moderate to high. Venkatraman Saminathan (2020) enlisted the problems faced by teachers and learners while attending online classes. Based on the literature reviewed the following objectives were formulated.

Objectives of the Study

1. To find out the online learning challenges of rural college students during the pandemic
2. To find out significant difference if any between the students in online learning challenges and academic anxiety with regard to gender
3. To find the relationship between online learning challenges and academic anxiety of rural college students

Methodology

With the view to solve the current problem the investigator had used descriptive mixed method. Primary data was collected through a self-reported closed questionnaire with five alternative answers, developed and validated by Lenin Selvanayagam (2021) to assess the 10 learning challenges consisting of each 5 items. Cronbach's alpha was performed on items to check the reliability and internal consistency. The academic Anxiety Scale developed and validated by Sonal Sharma (2019) was used to measure the variable under study. The population is the students of rural colleges affiliated to Manaonmaniam Sundaranar University, Tirunelveli, a sample of 356 students from 8 rural colleges was drawn using a simple random blindfolded sampling technique. Further from the sample drawn a small sample of 52 students was purposively selected for interview in order to get more clarification regarding the issues of online learning. The data was collected in September 2021. The collected data was analyzed using mean, SD, 't-test, and correlation analyses.

Analysis

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Table 1

Intensity of Online learning Challenges faced by Rural College Students

Online Learning Challenges	Count	Mean	SD
Adaptability Issues	356	3.42	0.876
Technical Issues	356	3.73	0.719
Computer knowledge issues,	356	3.24	0.797
Time management Issues	356	3.49	0.784
Self-motivation issues	356	3.69	0.901
Distraction issues	356	3.64	1.058
Online learning style issues	356	3.62	0.751
Communication issues	356	3.54	0.77
Virtual engagement issues	356	2.92	0.783
Feedback issues	356	3.33	0.787

From the table it is inferred that the technical issues (3.73) are the momentous issue faced by the students of rural colleges. Next are the self-motivation issues (3.69) and distraction issues (3.64). The least felt issue was virtual engagement issues (2.92). The students reported facing all the issues during online learning.

Table 2

Significant Difference between Rural College Students in Online Learning Challenges with regard to Gender

Learning Challenges	Gender	Count	Mean	S.D	t-Value	Remark
Adaptability	Male	153	29.98	7.509	0.544	NS
	Female	203	30.27	7.5		
Technical Issues	Male	153	31.27	7.304	0.673	NS
	Female	203	30.92	6.955		
Computer Knowledge Issues	Male	153	31.03	7.705	0.016	NS
	Female	203	31.02	7.784		
Time Management	Male	153	29.19	7.436	0.174	NS
	Female	203	29.1	7.007		
Self Motivation Issues	Male	153	29.54	7.135	0.051	NS
	Female	203	29.57	6.38		

Distraction Issues	Male	153	29.65	8.051	2.657	S
	Female	203	28.23	7.888		
Online learning Style Issues	Male	153	28.57	7.743	0.71	NS
	Female	203	28.92	7.838		
Communication Issues	Male	153	29.54	7.135	0.051	NS
	Female	203	29.57	6.28		
Virtual Engagement Issues	Male	153	29.95	9.051	2.637	S
	Female	203	28.13	8.788		
Feedback Issues	Male	153	29.57	7.742	0.711	NS
	Female	203	29.92	7.848		
Online Learning Challenges in total	Male	153	181.6	32.74	0.721	NS
	Female	203	179.9	31.83		

(At 5% level of significance the table value of 't' is 1.96)

The students of rural colleges significantly differ in distraction issues and virtual engagement issues with regard to gender. Comparing the mean scores the male students (29.65, 29.95) encounter greater issues than female students (28.23, 28.13).

Table 3

Significant Difference between Rural College Students in their Academic Anxiety with regard to Gender

Dimensions	Gender	Count	Mean	Standard Deviation	t-Value	Remarks
Academic Anxiety	Male	153	39.96	10.588	5.683	S
	Female	203	43.85	10.017		

(At 5% level of Significance the table value of 't' is 1.96,)

It is prominent that the rural students significantly differ in academic anxiety with regard to gender. Comparing the mean scores the female students (43.85) encounter greater academic anxiety than the male (39.96).

Table 4

Relationship between Online Learning Challenges and Academic Anxiety

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Online Learning Challenges	Count	'γ' value	Result
Adaptability	356	0.725**	S
Technical Issues		0.762**	S
Computer Knowledge Issues		0.768**	S
Time Management		0.731**	S
Self Motivation Issues		0.822**	S
Distraction Issues		0.765**	S
Online learning Style Issues		0.693**	S
Communication Issues		0.782**	S
Virtual Engagement Issues		0.858**	S
Feedback Issues		0.721**	S
Online Learning Challenges in total		0.732**	S

****Correlations is Significant at 0.01 level (2-tailed)**

Online learning challenges and academic anxiety of students of rural colleges were significantly related. There is a positive very strong correlation between Self-motivation issues and virtual engagement issues and academic anxiety. Strong positive correlations exist between academic anxiety and other online learning issues.

Conclusion

Though online learning is a boon to learners who want to learn anywhere and anytime due to their inability to attend face-to-face traditional classes, online learning seems to be the hindrance in comprehensive learning experience and real-time doubt solution for the learners who transit their learning mode during a pandemic. The learner from rural colleges faces as many challenges as is compelled to address the issues in order to reduce academic anxiety and facilitate enhanced learning. The issue of adaptability can mitigate providing content according to the individual needs and capabilities. High-speed internet connection and the provision of appropriate software tools can reduce technical issues. Basic computer knowledge and skills can be

provided through access to support devices. In order to avoid distractions students need to be committed to their learning, they need to involve themselves and need to stay positive during online classes. Restrict the study area from others during live sessions. The students need to understand their own learning styles and follow their own learning styles. Improve communication with teachers and friends, seek help from them and approach teachers for feedback regarding their performances. When students find the solutions to challenges they can reduce academic anxiety and improve their learning.

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difference between the mean scores of academic stress in relation to high IQ and low IQ levels of urban area students of higher secondary school is rejected. From the mean value of low IQ level and high IQ level of urban area students of higher secondary school in relation to their academic stress scores, it is clear that the low IQ level of urban area students has more stress than the high IQ level of students.

Conclusion

The study results indicate that the low IQ level of students in higher secondary school has more stress than the high IQ level of students. Across the streams also, it was observed that low IQ levelsin all three-stream(arts, science, and commerce) students have more stress than the high IQ level of students. The same results were repeated in a rural-urban area where low IQ level of rural as well as urban area students has more stress than the high IQ level students.

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ENRICHING E-LEARNING AT THE TIME OF ONGOING COVID -19 BY EMPLOYING E-PORTFOLIO AS AN E-ASSESSMENT TOOL IN HIGHER EDUCATION

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ABSTRACT

The most critical situation faced by the teaching and learning community is the closure of the traditional classes in institutions because of the COVID-19. And hence technology took a dominating position globally to fill the gap in the traditional classrooms in the online classroom. The principal scheme of this paper is to obtain a deep understanding of the possible benefit of integrating E-p (E-portfolio) as an E-A(E-Assessment) tool to enhance the teaching-learning process in the educational institution. Due to the outbreak of the COVID-19 pandemic, there is a necessity for a paradigm shift from the pedagogue specified approach to pupil specified approach in the ongoing educational system. This paper discusses enriching the employability skills of the students by using E-P as an essential E-A tool in strengthening higher education by E-L (E-learning) during the crisis of COVID-19, followed by a discussion on the benefit of E-p. The paper concludes with a discussion on the benefit of E-P if implemented in an educational institution in the course of COVID-19 will gain much momentum in achieving the educational objective.

Keywords: *Higher education, E-P, E-L, employability skills, COVID-19, and assessment tools.*

Introduction

In the current century of education, where higher education is facing unprecedented pressure and transformations in socio-economic, political, and cultural aspects; integration of technology in the field of education has become a necessity during the pandemic COVID-19 without losing contact with students. The pandemic crisis induces more innovative techniques to meet the persistent and growing needs of both students and teachers. With the expansion and advancement in different dimensions of computer-assisted learning, internet, multimedia,and networking technologies, the learner-centered approach has become more prominent and widely accepted in the existing educational system. It has brought radical changes fuelling the transition from traditional methods of learning to E-L making learning effortless.

Many students enter into higher education aspiring to equip and refine themselves with the desirable skills and attributes that are required for entering to occupation. In education relevant to the wide knowledge, skills, and employability of the students, there is a need for a significant reappraisal of ASS (assessment) strategy, policy, and practice. As ASS is one of the fundamental functions in uplifting the quality of higher education, ASS practice needs to balance with the changes in the context, aims, and structure of the higher education(Miller & Morgaine, 2009). A system that enhances student satisfaction by nurturing their potential and the method that depicts a fair representation of students' achievement must be adopted. In many developed countries of the world(Poole et al., 2018), the rapid changes in the academic environment resulted in increasing numbers of institutions that have embraced E-p as an academic platform

In the early 1980s, Professors Peter Elbow and Pat Belanoff (1986) first applied in the field of education at Stony Brook University in New York State as an alternative to standardized tests (Lombardi, 2008). With

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the availability of advanced technologies, multimedia-based E-p has replaced paper-based portfolios. The transition from portfolio to electronic portfolio indicated the diversion of dimension in the field of education, unlike past. With the rapid and continuous changes in educational technologies, many innovative tools and techniques are on the rise. It's evident from the literature that one can reach the learning objectives by appropriately integrating E-p in regular learning practice to strengthen their employability skill and it can also be verified through E-A.

E-portfolio

Recent technology integration in higher education has introduced complimentary to paper-based learning in a systematic, knowledge-seeking, and portable manner which opens boundless opportunities (Rhodes, 2010). E-P is considered to reach greater heights in an educational institution as a novel learning platform.

The traditional educational portfolio is paper-based, arranged, and organized in a type of binder or folder. With the introduction of the Electronic portfolio in the early 1990s, the concept of E-p has replaced the conventional paper-based form of the portfolio (Drury, M, 2006). It is indisputable that E-p offers a wider range and has more advantages over the paper-based portfolio in terms of presentation of content in various media (audio, video, picture, and graphic) storage, accessibility, maintenance, and organization. During the pandemic COVID-19 period many of the classes were conducted in online mode so students can read and reflect by their means by creating an E-p page, which helps them to read and reflect. It is an appropriate innovative tool for teaching, learning, and ASS (Amaya et al., 2013). The gathering of information and storing it on a web page using E-p helps the users to be creative and attain effective attainment. The contents can be stored in the form of text, audio, video, images, and graphics.

As ASS is one of the significant ingredients in fulfilling the educational needs and in determining the quality, E-p is the tool that provides institutions a means to assess how well they are in educating the students. With these tools, the students can access the virtual platform for sharing their achievements, insight, and goals with the teachers and their peers to ensure meeting their
educational and career goals.

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E-P as an active learning tool

E-p motivates and strengthens the active learning of the students as they can manage their learning according to their convenience at any time anywhere(Jwaifell, 2013). The use of E-p encourages and fosters creativity, critical thinking, and independent learning among the learners. They can also showcase their skills, achievement, and performance. It facilitates ASS task that includes self-reflection on the part of the learner (Helyer, 2015). The advancement of teachers and learners can be monitored by E-p. There is also a space for peer and teacher feedback. It allows the learners to ponder on their innate potential and assist in identifying their employability strengths. It can also engage learners to actively learn at their own pace and according to their own convenience. Unlike paper-based portfolios, E-p is accessible by the students, teachers, and parents easily (Tosun & Baris 2011).

E-P is a required assessment tool in higher education

Higher education, an apex stage of an educational system has become much more significant in the present era, especially during the crisis COVID-19 than it was ever before. Man's perfection towards self-reliance and development of a country would be hard to accomplish and actualize without the contribution of higher education.

National Policy on Education (1986) has envisaged higher education as a forum concerned with those critical issues such as communal, financial, ethnic, ethical, and non-material aspects being faced by humans ("National Policy on Education 1986," 1986). Higher education is one of the mechanisms in accelerating national growth and development as it enables to development of the specific skills and knowledge of learners. According to(MHRD. 2018) the enrolment of students in higher education is raised day by day which leads to the development of society.

Today, India is also among the nations in the world that can be counted as one of the most promising countries in the world which can transform the future world scenario in the field of science and technology. But, the dark side of the endless social-economic crisis, political turmoil, and religious problem of our country that are

rampant in our society need to be tackled. Therefore, higher education has a gigantic task of fulfilling the hope and aspirations of a country. With the existence of large and heterogeneous numbers of potential students in a linguistically and socially diverse nation like India the demand for access to higher education increases, we are now at a critical juncture in the evolution of the nature of higher education.

Learners must be taught how to identify the pertinent skills and must train and equips themselves that are obligatory in the labor market. In our uncertain and complex world, 'soft' or 'transferable' skills are increasingly cited as the necessary tools to achieve a successful career. Many young people entering the world of work are lacking the skills (Yorke, 2005). The curriculum is an important component in delving out the potentialities of the learners. Therefore, it must be designed to bring out their inherent potential in them by providing an innovative learning environment. The increasing number of student's enrolment in higher education with the outcome of learning does not seem to go together as the unemployment problem persists in our society.

There is a mismatch between the higher education and the skills the employers are looking for (Unni, 2016) To enable the learners to engage effectively and be on a par with the global learners, there is an urgent need to accelerate the strategic use of the online platform in assessing the achievement level of the learners.

Many studies revealed that E-p is widely used for varied purposes at different stages of education in different countries and it proves successful in achieving the educational goals, but the use of E-P is still not popularized yet in India.

Therefore, every educational institution must adopt an innovative technique like e-p to enhance the teachers' proficiency and empower the students. Adopting E-p can be a vehicle of change in higher education. E-p extends the learners to adopt and practice skills like communicative, reflective, technological, systematic, and problem-solving.

Higher Education for Employability Skills

As many students aspire to be employed after the completion of their studies, there echoes the need to acquire skills and competencies to fit into the world of work. The fundamental component of E-p is self-reflection which enhances the learners to face the global challenges (Stefanie al., 2007). The outcomes of the learning system depend on the input system in an educational institution. Higher education is therefore responsible for students' personal and professional growth and achievement. Shifting the traditional mode of learning to the outcome-based accompanied by a redefinition of curriculum and ASS process to groom students' generic skills and attribute to prepare them for entry into the world of work must be made possible in higher education. The term employability skill is fused differently with varied potentials, standards, and adeptness needed for the younger generation to challenge their life according to the need of the changing society(Heinrich et al., 2007).

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The innate potential of the learners is specifically identified by the teachers and it is their ultimate duty to motivate learners to interact with their peers and make sure to experience reflective practice. Advancements in the field of technology enable the use of E-p more resourceful as multimedia materials such as audio-video, pictures, graphics, etc can be included in E-p.

Educational qualification or credential is not sufficient in today's workplace as most the employees are expecting a reliable person who possesses desirable employability skills including soft skills and who can represent themselves well in the workplace. Teachers' autonomy and the use of interactive pedagogies such as project-based learning approaches will enhance the skills and competencies of the learners. Today, employers look for people who can produce innovative ideas and strategies to tackle problems and who are open-minded to new approaches. To foster such awareness both teachers and young learners need to have an insight into industrial sectors. The teachers must be well qualified with well-versed knowledge of the world of work to successfully nurture the young learners regarding the commercial awareness to effectively support them.

Today, due to the tremendous achievement of the goal of universal primary education, many young people are now looking forward to entering into higher education to acquire the necessary skills to secure employment in the future(Chen et al., 2012). With the invention and advancement in the field of technology, our world is

bombarded with information and with new knowledge and means to make teaching and learning easier and more realistic. Education is to make the learners self-reliant and not be a parasite(Yang et al., 2016). Therefore, an innovative online platform must be created so that the learners could explore knowledge and skills on their own. We live in a sophisticated world where the use of technology has become mandatory. The use of technology and the internet in education has become a common trend.

E-P and Employability Skills

Many studies related to E-p indicated that the students can identify, consider and groom themselves for the employability skills of what the employers are looking for during their studies(Malita, 2009). In higher education, E-p can be owned by individuals or groups- the students, staff, faculty, departments, campus organization, and the concerned institution (Drury, M, 2006). This online platform or forum enables the learners to showcase their achievements with others. It can enhance the learners' creativity, technological skills, and communication skills and exhorts or encourage critical thinking and lifelong learning (Kortelainen & Vanhala, 2004). It also develops and grooms their academic writing and presentation skills. Self-ASS, peer ASS, feedback from peers and teachers, and formative ASS can also be done using this ASS tool. Collaborative work can be done among the learners. The use of E-p is helping the learners to think and allow the user to engage in online discussion. E-p used improves and demonstrates the teaching-learning skills and can display their competencies to the prospective employee. (Lumsden et al. 2001).

A study conducted by Abigail Garth wait and Jim Verrill as shown in their article entitled "E-P: Documenting Student Progress" shows that with guiding support from school administration and a media specialist, they successfully conducted an invigorating E-p project with third-grade students. The project turns out to be a successful one. SiratsSantaCruz et al., 2019 in their study found that the formative ASS was carried out efficiently and it was consciously recognized by the teachers in positive attitude as a valuable tool. If E-p is used in organized educational sectors then it integrates E-p of teachers, and students as well as E-p of varied programs from different sectors which meet the demand of the learning community. The study also reflects that if the E-p is systematically organized and used in the educational institution would be more effective and will improve the performance of the learners in an accountable way. (Lorenzo & Ittelson, 2005).

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Constructive assessment tool as E-P

With shifting from a conventional method to operative learner-specified education, the mode of teaching has also shifted from the traditional classroom to E-L. ASS views are also changing. As new trends of learning with technology are budding in higher education and the teachers are forced to utilize them for maximum output. The constructivist view of teaching and learning emphasizes the construction of new knowledge. ASS must therefore not focus on transmitted knowledge acquired by the learners but rather assess the practical skills obtained. The ASS tool Epenhances the developmental and overall knowledge of the learners which in turn regulates the self-learning process. Self-regulated learning in E-p uses supports the constructivist principle of learning.

Clark proposed a model for learning ASS in three forms namely ASS for, ASS of, and ASS as is shown in Fig. 1. This model illustrates how effectively E-p is connected with the instructional methods, educational program, and acquired knowledge in the ASS triangle. (Clark, 2010). And the study adopted and modified the Clark model and suggests that three ASS should be appropriately assimilated into the E-p learning model.

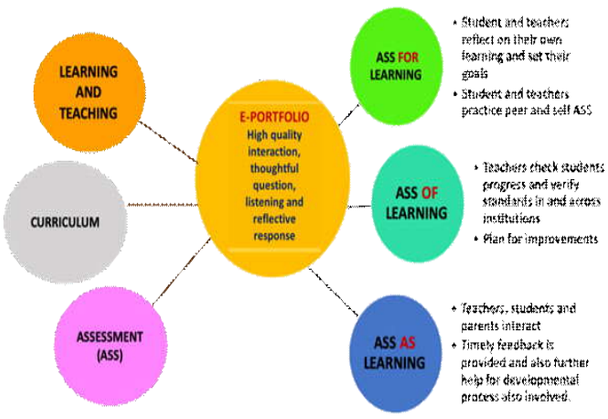

Figure1.The alignment of summative and formative ASS functions (Adapted from Clark, 2010)

The portfolio is an alternative method of ASS with formative value for students (Popescu-Mitroia et al., 2015). Collaborative ASS of the E-p by the teacher along with the students followed by constructive criticism keeping in mind the purpose of creating E-p will successfully assess the students' performance. Technology has brought a new dimension to students' performance ASS. E-p enables the learner to assess the learner's personalized work and systematically check their progress. The importance of using E-p is to let the students focus on the learning. Education, according to Mahatma Gandhi, education is all about developing a whole human in terms of physical, mental, and spiritual. E-p is one of the means to find out the innate potentials of the learners and to draw out the best in them. Many studies on E- P have proven that integrating E-P in the academic environment enhances learning achievement.

E-P pretended to reflect the self-learning process in higher education and assumed to gain recently innovatedASS tool in the teaching-learning process and enhance students' independence in online learning environments (Chen et al., 2012). It also acts as an R-p as ASS tool which changes the performance and learning outcome of the students. The self-regulated levels of performance are exhorted by the reflective learning process and E-p suitably focuses on reflective practices specifically from the feedback provided by the E-p instrument (Tillema, 2001).

In the process of learning, formative ASS is very important to diagnose the strength and weaknesses of the learners so that remedial measures can be taken up for the welfare of the learners(Mason et al., 2004). E-p in the education system will give more ownership and freedom to access knowledge and information. In this manner, they will be held responsible for their progress and achievement. One of the roles and responsibilities of teachers is to make learning more effective for the students. Therefore E-p is considered as one of the means of making the learners as it promotes the user to reflect. Successful use of portfolios includes providing supervised self-directed learning skills developed by the teaching faculty, integrating portfolios into the educational practice, and tutoring students regularly by applying scaffolding in learning and modeling the portfolio (Beckers et al., 2016). The multi-dimensional knowledge, understanding, and skills of the students must be considered while framing the ASS plan. (Stefani et al.,2007) mentioned different types of portfolios as the showcase portfolio, developmental portfolio, R-p, and ASS portfolio. A developmental E-p is referred to as a portfolio that portrays progress and identifies the developmental needs of the learners(Lin, 2008). It records the students' performance and achievement level of their previous course and the supervisor can track, plan and support their personal development accordingly. R-p is more like a personal portfolio where the users enable to present their written reflections of specific competencies and can assess their level of growth and work progress, learning outcomes, and changes in their thought process over a certain period (Slepcevic-Zach & Stock, 2018).

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However, an ASS portfolio refers to the portfolio where the teachers assess the learners based on the evidence provided of their achievement and competencies of the learners.

Conclusion

Education is to make the learners self-sufficient so that they can stand on their own feet and be able to contribute something to the welfare of society. Unless they were given an education that nurtures and sharpen their skills and is ready for work, we cannot say that the complete meaning of education is being realized. Therefore, in the present context, the development of employability skills in students is very important. It is also very crucial for the students to enhance their employability skills at the higher level of education as this is the stage where the learners are expected to enter the workplace soon. They must learn to stand on their own feet and be ready to serve their family and society. Therefore, E-p is one of the important tools that can be used as an ASS tool in an educational institution as it fosters more independent learning among the learners, especially during the pandemic COVID-19. In the digital world of today, the E-P strategy must be adopted in every institution to enhance and empower students. Implementing E-p will provide a more authentic way of assessing the students and it will also foster a learner-centered approach to teaching and learning.

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ORGANIZATIONAL CLIMATE OF SECONDARY TEACHER EDUCATION INSTITUTIONS IN RELATION TO TYPES OF MANAGEMENT AND LOCALE OF THE INSTITUTIONS

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ABSTRACT

The main objective of this research work was to study the organizational climate of secondary teacher education institutions (B.Ed. colleges). A total of 200 teacher educators were selected randomly for the study. The College Organizational Climate Description Questionnaire (COCDQ) was used to collect data. The result indicates that most (33.33%) of the secondary teacher education institutions possess Familiar Climate, whereas, very less (only 3.33%) institutions possess an Open Climate. No significant difference is found between the organizational climates of the Institutions in relation to types of management (government-aided or self-financed) and locale (rural or urban) of the institutions.

Keywords: *Government-aided, organizational climate, rural, secondary teacher education institution, self-financed, urban*

Introduction

The teacher education system of India is one of the oldest and largest systems in the world. Though the history of informal teacher preparation in India is as old as the history of the Indian education system, however, the institutionalized formal teacher training began during the British period only. The institutional climate or organizational climate or organizational set-up of any institution has a greater influence on its stakeholders. According to Halpin and Croft (1963) - "Personality is to the individual what organizational climate is to the organization. Organizational Climate refers to a set of organizational characteristics which can be created from the way an organization deals with its members". Educationists in the fifties and sixties used to think that the organizational climate of an educational institution must be good, where not only the teachers or the employees could discharge their duties at maximum level but students could experience learning at their maximum level also. The institutional climate has four major dimensions, i.e. physical climate, social climate, affective climate and academic climate. Among these 4 dimensions, the most important one is the social climate. The social climate of an institution includes active communication between teachers and students, the collegial relationship among principals, teachers and students, collective decision making and conflict resolution, etc.

An attempt had been made by Halpin and Croft (1963) to study the organizational climate of an educational institution. Thus, they were considered the pioneers of studying organizational climate. The study made by them was limited to elementary schools. Afterwards, the studies were focused on secondary schools also (Hoy Tarter and Kottkamp, 1991). In the Indian context, Motilal Sharma (1973) conducted a study on secondary schools in Rajasthan in the light of the study conducted by Halpin and Croft (1963). He categorized organizational climate into six types, viz. Open climate, Autonomous climate, Controlled climate, Familiar climate, Paternal climate and Closed climate on the basis of the group (teachers' behaviour characteristics and leader (principal's) behaviour characteristics. Group behaviour characteristics include four dimensions or sub-tests, viz. Disengagement, Alienation, Esprit and Intimacy; whereas, leader behaviour characteristics include other four dimensions

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or sub-tests, viz. Psycho-physical hindrance, Control, Production emphasis and Humanized thrust. Though each of the organizational climates has certain positive and negative characteristics, the Open climate is considered the best one. To prepare effective teachers, an institution's organizational climate is expected to be Open type.

Background of the Study

A number of studies have been conducted to find out the difference between organizational climates of government-aided and private or self-financed institutions. The research works of Maity (2018), Vedavathi (2017), Ghosh and Guha (2016), Akhilesh (2013), Babu (2013) and Raza (2010) reported significant differences between the organizational climates of government, government-aided and private or self-financed institutions. They also reported that the Open type of climate existed in government or government-aided institutions, whereas, the Close type of climate existed in private or self-financed institutions. But Arya (2012) and Chatterjee (2011) in their studies found no significant difference between the organizational climate of government or government-aided institutions and private or self-financed institutions.

The locale of an institution has a greater influence on the organizational climate of the institution. The study conducted by Ghosh and Guha (2016), showed no significant difference between the organizational climate of secondary teacher education institutions according to their locale, i.e. rural or urban; whereas the study of Shelat (1975) indicated a significant differences between organizational climate of the rural and urban institutions. He also reported that the organizational climate in rural institutions was mostly Autonomous and Paternal; whereas the organizational climate in urban institutions was mostly closed and open type.

The present problem emerged from the inconsistencies in the findings of the above-said studies.

Significance of the Study

The National Education Policy-2020 states that by 2030, only educationally sound, multidisciplinary, and integrated teacher education programmes shall be in force (NEP,2020, p.42) for which the infrastructural facilities of the teacher education institutions should be suitable as well as organizational climate must be conducive. In this context, to know the picture of organizational climates of secondary teacher education institutions in both government-aided and self-financed institutions, the present study is very much significant. The present study may also contribute to comparing the organizational climates of urban and rural secondary teacher education institutions.

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Objectives

1) To study the organizational climates of the secondary teacher education institutions in West Bengal.
2) To find out whether a significant difference exists between the organizational climates of government-aided and self-financed secondary teacher education institutions.
3) To find out whether a significant difference exists between the organizational climates of rural and urban secondary teacher education institutions.

Hypotheses

1. There is no significant difference between the organizational climates of government-aided and self-financed secondary teacher education institutions.
2. There is no significant difference between the organizational climates of rural and urban secondary teacher education institutions.

Methodology

Since the primary aim of the present study is to analyze the organizational climate of secondary teacher education institutions in the present context, the Descriptive Method is employed. Moreover, this study is conducted to collect detailed descriptions of existing phenomena with the intent of employing data to justify current conditions and practices, therefore, it is a piece 'Survey Study'. The simple random sampling technique

was applied to select 30 secondary teacher education institutions from both rural and urban areas from five districts of the state of West Bengal, India. A total of 200 teacher educators are included in the sample group. The College Organizational Climate Description Questionnaire (COCDQ), which was prepared and standardized by the researcher in the light of the School Organizational Climate Description Questionnaire (SOCDQ) by Motilal Sharma (1978) was used for data collection. Data were collected by the researcher by visiting the institutions personally before the lockdown period.

Analysis of Data

The first objective of this research work was to study the organizational climates of the secondary teacher education institutions in West Bengal. To identify and assign a particular climate type to an institution, specific procedures as suggested by Motilal Sharma (1978) were followed.

Table- 1

Organizational Climate of Secondary Teacher Education Institutions

Types of Climate	Types of the Institutions				Total	
	Government-aided		Self-financed			
	N	*%*	*N*	*%*	*N*	*%*
Open	0	0	1	5.56	1	3.33
Autonomous	3	25	3	16.67	6	20
Familiar	2	16.67	8	44.44	10	33.3
Controlled	3	25	1	5.56	4	13.3
Paternal	4	33.33	2	11.11	6	20
Closed	0	0	3	16.67	3	10
Total	**12**	**100**	**18**	**100**	**30**	**100**

Table 1 reveals that 33.33% of secondary teacher education institutions (both government-aided and self-financed put together) possess Familiar Climate, followed by 20% Autonomous Climate , 20% Paternal Climate, 13.33% Controlled Climate and 10% Closed Climate. It is found that only 3.33% of the institutions possess an Open Climate.

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The second objective of the study was to find out whether a significant difference exists between the organizational climates of government-aided and self-financed secondary teacher education institutions.

Table 2

Chi-square test (□²) between Organizational Climates of Government- aided and Self -financed Secondary Teacher Education Institutions

Types of Climate	Types of Institutions		Total
	Government-aided	Self-financed	
	Observed Frequencies(fo)	*Observed Frequencies (fo)*	
Open	0	1	1
Autonomous	3	3	6
Familiar	2	8	10
Controlled	3	1	4
Paternal	4	2	6
Closed	0	3	3
Total	**12**	**18**	**30**
χ^2 Value	8.4*		

(* Not significant at 0.05 level)

Table 2 reveals that the calculated Chi-square value is 8.4 and critical value with degrees of freedom 5 is 11.07 (□² = 8.4 < p 0.05, 5 = 11.07), which means p is not significant. Therefore, $H_0$1 is retained. So it can be said that there is no significant difference between the organizational climates of government-aided and self-financed secondary teacher education institutions.

The third objective of the study was to find out whether a significant difference exists between the organizational climates of rural and urban secondary teacher education institutions.

Table 3
Chi-square test (□) between Organizational Climates of Rural and Urban Secondary Teacher Education Institutions

Types of Climate	Locale of the institutions		Total
	Rural	Urban	
	Observed Frequencies (fo)	*Observed Frequencies(fo)*	
Open	0	1	1
Autonomous	2	4	6
Familiar	4	6	10
Controlled	2	2	4
Paternal	3	3	6
Closed	2	1	3
Total	**13**	**17**	**30**
$\chi 2$ value	4.39*		

(*Not significant at 0.05)

Table 3 reveals that the calculated Chi-square value is 4.39 and critical value with degrees of freedom 5 is 11.07 (□ = 4.39 < p 0.05, 5 = 11.07), which means result is not significant. Therefore, $H_o 2$ is retained. So it can be said that there is no significant difference between the organizational climates of rural and urban secondary teacher education institutions.

Findings and Interpretations

The main objective of the research work was to study the organizational climates of the secondary teacher education institutions in West Bengal. From the analysis of data, it was found that 33.33% of government-aided institutions possess Paternal Climate. It is because the principals of these institutions have to work hard to control the college and coordinate with different bodies associated with the institution. Most teacher educators pretend to be very close to the principal, but when the principal expects more from them, they try to avoid him. In these institutions, to control the teachers and to get the work done, his (principal's) leadership approach becomes benevolently autocratic. As a result, most of the teachers maintain distance from him. Therefore, he has to work very hard as if he is the paternal guardian of the institution.

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In the case of self-financed institutions, 44.44% of the institutions were found to be Familiar with the Climate because of the principal's laissez-faire attitude. Since both principal and teacher educators are private employees, they are only obliged to the managing body of the institution. The principal is not able to put rigid rules for the teacher educators, so the familiarity between the principal and teacher educators increases. A few teacher educators, who want to maintain the quality of education and dignity of institutions, do not like this type of climate and keep themselves aside. Since all are private employees, they establish personal friendships among themselves. Since the managing body sometimes creates pressure on the principal to get the work done perfectly; the principal exercises leadership in an indirect manner and tries to show satisfactory production to the management.

The earlier research works of Maity (2018), Vedavathi (2017), Ghosh and Guha (2016), Akhilesh (2013), and Babu (2013) reported Open type climate exists in government-aided institutions, whereas, Closed type of climate exists in private or self-financed institutions. But the present study does not go in the same line as the findings of the above-mentioned research works, since Familiar Climate found in self-financed institutions is more open than the Paternal Climate found in government-aided institutions (Halpin and Croft, 1963 Sharma, 1973).

When data were analyzed combining both government-aided and self-financed institutions together, it is found that 33.33% of secondary teacher education institutions possess Familiar Climate, followed by Autonomous Climate and Paternal Climate (20% each), Controlled Climate (13.33%), Closed Climate (10%) and Open Climate (3.33%).

The second objective of the study was to find out whether a significant difference exists between the organizational climates of government-aided and self-financed secondary teacher education institutions. By applying the Chi-square test, it is found that there is no statistically significant difference between the organizational climate of government-aided and self-

financed secondary teacher education institutions. This finding is congruent with those of Arya (2012) and Chatterjee (2011). However, many researchers, viz. Maity (2018), Vedavathi (2017), Ghosh and Guha (2016), Akhilesh (2014), and Babu (2012), observed significant differences between the Organizational climate of government-aided and self-financed secondary teacher education institutions.

The third objective of the study was to find out whether a significant difference exists between the organizational climates of rural and urban secondary teacher education institutions. From the analysis of data through the Chi-square test, it is found no significant difference between the organizational climate of rural and urban secondary teacher education institutions. The very same finding was reported by Ghosh and Guha (2016) in their studies. Therefore, the present study is congruent with the findings of Ghosh and Guha (2016). However, Shelat (1975) in his study found significant differences between the organizational climates of the institutions according to their locale, i.e. rural or urban. He reported that the organizational climate in rural schools was mostly Autonomous and Paternal, whereas, the organizational climate of urban schools was mostly Closed and Open type.

Educational Implication of the Study and Conclusion

The study may be helpful to provide real pictures of the organizational climates of the secondary teacher education institutions in West Bengal to the persons and organizations involved in the secondary teacher education program, so the climatic condition of the institutions may be improved accordingly to run integrated Bachelor of Education (B.Ed.) program successfully.

The present study is a sincere effort to understand the organizational climates of self-financed institutions which are contributing a lot to the teacher preparation process. Some self-financed institutions are doing also good jobs in this regard. The present study will be helpful to change the attitude of common people as well as policymakers toward this type of institution.

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SELF-EFFICACY AND ACADEMIC ACHIEVEMENT OF STUDENTS IN RELATION TO SOCIAL MEDIA USAGE

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ABSTRACT

Social media usage has been increased astonishingly during the last few years and there is a high rise among youngsters and students. On one hand, social media has created a positive impact on their life, but on other hand, it has created a negative impact on studies, health, and some other aspects. This study was conducted to find out the self-efficacy and academic achievement of students in relation to their social media usage. A sample of 120 students of Maulana Azad National Urdu University(MANUU), Hyderabad (India), was selected randomly. The data was collected by using self-constructed tools. Appropriate statistical techniques were used to analyze the data. Findings of the study have been discussed and suggestions were given for betterment.

Keywords: *Self-Efficacy, Academic Achievement, Social Media Usage*

Introduction

Man used to send written letters and messages through Messenger in the early days for contact or communication and it has been a prominent means of social communication for many centuries. The Telegraph, invented by Samuel Morse in the early eighteenth century, made it possible to deliver messages much faster than messages delivered by horses and riders in old days. The Telephone was later invented by Alexander Graham Bell in 1890 as an effective means of communication. Later, Telephone and Radio signals enabled people to transmit messages instantly. Technology began to advance rapidly in the twentieth century. The first supercomputers were created in the 1940s.

During the last quarter of the 20thcentury, the home computer was developed. The use of Internet Relay Chats (IRCs) paved the way in 1988 and began to be used as a very popular means of social communication until the 1990s. GeoCities in November 1994, Classmates.com in December 1995, and Six Degrees.com in May 1997 were launched. SixDegrees.com became known as the first social media site as it allows users to upload profiles and make friends with other users.

In the last few years, social media has developed at an astonishingly high speed, and grabbed millions of users around the world. In recent years, social media has become a major means of social communication among individuals. It is a platform that not only connects people but also allows them to express their feelings and thoughts. Due to this, it has become an important and essential part of a common man's life. According to Merriam Webster (2014), social media is defined as "Forms of electronic communities (as web sites for social networking & micro-blogging) through which users create online communities to share information, ideas, personal messages and other content (video & audio)."

Social media is a combination of the two words social and media. Social, means being social, which means being a social creature, and connecting with other people in society. Media, which means a mode of communication (with the facility of internet on mobile or computer). By combining these two different terms together, we can define a basic definition of social media as a web-based (Internet-based) communication platform that allows the users to connect and communicate with other users as well as the expression and exchange information and ideas.

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Review of Related Studies

Kumar and Papaiah (2012)found that the high school teachers did possess self-efficacy. But a significant difference was found between the self-efficacy levels of teachers working in Zila Parishad High Schools and Private Unaided High Schools. Manjunatha, (2014)concluded that social networking site has facilitated better communication with their families. Pavani and Gaurav Agrawal (2015)have conducted research on 'A Study of Self-Efficacy and Academic Achievement'.They found that one who has high self-efficacy possesses high academic achievement. Elizabeth Seabrook et.al. (2016) found that low usage of social networking sites was related to low levels of depression and anxiety and vice versa. Ajay Shukla and Yashaswi Singh (2017)found that Students and teenagers are spending more time on social media which remarkably affects their education and health. Sushma Singh (2020) found a significant negative correlation between SNS addictive behavior and academic achievement, and SNS addictive behavior and mental health of students.

Need and Importance of the Study

The younger generation, especially college students, are keen on various social media sites. These sites not only enable students to connect with their friends, teachers, and institutions but also give them the opportunity to make more friends. Connecting with social networking sites has become a trend among the student community around the world. Over the past decade, the use of social media and its various sites among college students has grown exponentially. They are very much eager to know and learn about technological advancements and new trends. Social media use is higher among college students than other users. But overuse of social media started creating some problems related to their health (like anxiety, depression, sleep disturbances), studies, self-confidence, self-esteem, self-efficacy, etc.

The investigator has not seen any study on the self-efficacy and academic achievement of students in relation to their social media usage. To fill this gap, the present study has been conducted. Furthermore, the present study will make students aware of how social media influences their self-efficacy and studies.

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Objectives

1. To compare the mean scores of self-efficacy, academic achievement, and social media usage of male and female students.
2. To study the correlation of self-efficacy and academic achievement with social media usage of students.

Hypotheses

1. There is no significant difference between the mean scores of self-efficacy of male and female students.
2. There is no significant difference between the mean scores of academic achievement of male and female students.
3. There is no significant difference between the mean scores of social media usage of male and female students.
4. There is no significant correlation between self-efficacy and social media usage of students.
5. There is no significant correlation between academic achievement and social media usage of students.

Methodology

The investigator conducted a survey on a sample of 120 undergraduate (60 male & 60 female) students of MANUU who were selected randomly. The self-efficacy scale and social media usage scale were developed by the investigator. The self-efficacy scale consists of 20 statements (includes both positive and negative and are in equal number) and reliability is 0.803. the range is between 100-20. A high score indicates a high level of self-efficacy. Social Media Usage Scale consists of 24 statements (includes both positive and negative and are in equal number) and reliability is 0.782. The range is between 120-24. A high score indicates a high level of social media usage.

Mean, Standard Deviation, t-Test (to know the significance of the difference between the group of variables), and Pearson's Product Moment Correlation (to know the correlation between the variables) were

used for data analysis. The analyzed data are presented as under.

Analysis and Interpretation

Hypothesis 1: There is no significant difference between the mean scores of self-efficacy of male and female students

Table 1
Self-efficacy of male and female students

Gender	N	Mean	SD	df	't' value	Remark
Male	60	70.67	6.734	118	0.896	NS
Female	60	71.78	6.911			

Table-1 shows the mean scores of self-efficacy of male and female students are 70.67 and 71.78 respectively. It is evident that the 't'-value is 0.896, which is not significant. Thus, the null hypothesis that there is no significant difference between the mean scores of self-efficacy of male and female students is not rejected. It means that both male and female students are having an equal amount of self-efficacy.

Hypothesis 2: There is no significant difference between the mean scores of academic achievement of male and female students

Table 2
Academic Achievement of Male and Female Students

Gender	N	Mean	SD	df	't' value	Remark
Male	60	76.14	4.331	118	1.974	S
Female	60	77.78	4.758			

Table-2 shows the mean scores of academic achievement of male and female students are 76.14 and 77.78 respectively. It is evident that the 't'-value is 1.974, which is significant at the 0.05 level. Thus, the null hypothesis that there is no significant difference between the mean scores of academic achievement of male and female students is rejected at 0.05 level. It means that both male and female students are academically not equal.

Hypothesis 3: There is no significant difference between the mean scores of social media usage of male and female students.

Table 3
Social Media Usage of Male and Female Students

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Gender	N	Mean	SD	df	't' value	Remark
Male	60	85.02	9.84	118	3.088	S
Female	60	79.18	10.828			

Table-3 shows the mean scores of social media usage of male and female students are 85.02 and 79.18 respectively. It is evident that the t-value is 3.088, which is significant at the 0.01 level. Thus, the null hypothesis that there is no significant difference between the mean scores of social media usage of male and female students is rejected. It means that usage of social media between male and female students is not equal.

Hypothesis 4: There is no significant correlation between self-efficacy and social media usage of students.

Table 4
Correlation between Self-Efficacy and Social Media Usage

Variables	Mean	SD	''	Remark
Self-Efficacy	71.23	6.818	-0.316	significant at 0.01 level
Social Media Usage	82.1	10.71		

Table-4 shows that the correlation coefficient between self-efficacy and social media usage of students is -0.316which is negative, moderate and significant at 0.01 level with df120. It reflects that self-efficacy and social media usage of the students are negatively and significantly correlated. Thus, the null hypothesis that there is no significant correlation between self-efficacy and social media usage of students is rejected. Therefore, we can say that self-efficacy and social media usage were found to be inversely and moderately related. That is, the higher the social media usage, the lower is likely to be the self-efficacy of the students and vice versa.

Hypothesis 5 : There is no significant correlation between academic achievement and social media usage of students.

Table 5
Correlation between Academic Achievement and Social Media Usage

Variables	Mean	SD	'r'	Remark
Academic Achievement	76.96	4.605	-0.646	S
Social Media Usage	82.1	10.71		

Table-5 shows that the correlation coefficient between academic achievement and social media usage of students is 0.646which is negative, high and significant at 0.01 level with df 120. It reflects that academic achievement and social media usage of the students are negatively and significantly correlated. Thus, the null hypothesis that there is no significant correlation between academic achievement and social media usage of students is rejected. Therefore, we can say that academic achievement and social media usage were found to be inversely and highly related. That is, the higher the social media usage, the lower is likely to be the academic achievement of the students and vice versa.

Findings

1. Male and female students are having an equal amount of self-efficacy.
2. Male and female students are academically not equal. By looking at mean scores, it is clear that female students are academically better than male students.
3. Social media usage between male and female students is not equal. It is very clear from the mean scores than male students are having very high usage of social media than their counterpart female students.
4. There is a negative, moderate and significant correlation between self-efficacy and social media usage of students. It means that as social media usage increases, the level of self-efficacy decreases.
5. There is a negative, high and significant correlation between academic achievement and social media usage increases, there is a decline in their academic achievement.

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Conclusion

Social media has various features like sending and receiving messages, sharing photos with others, making audio and video calls through various social media sites and applications, and connecting users with the rest of the world. Due to these beneficial features, it has become very essential for one's life. At the same time, excess use of social media can harm health, studies, daily life, and some other aspects also. Therefore, to get the right and positive effect of it, there should be a time limit for its usage. One can mark its own limit to get positive impacts. During the academic life of students, there should be minimum use of social media, so that they can participate in various tasks and activities. It is very important for every student to have a good academic background for a good job in life. And for this, they must have a high level of self-efficacy. For active participation of students in academic activities, the Self-efficacy of students needs to be enhanced by motivation, increasing self-confidence, and building their self-esteem. As students with low self-efficacy have low aspirations which may affect their results in academic performance. Therefore, the use of social media among students should be controlled and justifiable manner. As self-efficacious students recover quickly from any problem or challenges in life and ultimately are likely to achieve their personal goals. Therefore, Teachers can boost self-efficacy with credible communication and motivate them to make their best efforts academically also.

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SCHOOL CLOSURE DUE TO COVID-19: A TRAINING PACKAGE FOR THE MOTHERS OF CHILDREN WITH SENSORY PROCESSING DISORDER

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ABSTRACT

The purpose of the study was to find out the effect of packages on the mothers of children with sensory processing disorder during school closure due to COVID-19. Mothers having children with Sensory Processing Disorders were selected for this study. The study results show that there is a significant effect on the understanding of motor planning and visual perception among mothers of CwSPD. Also, the data clearly shows the significant effect in cooperation of CwSPD with the mothers after undergoing the training package. However, there is no significant effect on the associated health conditions of CwSPD. To conclude it can be stated that under the pretext of closure of the school during the COVID-19 pandemic the package developed by the researchers worked significantly and the execution could be continued in the future also.

Keywords : *Children with Sensory Processing Disorder, COVID-19, training package, Visual Perception, and Motor Planning.*

Introduction

Disability is part of being human. Almost everyone will temporarily or permanently experience a disability at some point in their life. Over 1 billion people – about 15% of the global population currently experience disability, and this number is increasing due in part to population aging and an increase in the prevalence of non-communicable diseases(WHO, 2020).Persons with disabilities are less likely than others to complete education, and more likely to be excluded altogether from schooling.Because of COVID-19, most Stateshavetemporarily closed education institutions affecting all students, including students with disabilities.

To reduce the impact of disruption in education, some States are adopting remote learning practices. As a result, many students with disabilities are being left behind, particularly students with intellectual disabilities (OHCHR, 2020).

Sensory processing disorders are impairments in responding to sensory stimuli such as impairments in detection, modulation, or interpretation of stimuli (Miller, 2007). Sensory processing disorders have been classified by proponents into three categories: sensory modulation disorder, sensory-based motor disorders, and sensory discrimination disorders (Miller, 2007). According to Lucy Jane Miller (2007), there are common behavioral observations that can assist parents, teachers, and health care practitioners to determine if a child would benefit from further evaluation of SPD. 5.3% of the kindergarten children meet screening criteria for sensory processing disorders according to their parental reports Ahn, (2004). Sensory processing problems impact children's responses to sensory events in daily life. (Yochman, 2004). Sensory modulation disorder (SMD) Sensory modulation refers to a complex central nervous system process by which neural messages that convey information about the intensity, frequency, duration, complexity, and novelty of sensory stimuli are adjusted (Schaaf, 2010). The acceleration of technological, economic, and social changes makes it imperative that our education systems adapt almost in real-time. Policymakers should work closely with

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teachers and school leaders and leverage their expertise to help students succeed in the future world of work (OECD,2019). As the COVID-19 crisis pushes up levels of hunger among the global poor, the World Food Programme and UNICEF are urging national governments to prevent devastating nutrition and health consequences for the 370 million children missing out on school meals amid school closures(UNICEF, 2020).UNESCO joined its partners in the Global Action on Disability (GLAD) Network to raise awareness of the urgent need to put strategies and measures to mitigate the impact of school closures on learners with disabilities. The COVID-19 pandemic is having a disproportionate impact on learners with disabilities who were already experiencing social and educational disadvantages. As many as half of the estimated 65 million primary and lower secondary-school age children with disabilities in developing countries were already out of school before COVID-19 according to GLAD(UNESCO, 2020). As schools transition to online learning during the COVID-19 crisis, it is important to provide teachers with guidance and relevant, evidence-based resources on how to deliver lessons in remote and online settings in special education. Systemic approaches are necessary to help parents and caregivers with both their domestic responsibilities and students' education.

The purpose of the study

would help the mothers of children with Sensory Processing Disorders to adopt the training package to improve the motor planning and visual perception of their children during the pandemic. Also, considering the difficulties faced by the parents of these children, it would give a significant improvement in the motor planning and visual perception of children with Sensory Processing Disorders during a pandemic.

The critical areas selected for the study

Motor planning include sitting, walking, jumping, climbing, eating, dressing, etc. or it may be stated that all the ADL needed for the day-to-day life is a result of motor planning. The child faces significant problems as well as the mother if he has difficulty in this area. Therefore, it is a critical and crucial area that needs to be investigated during a pandemic.

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Visual perception includes visual tracking, visual focus, visual chasing, visual awareness, spatial relationship, etc. Similarly, problem-solving and decision-making skills are very much needed as they lead to academics which are equally important for everybody.

Research Design

A research design is the set of methods and procedures used in collecting and analyzing measures of the variables specified in the subject taken for research. The researchers adopted a purposive group design, which comes under experimental research to find out the effect of the package.

Sample of the study

Five mothers having children with Sensory Processing Disorders was selected for this study.

Research Tool

An informal yet validated assessment checklist was used to assessing children with ASD. The results declared that five out of ten children had the features of SPD also. The researchers selected two areas namely: motor planning and visual perception. Hence, the researchers have attempted to conduct a study on 'School closure due to COVID-19: A training package for the mothers of children with Sensory Processing Disorder'.

Experimentation

The tool was given to 10 experts in the related field (including Para-professionals, educators, and mothers{those who were not the part of the study}. Having received the suggestions and opinions from them few items were deleted and a few added as well.

Data analysis

Table 1

Comparison of pre and post-tests mean scores of SD levels on mothers' understanding of the Disorder

Test	n	Mean	DM	SD	SEM	't' ratio
Pre-test	5	10.2	13	4.2	1.89	6.85*
Post-test	5	23.2				

(*Significant at 0.05 level)

Table No. 1 shows pre and post-test mean, standard deviation, and value of the application of training package for enhancing the mothers' understanding about the disorder SPD). The pre and post-test means are 10.2 and 23.2. This data clearly shows that much difference has occurred due to the training package. The standard deviation is 4.24 and the standard error of the mean is 1.89. Since the obtained ratio of 6.85 is higher than the table value of 2.78. Hence, it is found that there is a significant difference between pre-test and post-test on mothers' understanding at 0.05 levels. So the first hypothesis is fully accepted. The result of the above-mentioned data shows that there is a significant effect on the understanding of motor planning and visual perception among mothers of CwSPD.

Table2

Comparison of pre and post-tests mean scores of SD levels on child's co-operation in the execution of therapy

Test	N	Mean	DM	SD	SEM	't' ratio
Pre-test	5	11	10	4	1.78	5.59*
Post-test	5	21				

(*Significant at 0.05 level)

Table No. 2 reflects pre and post-test mean, standard deviation, and value of the application of training package for enhancing the child's co-operation in execution of the therapy. The pre and post-test means are 11.00 and 21.00. The standard deviation is 4.00 and the standard error of the mean is 1.78. While analyzing the data, the researcher found that the obtained ratio of 5.59 is higher than the table value of 2.78. Hence, it can be stated that there is a significant difference between pre-test and post-test on child's co-operation at 0.05 levels which is highly significant. So, the hypothesis is fully accepted. The result of the data shows that there is a significant effect in the cooperation of CwSPD with the mothers after undergoing the training package.

Table 3

Comparison of pre and post-tests mean scores of SD level on the associated health condition of the children with SPD

Test	N	Mean	DM	SD	SEM	't' ratio
Pre-test	5	20.4	0.2	0.44	0.20	1.00
Post-test	5	20.2				

(*Significant at 0.05 level)

Table 3 show pre and post-test mean, standard deviation, and value of the application of training package for enhancing the child's associated health condition. The pre and post-test means are 20.40 and 20.20. The standard deviation is 0.44 and the standard error of the mean is 0.20. Since the obtained ratio of 1.00 is lesser than the table value of 2.78. Hence, it is found that there is no significant difference between pre-test and post-test on the child's associated health condition at 0.05 levels. So, the hypothesis is rejected. The study results show that there is no significant effect on the associated health conditions of CwSPD.

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Conclusion

The result of the above-mentioned data shows that there is a significant effect on the understanding of motor planning and visual perception among mothers of CwSPD. Also, the data clearly shows the significant effect in cooperation of CwSPD with the mothers after undergoing the training package. However, the result of the study shows that there is no significant effect on the associated health conditions of CwSPD.There is a significant difference between S-1 and S-3; between S-1 and S-4; between S-3 and S-5; S-4 and S-5. The results of the study showed that sample-1 and sample-5 (Mothers) here, sample refers to mothers of CwSPD 1 and 5 were found to be better than other samples (mothers) of CwSPD in the domain of understanding the concept of motor planning and visual perception when the school was closed and direct intervention was not possible. To conclude it can be stated that in the pretext of closure of the school during the COVID-19 pandemic the package developed by the researchers worked significantly and the execution could be continued in the future also.

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COMPETENCIES REQUIRED FOR SECONDARY TEACHERS TO HANDLE STUDENTS WITH LEARNING DISABILITIES

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ABSTRACT

The present study is focused on the Competencies required for Secondary Teachers to Handle Students with Learning Disabilities. The investigator used the normative survey method for the study. The sample consists of 545 secondary teachers from Chennai and Kanchipuram districts of Tamil Nadu, South India as the locale of the study. A stratified random sampling technique has been used for the selection of samples. The investigators developed a tool to measure the Competencies required for Secondary Teachers to Handle Students with Learning Disabilities. The data were analyzed using t-test and F -test and Stepwise Multiple Regression. The major finding of the study reveals that the majority of secondary teachers have an average level of competencies (49.17%).

Keywords : *Competencies, Learning Disabilities, Secondary Teachers, Assistive Technology.*

Introduction

Teachers play an important role in any educational system. They are artists who mold and shape the student's physical, intellectual, and moral powers. In any normal school, one can find students with different disabilities like visual, hearing, mental retardation, and orthopedically handicapped apart from students with slow learning and learning disabilities. Many times, the children with severe disabilities enter the special schools meant for them, but the students with mild and moderate disabilities are in normal schools. The teachers need competencies to handle students with Learning Disabilities.

Significance of the study

The prime focus of the study is to list out the competencies required for secondary teachers to handle students with learning disabilities. The study also aims to the development of a questionnaire to identify the required competencies of secondary teachers to handle students with learning disabilities.

Objectives of study

1. To find out the required competencies of Secondary teachers to handle students with learning disabilities.
2. To list out the specific competencies required for Secondary teachers to handle students with learning disabilities.
3. To identify the required competencies of Secondary teachers to handle students with learning disabilities which vary based on their personal and demographic variables.

Materials and methods

The investigators used the survey method for the study.

Tools used

The following tool has been used in the present study. A tool constructed and validated by the investigator (2016) was used to assess the competencies required for secondary teachers to handle students with learning disabilities (CRSTHSLD)

Sample

The investigators selected Chennai and Kanchipuram districts of Tamil Nadu, South India as the locale of the

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study. The researchers selected the schools in Chennai and Kanchipuram educational districts by using a simple random sampling technique. The teachers working in this 15% of the high schools (545 in number) form the sample of the study. For the purpose of the study, the investigators randomly selected 292 teachers in government schools, 88 teachers in government-aided schools, and 165 teachers in private matriculation schools.

Statistical techniques used

The following statistical techniques were used in study

1. Descriptive statistics like Mean and Standard Deviation and percentages have been calculated.
2. Differential Analysis ('t'-test, 'F'-test) and Step-wise Multiple Regression.

Analysis and Interpretation of Data

Competencies for Secondary Teachers to handle Students with Learning Disabilities

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Table 1

Number and Percentage of Teachers with Low, Average, and High Competency

Level of competencies	N	Percentage (%)
Low	149	27.34
Average	268	49.17
High	128	23.48

Hypotheses 1 : There is a significant difference in the required competencies on various aspects (Nature of learning disabilities, Identifying the causes and characteristics of learning disabilities, Identification and assessment of students with learning disabilities, Development and use of instructional materials, media and Assistive Technology devices, Guidance and Counseling to the students with learning disabilities and their parents) of learning disabilities in students by the secondary teachers due to variation in their Gender.

Table 2

Mean and SD scores of male and female teachers on different competency areas of learning disabilities in students and the calculated 't'-value

Dimensions	Gender	N	Mean	SD	't' Value	Remarks at 0.01 Level
Nature of Learning Disabilities	Male	208	4.8	1.3	3.83	S
	Female	337	4.35	1.31		
Identifying the Causes and Characteristics of Learning Disabilities in Students	Male	208	7.63	2.23	10.99	S
	Female	337	5.51	2.16		
Identification and Assessment of Students with Learning Disabilities	Male	208	5.44	1.99	5.27	S
	Female	337	4.54	1.87		
Instructional Methods and Materials for students with learning disabilities	Male	208	12.91	4.15	5.53	S
	Female	337	10.91	4.06		
Guidance and Counselling skill required for teachers to facilitate students with learning disabilities	Male	208	5.77	2.02	6.71	S
	Female	337	4.57	2.02		
Competencies as a Whole	Male	208	36.57	10.29	7.66	S
	Female	337	29.91	9.58		

The above table 2 shows that the obtained 't' – values with respect to the competency area nature of learning disabilities (3.83), Identifying the causes and characteristics of learning disabilities in students (10.99), identification and assessment of students with learning disabilities (5.27), Instructional Methods and Materials for students with learning disabilities (5.53), Guidance and Counselling skill required for teachers to facilitate students with learning disabilities (6.71) and the competencies as a whole (7.66) are significant at 0.01 level. It means that the possessed required competencies of the secondary teachers are different irrespective of their gender. Hence the formulated hypothesis, "There is a significant difference in the required competencies on various aspects of learning disabilities by the secondary teachers due to variation in their Gender" is accepted.

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The required competencies of the secondary teachers are different in respect of the Gender of the teachers.

Hypotheses 2 : There is a significant difference in the required competencies on various aspects of learning disabilities in students by the Secondary teachers due to variation in their Age.

Table 3

Mean and SD Scores of teachers with different age groups of teachers on different competency areas of learning disabilities in students and calculated 'F' value

Dimensions	Age	N	Mean	SD	F-value	Result at 0.05 Level
Nature of Learning Disabilities	21-30 years	139	4.58	1.26	1.65	NS
	31-40 years	213	4.62	1.24		
	41-50 years	146	4.44	1.33		
	51-58 years	47	4.19	1.77		
Identifying the Causes and Characteristics of Learning Disabilities in Students	21-30 years	139	6.31	2.41	1.4	NS
	31-40 years	213	6.38	2.37		
	41-50 years	146	6.47	2.4		
	51-58 years	47	5.65	2.61		
Identification and Assessment of Students with Learning Disabilities	21-30 years	139	4.52	1.85	2.49	NS
	31-40 years	213	4.97	2		
	41-50 years	146	5.13	1.9		
	51-58 years	47	4.82	2.17		
Instructional Methods and Materials for students with learning disabilities	21-30 years	139	11.64	3.92	0.72	NS
	31-40 years	213	11.76	4.32		
	41-50 years	146	11.86	4.05		
	51-58 years	47	10.85	4.93		

The above table 3 shows that the obtained 'F' values with respect to the nature of learning disabilities (1.65), Identifying the causes and characteristics of learning disabilities in Students (1.40), Identification and assessment of students with learning disabilities (2.49), Instructional Methods and Materials for students with learning disabilities (0.72), Guidance and Counselling skill required for teachers to facilitate students with learning disabilities (1.10) and competencies is whole (0.69) are not significant at 0.05 8.

level indicating that the variable age has not any significant bearing on their required competencies to handle students with learning disabilities. Thus, the stated hypothesis, "There exists a significant difference in the required competencies of secondary teachers to handle students with learning disabilities due to age" is rejected.

The required competencies of the secondary teachers are the same in respect of the Age of the teachers.

Findings

The following are the findings of the study

1. This finding reveals that the majority of the secondary teachers have an average level of competencies (49.17%).
2. 76% of the teachers felt the need for requiring competency in the nature of learning disabilities in students.
3. 66% of the teachers felt the need for requiring competency in identifying the causes and characteristics of learning disabilities in students.
4. 71% of the teachers felt the need for requiring the competency in identification and assessment of students with learning disabilities.
5. 65% of the teachers felt the need for requiring competency in the area of development and use of instructional materials, media, and Assistive Technology devices.
6. 69% of the teachers felt the need for requiring competency in guidance and counseling the students with learning disabilities.

Educational implications

1. Learning disabilities awareness programs should be organized for secondary teachers.
2. In-service training programs should be organized at the district level.
3. DIET, SCERT, NCERT & SSA should develop competency-based modules on learning disabilities aspects and supply them to teachers.
4. Parent Teacher Association (PTA) should be strengthened to sensitize the parents about the learning disabilities in children and students in their early years.
5. Media should take a leading role to broadcast programs on learning disabilities.
6. Self-learning modules should be prepared to make the teachers aware of their competencies to handle students with learning disabilities.
7. The teachers' training curriculum at different levels should explicitly incorporate the concept of learning disabilities.
8. Need to promote awareness about Assistive Technology among Teachers, Parents, and other paraprofessionals.

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Conclusion

Nowadays every classroom has learning disabilities students. This study reveals the importance of providing knowledge and skills to the teachers working in schools, as the teachers need more knowledge in the field of learning disabilities. This study also reveals the necessity of incorporating the competencies in the teacher education curriculum. Specialized resource teachers can be trained by the NCERT and Department of Education at the University level who have good expertise in this area. The government should appoint one such resource teacher for each block and they will assist the general school teachers in their jurisdiction about the ways and means of overcoming learning disabilities in students.

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SCIENTOMETRIC DIMENSION OF RESEARCH OUTPUT ON VIRTUAL LEARNING ENVIRONMENT: A SCOPUS BASED EVALUATION OF TWO DECADES

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ABSTRACT

The virtual learning environment has gained momentum in recent days, especially during the pandemic period. Most learners are in virtual learning mode these days. This paper identifies the research productivity in the field of the virtual learning environment by the faculty of social sciences, as indexed in the Scopus database from 2000 to 2019. Out of the 6923 articles considered for the analysis, 3419 publications (49.38 percent) are journal articles. The journal "Computers and Education" published 226 articles (3.26 percent) and Castro, M contributed 23 articles as the most prolific source and author respectively. The United States of America contributed 1627 articles (23.50 percent). The Open University of the USA published 69 articles and topped the most productive institutions' table. It is suggested to extend more funds to the young researchers to contribute papers in the most talked-about field of the day 'Virtual Learning Environment'.

Keywords : *Virtual Learning Environment, Research productivity, Scientometrics, Productive Institutions, Prolific Authors.*

Introduction

The Virtual learning environment is the current trend study in education. The innovative ideas in educational technology have created new teaching and learning tools in a Virtual learning environment like a virtual classroom, virtual reality, and flipped classroom. The Virtual learning environment provides the experimental ideas of the curriculum. Students easily understand science, mathematics, and biology through a virtual learning environment. The Teachers provide the pictures, lessons, videos, audio, and practical examples of the subject in the virtual learning environment. In these Google online days, the concept of blackboard teaching decreases. This paper focuses on the scientometric study of the research publications related to the virtual learning environment. This study explores the growth and development of the publications on "virtual learning environment" as indexed in the Scopus database and contributed by the Social Sciences faculty.

Definition of Scientometric Study

The term scientometric was coined in 1969 by the Russian scientists Nalimov and Mulechenko. The main aim of the scientometric study is to provide a quantitative analysis of the keyword, author productivity, affiliating institutions, and journals. In the last two decades, library and information science professionals published more number of papers in scientometrics. The Scientometric study provides the visibility of the publications in the specific field, authors' collaboration, affiliations, and sponsoring institutions.

Significance of the Study

The role virtual learning environment is the most wanted one for all higher education institutions and provides the facilities in physical and virtual modes. In recent years highly utilized these VLE based activities

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have and a number of articles written by researchers in the field of social sciences. This time is the correct time for analyzing the output of Virtual Learning Environment topics in and around the world. So that his study identified the output of articles in the Virtual Learning Environment over the past two decades.

Literature Review

Constantinos Coursaris and Wietske Van Osch (2014) conducted a search productivity analysis and citation analysis of people, institutions, and countries supported 610 peer-reviewed social media articles published in journals and conference proceedings between October 2004 and December 2011. The results show that: the social media domain displays limited diversity and is still heavily influenced by practitioners. The paper raises two fundamental challenges facing the social media domain and its future advancement, namely the shortage of educational maturity and therefore the Matthew Effect. This paper identified foundational research areas, theoretical perspectives from a range of social science disciplines, and potential research questions that evoke the involvement of current peripheral actors to support the advancement of the social media domain into new, broader, and more pertinent territory.

Raja and Murugan (2015) presented a bibliometric analysis of the 'Journal of Research and Reflections on Education' from 2004 to 2013 (Ten Years). The pattern of a variety of articles published, number of authors, contribution, number of studies associated with the geographic jurisdiction, the quantity of pages contribution, number of references cited within the articles, designation wise authors contribution, and topics covered in the journal were studied. The highest number of articles was (31) published in the year 2006. 60.76% of the articles (161 articles) are contributed by double authors. 71.94% of the authors are from colleges and universities. 83.39% of the articles (221) are state-level studies. 15. 85% of the articles (42) covered the area of "teaching skills".

Objectives for the Study

The following objectives are framed for the study:

1. To carry out the subject-wise analysis of global VLE Research output
2. To investigate the various sources of VLE research output
3. To examine the types of documents found in VLE research output
4. To explore the contributions of different countries in VLE research output
5. To understand the most productive authors in VLE research output and
6. To understand the most productive institutions in VLE research output

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Methodology

This study analyzed the results extracted from the Scopus database. The required data for the present study is the bibliographical records on the virtual learning environments downloaded from the Scopus database from 2000 to 2019. Out of 13362 articles published, only 6923 articles published in the subject area 'Social Sciences' were included in the analysis.

Data Analysis and Interpretation

Table 1

Forms of Publications

Document Type	No. of Documents	Percentage
Article	3419	49.38
Conference Paper	2286	33.02
Book Chapter	769	11.1
Review	177	2.55
Conference Review	153	2.21
Book	88	1.27
Editorial	18	0.26
Short Survey	6	0.08
Note	3	0.04
Erratum	2	0.02
Letter	1	0.01
Retracted	1	0.01
Total	**6923**	**100**

Table 1 reveal that the research output on virtual learning environment by the social scientists covered most of the forms of publications. . Out of the 6923 publications, 3419 publications (49 percent) journals articles, followed by 2286 publications (33 percent) are conference papers, 769 publications (11 percent) are book chapters, 177 publications (2.5 percent) are

reviews and 153 publications (2 percent) are conference reviews while there are 88 books. Other forms of publications like editorials, short surveys, notes, errata, letters, and retracted publications were found to be less than 20. Thus, journal articles, conference papers, and book chapters are the most preferred communication medium among the researchers in the 'Virtual Learning environment'.

Top-Productive Authors

Table 2 reveals that out of the 6923 publications, the highest number of 23 articles (0.33 percent) were authored by Castro, M., 22 articles (031 percent) by Tsiatsos, T., 20 articles (0.28 percent) by Lan, Y.J, 18 articles (0.26 percent) by Ketelhut, D.J.,16 articles (0.23 percent) each by Dede, C, Nelson, B.C, and Wood, D., 15 articles (0.21 percent) by Gregory. S., and 14 articles (020 percent) each by Esche, S.K, and Jong, M.S.Y.

Table 2

Top-Productive Authors

Authors	No. of Documents	Percentage
Castro, M.	23	0.33
Tsiatsos, T.	22	0.32
Lan, Y.J.	20	0.29
Ketelhut, D.J.	18	0.26
Dede, C.	16	0.23
Nelson, B.C.	16	0.23
Wood, D.	16	0.23
Gregory, S.	15	0.22
Esche, S.K.	14	0.2
Jong, M.S.Y.	14	0.2

Table 3 states that out of the 6923 publications, 69 articles (0.99 percent) were published by the Open University of U. K, followed by 63 articles (0.91 percent) from the Universidad Nacional de Educacion a Distancia, 61 articles (0.88 percent) from the UniversitatOberta de Catalunya, 49 articles (0.70 percent) from the Arizona State University, 45 articles (0.65 percent) from the National Taiwan Normal University and 43 articles (0.62 percent) from the Curtin University. The rest of the top 10 institutions published less than 0.5 percent of records in 'Virtual learning environment' research.

Table 3

Most Productive Institutions

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Institutions	No. of Documents	Percentage
Open University,UK	69	0.1
Universidad Nacional de Educacion a Distancia	63	0.91
UniversitatOberta de Catalunya	61	0.88
Arizona State University	49	0.7
National Taiwan Normal University	45	0.65
Curtin University	43	0.62
Nanyang Technological University	38	0.55
Indiana University Bloomington	38	0.55
University of Central Florida	36	0.52
The University of Sydney	34	0.49

Table 4

Source-wise distribution of Publications

Source Title	No. of Documents	Percentage
Computers and Education	226	3.26
Proceedings Frontiers in Education Conference FIE	144	2.08
British Journal of Educational Technology	96	1.38
Educational Technology and Society	82	1.18
Computer Applications in Engineering Education	64	0.92
International Journal of Emerging Technologies in Learning	60	0.86
Turkish Online Journal of Distance Education	52	0.75
Interactive Learning Environments	51	0.73
International Journal of Engineering Education	49	0.7
Journal of Computer Assisted Learning	48	0.69

Table 4 reveal that the journal "Computers and Education" is the most productive source with 226 articles (3.26 per cent) followed by 144 articles (2.08 per cent) published in the Proceedings Frontiers In Education Conference Fie, 96 articles (1.38 per cent) published in the British Journal of Educational Technology, 82 articles (1.18 per cent) published in the Educational Technology And Society, 64 articles (0.92 per cent) published in the Computer Applications in Engineering Education, 60 articles (0.86 per cent) published in the International Journal of Emerging Technologies in Learning, 52 articles (0.75 per cent published in the Turkish Online Journal of Distance Education, 51 articles (0.73 per cent) published in the Interactive Learning Environments, 49 articles (0.70 per cent) published in the International Journal of Engineering Education, and 48 articles (0.69 per cent) published in the Journal of Computer Assisted Learning.

Table 5

Ten Most Productive Countries in VLE Research

Country	No. of Documents	Percentage
United States	1627	23.5
the United Kingdom	964	13.92
Spain	574	8.29
Australia	465	6.71
Brazil	271	3.91
Taiwan	243	3.51
Canada	230	3.32
Germany	191	2.76
Italy	191	2.76
China	183	2.64

Table 5 reveals that out of the 6923 publications, 1627 articles (23.50 percent) were contributed by the United States, followed by 964 articles (13.92 percent) from the United Kingdom, 574 articles (8.29 percent) from Spain, 465 articles (6.71 percent) from Australia, 271 articles (3.91 percent) from Brazil, 243 articles (3.51 percent) from Taiwan, 230 articles (3.32 percent) from Canada, 191 articles each (2.75 percent) from Germany and Italy, and 183 articles (2.64 percent) were contributed by China.

Conclusion

Out of the 6923 publications on virtual learning environments contributed by the researchers of social sciences, most of the publications were journal articles. The research output on VLE gradually increased over the years because more learning tools are created every day by experts in the field of learning and teaching. This study identified that one of the authors Castro, M contributed 23 articles in the virtual learning environment. The United States of America and The United Kingdom published 1627 and 964 articles respectively in the field of the virtual learning environment. Also, this study identified the journal of Computers and Education published 226 articles in the field of the virtual learning environment. Thus, it is clear that the quantum of publications in the field of virtual learning environments is gradually increasing and most nations are participating. This study recommends that the agencies should extend more funding assistance for encouraging the authors to write articles in the field of the virtual learning environment.

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INTEGRATING AND INCULCATING LIFE SKILLS AND TECHNOLOGY IN SCHOOL EDUCATION: KISS A ROLE MODEL IN THE MODERN EDUCATION SECTOR

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ABSTRACT

The present study explores the ongoing practices and innovative ideas of Kalinga Institute of Social Sciences (A home for 27,000 disadvantaged groups of children) to define reform efforts aimed at integrating academic and vocational education within the campus in particular and in the sector of education in general. It describes how the institution has attempted to implement integration reforms through different vocational-based education and examines the implications in the form of vocational/skill development experiences on the campus. To prove the above objectives three research questions were established along with the same number of objectives and Focus of the questions was to examine different vocational trade practices and their significance in the present-day context along with their impact on their skill development and making them self-reliance after education was also aimed to explore in research questions.The qualitative methodology (interviews, document analysis, and observation) is used. Research findings show that there are some items that can be adopted as the Guidelines for different govt. and non-govt. schools as it is one of the best international-based practices in integrating vocational education in school education, especially for the vocational streamed school. It is also found that it is helping the students for making them self-reliant after completion of their education and meeting the basic requirements and improving their economic condition.

Keywords : *Integration and Inculcation, life skill, technology, Technical Skills, Vocational Skills, School Education, KISS and Role Model.*

Introduction

Lifeskills Education with technological skills is a new chant of education here at KISS, that is not only incorporated into the school curriculum with the aim of the development of educational support services, like social work, school health, specialized education, vocational, general guidance, counseling, and psychological services but also rigorously practiced in everyday basis. It's a fact no matter how smart you may be academic if you don't have proper life skills and updated technical knowledge to go along with it, you are not able to cope with real-life situations, especially since it is very impossible to tribal. The Growth and advancement of a country rely on the development and improvement of youthful villagers like tribals.

Even Blind children of today's world are frequently introduced to advanced devices such as computers, talking cell phones, and electronic notetakers at very early ages. This is mostly a good thing, but it does have a miserable side. In the race to keep up with technology, other more fundamental and crucial life skills can be overlooked. But it is a rare combination of both in the present school where more than 27 thousand tribal students taking education from KG to Ph.D. a way forward to wholistic education.

It is clear that to help students become capable and competent practitioners requires that they have training in self-awareness, knowledge acquisition, and skill-building (Kramer, 1998). According to Shebib (2003), practitioners need to have skills in four areas: relationship building, exploring or probing, empowering, and challenging. An essential additional skill is the

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ability to gain and utilize knowledge from practice (Dorfman, 1996). Mendenhall (2007) says that in order for students to develop these skills, education at the master's level, as well as practical experience, is necessary and expected. What can we do in our classrooms to increase student success, not only in their internships but most importantly in work settings following graduation? How can we use classroom teaching to enhance the ability of students to put what they've learned into practice, and how can we use that improved practice to enhance classroom learning? As Fiszer (2004) states in his book How Teachers Learn Best, "The resulting data point to the need for an ongoing professional development model that directly connects training and practice"

Kalinga Institute of Social Sciences is the largest tribal residential institution where there are 25000 children from 62 tribes, and 60 percent of them are tribal girls. The campus sprawls out over 80 acres and the built-up area is a whopping 10,00,000 square feet. The library alone occupies 15,000 square feet and holds over more than 30,000 titles. This makes it the largest residential tribal institution in the world. KISS provides accommodation, food, healthcare, education, and vocational training absolutely free. To stop this, there is job assurance once the education is complete. It is one of the role models and frontrunners in the modern education age to implement and integrate the new and innovative vocational ideas into school education. The role of education in facilitating social and economic progress has long been recognized not only in the country's education system but also it is really the practice of KISS. At KISS education improves the functional and analytical ability of the tribal students and thereby opens up opportunities for individuals and also groups to achieve greater access to labor markets and livelihoods of the tribal which helps them to be a part of the mainstream. A better-educated labor force is essential if we are to meet the labor supply requirements of faster growth. So here education is not only an instrument of enhancing efficiency but is also an effective tool for widening and augmenting democratic participation and upgrading the overall quality of individual and societal life.

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Skills and knowledge are the engines of economic growth and social development in any country which is proved also. Countries with higher and better levels of knowledge and skills respond more effectively and promptly to the challenges and opportunities of globalization. India is in transition to a knowledge-based economy and its competitive edge will be determined by the abilities of its people to create, share and use knowledge more effectively which is emphasized in KISS and provided the skills and competencies accordingly to the most disadvantaged group of students. This transition will require India to develop workers (especially rural tribal areas people) into knowledge workers who will be more flexible, analytical, adaptable, and multi-skilled. In the new knowledge economy, the skill sets will include professional, managerial, operational, behavioral, interpersonal, and inter-functional skills.

As education is the means for bringing socio-economic transformation in a society, various measures are being taken to enhance access to education to the marginalized sections of the society. At this juncture, KISS is really fulfilling the aims of our country through education by integrating vocational skills. To achieve these goals, India needs flexible education and training system that will provide the foundation for learning, secondary and tertiary education, and develop required competencies as means of achieving lifelong learning which is now already practiced in the institution.

Present technical and vocational education system in India: an overview

Technical and Vocational Education plays a vital role in the human resource development of the country by creating skilled manpower, enhancing industrial productivity, and improving the quality of life. The term Technical Education and Vocational Training are sometimes used synonymously. However, as per present practice, the term TE refers to post-secondary courses of study and practical training aimed at the preparation of technicians to work as supervisory staff. The term VT refers to lower level education and training for the population of skilled or semi-skilled workers in various trades and it does not enhance their level with respect to general education.

The main agencies involved in TVET policy formulation and its implementation include:

Central government

1. National Skills Development Council
2. Ministry of Human Resource Development
3. Department of School Education and Literacy (for TVET programs in senior secondary schools)
4. Department of Higher Education (for Technical Education)
5. Ministry of Labour and Employment, Directorate General of Employment and Training (for Vocational Training)
6. There are some other 20 Central Ministries and Departments which have run some small TVET programs.

Review of Related Studies

We can better understand the importance of integration of vocational skills in school education with the following literature which is already proved by many researchers like Pushpalatha, U. (2021), Technology plays a vital role in changing student behavior. Technology gives a visual presentation that deeply penetrates their minds and so it brings changes to them. Introvert becomes extrovert. They become outspoken because they build their confidence level. Inferior thoughts get eradicated.Pushpalatha, (2020) stated that technology will increase students' thinking ability, critical analysis, analytical skills, reasoning skills, and evaluating skills. It brings a friendly atmosphere. Moreover, it creates a student-centered learning environment. Nasheeda et al., (2019), LSE is based on interactive and participatory teaching and learning methods and addresses real-life situations to apply and train essential skills. These situations often relate to problematic health-related attitudes and behaviors such as substance use, consumption of high-calorie foods, violence, risky sexual behavior, or physical inactivity. By addressing these issues, LSE aims to enable healthy choices, thereby preventing chronic diseases and adverse social consequences in the long term Sancassiani et al., (2015); MacArthur et al., (2018); Singla et al., (2020), Beyond this problem-focused approach, LSE also targets physical and mental health by promoting physical, psychological, and social well-being. Roodbari, Sahdipoor, and Ghale (2013) in their research showed that life skills training has a positive effect and improves social development, and emotional and social adjustment, suggesting an increase in the compatibility of children and public health.Paryono& Quito (2010) In the area of vocational education and training (VET), the integration of ICT is not only an option but also a necessity for making the education process more attractive, Jawarneh, El-Hersh &Khazaleh 2007; Moreno, Helenius&Jarmo (2001): Integration of ICT into vocational instruction can provide schools with potential access to the world of work outside of the school, UNESCO, (2005, p. 7): Technical and vocational education is used as a comprehensive term referring to those aspects of the educational process involving, in addition to general education, the study of technologies and related sciences, and the acquisition of practical skills, attitudes, understanding and knowledge relating to occupations in various sectors of economic and social life.Lauglo, (2004): In the context of school education, we need to consider adopting the currently academic-focused curricula to embrace vocational or practical subjects - "vocationalisation" - so that students have more options but we must do so without closing the doors to traditional academic options.Msisika, (1994) in which he argued that vocationalisation should not be relied upon as a solution to youth unemployment and that the costs of such a program could be difficult to justify in a relatively poor country such as Malawi. He also expressed concern that job markets can change rapidly and without warning, and that this makes it impossible for schools to fully prepare - that is, train - their students for the world of work. In short, in his opinion, vocational training is a specialist area that should be undertaken by specialist institutions rather than by general education institutions.Pavlova & Maclean, (2006): Another significant difference is that, in developing countries, the overwhelming majority of workers are employed in the unorganized sector and self-employed, or are workers and apprentices in micro-enterprises, unpaid family workers, casual laborers, home-based workers, peripatetic workers, and migrant laborers, out-of-school youth and adults in need of relevant job skills, farmers and artisans in rural areas.Lewin, (2006), Access to and successful completion of secondary schooling are critical for survival and success in most developing countries;if national pools of talent are to be fully accessed, equality of

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educational opportunities must improve to enable social mobility. Similarly, competitiveness, especially in high-value-added and knowledge-based sectors of the economy, depends on knowledge, skills, and competencies associated with abstract reasoning, analysis, language and communication skills, and the application of science and technology — all of which are most efficiently acquired through secondary schooling. The findings of a 2007 UNICEF Regional Study on Education in Central and Eastern Europe and the Commonwealth of Independent States (UNICEF, 2007) and lessons learned in reforming vocational education are almost universal, making them relevant to the current study.

Rationale of the study

While high-quality pre-primary, primary, secondary, higher, and vocational education and training are basic necessities to a country's success in the present-day context, in a rapidly changing world lifelong learning has to be a national priority as well as is one of the primary goals of KISS because it is the key to continued employment, entrepreneurship, economic success and enabling people in a general tribal group of a child, in particular, to participate fully in society as empowered citizens. Vocational education, skills, and training are therefore crucial to the KISS broader education agenda and essential to the development of a knowledge society, economy, and democracy of the tribal people. Despite this unequivocal acceptance of the need, despite much debate and even more discussion, if it has yet to take firm root and if all countries cannot claim adequate success within the time frames needed, we should be challenged to ask ourselves why this is so. Why is it that vocational education, skills, and training continue to be perceived as an inferior option to academic education in our country, even if the latter at times is nothing more than a paper chase giving rise to the problem of not just the educated unemployed but the bigger problem of the educated unemployable in our tribal society particularly? Answers to these vexing questions should help us make that most important shift in perception of vocational education, skills, and training from prejudice to pride.

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Let us, therefore, consider the outcome of vocational and skills training that we are focusing on today at KISS which is to empower particularly tribal citizens. A citizen's life is not lived in isolation but in the midst of society, which unhappily is unequal if we critically analyze the real scenario of tribal's in our country and state. There will, therefore, always be significant areas where a citizen must confront the challenges that an unequal society presents. Regretfully, in a world that is divided, an unequal society compromises the basic dignity of the human person to live life abundantly, which is grounded in human freedom and realized and protected in relationships with others. Empowerment of tribals must therefore be integral and include increasing the physical, spiritual, emotional, aspirational, political, social, educational, gender, and economic strength of individuals and communities. This involves developing confidence in their own capacities, and what better than enhancing personal skills? So here one of the front runners providing proper vocational skills along with proper blending of academic subjects to the tribal's need to be analyzed in front of the educated masses which will definitely help the policymaker to start this type of model which will enable the students of our country in a long run. So here the following issues are in hand for the discussion:

Issues in Hand

Following are the issues or research questions upon which the analysis will be based:

1. Whether the integration of vocational/technical education and academic curricula solve the pre-fixed objectives to achieve some new skill?
2. What different vocational/technical skills are inculcated within the tribal students?
3. Whether do the integrated curricula have any impact on their economic sufficiency?

Objectives of the study

The present study addressed the following objectives:

1. To study the integration of vocational/technical education and academic curricula at KISS and its worth for the tribals
2. To highlight different vocational/technical skills inculcated at KISS within the students.

3. To examine its impact on the tribal children after education for their economic development

Methodology of the study

Methodology

Descriptive survey method was used in the study as the investigators tried to get information about more than one variable also with a better understanding of perceptions of stakeholders (Hittleman and Simon, 1997). Through this method information about conditions, situations, and events that occur in the present can be obtained (UNESCO, 2005). Therefore, in the present study, the investigator used this method to explore all possibilities to highlight, and measure the impact and effectiveness of integration curricula of KISSand its different policies and issues regarding tribal employment and education, Also the problems and its eradication from the root.

Secondary data collection

The sources of secondary data are the published and unpublished reports. Data from secondary sources were gathered from books, articles, journals, published reports, and Government documents. Quantitative information with regard to current impact, issues on integrated curriculum and policies, and issues on tribal employment and vocational education in the schools.

Discussion

Why integrate academic and vocational curricula?

Indigenous tribal people make up around 370 million of the world's population; they constitute around one-third of the world's 900 million extremely rural poor people. Every day indigenous all over the world face issues of violence and brutality due to their economic insufficiency which impacts our large-scale development. As far as Odisha is concerned, indigenous people constitute 22.13 percent of Odisha's population, where chronic poverty, severe poverty, and multidimensional deprivation characterize several parts. Despite being endowed with vast human and natural resources and achieving substantial progress in many areas during the past more than 60 years of planned development strategies, Odisha has continued to be one of the poorest states in India plagued by acute and persistent poverty. Consequently, a discourse on these issues becomes pertinent at this particular juncture, so here according to the above problem the institution tried to solve the issues like Skill development, economic development of the poorest people, mixing them with the mainstream, etc. Are the key agendas before integrating both the curriculum one in the campus? In the institution, the basic objectives of integrating the vocational skills with the academic curriculum are based on the following major two principles

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1. Integration must be guided by one central purpose: to increase student achievement.
2. Well-conceived and effectively delivered, integrated instruction can benefit any student in the future for their economic sufficiency.

The intense focus of KISS on raising academic standards, increasing high school graduation requirements, and improving post-secondary completion rates indicates that schools and side by side provide the interested vocational skills which will help him for self-reliance in the future. But force-feeding a traditional academic curriculum to all students is not likely to produce the desired result which is practiced already by KISS and developed the blended curriculum for a better result for the tribal. There is increasing evidence that many students are able to master much higher levels of knowledge and skill when educators pay more careful attention to the wide range of student learning styles and modify instruction to accommodate them. Therefore, in addition to standards, new instructional strategies must also be developed.

Providing a program of the integrated academic and vocational curriculum in the institution offers one promising alternative to both teachers and tribal students. At all times, however, integration must be guided by one central purpose at KISS: to increase student achievement. The integration also offers teachers an important tool for raising the achievement of underperforming students. In short, when well-conceived and effectively delivered, integrated instruction can benefit any student. This is, in fact, one of its great advantages over other instructional strategies that depend on segregating students by ability. What, then, are some of the key ingredients for practicing integration effectively?

Another objective of blending the present curriculum is in a highly competitive, multicultural

workplace, integrated skills and personal qualities are in great demand. Technical innovations have altered the way work is performed and new management processes have changed the way people perform it. School-to-work and tech prep legislation call for school reforms that will prepare students with the academic, technical, adaptive, and interactive skills they will need in this changing workplace. Rather than being in competition with academic and vocational integration, school-to-work and tech prep programs provide ways to enhance it.

What different vocational and technical skills are inculcated?

Keeping in view of the above need he emphasized following need-based vocational various trades according to the need and interests of the students as well as current society. KISS introduces a large-scale and different vocational-based education like Computer Training, Composite Farming, Food Processing, Animal Husbandry, Art and Craft, Tailoring, Appliqué, Making soft toys, Chemical works (phenyl, hand wash, dish wash, etc.), Recycled Paper, Painting, Photo Framing, Incense Sticks, Food processing and preservation, Medical Attendant, Security Guard Training, Bakery, Pisciculture, Driving, Mineral water processing

With a huge scale with the principle like at least one vocational course is necessary for everyone. KISS introduces different vocational education because vocational education link with productivity economic development and individual productivity. It is designed to impart necessary occupation skills among the tribal student to mould them into success and make them fit into the job market along with proving themselves one of the major stakeholders in the process of national development. Also, one of the main aims of this institution is that when the completion of their study they are involved in any vocation for the maintaining livelihood.

Along with the above many vocational and skill-based education, many different programmes are also integrated within their curriculum for their sustainable development. The programmes like Micro-English access programme, Employment-based education, Life skill education, Language Education (with Language Lab) and Multi-lingual Education.

Whether there any impact on their economic sufficiency?

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First of all, it provides Vocational and Technological Education at the junction of two fundamental citizen rights: the right to education and the right to labour, which, in article 247 of the Constitution, are mentioned as the right to professionalization. So here some impacts are highlighted those we perceive and found from the tribal people areas after the completion of their education from the institute:

1. It equips the tribal student with the skills they need for entering the job market, which ultimately changes their past economic scenario.
2. Tribal Youths are the most vibrant and dynamic segment as well as a potentially most valuable human resource of our country, after they are getting training from the institution; they are maintaining a healthy life in their village.
3. Skill development initiatives of KISS support employment generation, economic growth and social development process of the tribal people, Skill development policy is also an integral part of comprehensive economic, labour and social development of the tribal people.
4. It helps for improving crop productivity which is changing the living standards of the tribal people.
5. The programme also strengthens the competitiveness of the country in the labour market and enables the sustainable development of the country and them also.
6. Develop a high-quality skilled tribal workforce/ entrepreneur relevant to current and emerging employment market needs.
7. One of the major features of KISS is that 60% are women in the institute, so the programme trained women in marketable trades and also upgraded their skills for getting remunerative employment opportunities.
8. The vocational programme makes the effects on organising women into effective Self-Help Groups and producing their different home-based products, which develop their participation in the economic change and sustainable development.
9. It provides an alternative for those who had entered higher education but had no real idea about what they planned to do afterwards.

10. It releases the person's power and energy to act and shackles the way of his authentic self-development; self-reliance and self-confidence in their life.
11. It takes him beyond the mechanical or technical mastery of a written word to quality of consciousness, critical reflectiveness, and a changed awareness and perception of his existential situation.
12. The programme not only helps the tribal children to enhance their technical knowledge and vocational skills necessary industrial sector but also helps them in agricultural, industrial, and commercial sectors, which leads to their economic development.
13. Through this programme, KISS provides training and necessary skills leading to the production of craftsmen, technicians and other skilled personnel at a large scale to the tribal's, so many of them are enterprising and self-reliant along with providing work to their poorest villagers.

Findings of the study

Along with the above developmental condition and points here some other needful points are also necessary to highlight to enhance the worthiness of the particular programme at KISS

1. The students act pragmatically in accordance with the motivation they receive from the programme and other staff of their educational system.
2. Here at KISS Vocational Education provided to the tribals is not merely training, but the development of abilities in order to articulate, mobilize and put knowledge contents, skills and values into action for the betterment of their life.
3. After the education they are getting better employment prospects and increased ability to retain their current job and opportunities.
4. One of the interesting findings of the study that its reduction in crime in the areas, as we know many crimes are occurring in the tribal areas due to their economic insufficiency and literacy, so it's obvious to reduce the level of crime in the areas.
5. It develops the civic competencies among the tribals after their economic and literacy change

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6. Now better-functioning democracies in the areas after they developed in many sectors
7. Better health especially as far as mental disorders are concerned, lower mortality among elderly people and improved health-related behaviour of the tribal
8. Not only does change occurs in the above areas but also changes clearly state their benefits in the areas like higher wages, better job prospects, greater self-confidence, better health longevity, better parenting, higher education of children, and lower mortality.

Conclusion

In conclusion, vocational-technical education systems are dynamic in nature. The challenges and opportunities are unique. The key issue today is how to build a responsive vocational system in time for the future. While there are more differences than similarities, the overall educational goals, concerns and issues are the same. However, from the international perspective, there is no ideal system that will suit the needs or aspirations of all countries. The systems are often shaped by the economic, social and cultural conditions of the local community."Education is the key to development, then vocational training is the master key that will open the doors to employment opportunities, sustainable livelihoods and self-reliance—and close the doors to adversities". Vocational Courses have already been offered in several secondary schools as a pilot test although not consistently across India. There is a continuing need for all people or stakeholders to collaborate in introducing quality vocational training programmes in secondary schools across the region. Collaboration is needed between the countries that are in the process of strengthening these programmes and countries that are already running successful TVET courses in their secondary schools like KISS.

The introduction of the blended way of education that life skills education and updated technology especially for school children will require input from the school and education authorities, for teacher training and the development of teaching manuals, as well as for the ongoing support of teaching programmes once they are in place. This venture is valuable considering that the potential gains of life skills education are so far-reaching. Apart from the

impact on child health, there may be other benefits for the school as an institution. For example, many evaluative studies of life skills programmes on school children suggest that the methods used can help to improve teacher and pupil relationships and there are indications that life skills lessons are associated with fewer reports of classroom behaviour problems. There are also research indications of improved academic performance as a result of teaching life skills. Other positive effects include improved school attendance (Zabin et al., 1986), less bullying, fewer referrals to specialist support services and better relationships between children and their parents.

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IMPACT OF CAREER GUIDANCE PROGRAMME FOR GRADE IX STUDENTS IN EAST KHASI HILLS DISTRICT, MEGHALAYA

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ABSTRACT

This research paper makes an attempt to investigate the Impact of Career Guidance Programme for Grade IX Students in East Khasi Hills District of Meghalaya. The objectives were (i) To identify the level of Career Awareness of the Class IX students, (ii) To identify the potential of the Class IX students and (iii) To find out the significant difference between the pre and post test scores of Class IX students in their awareness on Career Guidance. The investigator has opted for single group design having 88 Class IX students from St. Francis Hr.Sec. School, Smit, Meghalaya. A Questionnaire assessing the Career Awareness of the High School Students with 55 items having multiple choices was employed as Pre and Posttest. The investigator identified the potential of the IX grade students by Adopting JIVA method though which the investigator identified their career interest. Findings revealed that 9.1% of Class IX has Analytical-logical potential. That there is significant difference between the pre and post test scores of Class IX students in their Awareness on Career Guidance. Hence, the need for standardized and academically prepared career guidance awareness program for secondary school students is realized. Additionally, the investigator identified the potential of the students who could be guided to opt for right career choices.

Key Words : *Career Awareness Programme, Career Choices, Potential Identification.*

Introduction

Career Guidance helps in discovering oneself which is the beginning to discover career. Achievement Motivation theory proposed by McClelland clearly states that every individual is in need of certain Motives as needs namely Need for Achievement, Power and Affiliation. Based on their needs and life style they are expected to choose their career.

Significance of the Study

The students of Khasi Hills of Northern Districts of Meghalaya are the first-generation learners who are trying to come up in their life through the Education. But, the formal education system does not have any system of Career Guidance programme. The needs for standardized and academically prepared career guidance awareness program for secondary school students are realized. Knowing or identifying the ability of the secondary school students and giving career guidance intervention for the culturally grounded students will help them to decide a career path. Here, the investigator makes an attempt of identifying the grade IX students' aptitude and accordingly, provide them timely guidance on their choices of higher education and jobs by a well-established and suitable Career Guidance Programme. As a Career Guidance expert, the investigator made an attempt to find the Impact of Career Guidance Programme for Grade IX Students in East Khasi Hills District of Meghalaya.

Reviewed Studies

Walters (2010) identified the characteristics of teachers that Australian learner identified as supportive of their career pathways. The Yorkshire Times (2012) revealed that at Tong High School in England, staff training and development put teachers at the forefront as they discovered that teachers were best placed to inspire the students' career choices and bring out the best in the students. School subjects were found to play a major role in influencing

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students to prefer certain careers over others. Lyngdoh (2021) recommended that appropriate career guidance and monitoring is the immediate need for the Postgraduate students pursuing Professional Courses in Shillong, East Khasi Hills District, Meghalaya.

Title of the Study

Impact of Career Guidance Programme for Grade IX Students in East Khasi Hills District of Meghalaya.

Definitions of the Key Terms

The following operational definitions of the terms are proposed by the investigator, as he has chosen to find the Impact of Career Guidance Programme for Grade IX Students in Khasi Hills of Northern Districts of Meghalaya in East Khasi Hills District of Meghalaya.

Impact of Career Guidance Programme

By the term, 'Impact of Career Guidance Programme', the investigator means that creating career guidance programme modules designed for Class IX students in East Khasi Hills District of Meghalaya. Considering their educational, cultural and geographical based academic inspirations. Hence to implement it in order to create awareness on career choices and to find the influence of the career guidance programme on their outcome.

Class IX Students of Khasi Hills of Northern Districts of Meghalaya

By the term 'Class IX students' the investigator means that the students who are studying standard IX in a formal educational system, after obtaining their Elementary School Leaving Certificate in East Khasi Hills District of Meghalaya. This is in the North East part of India.

Research Objectives

a) To identify the level of Career Awareness and Potential of the Class IX students.

b) To find out the significant difference between the pre and post test scores of Class IX students in their Awareness on Career Guidance and with respect to Section A and B.

Hypotheses

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The hypotheses are formulated based on the objectives.

1. There is no significant difference between the pre and post test scores of Class IX students in their Awareness on Career Guidance.
2. There is no significant difference between the pre and post test scores of Class IX students of Section A and B in their Awareness on Career Guidance.

Research Design and Sample

The investigator has opted for single group design as the research is focusing on the impact of Career Guidance Programme on Grade IX students. The IX class students of St. Francis Hr.Sec. School, Smit, Meghalaya were chosen for this investigation.

Pre-test

The investigator has developed a Questionnaire assessing the Career Awareness of the High School Students. It consists of 58 questions with multiple choices. The rights answer was scored as '1'; otherwise, the score was '0'. The Item Analysis was done with the 88 IX grade students of St. Francis Hr.Sec. School, Smit, Meghalaya. The item total correlation was done. Hence the final Questionnaire assessing the Career Awareness of the High School Students consists of 55 items. The investigator considered this as pre-test assessing the career awareness of the high school students.

Treatment

The investigator identified the potential of the IX grade students by Adopting JIVA method though which the investigator identified their career interest. In the Second Phase, to check the students' Knowledge on the Chosen interested career, the investigator has prepared 50 Cards on 50 different career Names and Each Card consists of Definition, Responsibilities, Eligibility and Potential, Career Path and Growth and Work Place. This module would be employed for a period of five working days.

Post Test

Questionnaire assessing the Career Awareness of the High School Students consists of 55 items was employed as post-test with 88 IX grade students of St. Francis Hr.Sec. School, Smit, Meghalaya. The answer scripts were scored as per the scoring procedure.

Ethical Considerations

The following are the ethical considerations in the present study as per the guidelines of American Psychological Association

a) The purpose of the research, procedures and expected duration of the study was explained clearly in advance to the sample units of this investigation.

b) The participant or sampling unit of this study was given absolute right to withdraw from the treatment at any time without informing any reason.

c) The participant was given enough knowledge on the benefits of this research to him. The participants were given intellectual incentive not financial or material.

d) The joyful participation of the sampling unit was ensured during this investigation.

Delimitations of this Study

a) This study is limited to St. Francis Hr. Sec. School, Smit, Meghalaya.

b) The investigator has taken the Class IX students for his investigation.

Analysis of Data

Objective 1 : To identify the level of Career Awareness of the Class IX students

Table 1

Level of Career Awareness of the Class IX Students

N	Low		Moderate		High	
	N	%	N	%	N	%
48	25	52	13	27	10	21
40	22	55	12	30	6	15

It is observed from the above table that 52% of class IX-A students have low level of Career Awareness, 27% of them have moderate and 21% of them have high level of career awareness. Whereas, 55% of the class IX-B students have low level, 30% of them have moderate and 15% of them have high level of Career awareness.

Objective 2 : To identify the potential of the Class IX students.

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Table 2

Potential of the Class IX students

Potential	Number	Percentage
Physical-Mechanical	17	19.3
Spatial	21	23.9
Linguistic	21	23.9
Analytical-Logical	8	9.1
Personal	21	23.9

It is observed from the above table that 19.3% of the class IX students have the Physical-Mechanical potential, 23.9% of them have the potential of Spatial, 23.9% of them the Linguistic potential, 9.1% of them have Analytical-logical potential and 23.9% of the Class IX students have the personal potential.

Differential Analysis

Hypothesis 1 : There is no significant difference between the pre and post test scores of Class IX students in their Awareness on Career Guidance.

Table 3

Difference between the pre and post test scores of Class IX students in their Awareness on Career Guidance.

Category	N	Mean	S.D.	Calculated 't' value	'p' Value	Remarks at 1% Level
Pre-Test Vs. Post-Test	88	19.73	5.181	22.284	0.00	S
	88	34.86	9.009			

It is inferred from the above table that there is significant difference between the pre and post test scores of Class IX students in their Awareness on Career Guidance.

Hypothesis 2 : There is no significant difference between the pre and post test scores of Class IX students of Section A and B in their Awareness on Career Guidance.

Table 4

Difference between the pre and post test scores of Class IX students of Section A and B in their Awareness on Career Guidance.

Sections	Category	N	Mean	S.D.	Calculated 't' value	'p' value	Remarks at 1% Level
Section A	Pre-Test Vs.	48	20.9	5.309	20.07	0.00	S
	Post-Test	48	35.33	8.141			
Section B	Pre-Test Vs.	40	18.33	4.714	13.12	0.00	S
	Post-Test	40	34.3	10.029			

It is inferred from the above table that there is significant difference between the pre and post test scores of lass IX students of Section A and B in their Awareness on Career Guidance.

Findings and discussion

Based on the Analysis of data, the following findings are presented

a. 52% of class IX-A students have low level of Career Awareness, whereas, 55% of the class IX-B students have low level of Career awareness. It is evident that the class IX students show significantly low level of career awareness which paves the way to provide career guidance programmes to them.

b. Among the Class IX students, only 9.1% of them have Analytical-logical potential. This may be due to their habitat.

c. That there is significant difference between the pre and post test scores of Class IX students in their Awareness on Career Guidance. While comparing the mean scores, the post test scores are significantly higher than the pre test scores. This shows the impact of the Career Awareness programme on the Class IX students. This programme enhanced their awareness on Career Choices and opportunities.

d. It is inferred from the above table that there is significant difference between the pre and post test scores of class IX students of Section A and B in their Awareness on Career Guidance. Further it is evident that irrespective of the factors involved in their academic environment, the career awareness programmes stamped its effectives and enhanced the awareness among the Class IX students.

Conclusion

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The class IX students of St. Francis Hr. Sec. School, belonging to East Khasi Hills showed a great level of improvement in the career awareness after the Career Awareness Programme. But the formal education system does not have any system of Career Guidance programme. Hence, the need for standardized and academically prepared career guidance awareness program for secondary school students is realized. Additionally, the investigator identified the potential of the students who could be guided to opt for right career choices. This is the great academic help to the students pursuing higher secondary education.

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ATTITUDE OF TEACHERS TOWARDS EDUCATIONAL MEDIA AT HIGHER SECONDARY SCHOOL STAGE

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ABSTRACT

Educational process can't proceed systematically without the help of educational technology. Every aspect of educational system is fully enlightened with educational technology. However, the teachers' attitude to integrating technology into regular pedagogical activities in the classroom determines how well educational media are used. The present study, for which 150 teachers were chosen, focuses on how teachers feel about educational media. A self-made standardised attitude scale has been prepared. The findings shows that, at the higher secondary school level, female teachers and teachers of science subjects have more positive attitudes towards educational media than male teachers and teachers of art subjects, respectively.

Keywords: *Educational media, Teachers attitude and Higher Secondary School Stage.*

Introduction

Media is the most powerful tool of communication. It helps promoting the right things on right time. It is the most powerful tool of communication. Educational media is proposed as an active, student-centred approach in, which learners can select relevant words and images, organizing them into coherent verbal and visual models, and integrating them into whole conceptual structures (Mayer, 2001). Such an approach can enhance students learning when appropriate principles are taken into account (Moreno & Mayer, 2000; Mayer & Moreno, 2003). Educational Media create interest in students learning and turn their attention to educational topics. It provides necessary basis for gradual and supplementary learning and makes it perpetual. It gives real and actual experiences to the students and motivate then for more activities. They provide students with some experience that cannot be acquired from other ways, so they increase their mental development, deep understanding, and learning.

One of the basic requirements for education in this era of information explosion is to prepare learners for participation in networked information. But the effective use of educational media in a classroom depends upon the attitudes of teachers and educators to apply technology in schools' daily pedagogical practices. Various studies have been done on studying the attitude of educators. Attitude is one of the important factors that determine the success in language learning (Ghazali, etc, 2009). In fact there is a significant relationship between the experience level and favourable attitudes towards the use of ICT tools (Suliman, etc, 2014). To add, Yunus (2007) proved that positive attitude towards ICT usually foretell further future computer use. Brinda, S. et.al (2012) found that attitude of ICT among below 25 years old trainee is higher than the above25 years B.Ed. trainees. Reena Yadav (2015)Attitude of Secondary School Teachers towards the Use of Information Communication Technology in Education found that teachers showed more positive attitude towards use of ICT .ProsperyMwila (2018)Assessing the attitudes of secondary school teachers towards the integration of ICT in the teaching process in Kilimanjaro, Tanzania.

Significance of the Study

The role of media in education is evident today by the number of computer labs, television sets and libraries that have become part of curriculum in most schools today. John Dewey stated that education could not be limited within teacher and taught without social environment. So media is

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one such potent force in the social environment of education. Through modern electronic techniques and technologies, media prove that education is, really comprehensive not confined within four walls of the classroom.

Teacher is an effective and dominating factor among the ones contributing to educational improvements. The teacher effectiveness depends mainly on the teachers' attitude, characteristics and the classroom phenomena such as environment and climate, organisation and management. Various commissions and committees have recommended methods of bringing about qualitative improvements in education. As a result, the teachers are motivated, inspired and endured to develop better curriculum, text books and teaching aids. But all the efforts are meaningless unless teachers are not having the positive attitude towards educational technology. The teaching learning process has been greatly influenced by rapid advances in educational media. Integration of this educational media in classroom helps to create an environment for students' activities that lead to meaningful and sustainable learning experiences. It supports students in their own constructive thinking, allows them to transcend their cognitive limitations. It is possible to bring the process of learning beyond the boundaries of classroom by exploring new possibilities of educational media.

Objectives:

1) To study the level of attitude of teachers towards educational media at higher secondary school stage.
2) To study the attitude towards Educational Media among teachers at higher secondary school stage in relation to their :-
   i) Board of the Institution
   ii) Gender
   iii) Teaching Experience
   iv) Teaching Subject

Hypotheses

1. There is no significant difference in the attitude of teachers of CBSE and State Board schools towards educational media at higher secondary school stage.

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2. There is no significant difference in the attitude of male and female teachers towards educational media at higher secondary school stage.
3. There is no significant difference in the attitude of teachers with a teaching experience of 1-15 years and the teachers with a teaching experience of 16-30 years towards educational media at higher secondary school stage.
4. There is no significant difference in the attitude of teachers teaching science subjects and the teachers teaching arts subjects towards educational media at higher secondary school stage.

Methodology

Descriptive Survey method was adopted by the researcher to study the present study.

Sample of the Study

Twenty-five schools each of CBSE and State Board schools were selected from the population using stratified random sampling technique making the sample of 50 schools. From each school 3 teachers were then selected using incidental sampling technique making a sample of 150 teachers for the present study.

Research Tool

Attitude towards Educational Media Scale (AEMS) developed and standardized by the investigator for teachers of higher secondary school stage. The scale has 25 items based on five-point scale. Out of 25 items, 19 items were positive and 6 items were negative in nature.

Analysis of Data

Objective 1 :

1) Level of Attitude towards Educational Media among Teachers at the Higher Secondary School Stage

Table 1

Level of Attitude towards Educational Media among teachers at Higher Secondary School stage.

S. No.	Level of Attitude towards Educational Media	Frequency	Percentage
1	Favourable	137	91.333
2	Neutral	5	3.62
3	Unfavourable	8	5.586
Total		150	100

From the above Table 1 it is clear that 91.333% teachers have favourable attitude towards educational media at the higher secondary school stage. It also states that only 5.586% teachers have unfavourable attitude towards educational media while 3.62% teachers are neutral towards the use of educational media at higher secondary school stage.

Hypothesis 1: There is no significant difference in the attitude of teachers of CBSE and State Board schools towards educational media at higher secondary school stage.

Table 2

Attitude towards Educational Media among Teachers at higher secondary school stage with reference to board of institution

Variables	Groups	N	Mean	SD	t-value	Remarks
Board of Institution	CBSE	75	99.23	10.05	0.96	NS
	State Board	75	98.5	12		

Table 2 shows that the t-value of CBSE and state board teachers is 0.96 less than 1.96 which is not significant at 0.05 level of significance. Therefore the hypothesis is accepted. It is concluded that there is no significant difference in the attitude of teachers of CBSE and State Board towards educational media at higher secondary school stage.

Hypothesis 2: There is no significant difference in the attitude of male and female teachers towards educational media at higher secondary school stage.

Table 3

Attitude towards Educational Media among Teachers at higher secondary school stage with reference to gender

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Variables	Groups	N	Mean	SD	t-value	Remarks
Gender	Male	70	94.76	13.93	2.81	S
	Female	80	100.31	9.53		

Table 3 shows that the t-value of male and female teachers is 2.81 greater than 1.96 which is significant at 0.05 level of significance. Therefore the hypothesis is rejected. It is concluded that female teachers have more favourable attitude towards educational media as compared to male teachers at higher secondary school stage.

Hypothesis 3 : There is no significant difference in the attitude of teachers with a teaching experience of 1-15 years and the Teachers with a teaching experience of 16-30 years towards educational media at higher secondary school stage.

Table 4

Attitude towards educational media among teachers at higher secondary school stage with reference to teaching experience

Variables	Groups	N	Mean	SD	t-value	Remarks
Teaching Experience (in years)	1-15	85	99.5	9.63	1.6	NS
	16-30	65	97.03	15.35		

Table 4 shows that the t-value of teachers with a teaching experience of 1-15 years and Teachers with a teaching experience of 16-30 years is 1.6 less than 1.96 which is not significant at 0.05 level of significance. Therefore the hypothesis is accepted. It is concluded that there is no significant difference in the attitude of teachers with a teaching experience of 1-15 years and teachers with a teaching experience of 16-30 years towards educational media at higher secondary school stage.

Hypothesis 4 : There is no significant difference in the attitude of teachers teaching science subjects and the teachers teaching arts subjects towards educational media at higher secondary school stage.

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ATTITUDINAL CHANGE IN COLLEGE STUDENTS TOWARDS THE PRESENT EXAMINATION PATTERNS: A QUALITATIVE STUDY

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ABSTRACT

The students are unique in ability and personality. This uniqueness of students demands a more advanced style of learning and evaluation procedure today. This study aims to analyze the recent trends in attitudinal change of college students towards the present University examination patterns of Kerala. A qualitative research design was used for the data analysis, and 40 individuals were interviewed. They are Undergraduate students from Palakkad District, Kerala. Most of the participants experienced examination anxiety. Most participants felt that a systematic and well-organized approach to learning would help them perform better in the examinations. Most of the participants desired a change in the present pattern of examination. Proper stress management techniques should be implemented to handle examination anxiety among students.

Keywords: *examination anxiety, evaluation, stress management*

Introduction

Higher education's fundamental objectives are the learner's personal growth and overall development. Proper education can unveil the hidden talents of students, and it helps them to be fully functioning individuals in all walks of life. But nowadays, education fails to understand students' real talents and needs. It may be due to the over-emphasis of the Indian curriculum over the theoretical aspects of knowledge; getting marks outweighs the importance of gaining practical knowledge(Ghonge,2020).

Learning is a relatively permanent change in behavior due to an experience. The learning process is an ongoing lifetime process; it can happen anywhere. Learning includes acquiring multitudinous skills, including social, analytical, kinaesthetic, cognitive, spatial, verbal, mechanical, and emotional skills. It is similar in the case of intelligence, too; both are multi-dimensional. Learning prepares someone to be a fully functioned individual who is competent enough to deal with all aspects of life. So the role of teachers is quite crucial in the overall development of their students. A teacher must be flexible enough to change the function from a supportive friend to a participative leader. As per the sociocultural theory of development postulated by Vygotsky (1978), adults are an essential source of students' cognitive development. Students' actual capacity is unveiled through effective social interaction with teachers and the community. So, flexibility is requisite in teaching pedagogy, performance appraisal, and evaluation of students' academic performance.

Review of Related Studies

A study was conducted by (Kumari & Jain,2014). Higher levels of examination anxiety were linked to worse performance on academic assessments (Cassady & Johnson,2001). O'brien (1991), based on a series of studies conducted from 1984-to 1989 on the cognitive reason for test anxiety, found out that not only the cognitive or the emotional factors determine examination anxiety but also the evaluation and teaching methods. Still, there is a question: is that anxiety fruitful? And those examination scores can do best in their life? Or does the current advancement in this technological era change students' attitudes toward the existing form of evaluation patterns? This study is an inquiry into the above set of questions.

Significance of the Study

Nowadays, the skills of students are evaluated and labeled merely based on the basis of their examination

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scores. Many researchers conducted in the field of education report; that there is not that much significant correlation between the scores of examination and the success of students in their careers. But most of the students are the result of their families and the society.

Each student is unique in cognitive, personal, social, and emotional aspects. The concept of students' learning and academic studies is changing day by day, and it raises questions about the relevance of conventional examination patterns in assessing students' skills. So, the present study reflects the attitude of current undergraduate students toward the present examination procedures, what change they need in examination patterns, and what they expect from an evaluation process.

Research objective

This study aims to analyze the attitudinal change in college students towards the present University examination patterns of Kerala.

Here, an attitude refers to students' approach to the examination, how they feel about the current examination pattern, and what changes they feel should be followed to make these evaluation patterns quite effective.

Examination refers to the evaluation procedure pattern followed to assess students' skills at present colleges in Kerala.

METHOD

Participants

The present study consisted of 40 undergraduate students from the colleges of the Palakkad district of Kerala. The participants were selected through the technique of purposive sampling. All of them are from the same socio-ethnic background and of the age group of 18-20. Details of participants are shown in Table 1

Table 1

Class	Male	Female
1st UG	8	12
2nd UG	10	10

Research design-Qualitative exploratory research design was used.

Data collection tool

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The Semi-structured interview with the help of a self-developed questionnaire by the researcher herself was administered. It consisted of 25 questions. The interview questions were classified under five major domains such as social and familial, emotional and cognitive, educational, career, and personal aspects. A few questions are noted below in table 2.

Procedure

Proper rapport was established with the participants. The investigator administered an interview to the 40 participants with the help of a self-developed questionnaire. Each session lasts approximately 30-35 minutes. All the ethical standards prescribed under the code of ethics of APA were ensured throughout the study. Their responses were coded. The order of questions changed as per the quantity and quality of response of the participants. The obtained data were systematically coded, frequency of each coding unit was enumerated. That was later categorized under five major domains

Table 2

Aspect-wise distribution of items in the interview schedule

Sl No	Areas	Definition	Example
1	Social & familial aspects	The relationship of participants with friends, Family ,and community and how it affects exam performance	What are your friends telling you about their attitude/feelings about the examination? Do you think friends have a role in your exam performance? What is your parents' attitude towards you before and after your exam results are announced? Do you think a positive family environment is necessary for better examination results?
2	Educational Aspects	Influence of educational factors such as student-teacher relations, the attitude of the teachers, educational settings, educational culture, subject interest in exam performance	How can teachers contribute to your better performance? Do you often feel segregated based on your exam score? How student-teacher interaction helps for a good outcome? What strategy should be followed for a better exam results?
3	Career and Personal	Participants' perceptions about the relationship between their career, personal growth, and exam performance.	What do you benefit from exams in your life? Do exams influence your personal growth? Does it make you competitive for your career?
4	Cognitive and emotional aspects	Participants' emotional attitudes, feelings toward examination, and their understanding about the relationship between cognitive aspects and examination performances.	Do exams assess your cognitive skills? What did you feel after examination dates were announced?
5		Change required by the participants in the present examination pattern	What kind of exams do you dream of?

Result and discussion

Table 3

Relevant areas and percentage of response

Sl no:	Relevant aspects	Percentage
1	**Social & familial**	
	Family support	80
	Comparison –	80
	Influence of friends-	65
	Social media/mobile-	60
2	**Educational**	
	Role of Teachers	85
	Subject interest	65
	Academic competency	80
	Systematic & an organized way of learning	90
3	**Cognitive &emotional**	
	Exam anxiety-	90
	Hatred-	50
	Not assess cognitive skill	70
	Presentation &memory	50
4	**Personal & Career**	
	Self -confidence	65
	Personal growth	50
	Role in Career	50
5	**Change is necessary**	95
	Practical & socially relevant questions	90
	One word and direct questions	80

The world is changing rapidly, demanding creative and fully functioning individuals in every walk of life. Graduation days are assumed to be a significant part of a student's academic life under present circumstances. These days would bring out the best in students if proper care and exposure are provided. In the western educational system, practical knowledge and career competency are equally assessed and evaluated, but in India, the prime focus is training young minds to follow a fixed curriculum; it closes the door to creativity and freedom to provide suggestions or share ideas. As per this study (shown in table 3), most of the participants responded that the present examination system is an anxiety generator and fails to understand the uniqueness of individuals. Most participants agree that the current examination system solely assessed their memory and writing skills. And they do believe current examinations fail to gauge their higher-order cognitive capabilities. As per their opinion, it gives little space for creative thinking, resulting in a low creative contribution by themselves in most of the examinations.

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In social and familial aspects, most participants agreed there is a positive relationship between a better family and social environment and examination performance. The comparison shown by parents and society based on the marks made them depressed, affecting their upcoming performances. Low examination scores kill their confidence and make them inferior in future endeavors. So, a better reinforcement coupled with unconditional positive regard on the part of family and society would bring better outcomes. Many participants also reported that addiction to social media and technology is the key factor in poor academic involvement and achievement. Talaue et al. (2018) noted that social media has a dual impact on educational attainment. It is critical to utilize them responsibly.

In educational aspects, they agreed that teachers have an inseparable role in students' academic excellence. Some participants responded that frequent monitoring and individual attention from teachers are required to get motivated to excel in exams. Research shows that teachers can help students become more self-sufficient and take up the challenges. Further, they can help the students by inculcating the capacity for self-management within them (Blazar & Kraft,2017). The majority of the participants believed that teachers should be supportive friends and a scaffolder in their successful academic journey. The personality and attitude of the teacher play a fundamental role in the quality of education, and they can assure a supportive learning environment for the academic excellence of the students (Rashid & Zaman,2018). Interest in the respective subject and the availability of books are equally important. Sixty-five percent of participants reported that examination outcomes, subject interest, and availability of materials are interrelated.

Most respondents firmly agreed that a systematic and standardized way of learning behavior, proper revision, persistent study habits, scheduling the content

by brief notes, and adequate sleep and food intake would bring better outcomes in the examinations. Most respondents believe that good academic performance will also increase their self-confidence in future outcomes; it would act as positive reinforcement for their further academic involvement. The examination performances indirectly act as a boost to career development cum personal growth. So, the academic community and educational policymakers have to give proper attention to reforming the assessment practices.

Examination stress is a reality and needs to be adequately addressed. Managing stress would improve the academic spirit and wellness of the students(Alborzkouh et al.,2015). Proper stress management techniques should be incorporated into the curriculum. Stress management techniques include relaxation/meditation, exercise, time management, assertive communication, supportive group therapy, person-centered counseling, and group counseling. And, 90% of participants suggested a change in the existing examination pattern.

The suggestions of the participants

They suggested examinations focussing more on practical activities useful for better living. They prefer to include socially relevant subjects in the examination. Some participants like to have the word and direct questions in the examinations instead of the descriptive type. In participants' opinion, the examination mode should be flexible enough to provide options for students either to opt for viva voice/written pattern. They wish to reduce the duration of the examination to one hour, and it will be good enough to provide additional 30 minutes for viva voice. Some of them prefer to have a single exam for all the subjects. Most of them prefer a timely conducted examination and immediate publication of the results. Instead of labeling pass/fail, they prefer to notify 'failure' as just qualified. Some participants prefer to have an option to write the exam with an open book. In their opinion, teacher-student informal interactive sessions shall be included in internal examinations. They wished to get attention from the teaching community and society about the anxiety issues faced by students to boost their self- confidence for their effectiveness.

Conclusion

The academic assessment system should be flexible enough to meet the unique needs of students. The examination should deal with social issues and practical problems instead of purely focussing on theoretical aspects. The evaluation pattern should incorporate activities that challenge students' minds, stiffen their analytical, social, ethical, and emotional skills, and invoke divergent thinking capabilities. It will help them perform better in different fields as they grow up. So, a holistic change should be adopted in the field of higher education. For the same, Government bodies, teaching community, family environment, educational settings, and community have an inevitable role.

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DEVELOPMENT OF ACADEMIC HONESTY SCALE FOR B.Ed. TRAINEES USING EXPLORATORY FACTOR ANALYSIS (EFA)

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ABSTRACT

Every nation wants to cultivate its citizens through education. The education that one receives should ensure him/her follow honesty in all walks of life. This is possible only when an environment of honesty exists in all the academic activities of the educational institution. First, the teacher should follow honesty in academic activities. It should be nurtured with more emphasis on teacher preparation itself. In order to frame academic honesty policies for both school education and teacher education, it is necessary to measure the levels of academic honesty among the B.Ed., trainees. Hence a scale to measure the academic honesty of B.Ed., trainees are more warranted. This study utilized an exploratory research design using the Maximum Likelihood method of extraction. The data were collected from 404 B.Ed., trainees of the States of Tamilnadu and Haryana. The results of data analysis using SPSS ver. 22 has identified four factors viz., Cheating during and after Examination, Cheating during Examination with Neighboring Candidates, Falsification and Plagiarism, and Cheating Prior to the Examination, to measure the academic honesty of B.Ed., trainees. The reliability and validity of the scale have been established.

Keywords : *Academic Honesty, B.Ed., trainees, Exploratory Factor Data Analysis, Maximum Likelihood*

Introduction

Every nation expects its citizen should be honest. Honesty is being first inculcated by the family members to the child. Later it is being strengthened or refined into the desired direction by education. Education cultivates human beings. The cultivated human beings do the work with integrity. The teacher acts as a role model to the students in developing honesty in all types of academic activities including online academic activities. The teacher trainees who become future teachers should have an adequate level or more level of honesty in their academic activities.

Academic Honesty

Academic honesty refers to demonstrating and upholding integrity and honesty in all academic works that a learner does. Academic honesty is one of the core values of academic integrity. It is also stated in an opposite way like academic dishonesty or academic misconduct. Kibler, Nuss, Paterson, and Pavela (1988) stated that academic dishonesty has been classified into four categories: not being involved in cheating, fabrication, facilitating academic dishonesty, and plagiarism. According to Arent (1991) and Pratt & McLaughlin (1989), Students' academic dishonesty includes right from lying cheating on exams copying or using other people's work without permission, shifting or forging documents, buying papers, plagiarism, purposely not following the rules, shifting research results, providing false excuses for missed tests and assignments, making up sources, and so on. According to McCabe and Bowers, (1994) academic dishonesty is based upon a particular violation behavior, such as cheating on a test or plagiarism. Newstead, et al., (1996) and Graham, et al., (1994) pointed out that academic dishonesty is an injury to academically honest

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students as well as faculty/teachers whose purpose is to teach. Hard, Conway, and Moran (2006) defined Academic misconduct as 'providing or receiving assistance in a manner not authorized by the instructor in the creation of work to be submitted for academic evaluation including papers, projects, and examinations (cheating); and presenting, as one's own the ideas or words of another person or persons for academic evaluation without proper acknowledgment (plagiarism)' (p. 1059).

Factors of Academic Dishonesty

The factors of Academic dishonesty have been identified by many researchers. A few have been described in this section. Gallant (2008) has described five categories of academic dishonesty viz., Plagiarism, Fabrication, Falsification: Misrepresentation, and Misbehavior. Munir, Ahmad, and Shahzadi (2011) have identified eight factors for the occurrence of academic cheating viz., Plagiarism, Fabrication, Cheating, Sabotage, Outside Help, Electronic Cheating, Unethical Behavior, and Free-Rider. Katoch (2013) has considered nine factors for the occurrence of academic cheating namely. Cheating, Fabrication, Facilitating Academic Dishonesty, Plagiarism, Multiple Submissions, Abuse of Academic Materials, Deception & Misrepresentation, Electronic Dishonesty and Carelessness.

Need and significance of the study

An intentionally unethical behavior of academic dishonesty has been defined by various authors almost with the same core values. It includes cheating, falsification, getting help from others, and plagiarism. That means upholding honesty in getting admission, participation in classroom activities and classroom examinations, preparing and submitting assignments and projects, etc., before, during, and after Board or semester examinations.

Many stakeholders of the educational system are concerned with the problem of academic dishonesty and the rate at which it is increasing (Ameen, et al., 1996). This leads to not only the emergence of unhealthy situations in the nation but also to the future growth of the nation. Hence the policymakers have taken measures to strengthen academic honesty. In India also the University Grants Commission in higher education and the various boards of school education has also formulated academic honesty policies and advised all kinds of educational institutions to adhere to them strictly. But the success of the policy depends on the implementers namely the teachers. In teacher education, program care should be taken to develop or imbibe such honest qualities. The future teacher that is the B.Ed., trainees should have a thorough understanding of the qualities of academic honesty. In general, a few types of research have been done to try and identify variables that have an effect on academic dishonesty (Caruana, et al., 2000). But in teacher education, there is a scarcity of research to identify variables that have an effect on academic honesty. Hence in this study, the researchers tried to identify the constructs for academic honesty of the B.Ed., trainees using Exploratory Factor Analysis (EFA) which is more warranted.

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Objectives of the study

The main objective of this study are as follows. :

1. To construct a tool for measuring the Academic Honesty of B.Ed., trainees.
2. To validate the Academic Honesty Scale for B.Ed., trainees.

Methodology

Researcher adopted an exploratory type of research. Explanatory research focuses on studying a situation or a problem in order to explain the relationships between variables. (Saunders et al., 2007). Exploratory Factor Analysis (EFA) is a process of determining factors, concerning the relationships between variables and creating a theory (Rustico and Jerusalem,2020). In this study of scale development, the following seven stages viz., Identification of the dimensions of Academic Honesty, Item pool generation, Determination of the measurement scale, Expert review of the initial item pool, Revision and inclusion of items, Administration of the items to a sample and Evaluation of the items were followed:

Sample

In order to test the reliability and validity of a developed tool, a survey was administered to 410 B.Ed., trainees. Out of 410 after eliminating respondents whose responses had missing values the final sample size was 404. This is more than 10 times the number of initial items (28) selected for factor analysis.

Tool Development

To achieve the above-said objectives, the researcher followed the under mentioned procedure in developing the research tool.

Step 1 : Identification of the Dimensions of Academic Honesty

A review of literature that was retrieved from scientific databases was conducted to identify factors that influence academic honesty. An informal interview was also adopted to finalize the dimensions. The interview was composed of guide questions designed to elicit responses on academic honesty followed by B.Ed., trainees. The outline included an engaging question, exploratory questions, and an exit question. They identified eight dimensions Falsification, Cheating in the Classroom Activities, Cheating before the Examination, Cheating during the examination, Cheating after the Examination, Plagiarism, Getting Help from Authorities, and doing Other Unfair Activities.

Step 2 : Item pool generation

An initial pool of 50 items was generated based on content that was identified by means of literature reviews and interviews. These items were classified into the above said eight dimensions. An easy-to-use dichotomous scale (i.e., yes-no; yes=1, no=0) was employed to record the participant responses to each of the 50 items. The initial questionnaire was developed in the Tamil language, and the first pilot study was conducted on 200 B.Ed., trainees to determine if respondents could accurately understand the meaning of the items. Thirty-two items were selected from this step.

Step 3 : Determination of the measurement scale

In the pilot study, participant responses were recorded on a 5-point Likert rating scale, which is more likely to produce predictable and controllable results than a dichotomous scale. The scores that were assigned to each response anchor of the Likert rating scale for positively worded were as follows: 4=always, 3=often, 2=sometimes, 1=rarely, and 0=never. For negatively worded items, the scores were assigned in a reverse way that is 0=always, 1=often, 2=sometimes, 3=rarely, and 4=never.

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Step 4 : Expert review of the initial item pool

In order to examine content validity, five academicians who are experts in tool development, reviewed the initial pool of 32 items. The validity of each item was assessed and a content validity index was computed (Lynn, 1986). Items with less than 80% 'agreement' ratings between the five experts were reviewed and revised. No one differed in the categories. Hence the identified categories were retained.

Step 5 : Revision and inclusion of items

Based on the views and comments given by the experts, and the pilot study only four items were deleted, and two items were simplified. Thus for further analysis, 28 items were selected.

Step 6 : The selection of items for administration of the tool

The instrument for factor analysis consisted of 28 items that were selected through literature review, content validation by experts, and a pilot study.

Step 7 : Evaluation of the items

Items having factor loadings more than 0.4 are usually considered for item selection. The parallel analysis appears to be among the best methods for deciding how many factors to extract or retain (Thompson, 2004). In a parallel analysis, actual Eigenvalues are compared with random order Eigenvalues. Factors are retained when actual Eigenvalues surpass random ordered Eigenvalues. The rotational method direct oblique was used to identify the latent variables. The proportion of the total variance explained by the retained factors should also be noted. As a general rule, this should be at least 50% (Streiner, 1994). Without any cross-loadings, a rule of all retained

factors should have at least three items with loading greater than 0.4 is adopted in fixing the number of factors in the final analysis.

Data Analysis

The reliability and validity of the questionnaire were tested by administering the final pool of 28 items to 404 B.Ed., trainees. Data were collected using Google's online survey platform and face-to-face mode depending upon the availability of B.Ed., trainees. Data were analyzed with responses provided by 404 B.Ed., trainees using the IBM SPSS Ver. 22. Before conducting the factor analysis items were checked whether their item-total correlations are greater than 0.4. Out of the 28 items, 19 items have their item-total correlation value greater than 0.4. Thus the resulting tool of this stage for validation consisted of 19 items.

Preliminary Parallel analysis of 19 items under the condition of common factors analysis resulted in four factors. After fixing the number of factors as four according to Parallel analysis, preliminary factor analysis was carried out using the Maximum Likelihood method of factoring since in this study the focus is on identifying the structural relationship between variables. Items were checked whether all the items have a commonality of more than 0.4. One item (Item 13, I don't put my parent's signature but get it from them only) had a communality value of 0.256 and hence it was deleted.

Final parallel analysis of 18 items, under the condition of common factors analysis lead to the same number of four factors. The final factor analysis was carried out using the Maximum Likelihood method of factoring. It does not have any cross-loadings. The obtained KMO value is 0.866 which is above Kaiser's recommended threshold of 0.6, which shows that the sample size is adequate to perform factor analysis. Similarly the result of Bartlett's Test of Sphericity (Chi-Square 3762.52, df 153, p<.000) also indicates that correlations between items are sufficiently large for EFA. The obtained determinant of the correlation matrix 0.0506 for 18 items is higher than the threshold value of 0.00001 (Field, 2013). The anti-image correlation values are between .775 (Item 22, I force the candidate who is seated near in the examinational hall to solve a question & write the answer in the question paper and give it to me) and .919 (Item 3, I communicate answers to a friend during a test either by whisper or any sign language). There are 32 (20.0%) non-redundant residuals with absolute values greater than 0.05. These findings have allowed the inclusion of all the 18 variables in the factor analysis.

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Table 1

Factor Eigenvalues and Variance

Total Variance Explained							
Component	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total
1	6.797	37.761	37.761	6.306	35.033	35.033	4.944
2	2.085	11.586	49.347	1.442	8.012	43.046	3.112
3	1.629	9.052	58.399	1.403	7.794	50.84	4.599
4	1.323	7.351	65.75	1.114	6.188	57.027	3.149
Extraction Method: Maximum Likelihood							

Table 1 shows that the four factors after rotation explain 35.033%, 8.012%, 7.794%, and 6.188 % variance respectively. Looking at the second elbow on the plot (Fig. 1), the Screen test suggests there are four factors exist as latent variables that is the breakpoint happened after the fourth factor, when the factor Eigenvalue dropped below 1. Figure 1 also indicates the four factors made sense in terms of variance explained.

Table 2

Factor Loadings & Cronbach's Alpha value of the Academic Honesty Scale

Factor	Items	Loadings	Cronbach's Alpha value
Cheating During and After Exam	Item26	0.886	0.876
	Item19	0.782	
	Item7	0.739	
	Item14	0.711	
	Item17	0.644	
	Item3	0.626	
Cheating during Examination with Neighbor	Item22	0.936	0.765
	Item6	0.59	
	Item12	0.556	

Falsification and Plagiarism	Item5	0.866	0.847
	Item10	0.714	
	Item18	0.677	
	Item20	0.644	
	Item24	0.626	
	Item21	0.561	
Cheating Prior to the Exam	Item16	0.834	0.808
	Item4	0.793	
	Item9	0.478	
Academic Honesty			0 .871

The Table 2 indicates that none of the items have cross-loadings and all the items in these four factors have factor loadings more than 0.4. It implies that the items in these four factors are practically significant in explaining the academic honesty of the B.Ed., trainees.

Reliability Analysis

According to McMillan (2007) the reliability of an instrument is concerned with the consistency, stability, and dependability of the scores. Cronbach's alpha coefficient indicates how well the items fit together conceptually (Nunally, 1994 DeVon et al., 2007), with the acceptable value of = 0.70 (DeVellis, 2012). The value of Cronbach Alpha is classified based on the reliability index classification where 0.90-1.00 is very high, 0.70-0.89 is high, 0.30-0.69 is moderate, and 0.00 to 0.30 is low (Babbie, 1992). Hence the internal consistency was tested using Cronbach's alpha for each factor and total in SPSS. Table 2 shows the Cronbach's Alpha value of the academic honesty scale and its dimensions which range from 0.765 to .876. The analysis shows that the obtained Cronbach Alpha values are

higher than 0.70, which falls into the classification of high and very high. They clearly evince that the internal consistency of each factor of the academic honesty scale is in the acceptable range of Cronbach's Alpha value.

Conclusion

This study offers a scale to measure the academic honesty level of B.Ed., trainees. On the basis of the obtained results of Cronbach's alpha coefficients, it is concluded that the developed tool, has a very high level of reliability and construct validity. Therefore, the instrument could be used to assess/measure the level of academic honesty of B.Ed., trainees which is the need of the hour for ensuring the development of an honest teacher at present and the development of honest students (citizens) in the future by B.Ed., trainees. The tool is given on the next page.

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Academic Honesty Scale
(Developed by M. Dona Amalorpavam, & Dr.I.Muthuchamy, 2020)

SI. No.	Items
1	I get admission by recommendation through an influential person/politician when getting low marks.
2	I respond to a teacher in a submissive way when not knowing the answer to a question posed by a teacher.
3	I communicate answers to a friend during a test either by whisper or any sign language.
4	I write expected answers on the table or wall in prior time.
5	I provide actual reasons for not attending classes/examinations.
6	I get an answer from a candidate who is seated nearby in the examination hall either by whisper or any language.
7	I use only allowed materials or things in the examination.
8	I rely too heavily on other people's work through giving proper citations.
9	I use a friend to take a test on my behalf of me.
10	I submit the Assignments / Lesson Plans / Teaching Learning Materials (TLM) after getting it prepared by me only.
11	I get extra credit or marks by impressing the teacher by praising him/her in terms of pseudowords.
12	I solve the question paper and hand over answers to a candidate who is seated near in the examinational hall.
13	I don't put my parent's signature but get it from them only.
14	I threatened the hall invigilator to give answers directly to me.

15	I give someone else's works to others as my work but as their own work.
16	I hire someone to appear for an examination for me.
17	I influence the examiner indirectly in the evaluation center through bribing.
18	In my submissions/presentations I use both quotations and citations of the sources.
19	I change marks/grades in the mark sheets after examinations, with the aid of an influential person.
20	I bring a friend as a parent/ guardian during the parent-teacher meet.
21	I give true or right explanations when missing the deadline of my assigned educational project.
22	I force the candidate who is seated near in the examinational hall to solve a question & write the answer in the question paper and give it to me.
23	I request the hall supervisor for permission to go out for urgent calls in order to bring forbidden materials inside the hall.
24	I buy Projects / Assignments / Research Papers / Lesson Plans / Teaching Learning Materials (TLM) in shops or online and submit them as my own effort.
25	A written Works / Assignments / Home-works / Lesson Plans / Teaching Learning Materials (TLM) that is /are actually prepared by family members is/are submitted by me as my own effort.
26	I threat hall invigilator to compel the candidate who is seated in the examinational hall to provide answers.
27	I alter Marks / Grade Sheet by giving bribery.

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ATTITUDE OF TEACHERS...

Table 5
Attitude towards Educational Media among Teachers at higher secondary school stage with reference to teaching stream

Variables	Groups	N	Mean	SD	't' Value	Level of significance (0.05 level)
Teaching stream	Science	80	100.25	10	4.08	S
	Art	70	96	12.85		

Table 5 shows that the 't' -value of teachers teaching science subject and teachers teaching arts subject is greater than 1.96 which is significant at 0.05 level of significance. Therefore the hypothesis is rejected. It is concluded that attitude of teachers teaching science subjects is more favourable than teachers teaching arts subject towards educational media at higher secondary school stage.

Conclusion

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On the basis of research findings, the conclusion was made. Teachers have positive attitudes towards educational media at higher secondary school stage, female teachers have more favourable attitude towards educational media as compared to male Teachers and teachers teaching science subjects have more favourable attitude towards educational media than teachers teaching arts subjects at higher secondary school stage. This empirical investigation has shown that teachers attitude towards educational media at higher secondary stage.

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A STUDY ON PROFESSIONAL ETHICS OF TEACHERS WITH THE SUCCESS RATE OF SCHOOLS IN TRIPURA

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ABSTRACT

The present study has been conducted to compare the professional ethics of secondary school teachers in relation to the success rate of secondary schools in board exam. In this study, a 5-point Likert-type scale of professional ethics has been administered among 200 secondary school teachers in Tripura. The findings of the study reveal that there is a significant difference between the teachers of high and low success rate schools in terms of the three dimensions of professional ethics i.e. Obligations towards Students – (OTS), Obligations towards Parents, Community, and Society – (OTPCS) and Obligations towards the Profession and Colleagues (OTPC).

Keywords : *Professional Ethics, Success rates of Schools, High success rate Schools and Low Success rates Schools.*

Introduction

The decorum of Professional Ethics for teachers come up with an outline of principles to help them in performing their responsibilities towards students, parents, colleagues, and community. A code of professional ethics is generally based on two principles, namely, professional integrity and professional ethics (Malo, 2015).To ensure professionalism among teachers, it is important to increase cognizance of the ethical principles governing the teaching profession. Without professional ethics, it is not possible to keep the professionals in the right direction for the overall development of the institution. In 1998 NCTE documented titled Curriculum Framework for Quality teacher 'highlighted the need of inculcating the intrinsic and extrinsic values of professional competencies, professional commitment and professional ethics.' Hence, strengthening professional ethics is very important for improving the quality of teachers and also, for quality education. Because teacher quality and quality teaching are linked with teacher values and beliefs are widely held (Arthur, 2010; Gore, 2007, Westcombe-Down, 2009). Therefore, the ethical code impacts the performance of teachers, which directly influences the academic achievement of learners. Right of Children to Free and Compulsory Education Act, 2009 entrusts teachers with some arduous professional responsibilities to be internalized by them in the performance of their duties (RTE, 2009). Therefore, it is appraised essential that the decorum of Professional Ethics be developed and implemented by the academicians.

Background of the Study

The Oxford English Dictionary defines ethics as "The department of study concerned with the principles of human duty" and "The moral principles by which a person is guided". The debate concerning the ethics of education that took place in the United States at the beginning Bajpai (1978) studied social alienation in Professional ethics and found that all the four professional groups (teachers, doctors, lawyers, and engineers) were found alienated from their professional ethics where the degree of alienation varied from one professional group to another. The alienation was present in both the profession as a whole as well as in the minds of individual members of the profession, which were the outcomes of the prevailing socio-economic system and the changing values of our society. In ethical

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education guides to choosing what drive and attitude in kids ought to be reinforced and what ought to be oppressed. There exists an ethical and moral commitment (Burgh, Field, & Freakley, 2005) to prepare, not just an elite few, but all students to participate in society with high levels of scholarly and scholastic potential and the ability to build up the aptitudes of deep-rooted students. Ethics directly or indirectly exert a paramount influence on all departments of our life.

Significance of the study

In ancient Indian times, teachers were concerned about the overall improvement of students which includes intellectual development, social values, responsibilities, and appreciation of cultural heritage. Nonetheless, these above characteristics are not found in the current education system. It is high time to identify the declination of ethical values in our society. It has been found that among various factors that affect or influence the efficiency of education, teachers alone contribute 68%, whereas other factors like infrastructure, the role of leaders, political background, etc. together contribute 32% only (Panda and Tiwari,1997). The UNESCO's International Institute of Educational Planning study on corruption in education states that there is 25% teacher absenteeism which is the highest all over the word (Hallak and Poisson, 2005). The ghost teacher not only affects the quality of education but also a huge drain on resources resulting in the waste of 25% of education funds in India. An effective teacher is not only skillful at promoting learning, but also a model of ethical behavior. Now, the major parts of the globe are witnessing racial discrimination, corruption, terrorism, regional hatred, and value deterioration, and hence, it is everyone's responsibility to highlight the importance of ethical standards of teachers in a particular respect, because education along with ethics brings out vital changes in personalities, communities and in the whole universe promoting world peace and universal brotherhood. Thus, the professional ethics of teacher of teachers are very closely related to students' quality performance. Therefore, the present investigator aims to study the professional ethics of secondary school teachers in relation to the success rates of secondary schools.

Objectives

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1. To study the level of professional ethics of secondary school teachers.
2. To find out the significant difference between the professional ethics of secondary school teachers with respect to the academic achievement of schools in the Board exams.
3. To find out the significant difference between the secondary school teachers with respect to three dimensions of professional ethics.

Hypotheses

1. There is no significant difference between the high and low success secondary school teachers in relation to the professional ethics.
2. There is no significant difference between the high and low success secondary school teachers in the measures of three dimensions of professional ethics.
3. There is no significant difference between male and female teachers of high success and low success schools in relation the professional ethics.

Methodology

Descriptive survey method has been applied for the present study.

Respondents

Stratified random sampling method has been used for the collection of data for the study. Data has been collected from200 secondary school teachers of Tripura.Under this technique, the researcher has made two divisions of schools on the basis of the success percentage of schools, namely (i) High Success Rate Schools (Success percentage 100% in Madhyamik Exam) and (ii) Low Success rate Schools (Success percentage below 60% in Madhyamik Exam).

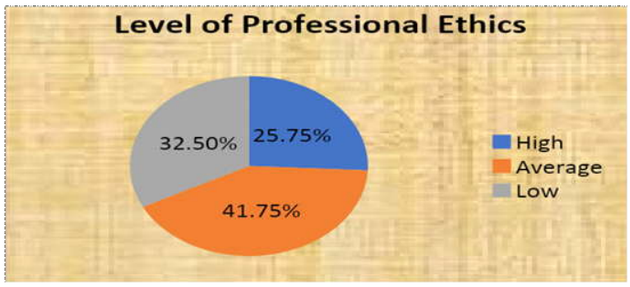
Research tool and statistics

The professional ethics scale has been developed by the researcher on a 5-point Likert-type scale. The coefficient of internal consistency has been found to be 0.901 by the Cronbach's Alpha method. The intrinsic validity of the scale was found to be 0.949 by using the

square root of the reliability coefficient. Different descriptive and inferential statistics have been used for testing the proposed hypotheses.

Analysis and Interpretation

Figure 1
Percentage of professional ethics secondary school teachers.

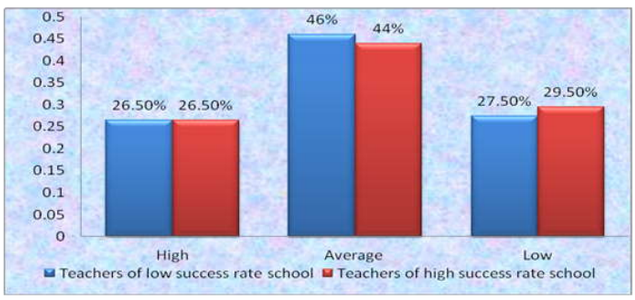


Interpretation

Figure 1 shows the level and percentage of professional ethics in secondary school teachers. The observation above indicates teachers of Tripura performing at secondary school have different levels of professional ethics. A greater number (41.75%)of teachers have an average level of professional ethics while 25.75% of teachers lie in a high level and the rest of 32.50% of teachers undergo a low level of professional ethics.

Figure 2

Comparative graph of two groups of teachers



Interpretation

Figure 2 shows the level and percentage of professional ethics secondary school teachers in respect of academic achievement of schools. This indicates that 26.50%of secondary school teachers possess a high level of professional ethics in both types of schools. The majority (46%) of teachers lies in the average level of professional ethics in low success rate schools, whereas 44% of a teacher lies in high success schools and 27.50% and 29.50% of teachers belongs to low level of professional ethics respectively in low and high success schools.

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Hypothesis 1 : There is no significant difference between the professional ethics of teachers with respect to the academic achievement of schools in board exams.

Table 1

Difference in the levels of professional ethics of secondary school teachers in respect of academic achievement of schools in board exams.

Variable	N	Mean	SD	't' value	Remark
Teachers of high success rate schools	200	172.2	11.97	7.641*	S
Teachers of low success rate schools	200	157.8	23.75		

Interpretation

Table 1 indicates that there is a significant difference between the levels of professional ethics of secondary school teachers in respect of success rate of secondary schools in board exam and the teachers of high success rate schools may be more favorable towards their professional ethics.

Hypothesis 2 : There is no significant difference between the high and low success secondary school teachers in the measures of three dimensions of professional ethics.

Table 2
Difference between the means of a different dimensions of Professional Ethics in respect of academic achievement of schools in board exams

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Dimension	N		Mean		SD		't' value	Remark
	Teachers of high success rate schools	Teachers' of low success rate schools	Teachers' of high success rate schools	Teachers' of low success rate schools	Teachers' of high success rate schools	Teachers' of low success rate schools		
Obligations towards Students (OTS)	200	200	66.34	60	6.85	13.37	5.97*	S
Obligations towards Parents, Community and Society (OTPCS)	200	200	33.35	31.02	2.9	5.94	4.96*	S
Obligations towards the Profession and Colleagues(OTPC)	200	200	72.51	66.8	9.53	11.07	5.52*	S

Interpretation

The results presented in table 2, it is observed that high success rate school teachers seem to be in a favorable in respect of obligations towards Students (t = 5.97). With regard to the second dimension (Obligations towards Parents, Community and Society - OTPCS) of professional ethics, the obtained 't' value was found significant (t = 5.96). From these results, it is revealed that high success rate school teachers have a favorable leaning toward Obligations towards Parents, Community, and Society dimension of professional ethics as compared to their comparable group. In the third dimension of the professional ethics scale i.e. Obligations towards the Profession and Colleagues (OTPC), the obtained 't' value was reported to be significant at a 0.05 level of confidence (t = 5.52). It can be said that high success rate school teachers are inclined towards the high quality of teaching as compared to low success rate school teachers and seem to have a high belief in Obligations towards the Profession and Colleagues.

Educational Implications

Based on the findings of the present study several implications of teachers' professional ethics are to be set down. Since the present study examined that professional ethics is contributing factor to academic achievement, henceforth the administration should have an unbiased and impartial view of management towards teachers for maintaining accountability and transparency, and for better outcomes for the institution. The result of the study will assist policymakers in evaluating the professional ethics of school teachers, making a framework of ethical principles for teachers in the profession, and electing the right candidates on the basis of the sub-areas of professional ethics. The study also recommends that the ethical values must be incorporated into the process of education and must be fostered by the academic staff for improving the quality of education.

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SUSTAINING SCHOOL EDUCATION THROUGH GOOD GOVERNANCE DURING TROUBLED TIMES: A CASE OF DON BOSCO SCHOOL, DELHI

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ABSTRACT

The case follows Delhi's Don Bosco School Principal Father Maniparamben. The case demonstrates his confusion and anxiety about bringing value to the school amid the COVID-19 pandemic. When he entered the school, he made encouraging and futuristic pledges to himself and others. He never believed pandemic would paralyse the entire school system. In a short time, he's brought outstanding education to tumultuous times. The case describes Don Bosco School's success through its motto, "Even More and Better Ever" during the challenging times.

Keywords : *Change Management, COVID-19, Decision Making, Delhi Schools, Don Bosco School, Pandemic.*

Overview

Father Davis Maniparamben is the Rector and Former Principal of Don Bosco School (DBS)Alaknanda in New Delhi. In June 2019, outgoing Principal Father Babu Varghese handed over the baton to Fr. Davis Maniparamben. Though happy with his new duty, he was ready to go the extra mile to give outstanding education with equity. He grew passionate and managed the school efficiently with the motto "Ever More and Better Ever". Personally, he was worried about COVID-19.

Fr. Davis was process- and solution-oriented. He always made good decisions. Even in routine settings, he used to analyse the problem and evaluate the benefits, demerits, and implications of all available options to determine a course of action using his creative and judgement skills. He employed organisational analytic methods to track internal school changes from day one.He aligned seven elements for proper function. Strategy, structure, systems, staff, style, skills, and values. His self-motivation and ambition helped him excel in school. But who thought of lockdowns? The epidemic affected the economy, healthcare system, environment, and people. Education didn't stand out. Pandemic paralyzed the global schooling.

Fr. Davis returned home on 20 March 2020 after delivering books, clothes, food, and basic supplies to Don Bosco's afternoon school for underprivileged children. He didn't know a pandemic would stop everything and make him wait months to relive experiences. Prime Minister Narendra Modi announced a 21-day curfew when the COVID-19 death toll reached 12. Then came more months. During the lockdown, Don Bosco's new principal was frightened and bewildered about the epidemic. His vision was promising when he joined the school.

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The challenge of managing schools during these times was exacerbated The constant phone calls from parents scared him. His responsibilities grew. Bringing the school up to par was a struggle. He had to strike quickly. Only careful actions could save him. Some of the concerns that Fr. Davis had were: school fees that many parents were deferring and defaulting on; teacher training for online teaching; boys' performance in 12th grade; exam schedule; school maintenance costs; financial decisions; convincing parents for seamless and quality teaching. The Principal had no choice but to save time and resources. His exceptional decision-making and change-management skills saved the pandemic.

Origins of Don Bosco

A young priest named John Bosco, today known and adored as St. John Bosco was first known as Don Bosco by the youth of his time. In Italy, priests are called "Don." In 1841, he began with a handful of homeless and underprivileged teens for religious education and afternoon recreations. When asked about helping Don Bosco, kids jumped at the chance. Eighteen16-22-year-old Salesians started out. Today, over 132 countries have 15,300 Salesians. They care for and educate young brains by spreading Jesus' gospel. The Salesians of Don Bosco assist young aspiring minds in 215 nations through 3000 schools, colleges, technical schools, and other youth centers (Don Bosco, 2021a).Don Bosco is an all-boys Private Unaided Catholic school (Minority). Don Bosco teaches young striving minds piety, virtue, knowledge,discipline, self-reliance, and hard labor (Don Bosco, 2021b).

DBS Differentiated Strategy Then and Now

School Administration: Teaching, learning, curriculum development, evaluation, quality inspection, and literary, cultural, and sports activities are part of DBS education administration. It also addresses educational policy, evaluation, and innovation. During COVID-19,Fr. Davis followed the DOE's circular which mentioned restructuring committees, and organized numerous committees to ensure proper school management committee work execution.Committees redesigned planning activities and techniques to complete ordinary tasks in record time. So DBS encouraged many stakeholders (parents, students, instructors, non-teaching personnel, and external support providers) to engage with him virtually. It mirrored the walk-in provision of meeting the Principal in emergencies and offline, which was the main draw before COVID-19. The welcoming atmosphere and knowledgeable staff added to its legacy and tradition. Parents loved circular letters with a personal touch (Don Bosco, 2021c).

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Fr. Davis led DBS to ensure that parents and children received the same care and attention as on a typical day. They introduced a few virtual meeting platforms where stakeholders could express their issues and the father could ease their worries. This boosted school and stakeholder confidence. The school worked to maintain clear and transparent free speech.The parent-teacher meeting was split over two days (Fridays and Saturdays) based on roll numbers, instead of the usual one. In other circumstances, parents could choose their day, which aided working parents. This not only kept parents in touch with school officials but also kept everyone out of the Delhi traffic. A lasting lesson from a community-minded act.

Infrastructure

The school has one of Delhi's largest and greenest campuses. The grey buildings, well-lit corridors, CCTV and fire safety, and ventilated classrooms are a unique blend of functionality and comfort. The school's theatre features superb acoustics, a good sound system, and seating for more than 1500 pupils. The school has green open spaces with diverse vegetation. The school's user-friendly website manages all activities. In order to provide a more dynamic and comfortable learning environment for the children, the school routinely renovates scientific labs, sports fields, washrooms, and purchases furniture with a unique color code for each section. Sanitation drive sensitizes the boys to adopt a healthy hygienic lifestyle. There are staff rooms, counselor rooms, and sick rooms with a nurse. Don Bosco is one of few Indian schools with Kindle e-reading. The school has CAMPUS CARE, a data tracking system from KG to class XII, to assess each student's development frequently (Don Bosco, 2021c).DBS introduced K-YAN or Knowledge Yan well before the epidemic. K-Yan combines a computer, projector, and TV. The KYAN

program allows teachers to show students concepts using audio-visual presentations.

During pandemics, they adopted digital infrastructure to spread knowledge to students. They used tools and technology to assure uninterrupted learning. Zoom, Google Meet, and Microsoft Teams were popular. Fr. Davis recommended Microsoft Teams after a cost-benefit analysis. Microsoft Teams also had the following benefits: better UI, experience, and security. MS Teams included video conferencing, chats, and file uploads. Syncretic or real-time communication in MS Teams and asynchronous/flexible communication via email and WhatsApp increased. To sustain learning momentum during the epidemic, the school notified pupils they could consult their e-library from home. In other circulars, they also referenced edx.org, academicearth.org, archive.org, etc. Students were urged to enroll in Byjus, Udemy, Coursera, and others. At DBS, teachers took online workshops and used audio-visuals to distribute knowledge online.

Admissions

Don Bosco welcomes Kindergarteners, unlike other institutions. This provides the school an advantage in managing older children compared to other nearby schools that take nursery kids (3 to 3+). So they differentiate and find a place for unique school ideas. Prior to COVID-19, applications were shortlisted based on the distance between the nursery and KG, and then a lottery was used.

During the epidemic, for 2021-22 admissions, the DoE required schools to post-admission criteria and points online, along with the start date. The circular further stated that parents can be charged Rs 25 (non-refundable) for admission registration. Parents can elect to buy school prospectuses. Pre-primary and/or Class I private unaided schools admitting children must reserve 25% of places for kids from Economic Weaker Section (EWS) categories and children with disabilities.

Schools had to advertise admissions and counsel pupils during the pandemic. As a result, school admissions in Delhi were halted. DBS continued its processes, though. Despite DOE's creation of Uniply.com, a single-window website for Delhi school admissions, DBS under Fr. Davis built their own online platform for admissions. He also made sure no application was denied due to inadequate information, considering the dearth of digital literacy among the local community.

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Fee Structure

Normally, Delhi schools charge differently depending on the services they provide. Admission, practicals, test, library, building fund, tuition, transport, and other fees are included. Parents refused to pay full tuition during the epidemic, claiming pupils did not use the infrastructure. Due to job losses and business closures, many parents suffered economic difficulties. Being compassionate, Fr. Davis extended deadlines and slashed prices. Even the government intervened and reduced private school fees. Private schools decreased fees to tuition alone. A minority catholic school never prioritized money. To cover expenses and administer the institution, timely fee collection was required. The school had to accept the government's monthly fee order. The school's low basic tuition may not have been enough to satisfy future EdTech ambitions and pay teachers and personnel.

Teaching Pedagogy

Don Bosco had been using blended learning for many years prior to COVID-19 since they aspired to provide the greatest education. K-Yan already existed. DBS becomes virtual amid a pandemic. WhatsApp, MS Teams, Google Meet, Google Classroom, Zoom, etc. MS Teams and Kahoot were used for assignments, quizzes, classes, and file posting. It was noted that initial teething concerns such as content preparation and audio-video modes were encountered. Online education was seen as a distraction by both students and parents. Fr. Davis organized counseling for both parties. This ensured a smooth transition from traditional to online schooling.

Even government authorities took action. National Education Policy (NEP) 2020 revealed digital education projects. National Digital Educational Architecture (NDEAR) was announced to promote Digital First Mindset. NDEAR Digital Architecture supported teaching and learning, educational planning, governance, and administrative functions of the Center and States/UTs (PIB Delhi, 2021).

DoE sent a circular to all schools inviting teachers and SMC members to submit ideas and practices related to COVID-19 and school closures on 01-01-2021. On 19-11-2020 information on the support material and weblink was also released. EWS from private secondary and senior secondary schools could join online coaching. Students from wealthy households arranged devices for EWS online lessons. On 27-11-2020, CBSE released information about its sample question paper (SQP) and marking scheme for 2020-2021. Fr. Davis collaborated with NGOs to give poor pupils in his school electrical equipment and Wi-Fi to meet all the requirements set by the DoE.

Extra-Curricular Activities

Various clubs in DBS such as the cultural club, Drama Club, Swastha Bosco Mission, Analytix club, Eco Club, and Mathematics club were quite popular. In order to keep the clubs active and the morale of students high,competitions such as quizzes, storytelling, debate, etc. were organized via digital modes during a pandemic. Workshops were conducted through digital apps in various areas such as soft skills and the development of positive capacities. A circular for an online drawing competition was floated by DOE on 18-12-2020 for kindergarten to class X.DBS ensured active students' participation.

Fr. Davis left no stone unturned in uplifting the confidence levels of the students not only by virtual competitions but also by organizing webinars and motivational lectures. Days passed by, years passed by, and the students, teachers, and parents slowly and gradually adapted to digital technologies. Fr. Davis again started feeling content with his efforts drawn toward the changing dynamics by recommitting and reimagining education for a better future.

What we call the beginning is often the end. And to make an end is to make a beginning. The end is where we start from. These beautiful words of T.S. Eliot absolutely befit the special occasion of the farewell of Rev. Fr. Davis ManiparambenSdb on Saturday 26 June 2021. Father Davis passed his baton to his successor Fr. HemletKujurSdb, Principal, DBS-Alaknanda, New Delhi.

Future Challenges of Digital Education at DBS

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Fr. HemletKujur has to build upon the existing digital infrastructure that Fr. Davis has built. He needs to strengthen it not only as per the International standards but also to work on the challenges that Fr. Davis had enlisted through interviewing his faculty and students. The challenges that came during his tenure were: a) lack of non-verbal cues b) technical glitches c) interference of environmental factors d) health and mental problems e) power cuts and network issues and f) less engagement. Reimagining in this endeavor requires Fr. Hamlet to the appropriate decision-making skills involving intelligence, design, and choice activity. Also, it requires unfreezing, changing, and refreezing the assumptions or ways of working by creating a perception that change is needed in moving to the desired level and finally solidifying that change.

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CHANGE IN TEACHERS' PEDAGOGICAL BELIEFS DURING COVID-19 PANDEMIC

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ABSTRACT

Pedagogical beliefs constitute one of the most valuable psychological compositions of the teacher through which judgments, decisions, and actions regarding instructional practices are made. Rooted in one's experiences and having affective association pedagogical beliefs are resistive to change generally. However, deep reflections on one's actions and their consequences facilitate teachers to attend to their core beliefs and tend to modify them in emerging contexts. In the present scenarios of the COVID-19 pandemic, teachers have to modify their time-tested actions that are related to teaching and learning processes. Do these changes are temporary, just for the sake of fulfilling the task at hand, or is there any change in their pedagogical beliefs? Keeping this question in mind present study was designed to explore and analyze the changes in teachers' pedagogical beliefs during COVID 19 pandemic. Survey method was adopted for collecting the data by using a self-constructed online open-ended questionnaire from 48 school teachers. Responses were collected and analyzed qualitatively by using the content analysis technique. Findings of the study suggest that there is no major change in core beliefs w.r.t. purpose of education, schooling, nature of teaching and learning, and curriculum. However, teachers reported changes in their beliefs w.r.t. pedagogical as well as assessment strategies along with the efficacy to use ICT tools.

Key terms : *Pedagogical beliefs, pedagogical practices, COVID-19, ICT*

Introduction

History dates back to 1377 when the first quarantine was implemented in Dubrovnik, Croatia (Grmek & Buchet, 1997). Since then organized institutional non-pharmaceutical measures in the form of quarantines on the outbreaks of the pandemic were extended to the whole of Europe during 14th to 18th-century plague (Cipolla, 1981; Toner, 1873); then in the 19th-century cholera (Oldstone, 1998; Beckmann, 1846) and later in 20th-century influenza. Closure of schools, universities, places of worship, and theatres along with the suspension of public gatherings was implemented (Tognotti, 2013). In the 21st century mankind again witnessed similar intervention measures initially with SARS in 2003, then with swine flu in 2009 (Tognotti, 2013) and now with the COVID-19 pandemic. These non-pharmaceutical measures, especially the closure of schools, had proved effective to reduce the spread of disease. For example, mathematical modeling reports the delay in transmission of outbreaks (Mustafa, 2020). Historically also, school closures and public gathering bans in the USA during the influenza pandemic in 1918-1919 lowered the total mortality rates (Simon, 2020). Similar effectiveness of school closures in reducing the morbidity rate by 90% was reported in 1957-58's Asian flu (Zumla, 2010). From 2004 to 2008 flu in the USA (Cauchemez, 2009) and also in 2009's H1N1 outbreak in Japan, such measures were reported to reduce the spreading of the disease (Jackson et al, 2013) effectively and this has been witnessed in the case of COVID-19 outbreak also (Wood, 2020). However, these measures have costs (Haq, 2020) either economic, social, or psychological that may be measurable or immeasurable.

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Such closures of schools inevitably affected all the stakeholders of the schooling system and especially the teachers. They have to adopt different strategies that are quite different from regular face-to-face or on-site teaching-learning practices and such adoptions are quite difficult, full of affliction, and tiresome process especially when one is practicing his/ her time tested strategies based on their experiences that are rooted in their highly personalized belief system related to objectives and goals of education, the purpose of the classroom teaching-learning process, nature of learning, their self as a teacher, etc. These all aspects comprise a complex construct known as pedagogical beliefs and can be thought of as guiding principles teachers hold to be true that serve as lenses through which new experiences can be understood (Khader, 2012).

Review of Related Studies

Though hard to define, beliefs can be understood as mental representations or models (Lewis, 2018) just like conceptual/ knowledge systems. However, the difference between both is that beliefs consist of presumptions, ideologies, and commitment (Calderhead, 1996) whereas concepts are factual propositions and one is free to consider a proposition true or false even after attaining it that is, one can believe a proposition or not (Ertmer, 2005). Secondly, beliefs serve as a valuation system (Seitz et al, 2017) by which one can associate personal meaning with a particular cognitive input or perception (Paloutzian & Mukai, 2017; Seitz & Angel, 2014). When one says "I believe that ...", one is applying both formal analytic as well as subjective certainty of mental representations or constructs (Harris et al., 2008) that facilitates measuring and evaluating (Markman et al., 2013; Park, 2005) the cognitive inputs to arrive at a judgment (Rokeach, 1972) which is effective in nature (Nespor, 1987).

Just like beliefs it is also hard to define the teacher's pedagogical beliefs (Tatto & Coupland, 2003) and can be viewed as a 'set of ideas rooted in the psychological and mental content of the teacher and play a central role in guiding his/her teaching behavior' (Khader, 2005), a holistic conception (Ghaith, 2004) or viewpoint about teaching and learning process (Haney, Lumpe & Czerniak, 1996). It encompasses aspects like- how a teacher perceives and addresses various educational processes viz. teaching, learning, assessment; their profession, understanding of the nature of human interactions and its limitations and establishing such relationships; status of various stakeholders; goals, objectives, principles, and ethics with respect to various kind of educational activities (Richards, Gallo, and Renandya, 2001; Borg, 2003) along with their professional development (Calderhead, 1996) in the form of generalization (Hermans et al., 2008).

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Research continuously indicates the relationship between teachers' pedagogical beliefs and various classroom processes like planning, teaching, assessment, etc. (Clark & Peterson (1986). How the teacher perceives the nature of their discipline, the nature of learning, and the status of child and teacher in the classroom are largely determined by their pedagogical beliefs (Cronin-Jones, 1991). As these beliefs get transformed into practical reality in the classroom (Ernest,1998) and therefore teachers' behavior can be predicted on the basis of these beliefs (Pajares, 1992). For example, Richardson et al. (1991) selected 39 teachers from different grades and interviewed them to explore their pedagogical beliefs. After observing their classroom teaching they inferred the relationship between both. In the same line, by adopting the qualitative method, Wang (2006) interviewed two teachers and then observed fourteen lessons in the English language and reported the consistency between teachers' teaching activities and teaching methods with respect to their beliefs. Further, by taking a sample of 135 teachers, Faour (2003) also reported the moderate relationship between pedagogical beliefs and real classroom practices. Very recently, Shun (2008) examined 2139 teachers from 40 primary schools and reported that there was not much variance in teachers' beliefs and their teaching methods.

Rationale for the Study

As stated above pedagogical beliefs are rooted in one's experiences that are associated with affective components (Nespor, 1987). They act like filters (Goodman, 1988) to new information and are resistive

toward change (Kagan, 1992; Kennedy, 2000; Murphy, 2000). Therefore, Griffin and Ohlsson, (2001), Kagan (1992), and Pajares (1992) considered them 'far more influential than knowledge' in terms of the teaching process. However, researchers like Block and Hazelip (1995) argue that beliefs vary in their strength. Those beliefs that are densely interconnected form the core that is more stable and have more implications and consequences (Rokeach, 1968). However, there are other levels of beliefs that are less stable (Morine-Dershimer & Kent, 1999; Pajares, 1992) and prone to change. Though such changes are voluntary and influenced by one's motivation and epistemological values (Griffin and Ohlsson, 2001). Furthermore, researchers like Voinea and Palasan (2014) and Korthagen (2005) suggest that reflection is an important aspect, and if reflection on the actions and their consequences are at the deepest level it facilitates teachers to attend to their core beliefs (Korthagen, and Vasalos, 2005) and tend to modify them in emerging contexts despite its novelty (Pajares, 1992; Fullan and Stegelbauer, 1991).

In the scenarios of schooling that recently emerge due to the COVID-19 pandemic; teachers have to modify their time-tested actions that are related to teaching and learning processes. Do these changes are temporary, just for the sake of fulfilling the task at hand, or is there any change in their pedagogical beliefs? Keeping this question in mind, the current study was designed.

Objective of study

The objective of the study was to study the change in teachers' pedagogical beliefs during the COVID-19 pandemic.

Methodology

The survey method was adopted for collecting the data by using a 'self-constructed online open-ended questionnaire' having questions related to change in perspective towards Purpose of education, the purpose of schooling, school curriculum, and its appropriateness, nature of teaching, nature of learning, acquisition of pedagogical skill, self-efficacy w.r.t. teaching, pedagogical strategies, nature of assessment and adoption of strategies, a professional self -- before and after the pandemic. 48 teachers' responses were analyzed qualitatively.

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For analysis of data, units of meaning were extracted and condensed from the teachers' responses. Condensing units of meaning were then multiply coded. These codes were later organized into categories on the basis of closeness to each other. Both similarities and differences were considered during this process. These categories help to synthesize the patterns. To support these patterns teachers' responses were stated as it is (in italics).

Data analysis and findings

Regarding the change in perspective towards the purpose of education prior to and during the pandemic of COVID-19, the majority of teachers assert that core aspects of the purpose of education do not change due to such situations and do not regard any change in perspective toward the purpose of education during COVID-19 pandemic. A teacher, for example, states that ".... the purpose of education to me is the ability to know oneself", strengths and weaknesses to work on both and grow as a responsible, empathetic and industrious social individual who can help others for the same. It was just the same before to pandemic as it is now ....". More specifically, teachers also emphasized individual as well as social responsibility towards health and cleanliness. For example ".... now, I will give preference to live more. Cleanliness and healthiness are essential for it ....". Contrastingly data also revealed that some teachers are feeling that COVID 19 has narrowed down the meaning of education, particularly in practice. They stated that in contrast to earlier, now it is confined to the transaction of content primarily that is also one way only. Teachers stated that ".... before the pandemic, education was multiply pronged.... and now the focus is on only some points while discussing content ....". Similarly, another stated that ".... prior to this pandemic, education was about all-round development of a child... with this pandemic situation, we are compelled to deliver the concepts on screen ...."

Regarding the change in perspective towards the purpose of schooling during the pandemic of COVID-

19 as compared to prior, all teachers considered schooling as a social process and its purpose is to provide equitable opportunities for learning and development. However, during COVID 19 teachers are noticing that "....now [during a pandemic] schooling process failed to provide equitable and just opportunities...", "... on the other hand authorities are expecting a similar kind of output that is impossible...". Teachers also reported that they are exploring technology-based possibilities for holistic development and maximizing the inclusion of learners.

Further, about the change in perspective towards school curriculum during the pandemic of COVID-19 as compared to earlier, all teachers were equivocal that there was ample flexibility as well as feasibility in various aspects of the curriculum and were in accordance to available resources. Prior to the pandemic, the curriculum was implemented considering the all-around development with unlimited resources and various possible ways. Now, during this pandemic, the teaching-learning process is being compromised at various levels. Completion of the syllabus is the only main objective excluding the activities related to the curriculum. They were concerned that COVID 19 has adversely affected the teaching-learning experiences. For example, a teacher states that ".... curriculum is well defined and achievable but due to closure of schools completing syllabi on time is quite impossible... even focus areas have been changed ....". Another teacher shared that ".... practical demonstration of many topics is not possible through digital technologies ....".

For the appropriateness of the curriculum for such kinds of situations, teachers unanimously stated that the curriculum is inappropriate for such kinds of situations, at least for strategic implementations. However, they were ready to seek alternatives. A teacher stated that ".... we should look deeper & try to implement other ideas also. Just through online class is not a solution ...". Another states that "... curricular content is appropriate but we have to change the strategies for transacting the curriculum ....". Many agreed that an alternative academic calendar developed by NCERT addresses the completion of content only as it can be transacted through online platforms but this will comprise many learning opportunities.

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Regarding the change in perspective towards the nature of teaching during the pandemic of COVID-19 as compared to earlier, many teachers insisted that face-to-face interaction is quite powerful for teaching-learning as it is an active process. Contrastingly, online teaching makes students passive. However, they also assert that due to pandemics, students are learning through digital technologies and teachers do not remain only a source of information and knowledge. Teachers asserted that ".... this will enable students to develop their own thinking and learning skills where teachers would act as a guide only who were involved to a greater extent prior to pandemic ....". Some teachers feel that due to online platforms there is an increase in parental involvement as well as an interaction which is a better sign. However, all teachers claimed that they are working under stress.

For the change in perspective towards the nature of learning (i.e. how students learn) during the pandemic of COVID-19 as compared to earlier, all teachers equivocally stated that learning would be ICT based from now on. Earlier teachers were adopting various methods as well as activities but from now on students will be dependent on electronic gadgets. This will reduce learner-to-learner interaction as well as reflecting on each other's viewpoints, discussing and debating which essential part of learning is. One teacher clearly stated that ".... learning was engaging and multi-pronged prior to pandemic... now it is monotonous and specific ....". Another stated that "... in this pandemic situation, learning depends primarily on monologue ....".

Regarding the change in teachers' wish to acquire any specific knowledge or skill related to the profession during the pandemic as compared to earlier, all teachers assert that they wish to acquire various kinds of skills that range from classroom management to various kinds of teaching skills, effective communication, etc. prior to the pandemic. After the outbreak pandemic, their preference changed towards developing skills related to the use of digital modes and tools more effectively

for teaching and learning. All teachers are concerned with various learning ICT tools.

Regarding the felt change in efficacy during the pandemic with respect to their pedagogical domain as compared to prior, teachers' responses can be categorized in two categories primarily: positive and negative. Many teachers assert that they feel gradation in their teaching skills. For example, ".... because in real class a teacher has to undergo a lot of challenging situation and questions. So there is always a need to upgrade and up-to-date yourself towards more betterment which has now decreased ....". Another states that ".... it has largely affected my teaching strategies as I have least resources to demonstrate any activity and also the verbal explanation is maximum which becomes a challenge for many [kinaesthetic] learners ....". Similar voice from another teacher was ".... with the skill set I have currently, I observed decline in terms of my efficacy in pedagogical domains ....".

Contrastingly, on a positive note, all teachers assert that they are adopting and learning to handle ICT tools for the teaching-learning process. For example a teacher states ".... obviously yes, now we are becoming techno-friendly. With the help of modern gadgets we are preparing ppt slides, graphs & sharing them ....". Another teacher states that ".... every day comes with a lot of challenges for us. However, we are sharing ideas through online platforms ....".

Regarding specific pedagogical strategies teachers adopted during the pandemic that they were not using earlier, all teachers assert that during this pandemic they adopted various ICT tools. They also stated that during this time they came to know about subject-specific ICT tools. They also tried improvised strategies on social platforms for effective teaching. For example, a teacher shared that ".... I have adopted a method which names "Ask me". The idea is like we have made a Whatsapp group (a group of students of the same class). If any student finds it difficult to solve any question or if he/she is having any doubts that student may drop his question in that Whatsapp group & other students whoever wants to answer can give the solution in teacher's supervision ....".

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For a change in perspective with respect to assessment during this pandemic compared to prior, teachers assert that since time is not a constraint now, alternative strategies for assessment can be implemented. For example, some teacher states that ".... projects can be given involving some practical approach to a problem...". Another teacher mentioned that "... thought-provoking questions which require a higher level of cognitive skills can be given rather than information-based questions for assessment as there is ample time...".

Many teachers looked forward to online evaluation strategies as an alternative. However, they were also concerned about systemic constraints. Contrastingly, few teachers assert that assessment becomes a bit difficult due to a lack of proper feedback mechanisms. For example, a teacher reported that ".... after giving home assignments it is not easy to check their work at a time due to inability to operate new technologies...". Another teacher said that ".... objective question-based assessment has been increased which is not suitable for deep learning....".

For specific assessment strategies teachers adopted during the pandemic that they were not using earlier, all teachers stated that they have adopted ICT-based objective tests primarily like MCQ, quizzes, etc. Some teachers are also using Google forms or webinars or online presentations.

Regarding the changes teachers feel in themselves as a professional during the pandemic period, there were mixed responses but a majority of teachers assert that without classroom interaction it is difficult to carry on teaching-learning practice as it was done earlier. They need to develop new strategies and skills for the same. They also stated that they have learned more ICT-based tools and also shared them with colleagues. Though, these teachers also mentioned that they feel restricted and unable to reach out to the maximum potential of children. Very few teachers also assert about job insecurities.

Teachers also assert that no one had the skills of coping with a pandemic earlier than this, so instead of focusing more on "completion of syllabus" during these

testing times, authorities should focus on the development of coping strategies practically. They also assert that they provide more flexibility and independence in terms of pedagogical approaches being followed.

Conclusion

As stated above, teachers' pedagogical beliefs vary in strengths (Block and Hazelip, 1995) whereas core beliefs are more stable (Rokeach, 1968). This aspect can be witnessed regarding the purpose of education, the purpose of schooling, curriculum, nature of learning, etc. where the majority of teachers stated that they don't feel any major change in their perspectives during the pandemic as compared to earlier. This is due to the fact that very fundamental principles of education and learning are generally stable. Rather they assert that during the pandemic period learners missed many essential elements of schooling that are equally important as the completion of the syllabus is. They even indicated that for syllabus also content is transacted at a surface level which rather requires deep processing for being learning meaningful.

However, as Morine-Dershimer & Kent (1999) and Pajares (1992) argued that due to voluntary and influence by one's motivation some levels of beliefs are less stable and prone to change. This aspect can be noticed when teachers adopted technological tools. They shifted from their time-tested face-to-face teaching-learning strategies and embraced domain-specific ICT tools. For assessment also adopted alternatives like webinars, online projects, discussions on social platforms, etc. Though they also agreed that online platforms do not equate to the real classroom processes these strategies will facilitate learning to an extent. Such alterations are due to changes in epistemological values which in turn affects pedagogical belief (Griffin and Ohlsson, 2001).

Reflection over the actions and their consequences is also a primary process for change in pedagogical beliefs (Voinea and Palasan, 2014; Korthagen, 2005). Teachers assert that after adopting different strategies and learning ICT tools they came to know about their shortcomings, problems, benefits, and scopes. They also stated that they will continue with these and try to improvise them so that deep learning can be facilitated as they are aware that during this period the process of teaching and learning is going on in its narrower sense. This aspect is in coherence with what Pajares (1992); Fullan and Stegelbauer (1991) argued that teachers tend to modify their beliefs in emerging contexts despite their novelty. Therefore, teachers are involving themselves in learning and developing novel strategies that can facilitate the students' learning as well as evolve them as enriched professionals even in this turbulent and volatile period.

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EFFECTIVENESS OF E-CONTENT PACKAGE FOR ENHANCING ACHIEVEMENT IN TAMIL POETRY AMONG STANDARD XI STUDENTS

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ABSTRACT

The researcher carried out experimental research to find out the Effectiveness of the E-content package for the achievement in Tamil poetry among standard XI students. Two Matriculation Higher Secondary Schools in Salem District of Tamil Nadu were selected for the study. One school for the control group and another school for the experimental group. Villibharatham in Tamil poetry of XI standard was chosen by the researcher. The standardized achievement test was conducted separately for the control and experimental group before intervention. The language teacher taught poetry in chalk and talk method for the control group. whereas the students in the experimental group were taught the poem using the E-content package by the researcher. Paired sample t-test was used to find the mean difference. The major findings of the study are; Samples in the control and experimental group do not differ in their achievement in Tamil poetry in the pre-test. The samples in the experimental group differ in their achievement in Tamil poetry in post-test when compared to the samples of the control group. It is evidently proved that there is an effect in the achievement of Tamil poetry among the students who have undergone their learning through the e content package when compared to the traditional method of teaching. Hence, the language teachers are to be trained to use the technology in their teaching to enhance the academic achievement of the students and to develop their professionalism in teaching.

Keywords : *Effectiveness, E-content package, Tamil poetry, achievement.*

Introduction

Education plays a predominant role in the shaping of the destinies of societies in all spheres of development and has never ceased to develop. It is the only way to improve the status of any Nation. (Marciniak, 2014). The application of e-technology in the education system in the modern world is inevitable and the same plays a vital role in bridging the gap between the teaching and learning process. The use of technology in the classroom is essential for improving the academic achievement of the students and also enhancing the professionalism of the teachers. If the education system fails to respond adequately to the challenges posed by the future citizen, stagnation will increase and ultimately hinder the development of the nation. It is ensured and there is no doubt that e-content packaging in information technology is the best tool in the pedagogical process. The present generation expects themselves to be engaged in technology as an active learners rather than passive listeners.

Need and Significance of the Study

Technology are full of stimuli and requires paying attention to many different things at once (Dhruvin,2017). The practical application of technology in teaching could develop the professionalism of the Tamil Language Teacher and enhance the academic achievement of the students. The usage of technology in teaching comprises

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the procedure, acquaintance, skill, and capability in the usage of technology in the accomplishment of specific functions before, during, and after academic activities. The practical application of information and communication technology in teaching ought to be based on the creativity of the content developer focusing on the judicial combination of visual, auditory, and kinesthetic (tactile) learning so that the learner will show interest in learning.

The Tamil language is one of the most classical languages in India. Having the mother tongue in Tamil Nadu is the prime medium of instruction in schools in Tamil Nadu. The teaching of the Tamil Language in Schools covers varieties of poetries, grammar, prose, and non-detailed stories in the Tamil Textbook in a sequential and coherent manner. Though the basic Language skills of Listening, Speaking, Reading, and Writing are being taught right from primary education, the students find it a little bit difficult in comprehending the theme of the poetry through teaching traditional methods.

Statement of the problem

In the modern world children are habituated with technology such as smartphones, computers, and television. In this regard, the learners are acquainted with the technology. Hence, the researcher wanted to design, develop and validate the E-content to enhance the Tamil Language achievement among the standard XI students. Further, how far does the validated E-content influence the Tamil poetry achievement of the students, and to what extent does the E-content enhance the language achievement rather than the students learn in the traditional way of teaching? Hence, this study is chosen by the researcher to find out the "Effectiveness of E-content package for enhancing achievement in Tamil Poetry among standard XI students"

Objectives of the Study

General objective of the study

To find out the Effectiveness of the E-content package for the achievement in Tamil poetry among standard XI students.

Specific objectives of study

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1. To find out the initial level of achievement in Tamil poetry among standard XI students in Control and experimental group.
2. To design, develop and validate the E-content package to teach Tamil poetry among standard XI students in the experimental group.
3. To prepare the lesson plan based on the traditional method to teach Tamil poetry among standard XI students in Control.
4. To teach the Tamil poetry based on the traditional method for the control group and using an E-content package to teach the students in experimental group.
5. To find out the level of achievement in Tamil poetry among standard XI students in the Control and experimental group after the intervention.

Research Questions

1. Are the XI students differ in their achievement in Tamil poetry between the control and experimental group in the pre-test?
2. Will the XI students in the control group differ in their achievement in Tamil poetry between pre-test and post-test?
3. Will the XI students in the Experimental group differ in their achievement in Tamil poetry between pre-test and post-test?
4. Are the XI students differ in their achievement in Tamil poetry between the control and experimental group in the post-test?

Methodology of the Study

Method

The researcher has used a pre-test and post-test double group Quasi-experimental design for this study.

Materials

Development of E-content package

E-content package was prepared to teach Villibharatham in Tamil poetry among XI standard students in the Experimental Group. In this poem, there are 10 stanzas. All the stanzas were used to prepare a

song with background music. 50 frames were designed with due explanation having images and animation as a motion picture. In the evaluation part, Multiple choice questions are inserted in the E-content package, there is an icon was designed to look back at any frame whenever the students want to clarify their doubts, reinforce their knowledge or to re-read the content. The Developed E content was validated by Two Professors who are in the Department of Education Technology and 5 Post Graduate Language teachers who are currently teaching the Tamil language at standard XI.

Development of Lesson Plan

The lesson plan was prepared by the subject teacher to teach Villibharatham in Tamil poetry among XI standard students in the control group. The language teacher prepared 3 lesson plans for teaching all the 10 stanzas. The lesson plan has a motivational part, using Teaching learning materials, Activities with chalk and talk method, an Assessment part, reinforcement activities, and follow-up work.

Population of the Study

Standard XI students in the State Board of Tamil Nadu are the population for the study. English medium Standard XI students in State Board of Salem District, Tamil Nadu are the accessible population for the study.

Sampling Procedure and Sample for the Study

The researcher has used a convenient sampling procedure to select the sample for the study in Salem District. Two Matriculation Schools are selected for the study. Firstly, Jothy Matriculation Higher Secondary School, Ayyothiyapattinam was selected for the control group. Secondly, Swami Matriculation Higher Secondary School, Masinayakanpattry was selected for the experimental group. In both schools, every 40 students in Section A were selected as a sample for the study. Altogether 80 Eleventh standard students were constituted as a sample for the study.

Tool for the Study

Achievement test

The researcher constructed an achievement test in consultation with the subject teachers. Initially, there were 36 multiple choice questions were framed. In the item analysis, 5 questions are rejected based on the calculation of the difficulty index and discrimination index. In order to have the whole number in the achievement test, one question was deleted by the researcher based on the suggestion of the research experts. The reliability of the tool was found with the split half method. The r value of the achievement test is found to be 0.84. Finally, 30 multiple choice questions are kept in the achievement test. Each question carries one mark for the correct answer.

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Testing the Research Questions

1. Are the XI students differ in their achievement in Tamil poetry between the control and experimental group in the pre-test?

Table 1

Mean difference in the achievement of Tamil poetry between the samples of the control and experimental group in the pre-test.

Test	Group	N	Mean	S.D	't' value	'P-value	Remark
PRE-TEST	Control	40	62.12	5.94	0.84	0.4	NS
	Experimental	40	61.3	5.78			

The above table shows the calculated P-value 0.40 is greater than 0.05 and it is not significant at 0.05 level. Hence there is no significant difference in the mean score of achievement in Tamil poetry between the control and experimental group in the pre-test.

It is understood that the sample in the control and experimental group do not differ in their achievement in Tamil poetry.

2. Will the XI students in the control group differ in their achievement in Tamil poetry between pre-test and post-test?

Table 2

Mean difference in the achievement of Tamil poetry between the Pre-test and post-test of the samples in the control group

Group	Test	N	Mean	S.D.	't' value	'P-value	Remark
Control group	Pre-test	40	62.12	5.94	59.6	0.00	S
	Post-	40	72.47	5.35			

The above table shows that the calculated P-value 0.00 is less than 0.01 and it is significant at 0.01 level. Hence, there is a significant difference in the mean score of achievement in Tamil poetry between the Pre-test and post-test of the samples in the control group.

3. Will the XI students in the Experimental group differ in their achievement in Tamil poetry between pre-test and post-test?

Table 3

Mean difference in the achievement of Tamil poetry between the Pre-test and post-test of the samples in the Experimental group.

Group	Test	N	Mean	SD	't' value	'P-value	Remark
Experimental group	Pre test	40	61.3	5.78	68.27	0.00	S
	Post-test	40	82.5	4.66			

The above table shows that the calculated P-value 0.00 is less than 0.01 and it is significant at 0.01 level. Hence, there is a significant difference in the mean score of achievement in Tamil poetry between the Pre-test and post-test of the samples in the Experimental group.

The samples in the Experimental group performed better in the post-test when compared to the pre-test.

4. Are the XI students differ in their achievement in Tamil poetry between the control and experimental group in the post-test?

Table 4

Mean difference in the achievement of Tamil poetry between the samples of the control and experimental group in the post-test.

Test	Group	N	Mean	SD	't' value	'P-value	Result
POST TEST	Control	40	72.47	5.35	11.66	0.00	Sig
	Experimental	40	82.5	4.66			

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The above table shows that the calculated P-value 0.00 is less than 0.01 and it is significant at 0.01 level. Hence there is a significant difference in the mean score of achievement in Tamil poetry between the control and experimental group in the post-test. The achievement in Tamil poetry of the samples in the experimental group is better than the control group.

Findings of the study

The following are the major findings of study

1. In the pre-test, the samples between the control and experimental group do not differ in their achievement in Tamil poetry.
2. The samples in the control group differ in their achievement in Tamil poetry between Pre-test and Post-test.
3. The samples in the Experimental group differ in their achievement in Tamil poetry between Pre-test and Post-test.
4. The samples in the experimental group differ in their achievement in Tamil poetry in post-test when compared to the samples of the control group.

Discussion of the study

There is no significant difference in the mean score of achievement in Tamil poetry between the control and experimental group in the pre-test. It is understood that the sample in the control and experimental group are equally distributed before testing the effectiveness of the E-content package. The samples in the control group performed better in the post-test when compared to the pre-test. Though there is an improvement in the achievement of Tamil Poetry in the post-test is just only 10. 35 %. This kind of achievement is the general scenario in teaching with the chalk and talk method. The samples in the experimental group differ in their achievement in Tamil poetry in post-test when compared to the samples of the control group. Impact of E-Learning vs Traditional Learning on Student's Performance and Attitude by Nahid Khalil Elfaki et al (2019). The findings revealed that the pre-test means a score of the samples in the experimental group 61.30 has increased to 82.50 in the post-test. It is a 21.20 % improvement

when compared to the pre-test. Hence, it is evidently proved that there is an effect in the achievement of Tamil poetry among the students who have undergone their learning through the e-content package when compared to the traditional method of teaching.

Conclusion

The findings of the present study revealed that the e-content package is a vital instrument for learning that support for teachers to simplify their teaching and convert the teaching style from the traditional way to the modem way by using technology.

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CONSTRUCTION AND VALIDATION OF SOCIAL MEDIA USAGE SCALE FOR HIGHER SECONDARY SCHOOL STUDENTS

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ABSTRACT

Usage of mobile phones as well as social media was increased among adolescents as part of the lock down in the context of Covid-19. The usage of social media for entertainment, as well as educational purposes, makes them more addicted to gadgets and various social media apps. In this scenario, sufficient studies on social media usage should be increased. Investigator developed and standardized a Social media usage scale to identify the addiction rate of Higher Secondary school students to social media. SMUS is a five-point Likert-type scale consisting of 22 items. The reliability of the scale was established using the Cronbach alpha test. The validity of the test was established by experts and the Spear son correlation method.

Introduction

Usage of technology increased and reached another level among the adolescent as part of the change in the mode of the teaching-learning process during the spreading of Covid-19. Most of the teacherswho were not active users of technology were forced to start using technology for the purpose of the teaching-learning process. Most of the teachers who were not well versed with higher technologies for educational purposes depended on WhatsApp and some who were a little bit well versed with technology migrated to Google meets.

Anyway, it was shown by Manasi (2019) that students should have moderate social media usage. As per a study conducted by Smith and Anderson (2018), social media use was highest amongst the younger population of the U.S. in the age group of 18 to 24. Andreassen (2015) established that people are addicted to social networking sites just like anything like tobacco or liquor. A study conducted by Sheela and Sangeetha (2017)shows that scholastic achievement was not at all linked with social media usage.

But the practical experience of the investigator was something different in the last few months. Most of the teachers were depending on WhatsApp, youtube and google meet for delivering lessons and continuing the teaching-learning process. The sudden shift of the learning process into technology-enabled learning made several changes in the habit of adolescents including their social media usage. In the current study, the investigator was trying to develop a Social Media Usage scale that includes 22 items in a five-point Likert typescale and standardize it.

Review of Related Literature

Social Media Affinity Scale was created and deployed by Gerlich, Browning, & Westermann, (2010). Results of the study showed that, among the students surveyed, no significant differences exist between males and females in their internet usage, social media usage, and also beliefs about social media sites in general.

Bányai, Zsila, Király, Maraz, Elekes, Griffiths, et al. (2017) surveyed a nationally representative Hungarian sample comprising 5,961 adolescents as part of the European School Survey Project on Alcohol and Other Drugs (ESPAD). Using the Bergen Social Media Addiction Scale (BSMAS) and based on latent profile analysis, 4.5% of the adolescents belonged to the at-

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risk group and reported low self-esteem, high level of depression symptoms, and elevated social media use.

Reilly,Dogra, Whiteman,Hughes,Eruyar,& Reilly (2018) conducted a study on a topic,social media as a threat to mental wellbeing.Three themesidentified by them were, (1) it was believed to cause mood and anxiety disorders for some adolescents, (2) it was viewed as a platform for cyberbullying, and (3) the use of social media itself was often framed as a kind of 'addiction'.

In a study conducted by Ramesh, Pruthvi, & Phaneendra (2018) in Government and Private PU colleges situated in a selected ward of urban Bengaluru city regarding their social media addiction and social media addiction was found in over one-third of subjects and the majority had mild addiction.

Jenkins, Wright, & Johnson, (2013) has been developed a 10-item two-factor Social Media Use Integration Scale (SMUIS) for college students.Bhati, a & Bansal, & Villa,. (2019) have the opinion that excessive use of Social Media is affecting the lifestyle of youth Moreover, statistics show that addiction to social media resulted in increased health problems and changes in behavior.

Need and Significance of the Study

A review of related literature shows that several studies have been conducted in the field of social media usage by several researchers at different levels. But usage of social media by secondary or higher secondary school students was not investigated in detail by any of the studies, especially from India. The main reason behind the negligence of that age group is that they didn't possess a mobile phone. But when the pandemic situation necessitated an academic ambiance where the mobile phone was indispensable, most parents were forced to purchase them for their wards. The study is conducted at the time when one year is over after the first COVID - 19 case was reported in the world and so seems significant for the current context.

Construction and Validation of the Scale

The Social Media Usage Scaleabbreviated as SMUS has been developed in three stages. SMUS is a blend of Likert type rating scale which has five options, Strongly Agree(SA), Agree(A), Undecided(U), Disagree(D), and Strongly Disagree (SD) and percentage analysis type questions. In the first stage of development, the investigator formulated about 42 statements which give an idea that the subject is using social media with the help of research advisor and from the ideas gained from the review of related literature. Among the 42 statements, 21 items were having positive polarity and 21 items were negatively polar. These items were classified into six categories, namely, Academic, Social, Psychological, Moral, Communication, and Entertainment Views. Then the drafted items were given to experts in the field and experts in the language. The items were modified and reconstructed according to the suggestions and converted into a Google form. This Google form was shared with 30 Higher Secondary School students for pre-tryout and necessary changes were incorporated into the statements.

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Try -Out

After the pre- tryout, the SMUS shared to Higher Secondary School students who were indifferent streams of study through WhatsApp groups of their respective schools, and 160 responses were collected through Google form. The collected responses were transformed into scores as per the scoring key. The scoring key was prepared by awarding 5,4,3,2 and 1 scores to the responses Strongly Agree(SA), Agree(A), Undecided(U), Disagree(D), and Strongly Disagree (SD) respectively for a positively polar statement and vice versa for a negatively polar statement. The total score of the scale is the sum of the scores of all the items. The 160 responses were arranged in descending order of their total score. 27 % of the responses with the highest score and 27% of the responses with the lowest score were separated out. They were termed as an upper group and lower group. To evaluate the statements, the t value between the scores of each statement was found. Items with a t value greater than 1.75 were regarded as a good item, which possesses internal consistency and hence discriminating power (Edwards, 1957). The items with a t value equal to or above 4 were selected and below 4 were rejected from the draft to form a final rating

scale. Thus the final scale consists of 22items 6 among them were negatively polarised and 18 were positively polarised.

Positively polar statements in the scale were items1,2,4,6,8,10,12,13,16,17,18,20 and 21while negatively polar statements were 3,5,7,9,11,14,15,19,20 and 22.

Reliability

A rating scale should be stable and trustworthy at any instance. In order to confirm that, the investigator should verify the reliability and validity of the items. Split -half method and Cronbach's Alpha test were used to check the reliability of the items after the pilot study. The final draft was given to 184 higher secondary school students in Google form and collected their responses as Google sheets. Cronbach's Alpha test gives an alpha value of 0.841 which shows that the scale is highly reliable. The Spearman-Brown Coefficient is 0.812 from the split-half method which also confirms the reliability of the test.

Validity

The validity of the test was checked by content validity and the Pearson correlation method. The items were thoroughly checked by experts in the field and validated. Pearson correlation analysis shows that all variables have a coefficient value higher than 0.174 in total. It ensured the validity of the items. Items in the Final form of SMUS were as follows.

Educational

1. If I have a doubt about any topic, I try to search for its answer on social media.
2. I am active in online academic groups.
3. I haven't shared class notes through social media.
4. I have lost concentration in my studies because of the excessive usage of social media.

Communication

5. I feel more comfortable when I am talking directly with my friends than chatting through Social Media with them.
6. If I have to inform something to my friends, I put it as a status.
7. I never share my ideas through social media.
8. I prefer to use smiley's while replying to a message.

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Psychological

9. I never use Social Media to chat with my classmates for solving a personal problem.
10. I feel frustrated when I am not able to use the Social Media app.
11. When I am using the Social Media app, I can control time.
12. I feel annoyed when I do not receive an immediate response while chatting.
13. I use social media to get relief from academic stress.

Moral

14. To make fun of others, I never initiated a chat in social media groups.
15. I never shared porn videos with my chat friends.

Entertainment

16. I spent most of my free time on social media.
17. I do get movie links and share them with my friends through social media.
18. I use social media to look at and share funny things.

Socialization

19. I prefer to attend a social gathering than chat in a social media group.
20. I never chat with my relatives in social media groups.
21. I use social media to become more sociable
22. I haven't attended any social media group get-togethers.

Results and Discussion

The SMUS was constructed and validated according to the standard techniques for the validation of a Likert-type scale with a five-point rating scale. It contains 22 items 10 of them are negatively polar and the rest were positively polar. The maximum score which can be obtained by a sample is 110 and the minimum score is 22. If the sample is 100% neutral to the statement, the score will be 66.

If a sample gains a score below 66, then it means that the sample is moderately or less addicted to social media

while a score which is higher than 72 shows that the sample is more addicted to social media. As the score reaches 120, the sample needs adequate attention and may be requested for an intervention from a professional for retrieval from the symptoms.

Conclusion

Technology is a boon when it is used productively. In the age of digital natives, the creative usage of mobile phones and social media can never be ruled out. During the contemporary scenario when the entire world faces an unprecedented standstill, mobile phones, as well as social media, play a pivotal role in carrying out academic activities by the teachers and the students throughout the globe. Even after the threat of this pandemic vanishes, the academic community will undoubtedly move forward in tune with the technological advancements in the years to come. Still, this study points out certain serious concerns regarding the necessity of proper monitoring among adolescents with regard to their usage of mobile social media. It also highlights the necessity of timely interventions on the part of teachers, parents, and professionals which will invariably enhance the physical, social and emotional development of the students at the higher secondary level.

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TOTAL QUALITY MANAGEMENT IN TEACHER EDUCATION INSTITUTIONS AS PERCEIVED BY TEACHER EDUCATORS

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ABSTRACT

Total Quality Management (TQM) assures a continuous improvement in the field of education. It is a collective effort to reach an organization to its utmost improvement. The purpose of the present study is to study the practices of TQM in Teacher Education Institutions (TEIs) and to find out the strong and weak areas of the different indicators of TQM in Teacher Educational Institutions (TEIs). The sample of the study consisted of 91 teacher educators. A questionnaire of 110 items in 11 areas followed a five-point Likert scale was answered by the teacher educators. The result of the study showed that there are some strong and weak areas of the different indicators of TQM in TEIs and TQM in the self-finance TEIs as perceived by the teacher educators is found better than the govt. aided TEIs in West Bengal. The result of this study suggests that by fixing weak areas, TEIs need to pay special attention to quality, so that they can achieve their goal.

Keywords : *TQM, TEIs, Teacher educators, Student-teachers.*

Introduction

Higher education institutions provide higher education as well as professional education. At present, new courses have been created, as a result of the demand for knowledge as well as with the aim of modern education. In education curriculum, teaching method, the role of the teacher, and the role of the institution have been changed. A quality-based organization or institution to achieve excellence always tries to bestow its best with its continuous improvement. Perhaps the best achievement is not possible, but it can be fought for.TQM, TQM is a method by which an institution can achieve its excellence in overall efforts.

Total quality management is a philosophy, not just a general idea. It is a mechanism to increase the quality of services in a certain way in a short time; it is a process by which the success of an organization reaches its peak. Total quality management is the process of continuous improvement in any organization where innovation, human resource management, infrastructure management, finance management, administrative management, leadership, etc. is involved. Total quality management is indicated by TQM. Where three words are observed. The first is the 'Total', the second is 'Quality' and the third is the 'Management'. The meaning of 'Total' is made up of the whole or involvement and input of everyone. The meaning of 'Quality' is a degree of excellence and the meaning of 'Management' is the way or act of controlling, handling, and directing. According to Besterfield, TQM is the art of managing the whole to achieve excellence. (Cited in Senthilvelan, 2013).

Review of Related Studies

On reviewing the literature it was observed by the researcher that in India and abroad many works have been done related to this ground. After reviewing India and abroad literature of this study, it was found that the TQM had a significant impact on education. The same result has been seen in the following studies like Farooq et. all (2007), Dahil and Karabulut (2013), Paul and

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Pineda (2013) Sivaramakrishnan (2017), Khan et. all (2018). This has been observed that higher education institutions can improve quality by implementing TQM principles (Bhalla, 2012; Sudha, 2013). It is noticed that there is no difference between the opinion of males and females and between science and arts secondary school teachers about TQM in education (Wani, 2014). Paul and Pineda (2013) showed that there was no significant relationship between TQM and their level of effectiveness. This has been also noticed that the TQM may play a good role in the institutions and the institutions have an opportunity to improve their services (Sivaramakrishan, 2016; Harith, 2013; Panday, 2014). Studies of the strengths and weakness of the components of TQM are also to be done by some researchers and suggest that the institutions have to focus on the weak areas and enrich the quality (Panner & Kumaravel, 2005; Gupta, 2005; Thapliyal, 2015). The study on TQM in schools also shows that the TQM level of schools is moderate and some improvements are needed for excellent performance (Taahyadin and Daud, 2018). One study has shown that TQM holds a greater role than developing the performance of the faculty members and applying TQM to faculty teaching skills was recommended (Sha'r & Harahsheh, 2013). From the above studies, it is clear that it is very important to implement Total quality management in teachers' training institutions. The literature is collected from different available sources. In this context, the present study becomes very important and unique from the all studies present in this review.

The rationale for the Study

Total quality management in education is an important issue. The requirement of Total Quality Management is being seen in every level of education from the School to the University. And so it is currently being applied in various fields of education including colleges and universities. Due to the explosion of knowledge student enrollment is increasing in higher education. As a result, private or self-finance educational institutions are being created along with government educational institutions. And special attention is being given to TQM for continuous development in these institutions. A successful TQM initiative is to help the educational institutions to reach the top of the development, which is interesting to face various competitions.

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Therefore, the current study has been taken to understand the Total Quality Management practices in Teacher Education Institutions and to compare the Total Quality Management practices as perceived by the Teacher Educators with respect to government aided and self-finance Teacher Education Institutions. This study was conducted on government aided TEIs and self-finance TEIs of North 24 Parganas and South 24 parganas in West Bengal and it was delimited to the B.Ed institutions of The West Bengal University of Teachers' Training, Education Planning and Administration (WBUTTEPA)

Method for the Study

The investigator used survey method for studying the problem

Sample for the Study

In this study samples were selected from the TEIs under WBUTTEPA 14 TEIs were selected with a total sample size of 91 teacher educators, 26 Teacher educators were selected from govt. aided TEIs and 65 Teacher educators were selected from self-finance TEIs

Tools used for the study

According to the requirement of the study, the researcher used the Mukhopadhyay's Institutional Profile Questionnaire (MIPQ) as a tool, developed by Mukhopadhyay (2001).

Procedure

In this study researcher selected the Teacher educators of 5 govt. aided and 9 self-finance Teacher Education Institutions under WBUTTEPA for data collection. At first, all the Principals or HODs of the TEIs were contacted and with their due permission, the MIPQ Questionnaire was administered to the Teacher educators of the TEIs. All the questions are in the statement form and all respondents were asked to respond freely.

Results

Based on the received data the institutional profiles were created in Teacher Education institutions.

Table 1

Average scores in the areas of the MIPQ of TEIs perceived by the teacher-educators

	AREAS	Score: <7.58	Score: 7.58+
Area 1	Principal as leader		7.69
Area 2	Teacher quality		9.84
Area 3	Linkage	3.22	
Area 4	Students quality		8
Area 5	Co-curricular activities (CCA)		8.74
Area 6	Teaching		9.79
Area 7	Office Management	4.28	
Area 8	Relationship		8.3
Area 9	Management Resources		7.9
Area 10	Examination		8.57
Area 11	Job Satisfaction	7.05	

The average scores in the areas of the MIPQ as perceived by the Teacher educators of govt. aided TEIs are as follows:

Table 2

Analysis of Institutional Profile of Govt. aided TEIs perceived by the teacher educators:

AREAS	Scores <7.22	Score 7.22+
Area 1		8.8
Area 2		10.42
Area 3	2.19	
Area 4		8.57
Area 5		9.11
Area 6		9.42
Area 7	1.84	
Area 8		9.07
Area 9	7.07	
Area 10	6.8	
Area 11	6.11	

The average scores of self-finance TEIs in the areas of the MIPQ perceived by the Teacher-educators are follows:

Table 3

Analysis of Institutional Profile of self-finance TEIs perceived by the teacher educators

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AREAS	Scores <7.72	Score 7.72+
Area 1	7.24	
Area 2		9.61
Area 3	3.63	
Area 4		7.76
Area 5		8.6
Area 6		9.93
Area 7	5.26	
Area 8		8
Area 9		8.23
Area 10		9.22
Area 11	6.27	

It is explicit (table-1) that in Teacher Education Institutions the areas such as Principal (Area 1), Teacher (Area 2), Students (Area 4), CCA (Area 5), Teaching (Area 6) and Relation (Area 8) were identified as strong areas as the average scores of the Institutional Profile stand well above the cut off score or cut off point of 7.58 (Grand Mean) and Linkage, office and satisfaction were identified as weak areas that are falling below the average scores of the Institutional Profile.

It is explicit (table-2) that in aided TEIs the Area 1, Area 2, Area 4, Area 5, Area 6 and Area 8 were identified as strong areas as the average scores of the Institutional Profile stand well above the cut off score or cut off point of 7.22 (Composite Mean). Teacher quality (Area 2) is the strongest area in govt. aided TEIs with an average or mean score 10.42. The areas such as Area 3, Area 7, Area 9, Area 10 and Area 11 were identified as weak areas that are falling below the average scores of the Institutional Profile. Office Management (Area 7) is the weakest area with an average score of 1.84. It is clear that (table 2) in self-finance TEIs the areas such as Area 2, Area 4, Area 5, Area 6, Area 8, Area 9 and Area 10 were identified as strong areas as the average scores of the Institutional Profile stand well above the cut off score or cut off point 7.72 (Composite Mean). The areas such as Area 1, Area 3, Area 7 and Area 11 were identified as weak areas in

self finance TEIs that are falling below the average scores of the Institutional Profile. Teaching quality (Area 6) is the strongest area with an average score of 9.93 and the Linkage (Area 3) is the weakest area with an average score of 3.63.

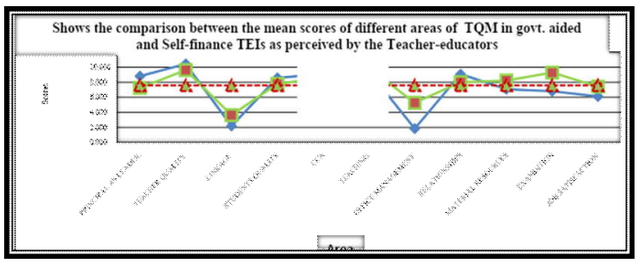

Fig. 1: Comparison of the different areas of TQM perceived by the teacher educators between the govt. aided and self-finance TEIs

Table 4

Total Quality Management as perceived by the Teacher educators with respect to the govt. aided and self-finances TEIs

PERCEPTION ON TQM PRACTICES, PERCEIVED BY THE TEACHER EDUCATORS	**Nature of the Institutions**	**N**	**Composite Mean**	**S.D**	**Grand Mean**
	Govt. Aided TEIs	26	7.22	7.86	**7.58**
	Self-finance TEIs	65	7.72	6.33	

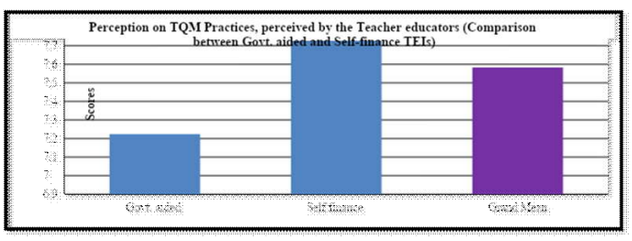

Fig. 2: Shows the comparison of Composite Mean scores between the teacher educators of govt. aided and self-finances TEIs in TQM perceived by the teacher-educators

It is observed that the composite mean score (fig. 2) of the self-finance TEIs is 7.72 as perceived by the teacher educators which is above the grand Mean 7.58 and the composite mean of the govt. aided TEIs is 7.22 which is below the grand Mean 7.58. Besides, the standard deviation score (table-4) of self-finance TEIs as perceived by the teacher educators is less than that of the govt. aided TEIs. Hence the Total Quality Management in the self-finance TEIs as perceived by the teacher educators is found better than the govt. aided TEIs.

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Discussion

The purpose of this study was to look how different components or indicators of Total quality management are practiced in teacher education institutions. In this study it has been observed that the Total Quality Management practices in the self-finance TEIs as perceived by the teacher educators was found better than the govt. aided TEIs in West Bengal. It was observed that the area Teacher and Students quality, CCA, Teaching and Relationship are the strong areas in both of the TEIs. Although the mean score of Teacher and quality of students, CCA and Relationship in govt. aided TEIs is more than the mean score of self finance TEIs. It must be said that the teacher educators of govt. aided TEIs are adequately trained and well qualified than that the self finance TEIs. It has been shown that the leadership of the Principal of the govt. aided TEIs seems to be better than that the self-finance TEIs and this area is the weaker area of the self-finance TEIs. Therefore it can be said that the principals of govt. Aided TEIs is very dynamic and they shows a lot of initiatives and much concern for staff. This shows that the area Linkage is the weak area of both of the self-finance and govt. aided TEIs. Therefore in Teacher Education Institutions have very less connection with the outside agencies. The TEIs have low connection with the former students and external people. They usually don't get outside expert for lecture to the teacher educators and student-teachers. The TEIs maintains less connection with the old students and the parents also. Most teachers and principals are not members of the local bodies in teacher education Institutions. Among all of the areas this is the weakest area in govt. aided and self-finance teacher education Institutions. It was observed that the area Office management is the weak area of both of the govt. aided and self-finance teacher education institutions. The weaker offices management indicates the lousy condition

of the office of the Teacher Education Institutions. It is not sure that office is very helpful. The weak area shows that office is not able to manage all the work systematically and there are many threats in the office management. The various records may not be properly maintained by the office in both of the TEIs. The area Resources is the stronger area of self-finance TEIs and the weaker area of the govt. aided TEIs. So the resource like library books, audio-visual aids, teaching learning materials like charts, Maps etc. are frequently available than that the govt. aided TEIs. This shows that the area Material Resources seems to be better than that the govt. aided TEIs. This shows that the area Examination seems to be better than that the govt. aided TEIs as perceived by the teacher educators. The area Job satisfaction is the weaker area of both self-finance and govt. aided TEIs. Most teacher educators do not enjoy to working their job. Therefore they have low job satisfaction in teacher education institutions. Most of the teachers are not happy with their job. The grumbling is present among the teachers in teacher education institutions that may be affect to the motivation of the teacher-educators. One of the reasons for low job satisfaction is the complaints about management and different facilities of the teacher education institutions.

The findings of this study revealed that some areas of Total Quality Management in Teacher education institutions are stronger areas and some are weaker areas with reference to the perception on TQM practices as perceived by the Teacher educators. It was found that one of the strong area of the TEIs as perceived by the Teacher educators is leadership of Principal. The same finding has been seen in other research study: Gupta (2015). Other stronger areas of the TEIs as perceived by the Teacher educators are quality of teachers, quality of studnts, CCA, quality of Teaching and Material resources. The same findings have been seen in research study: Gupta (2015); It was found that the area The Teacher quality, Students quality and Relationship in TEIs as perceived by teacher educators are stronger areas. The same findings have been seen in the study: Panneer and Kumaravel (2015). Other findings indicated that the weaker areas of the TEIs as perceived by the Teacher educators are Linkage and interface, Office management and Job satisfaction. The same findings have been seen in research studies: Panneer and Kumaravel (2015) and Gupta (2015). Another finding indicated that the Total Quality Management in the self-finance TEIs as perceived by the teacher educators was found better than the govt. aided TEIs in West Bengal. Here the stronger areas of govt. aided TEIs are Leadership of Principal, Teacher and students quality, CCA, Teaching and Relationship. The same findings have been seen in research study Gupta (2005) in the area Principal as leader, Teacher quality, CCA and Teaching quality. The weaker areas of govt. aided TEIs are Linkage, Office Management, Material Resources, Examination and satisfaction of job. The same findings have been seen in research study Gupta (2005) in the area Linkage, Office Management, and Job satisfaction. The findings indicated that the stronger areas of self finance TEIs Teacher and students quality, CCA, Teaching and Relationship, Material resources and Examination. The same findings have been seen in the research study Gupta (2005) in the area Leadership of Principal, Students and Teacher quality, CCA, Teaching quality, Material resources.

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Conclusion

In conclusions, the results of this study provide some momentous insights. There are some stronger areas and some weaker areas in Teacher Training Institutions perceived by the teacher educators on their Perception on Total Quality Management practices in TEIs. This study gives a fresh look about the weaker areas and stronger areas of the Teacher Training Institutions and also shown the perception on TQM practices, as perceived by the Teacher educators. The result of this study suggests that by fixing weak areas, TEIs need to pay special attention to quality, so that they can achieve their goal.

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SOCIAL MEDIA: ARE THE BUDDING TEACHERS ADDICTED TO ITS USAGE?

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ABSTRACT

The main purpose of this study was to identify the level of social media addiction among budding teachers. A survey research method was used. A self madeLikert scale was constructed and administered on a sample of 217 budding teachers in Coimbatore district, Tamilnadu. A cluster sampling technique was employed in this research. Percentages, Mean, Standard Deviation, and Student t-test were used for data analysis. The outcome of the study showed that the majority of budding teachers in the Coimbatore district have a low level of social media addiction.

Keywords : *Social Media, Addiction, Budding Teachers, Student Teachers, WhatsApp*

Introduction

In India, the typical social media usage before the Covid lockdown was nearly 150 minutes per day. But, that figure jumped to 280 minutes per day during when the Covid lockdown which means social media usage increased by 87% in India during the Covid lockdown (Chandramouli, 2020). The excessive use of social media leads to social media addiction among people. Tung (2007) indicated that one who uses social media from 8.5 hours to 21.2 hours per week consider a social media addiction. People spend a lot of time on social media which can make them addicted(Afacan, 2019). According to Cole (2020) 210 million people worldwide are affected by the internet and social media addiction.

Social media addiction can create potential problems among social media users. Research from RSPH and the Young Health Movement (YHM) (2017) described that Social media has been described as more addictive than cigarettes and alcohol, and is now so entrenched in the lives of young people that it is no longer possible to ignore it when talking about young people's mental health issues.

According to D'Souza, Samyukta, and Tejaswini (2018), the internet addiction increased, sleep quality of the female students decreased linearly and significantly. Reducing academic performance is one of the most important consequences of social networking overuse for students (Upadhayay & Guragain, 2017). The overuse of social media often impacts students' psychological and physical well-being (Abbas et al., 2019).

Significance of the Study

The awareness about cigarette smoking, drinking alcohol, and using drugs are promoted by Government and NGOs through different media. But, creating awareness about social media addiction is most urgent for today's scenario. It should start from the schools. Teachers must take responsibility to talk about this issue. The teachers should be able to mold the behavior of youngsters in the desired manner by their own example. This could be done only if the teachers are free from social media addiction. Hence, it is important to practice this habit from teachers when they are getting training in teacher education colleges. Thus, considering the key role of teachers in society, it is important to investigate the level of social media addiction among budding teachers.

Research Questions

The main purpose of the current study is to identify

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the level of social media addiction of budding teachers. Towards this main purpose, the following research questions were explored:

1. Which Social Media platform is used by budding teachers most?
2. What purpose do budding teachers use social media the most?
3. What is the social media addiction level of budding teachers?
4. Do budding teachers think that they are addicted to social media?
5. Does the level of social media addiction of budding teachers differ in terms of the locality of residence, academic qualification, and marital status?

Methodology

Method

Descriptive survey method was employed in this research to investigate the social media addiction level of budding teachers. According to Landman (1988), Descriptive research is thus a type of research that is primarily concerned with describing the nature or conditions and degree in detail of the present situation.

Participants

The research population consists of all second-year students who were studying Bachelor of Education (B.Ed.) at Teacher Education colleges in the Coimbatore district for the batch of 2019 -2021. Educational Institutions are shut down temporarily and classes were going through online due to Covid -19 issue (Mariappan, 2020). Hence, the researcher decided to collect the data online with the help of google forms. The researcher used a cluster sampling technique to collect the samples. The researcher got only 217 samples from that four colleges. By using a sample size calculator, the researcher identified that the sample size (217) shared the 20% proportion of the research population (1800).

Instrumentation

A Five-point Likert-type 'Social Media Addiction Scale (SMAS)' which was developed and standardized by the investigator (Arunkumar, 2020), was used to collect data. The researcher prepared the social media addiction based on four factors (Social Media usage, User thought, User Mood, and User physical activity). The tool consists of 26 items regarding social media addiction. According to the opinion of the experts, the items on the scale were found suitable for the present sample and study. Hence, the face and content validity was established. The internal coefficient of consistency was found as 0.88 through the Cronbach Alpha reliability method.

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Statistical techniques employed

To find the level of addiction to social media usage among budding teachers, a percentage analysis was employed. In order to study the influence of locality of residence, marital status, and academic qualification student's t-test was used.

Results

Research Question 1 : Which social media platform is used by budding teachers most?

To answer this research question, data were grouped and analyzed using frequency counts and percentages, as shown in table 1.

Table 1

Social media platforms most commonly used by the budding teachers

Social Media	Frequency	Percentage
WhatsApp	124	57%
Facebook	1	0.50%
Instagram	32	15%
Twitter	1	0.50%
YouTube	59	27%
Total	217	100%

Table 1 indicates that WhatsApp is the most preferred social media platform among the budding teachers in Coimbatore district.

Research Question 2 : What purpose do budding teachers use social media the most?

To find the answer to this research question, the researcher analyzed the response of budding teachers for the purpose of using social media.

Table 2
Purpose of using Social media among budding teachers

Purpose	Frequency (F)	Percentage (%)
Getting current News	92	43%
Touching with friends	46	21%
Entertainment	31	15%
Sharing opinion	3	1%
Fill the leisure time	26	12%
Sharing talent	3	1%
Academic Purpose	16	7%
Total	217	100%

It is observed from the table 2 that the most number of budding teachers (43%) from the sample used the social media for getting current news.

Research question 3 : What is the social media addiction level of budding teachers?

To answer this research question, data were grouped and analyzed using frequency counts and percentages, as shown in table 3. It shows that social media addiction among the budding teachers in the Coimbatore district.

Table 3

Level of Addiction

Level of Addiction	Frequency (f)	Percentage (%)
Too much level of addiction	5	2%
High level of addiction	11	5%
Moderate level of addiction	53	25%
Low level of addiction	91	42%
No addiction	57	26%
Total	217	100%

Table 3 reveals that 2% of budding teachers have too much social media addiction, 5% of budding teachers have high-level addiction, 25% of budding teachers have a moderate level of addiction, 42% of budding teachers have a low level of addiction, and 26% of budding teachers in the selected samples are not addicted to social media usage. In the selected samples, a total of 74 percent of budding teachers (f=160) are addicted to using social media. Among them, 57% of budding teachers have a low level of addiction. It indicates very clearly that most of the budding teachers in the Coimbatore district have a low level of addiction.

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Research Question 4 : Do budding teachers think that they are addicted to social media?

The investigator questioned budding teachers if they were addicted to the use of social media. Fifty-six participants (26%) responded that they were addicted to the use of social media and 161 (74%) budding teachers replied that they were not addicted. The social media addiction scale score of this 74% of budding teachers was evaluated by the researcher to understand whether or not they are really addicted.

Table 4

The level of social media addiction of budding teachers who believe they are not addicted

Level of Addiction	Frequency (f)	Percentage (%)
Too much level of addiction	2	1%
High level of addiction	5	3%
Moderate level of addiction	31	19%
Low level of addiction	72	45%
No addiction	51	32%
Total	161	100%

It is observed from the table 4 that only 32% of budding teachers' believe correctly that they are not addicted to social media. The belief of the other 68% of budding teachers is false.

Research Question 5: Does the level of social media addiction of budding teachers differ in terms of the locality of residence, academic qualification, and marital status?

To answer this research question, data were analyzed by using the student's t-test. Table 5 shows the influence of locality of residence, marital status, and academic qualification of budding teachers on social media addiction.

Table 5
Budding teachers' social media addiction with regards to the locality of residence, marital status, and academic qualification

Variable	Sub variables	N	M	S.D.	't' value	Remarks
Locality of residence	Rural	128	96.71	19.3	0.89	NS
	Urban	89	94.37	18.84		
Marital status	Married	43	96.11	22.2	0.12	NS
	Unmarried	174	95.66	18.29		
Academic qualification	Graduation	150	95.86	20.05	0.13	NS
	Post graduation	67	95.5	16.78		

In the table 5, the calculated 't' values 0.89,0.12 and 0.13 represent the difference between the social media addiction among budding teachers with regard locality of residence, marital status, and academic qualification respectively. These values are less than the table value of 1.96 at a 0.05 level of significance. Therefore, the variables locality of residence, marital status, and academic qualification does not influence the budding teachers' addiction level to social media.

Discussion

This study found that WhatsApp is the most favored social media platform among the budding teachers and Instagram secures the second position in the Coimbatore district. This finding is validated by the findings of Can and Gökçe (2019) who found that WhatsApp and Instagram are mainly used by University undergraduate students and Kaushik Bhakta (2017) who found that WhatsApp is the most used social media platform among the Undergatude students. This may be due to the fact that WhatsApp and Instagram provide instant and intimate communication for the users when compare with other social media platforms like Facebook, Twitter, etc.

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In the study, the researcher found that only 7% of budding teachers used social media for academic purposes in the Coimbatore district.In contradictory, the study by Balamurugan and Thanuskodi (2019) revealed that 27.7% of college students in Southern Tamilnadu use social media for learning. Kaushik Bhakta (2017) also found that only 12% of undergraduate students used social media for academic purposes in the districts of Howrah and Kolkata. From this comparison, the purpose of using social media for academics has differed in different geographical locations. Hence, it will be beneficial to conduct future studies on this matter.

The main aim of this study is to identify the level of social media addiction among the Coimbatore district's budding teachers. This research found that the majority of budding teachers in the district of Coimbatore have a low level of addiction. This is slightly better than the findings of the study by Sasikala and Anandaraj (2018), which showed that the B.Ed. students' level of social network addiction is moderate in the Thirunelveli district of Tamilnadu. Subathra, Nimisha. M, & Hakeem (2011) also found that almost all the selected college students in the Coimbatore district (98%) were addicted to social network chatting at a medium level. This is an awakening call for teacher educators, parents as well as budding teachers to concentrate on proper social media usage habits.

Most of the budding teachers in the Coimbatore district feel that they are not addicted to social media usage. But, the results of this study are contrary to their thinking. 68% of budding teachers who think they are not addicted to social media use are unknowingly addicted to it.So, budding teachers need to self-monitor their use of social networking sites.No significant difference was found in the level of social media addiction among budding teachers with respect to their locality of residence, marital status, and academic qualification.

Limitations and suggestions

This research has many strengths and some limitations. Some ideas are provided for future research within the scope of these limitations.Since the data obtained in this study are conducted on 217 budding teachers studying in four different teacher education colleges in Coimbatore district, Tamilnadu, it may be suggested to reach a large sample size from different regions. Gender-based analysis was not conducted because of a limited number of

male respondents. It may be suggested to collect more male samples to include genderwise analysis in the future. This study focused on only five social media platforms viz., WhatsApp, Facebook, Youtube, Twitter, and Instagram. In the future, research may be carried out on other social media platforms like Share Chat, TikTok, We Chat, Moj, etc.

Conclusion

The findings of this study can help budding teachers, teacher educators, administrators, parents, and decision-makers to understand the level of social media addiction of budding teachers.The government, University members, and mental health organizations can use this study as their reference in identifying the social media addiction and undertaking preventive and remedial actions to guide the future teachers. The results of this study can help the research scholars who are doing similar studies in the area of social media addiction.

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EFFECTIVENESS OF ICT INITIATIVE ON THE LIVELIHOODS OF STUDENTS IN TAMIL NADU: SOME REFLECTIONS

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ABSTRACT

In today's digital world, Information and Communication Technology (ICT) has positively impacted both social and personal aspects of human life. It is a vital factor of progress for nations, communities, and individuals. The Tamil Nadu Government has introduced an ICT-based educational development scheme to promote and protect the livelihood opportunities of students from rural poor communities. An evaluative study has been conducted to assess the effectiveness of the scheme on the livelihoods of the participants. The present study perceived that the ICT initiative has had a remarkable effect on their lives.

Key Words: *ICT, Development, Livelihoods, Empowerment, Government*

Introduction

In the postmodern era of technology and advanced visual communication, human society has seen a lot of innovation and progress. Communication, information management, time management, and routine tasks of life have seen a complete and dramatic modernization. The technology used to reform this information is thoroughly processed and accessed by the common man with a simple swipe of a finger. Undoubtedly, this technology has had an amazing impact on social-cultural and educational front as well.

Nuanced and developing countries have recognized that technological strategies are the future of public policies and government administrations. It brings about a social transformation as it effortlessly brings information and services to people, enabling them to touch each other's lives through social platforms. Moreover, it empowers the stakeholders to expand people's usage of government services, bringing it to par with private stakeholders. Be it job creation, economic growth, or networking with other people and countries, technology has played a major role. It is the pathway for contemporary communication and enhanced confidence in the standard of work. The new generation of students is seeing a completely new way of life and livelihood opportunities as they access ICT (Information and Communications Technology) for the burgeoning markets.

In the recent past, the human capital sector had adopted ICT usage from the stage of implementing government policies to the institutional level and even on the individual level. As more schools encourage mixed techniques of teaching and learning, ICT has become an essential part of the curriculum, proving once and again that technology has transformed teaching techniques and subject learning. Other than that, ICT has also fortified the skills of individuals, enhancing their livelihood, and improving their skills at work. But, an evolution of this level has to open doors for all sections of society. The transformation of ICT has been inclusive because it has brought a positive impact on the socio-economic status of women and depressed classes of society. The elevation in the quality of life among weaker sections of society is truly an admirable feat of ICT.

Tamil Nadu's Free Laptop Scheme

To understand the colossal potential of ICT, the Tamil Nadu Government commenced varied activities for entrepreneurs, medium enterprises, and government agencies so that they can disseminate indigenous knowledge and grassroots innovations that could put us on the center stage.

Tamil Nadu is a pioneer state as it implemented IT initiatives in various sectors. But it is also significant to identify contributors' attitudes toward development,

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their initiative to get involved, and their level of empowerment. Such innovative administrations also require proper setup, social acceptance from the environment, and public participation to make it a successful norm in society. In such a context, this study attempts to provide a few success stories that aid in understanding how ICT influenced students' learning process.

As part of their welfare schemes and public policies, the Tamil Nadu Government has already given laptops to many students studying in government institutions and government-aided ones. Lauded as unique and important, this initiative has given students from lower rungs of the society, an insight into the far-reaching capacity of technology and how it can come to their aid as they become part of the globalized market. This ambitious step by the Tamil Nadu Government was set in motion on September 15, 2011, shortly after which 68 lakh laptops costing Rs 10, 200 crores were distributed to the students so that they may use them to acquire a large range of skills.

Evaluating Social Environment

As the abovementioned scheme is highly individual by nature, there is a need to evaluate the level at which each student stands in terms of employability, computing skills, affinity to society, and empowerment within it. Additionally, it also endeavors to examine the economic and social background of the families and understand to what extent, ICT can bring about a positive change in the lives of these students. The aim is to view the benefits of ICT to their livelihoods. This discussion has been conducted with the focus on a group of Tiruvallur-based Government and Government aided Arts and Science College students.

Methodology

Case studies among students in Tiruvallur District, Tamil Nadu were decided upon as it has a good mixture of rural and urban features. The district consists of urban characters on the eastern side of the district, within the Metropolitan limit, while depressed classes and weaker sections of the society populated the Southern and Northern parts of the district. Six students from different walks of life were chosen for this study. Once they were identified, they were informed that this particular study would be on the effect that the Government supplied laptops had on their lives. It was emphasized that the study's goal would be to understand the change in their perspective when they benefited from this government scheme. To grasp the impact of this scheme, the subsequent case studies were taken up.

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Subsidized education and restrictive social environment: A reality

All the participants who were chosen for this study are from economically poor backgrounds. Their family income ranged from a minimum of Rs. 10,000 to a maximum of Rs. 15,000 only. A senior secondary high school education was the highest educational qualification of the earning members of their family. All participants of this study studied only in government institutions from the start of lower primary education, until their post-graduation. Their education was subsidized as it is in government educational institutions. As the participants have watched their parents struggle to pay even that subsidized amount, they pursue their education with great passion and determination.

Case Study – I

Bridging the gap in Knowledge Inequality

The first participant is Praveena, an Undergraduate student at the Government Arts & Science College. She perceived that the use of the laptop provided many positive impacts on my life. Hailing from a poor family in a remote village called Ayathur near Thiruvallur, Praveena's father, the sole earner in her family, works as a Plumber. She recounted that without the help of the Laptop distribution scheme which was introduced by the then Chief Minister J. Jayalalitha, she would not have been able to purchase the laptop on her own. In the case of this participant, it is quite clear that the scheme was useful for students like her who belong to such marginalized and weaker sections of society. Praveena also explained that since she comes from a weaker section of society, her English language and communication skills were quite poor. She was often ostracized in a classroom full of students who were aware of her predicament. Praveena disclosed that in

such a situation, the free laptop that she received through the scheme came to her rescue. Not only did it offer her the confidence she needed, but it also motivated her to request her teacher for help so that she could improve her vocabulary with the help of the laptop. She is now even more determined to learn about the technical aspects of computing and delve deeper into communication skills. Pleased with her performance, Praveena concluded by saying that the skilled group in her class has accepted her, now that the knowledge gap has been bridged.

Case Study – II

A Slow and Steady Approach to Employment

The next participant of the study is Mahalakshmi, an Undergraduate in the Government Arts and Science College who has also agreed that the scheme has improved her personality greatly. Like Praveena, Mahalakshmi is also a participant from a lower-class family. The sole earning member of the family is a Mason (contract laborer) whose monthly income is around Rs. 14,000. As a resident of a town on the outskirts of Tiruvallur, Mahalakshmi admitted that she had not heard of a computer or a laptop for a long time. When she learned of it, she knew she could not afford it. She thanked former Chief Minister J. Jayalalitha for the scheme that allowed her to access a technological advancement like a laptop. But, even when she got access to it, she had no idea how to use it or learn from it. This is where she pays gratitude to her friends and her teachers who patiently stood by her and helped her learn the device. It was they who helped her type her name in it. She was slowly able to improve her English language and communication skills as well. When her family fell on hard times, Mahalakshmi was forced to take a part-time job as a Data Entry clerk for a salary of Rs.7,000. The typing skills she had practiced on her free laptop gave her the confidence and the employment skills she needed to support her family and continue her education.

Case Study – III

Minority Welfare: Empowering the Gritty Girl Child

Sultana Begum, another Undergraduate student in the Government Arts and Science College of Tiruvallur said that the laptop she received opened doors to better abilities and work skills. Sultana was one of three sisters in her family. She desperately wanted to help out her father who was the sole breadwinner for the family and earned a meager income of Rs.10,000 as a Foreman. Her situation was similar to that of a Mahalakshmi. Being a girl from a rural community, she had no idea what a laptop was and how it can assist her with her goals. The laptop she received pushed her to a situation where she put her full effort into learning technical skills that would facilitate an employment possibility. Her typing skills paid off. She was able to get a part-time job as a billing staff in a wholesale agency that paid her around Rs, 7,500 a month. As she said that she was now using her salary to educate her younger sisters, Sultana profusely thanked the former Chief Minister J Jayalalitha for giving her a laptop that got her an employment opportunity during her education. Towards the end, Sultana added that the Tamil Nadu Government looked out for minority students who liked her through such schemes and promised to remain faithful to the former Chief Minister.

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Case Study – IV

Putting a Spotlight on Technical Knowledge

Ganesh is the son of a call taxi driver and he is from a village in Tiruvallur. He is in the second year of his Under Graduation course in Government Arts and Science College. The family's monthly income is barely 15,000 and he could not afford to buy his laptop. When he first got the free laptop from Tamil Nadu Government, he felt connected to a different world that gives him the confidence that he can get economic opportunities. He is astounded by the amount of knowledge he can glean from the technology it possesses. He is now up to date on the news and through the navigation; he is also able to improve his English. The people in his peer groups, who looked down on him for being different, now seem to be closer to him. Ganesh explained that the technical knowledge gave him the pride and confidence to stand tall in front of all his peers. He credited the Tamil Nadu Government for giving him that optimism in worldly knowledge that the laptop can offer him.

Case Study – V

Empowering the Struggles of those who dare to dream

Vignesh belonged to a family below the poverty line. The family income comes up to barely Rs.10,000 and he has two sisters in his family along with his father who works security in a private company. As someone who dreamt of working up the ladder and ridding his family of poverty, Vignesh's window of opportunity was that laptop he received for free from the Tamil Nadu Government. His family and others were wary as they had never heard of such technological advancements. But, as a person preparing for competitive exams, this second-year Under Graduate student, Vignesh found the laptop the perfect place to gather information, search for question papers and learn a lot about current events. But, what gave Vignesh so much happiness was that even as a person living under the poverty line, the laptop gave him a reputation and name among his peers. He thanked Former CM J Jayalalitha for erasing the line between the rich and the poor through this scheme.

Case Study – VI

Skill Education: The Path to Destroy Social Inequality

JohnSathish, the last participant, also belonged to a poor family, below the poverty line. As an elder brother of three sisters, John Sathish was very nervous about their futures. He knew he needed to get a job as soon as he completed the Under Graduate degree he was studying for. Their father was a washerman and only earned about Rs. 10,000 a month. Just when he thought he couldn't even dream about purchasing a laptop or computer, he got a free government scheme laptop that brought information to his fingertips. As a commerce student, he was eager to learn new techniques in Data Entry but even that required English language knowledge and communication skills. The laptop was the step in the right direction to get the language skills. The laptop was his greatest source of motivation because he soon learned to operate Tally packages with the help of his friends and even began working in a part-time job in a Chartered Accountant's office with a salary of Rs.8,500 that is highly beneficial for his family. Sathish wholeheartedly thanked the Tamil Nadu Government for introducing this scheme so that students from depressed classes can also improve their economic predicament.

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Conclusion

When it comes to welfare programs and schemes, Tamil Nadu Government has always spearheaded social progress. So, it falls upon us to evaluate the impact of every one of these schemes. Laptops for students of government and government-aided educational institutions by the Government of Tamil Nadu have to be investigated from several perspectives. From the abovementioned case studies, certain observations have been brought out.

1. The scheme helped facilitate communication skills for those participants who were at a disadvantage.
2. The students, do not look at it as a trivial piece of technology. They use it efficiently to gain knowledge that they could not otherwise access in their environments.
3. The laptops connected the students with the world and not only boosted their morale but also managed to procure employment opportunities.
4. The hope they get through this scheme is noteworthy. It helped them prepare for challenges, browse materials and check emails. The scheme demonstrated that students who come from struggling socio-economic backgrounds can also be employable.

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RELATIONSHIP BETWEEN EMOTIONAL INTELLIGENCE AND ACADEMIC ACHIEVEMENT OF HIGH SCHOOL STUDENTS

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ABSTRACT

This study mainly focuses on the relationships between Emotional Intelligence (EI) and Academic Achievement (AA) among High School Students. A sample consisting of 340 students of standard IX was taken through the survey method and put into a t-test and Pearson Correlation to find results. The result reveals that there is an intrinsic and direct correlation between EI and AA among High School Students. The findings of the study hold an important implication for the teaching-learning process so to enable the students to achieve academic standards as they experience the ambiance of classrooms where EI levels are high.

Keywords: *Emotional Intelligence (EI), Academic Achievement (AA), High School Students*

Introduction

Throughout civilization, education accounts for bringing behavioral changes in a person. The adolescent, ranging between the ages of thirteen to nineteen, is an age of "storm and strain" as Hall would put it. A transition phase where turmoil rules. Naturally, adolescents are exposed to some devastating external and internal skirmishes. Hence adolescents are forced to undergo an unexpected and rapid transition for which they are not prepared. As a result, it can cause confusion, conflicts, uncertainties, loneliness, fear, anxiety, stress, and frustration in their day-to-day life. Thus, the educational program comprising emotional skills enlightens and strengthens them to manage their adolescence patterns and explicitly about their emotional conflicts.

An authentic education aims to create a healthy integrated person, who is to be emotionally intelligent and socially mature. No doubt, such students will surely be exceptional and star performers in academic pursuit. A well-meaning education should be designed in developing skills to handle self and others at the same time. These two parameters are essential in character formation; they need to be equally emphasized along with academic achievement. While doing so, the researcher tries to find out whether there exists a relationship between EI and AA taking variables like sensitive aptitude and speculative attainment.

Significance of the study

Education is the process of faculty development from childhood to adulthood. Good (1959) defines Academic Achievement as the knowledge attained or skill developed in the school subjects, usually designated by test scores or marks assigned by the teachers. Education brings about substantial changes in the individual relating to his physical, intellectual, and emotional conditions. Education, particularly High School education plays a vital role in personal and professional success. True education should make a person compassionate and humane. Similarly, emotional intelligence also should be able to strike balance between emotions and reasons, while processing, the person achieves high self-esteem and become compassionate and empathetic which is demonstrated in social relationships.

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Daniel Goleman states that Emotional Intelligence is "the capacity for recognizing our feelings and people's feelings in and others, for motivating ourselves and for managing well the emotions in ourselves and our relationship". While thinking about the role of education, Don Bosco (1899) observed that "In every young person, a point of goodness is accessible and it is the primary duty of the educator to discover that sensitive cord of the heart so as to draw out the best in the young person."

Hence, the researcher strongly felt the need for this study to explore the relationship between EI and AA since education, as visualized by Daniel Goleman, should stress EI just as much as academic intelligence.

Review of Literature

Mallick, Rinku. Singh. Archana, Chaturvedi. Pumam and Kumar, Narendra. (2014) conducted "A Study on Higher Secondary Students Emotional Maturity and Achievement". This study found that (i) There is a significant difference between boys and girls high school students with respect to emotional adulthood level (ii) There is no significant difference between rural and urban high school students with respect to the level of emotional aptitude. (iii) There is a significant difference between male and female high school students in the levels of speculative attainment in economics.

Nadeem and Ahmad (2016) conducted a study on Emotional Intelligence and speculative attainment of higher secondary students. The sample of the study comprised 200 higher secondary students (N=100 boys and 100 girls) of 12th-grade selected randomly from various higher secondary schools of district Budgam. Rogan EmotionalIntelligence test was used to collect data from the selected sample. The aggregate marks of the previous two classes were taken as their academic achievement. Percentage, mean, and t-tests were used for the analysis of the data. The findings of the study revealed that male and female higher secondary students differ significantly on the composite score of emotional Intelligence. The study further highlighted that male higher secondary students have higher academic achievement than female higher secondary students.

Nithiya and Raj (2018) conducted a study to investigate Sensitive Aptitude and Hypothetical Achievement in Chemistry. To study the problems, the investigator employed the descriptive survey method as a technique. Sample 107 consisted of 1498 higher secondary (XI standard) school students in Kanyakumari District. Percentage analysis, t-test, and Pearson product-moment correlation were used for analyzing the data. The results showed that (i) there was a significant relationship between emotional aptitude and Hypothetical Achievement in Chemistry and (ii) there was a significant difference between Achievement in Chemistry of higher secondary school students with respect to gender and medium of study.

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Rajakumar & Soundararajan (2012) "A Study on Higher Secondary Students' Emotional Maturity and Achievement in Economics in Tirunelveli District". The sample comprised 1060 higher secondary students in the Tirunelveli district. The tool used was the Emotional maturity scale by K.M Roma Pal. Findings: There is a significant difference between boys and girls in higher Secondary students with respect to their Emotional aptitude. There is no significant difference between rural and urban school students with respect to their Emotional Maturity. There is a significant difference between male and female Higher Secondary students with respect to their Achievement in Economics. There is no significant difference between rural and urban school students with respect to their Achievement in Economics.

Statement of the Problem

"Relationship between Emotional Intelligence and Academic Achievement of High School Students"

Operational Definitions

1. **High School Level :** In this study high school level refer to students studying in 9th standard.
2. **Emotional Intelligence :** It refers to the ability to monitor one's own and of others in students in the ninth standard.
3. **Academic Achievement :** It refers to the academic attainment of the ninth-standard students in their examinations.

Objectives

of the study

To find out the significant relationship between Emotional Intelligence and Academic Achievement of High School students.

Hypotheses of the study

1. There is no substantial difference in emotional intelligence and academic achievement among High school students.
2. There is no significant difference in emotional intelligence and academic achievement with respect to Gender.
3. There is no substantial difference in emotional intelligence and academic achievement with respect to rural and urban high school students.
4. There is no correlation between Emotional Intelligence and Academic achievement among High school students

Method of study

Normative survey research method is used for the present study.

Sample of the study

The sample of the present study consists of 340 students of class IX selected from the different schools of Dindigul District out of which 170 boys and 170 girls. The sample was collected by using the multistage random sampling technique.

Tools used

The researcher adopted the Emotional Intelligence Inventory Standardized and validated by Shubhra Mangal (2013) for Emotional Intelligence and a self-developed tool for Academic Achievement.

Statistical Techniques Used

In the present study, various statistical measures such as Descriptive and Inferential statistics i.e. Mean, Standard Deviation (S.D.), T-test and Pearson Correlation have been used to find out the Emotional Intelligence of High School Students with respect to their Gender and Location

Delimitation of the study

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Limitations are the boundaries of the study (Best, 1992). Any piece of research work has its own merits and demerits, limitations, and drawbacks.

The following are the limitation of the present study:

1. The study is limited to the High school level, only Std IX
2. The present study is conducted only in Dindigul District, Tamil Nadu.

Analysis and interpretation of data

Hypothesis : 1 There is no substantial difference in emotional intelligence and academic achievement among High school students

Table: 1

Substantial difference between emotional intelligence and academic achievement among high school students

Sub variables	N	Mean	S.D	df	't' value	Re mark
Emotional Intelligence	340	89.85	6.65	338	10.71	S
Academic Achievement		85.22	7.04			

(At 5% level of significance table value of 't' is 1.96)

Calculated't' value (10.71) is greater than the table value (1.96) at 5% level of significance. So, it is concluded that there is a significant relationship between emotional intelligence and academic achievement among high school students. Hence the hypothesis is rejected.

Hypothesis : 2 There is no significant difference in emotional intelligence and academic achievement with respect to Gender

Table 2

Significant difference in emotional intelligence and academic achievement with respect to Gender

Sub variables	Group	N	Mean	S.D	df	Calculated 't'-value	Level of significance
Emotional Intelligence	Boys	170	85.50	6.45	338	5.79	S
	Girls	170	80.12	9.76			
Academic Achievement	Boys	170	90.78	6.28	338	1.83	NS
	Girls	170	89.48	7.01			

(At 5% level of significance table value of 't' is 1.96)

In case of emotional intelligence, the table shows that the Mean value 85.50 is obtained for Boys students and Mean value 80.12 is obtained in Girls Students. The calculated 't' value of 5.79 is greater than the table value of 1.96. So it is concluded that there is a significant difference in emotional intelligence in terms of gender. Hence the hypothesis is rejected.

In the case of academic achievement, the table shows that the Mean value of 90.78 is obtained for Boys students, and the Mean value of 89.48 is obtained In Girls Students. The calculated value of 1.83is less than the table value of 1.96. So it is concluded that there is no significant difference in academic achievement in terms of gender. Hence the hypothesis is accepted.

Hypotheses 3 There is no substantial difference in emotional intelligence and academic achievement with respect to rural and urban high school students.

Table 3

Substantial difference in emotional intelligence and academic achievement with respect to rural and urban high school students

Sub variables	Group	N	Mean	S.D	df	Calculated 't'value	Remark
Emotional Intelligence	Rural	170	85.42	6.38	338	1.79	NS
	Urban	170	83.87	9.18			
Academic achievement	Rural	170	89.15	7.11	338	1.78	NS
	Urban	170	90.45	6.73			

(At 5% level of significance table value of 't' is 1.96)

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In case of emotional intelligence, the table shows that the Mean value 85.42 is obtained for rural students and Mean value 83.87 is obtained in urban Students. The calculated value of 1.79 is less than the table value of 1.96. So it is concluded that there is no significant difference in academic achievement in terms of gender. Hence the hypothesis is accepted.

In the case of academic achievement, the table shows that the Mean value of 89.15 is obtained for rural students, and the Mean value of 90.45 is obtained In urban students. The calculated 't' value of 1.78is less than the table value of 1.96. So, it is concluded that there is no significant difference in academic achievement in terms of rural and urban. Hence the hypothesis is accepted.

Hypothesis 4 There is no correlation between Emotional Intelligence and Academic achievement among High school students

Table 4

Correlation between emotional intelligence and academic achievement among high school students

Sub variables	N	'γ' value	Remark
Emotional Intelligence	340	0.432	S
Academic achievement			

The calculated '□ value (0.432) is greater than the table value (0.098) with corresponding to the 0.05 level of significance. Hence the null hypothesis is rejected. Hence it is concluded that there is a high level of positive correlation between Emotional Intelligence and Academic achievement among High school students.

Findings

The finding shows that there is a significant relationship between emotional intelligence and academic achievement among high school students well coincides with the study made by Preeti (2013) stated that speculative attainment without emotional intelligence does not indicate future success and the absence of emotional aptitude also indicate weak personality and ability to construct relation at working

place as well as in schools. In a similar trend, the finding of the study undertaken by Parveen, Malik, and Aziz (2012) revealed that emotional intelligence contributes to and enhances the cognitive abilities of students. It is also true that higher academic achievers showed higher levels of emotional intelligence (Abdel-Hafez & Hassan 2011; Morales & Esther 2013).

The finding shows that there is a significant difference in emotional intelligence with respect to gender. The boys (mean = 85.50) are moderately better off with regard to their emotional intelligence than girls (mean = 80.12) in the High School. This may be due to the fact that boys, as they are well exposed to social outreach and interaction with cross-cultural realities, seem to have developed higher emotional regulations than girls, who are a normally limited circle of social outreach and mostly home-bound. This finding is in line with the result of the study made by Summiya Ahmad, Hayat Bangash, and Sheraz Ahmad Khan (2009) on Emotional Intelligence and Gender Differences, where it was found that males (mean = 419.16) as against females (mean = 380.88) and stands out better in dealing with perceiving, comprehending and expressing emotions. It is also in agreement with a study done by Asghar Ali, Nadia Saleem and Nida Rahman (2021) showed that male students (214.78) were highly emotionally intelligent than female students(202.70). Male students were also more intelligent on factors of emotional self-regulation and emotional self-awareness than females while there was no significant difference in the subscale of interpersonal skills.

Conclusion

Emotional intelligence helps one experience more positive than negative emotions. The level of emotional intelligence can help to calm the mind and thus to increase the absorption of information received. Thus, as a result, it will contribute to students' academic achievement. It is suggested that the student's academic achievement may be raised with the use of emotional intelligence training and workshops. Yoga and meditation are other means of succeeding emotional stability. Emotional intelligence could be renowned not just for academic attention but also make better upcoming in the desired field.

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EFFECTIVENESS OF CONCEPT MAPPING STRATEGY ON STUDENTS' ACHIEVEMENT IN ZOOLOGY AT THE HIGHER SECONDARY LEVEL

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ABSTRACT

This study examined the effect of concept mapping teaching strategy on students' achievement in zoology at XI standard students. It also examined the differential effect on achievement among zoology students. The study used two groups pretest-posttest equivalent-groups design, 50 students for adopting for the present research. Zoology Achievement Test (ZAT) developed by the researcher and validated by experts was used for the present study. Students taught using the concept mapping strategy achieved higher scores and significantly better than those taught using the conventional (lecture) method. The study recommended among other things that since concept mapping is found to be an effective strategy and enhances achievement among zoology students, teachers of this subject should accept it as one of the strategies they can use in zoology classrooms.

Keywords : *Concept mapping, examined differential effect.*

Introduction

Concept mapping measures the cognitive activities of the learner (Otor, 2011). It teaches mental skills as opposed to psychomotor activities. The pedagogical use of concept maps is to help students learn subject matter more meaningfully in science. The study of psychological theories of learning is very important and valuable as they are the fundamental theoretical foundations for innovative instructional strategies which are used in the teaching-learning process of science. This study is anchored on Ausubel's (1968) psychological theory of learning which is concerned with the processing of information and making it more meaningful to the learner so that it can be better understood and used.

Need For the Study

The emphasis of modern science teaching and learning is on learners' active participation in the learning process. This concern calls for the use of teaching strategies that emphasize the teaching of process skills of science and child-centered inquiry-based instruction. It is expected that the teaching strategies emphasize the teaching of process skills of science as noted by Rejane, Zelia, and Milke (2004). Zoology is one of the core science Subjects among science students in the higher secondary school curriculum in India and is linked to almost everything on earth. It plays a vital role in the industrial, technological, and economic development of any nation. It also features prominently in the areas of health, and agriculture to mention but a few. It is therefore a catalyst for sustainable national growth and development. Zoology teachers have applied several instructional approaches in teaching zoology yet the desired result in student achievement has not been achieved. According to my observation past 10 years, the low achievement of students in zoology among others includes teachers' inadequate preparations and methods adopted in teaching this subject. The pursuance of how to improve the achievement of students in zoology is the concern of this investigation.

Statement of the Problem

The researcher observed that the instructional strategies zoology teachers adopt could be responsible for the low achievement among the students in this subject. Certain difficult zoology concepts have also been contributing to poor achievement among zoology students. This study is therefore set to find out if concept mapping teaching strategy could enhance students' achievement in zoology of higher secondary students.

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Objectives

The following are the objectives of the study.

1. To find out the effectiveness of Concept Mapping Strategy in science teaching.
2. To find out the mean scores of the pre-test and post-test of control group students in their achievement in Zoology.
3. To find out mean scores of the pre-test and post-test of experimental group students in their achievement in Zoology.
4. To find out and compare the mean scores of the control and experimental group students in their gain scores.

Hypotheses

The following are the hypotheses of the study:

1. There is no significant difference between the mean scores of the control and experimental group students in their pre-test.
2. There is no significant difference between the control and experimental group students in their post-test.
3. There is no significant difference between the control and experimental group students in their gain scores.

Methodology

Experimental design is the blueprint of the procedures that enable the researcher to test hypotheses by reaching vivid conclusions about relationships between independent and dependent variables. In this experimental research, the investigator has chosen the two groups pretest-posttest equivalent-groups design for her study.

The pretest-posttest equivalent groups' design is

R O1 X O2	X gain = O2 – O1	O1 O3 – Pre-tests
R O3 C O4	C gain = O4 – O3	O2 O4 – Posttests

In this experimental method two groups of students are selected. One of the equivalent groups serves as the control group in which the subjects are taught by the traditional method. The other group serves as the experimental group in which the subjects are taught using the Concept Mapping Strategy. Both the groups had the same number of students and they were given equal time for each session. The treatment was given for 20 days with a schedule of one hour per day for each group and no students were absent on those days. The treatment was given without any disturbances.

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Tool Used

A research instrument that was validated by experts in Zoology subject, measurement and evaluation were used for this study namely Zoology Achievement Test (ZAT). The ZAT was made of thirty items drawn from the difficult zoology concepts. The instrument reliability was found to be 0.83.

Sample

The sample for the present study constitutes 50 XI standard Students of D.G.M Higher Secondary school at Sethiathope in Cuddalore district. As per the scoring of a general intelligence test in biology, 25 students were chosen as a control group and 25 students were chosen as the experimental group. Both groups were equated on the basis of the scores of the intelligence test.

Statistical Techniques Used

Statistical techniques serve the fundamental purpose of description and inferential analysis. The following statistical techniques were used in the study.

1. Mean (M) and standard deviations (SD)
2. 't-test for determining the significance of the difference between the means of the two sub-groups.

Analysis of Data

Hypothesis 1: There is no significant difference between the control and the experimental group students in their pre-test scores.

Table 1

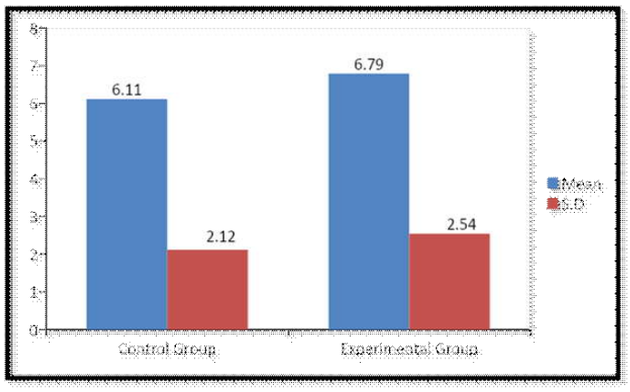
Difference between the control and experimental group students in their pre-test scores

Group	N	Mean	SD	't' Value		Remarks
				Calc.	Table	
Control	25	6.11	2.12	0.65	1.96	N.S.
Experimental	25	6.79	2.54			

The above table 1 shows that the computed t value of 0.65 is less than the table value of 1.96 at the 0.05 level and hence it is not significant. Consequently, the null hypothesis is to be accepted. So there is no significant difference between the control group and experimental group students in their mean scores of pre-test.

Figure.1

Mean Score of Pre Test of Control Group and Experimental Group



Hypothesis 2: There is no significant difference between the control and the experimental group students in their post-test scores.

Table 2

Difference between the control and experimental group students in their post-test scores

Group	N	Mean	SD	't' Value		Remarks
				Calc.	Table	
Control	25	9.48	2.03	2.35	1.96	S
Experimental	25	15.18	3.62			

The above table 2 shows that the computed 't' value of 2.35 is greater than the table value of 1.96 at the 0.05 level and hence it is significant. Consequently, the null hypothesis is to be rejected. So there is a significant difference between the control group and experimental group students in their mean scores post-test.

Figure.2

Mean Scores of Post Test of Control Group and Experimental Group

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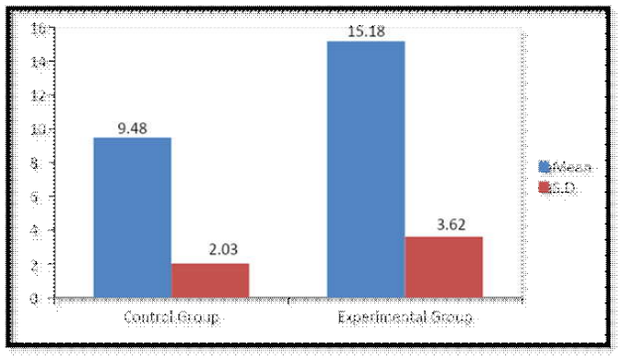


Hypothesis 3: There is no significant difference between the control group and the experimental group students in their gain scores.

Table 3

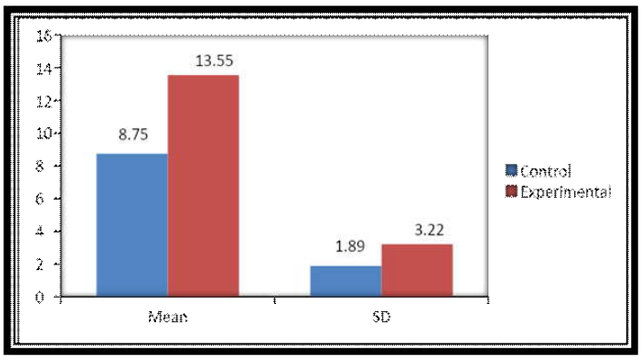
Difference between the control and experimental group students in their gain scores

Group	N	Mean	SD	't' Value		Remarks
				Calc.	Table	
Control	25	8.75	1.89	3.35	1.96	S
Experimental	25	13.55	3.22			

The above table 3 shows that the computed value of 3.35 is greater than the table value of 1.96 at the 0.05 level and hence it is significant. Consequently, the null hypothesis is to be rejected. So there is a significant difference between the mean scores of gain scores of the control group and the experimental group.

Figure.3

Gain Scores of Control Group and Experimental Group



Conclusion

However, considering their pretest-posttest gains, this means that there is a significant difference in the mean achievement test scores of students taught using concept mapping and those taught using the conventional method. The experimental group achieved significantly higher than the control group. Since concept mapping is found to be an effective teaching strategy that enhances achievement among zoology students, zoology teachers should accept it as one of the strategies they can use in classrooms.

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REBUILDING THE EXAMINATION SYSTEM IN HIGHER EDUCATION

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ABSTRACT

University Education Commission-1948 has rightly stated that "If we are to suggest in single reform in the education system, it should be of examination reform, still Significant and not achieved yet. The new education policy emphasizes moving away from rote learning of facts. The examination is a continuous and lifelong process in our educational system. It also occupies a central position in our educational system. From time to time, examinations in our educational system have come in for severe criticism. Since the time India attained independence the question of changing the pattern of examination along with changing the educational system in our country has been engaging the attention of the researchers, educationists, teachers as well as government. Unfortunately, the maxim happens to be misconceived and misinterpreted. It does not achieve the real objective of the curriculum. The majority of the students have come to look upon them as necessary evils-hurdles to be crossed by fair means or fouls. With increasing malpractices coming into vogue, examinations have actually become farcical in the character.

Keywords: *Examination reform, higher education, rebuilding,*

Introduction

The present examination system has evolved over a period of time from ancient India, where there were no examinations in Gurukuls and Madarsas, to the present concept of a rigorous examination system, although it is an inherent part of the outcome of Education. Redundant to say that the present examination system has been borrowed from the British education system. Or we can say it, is the result of colonization of the education system by the British. The purpose of education has totally shifted from imparting knowledge to just executing examinations, without giving due attention to whether the student is learning or not? Here, I must quote, in the year 2018 the day after the CBSE results were declared, a seventeen-year-old girl committed suicide having failed to clear the exam. Unfortunately, this was not the first time when such an incident has happened. Concerned about the students' well-being, Awanish Sharan, who was the collector of Kabirdham district, M.P. posted a picture of his class 10th and 12th board results. He wanted to send out a message that scoring poor marks or failing in an examination is not the end of the world and that there is always a way to turn things around. He cites his journey as an example and says that he too scored average marks in his board exams but through sheer hard work and perseverance, he managed to crack one of the toughest exams in the country. His post, which clearly articulates the point, is a beacon of hope for countless students who might be wallowing in despair and self-pity at present. " The other day I came across a piece of shocking news in the newspaper that one student committed suicide because of an unexpected result in the exam. I appeal to all students and their parents not to take the result very seriously! It's just a number game. You will be getting many more chances to prove your caliber. Keep moving...I am sharing my marks of 10th, 12th and graduation!"

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Every year, board exam results are often followed by news of students committing suicide for failing to secure "adequate" marks in an exam. Here I solicit, who is responsible for that, what is the real, the core purpose of education?

Pandit Jawahar Lal Nehru while delivering a convocation address speech at the University of Allahabad in 1947 said: What should be the objectives of the University and its role in national life? A university stands for humanism, tolerance, reason, the adventure of ideas, and for the search for truth. It stands for the onward march of the human race towards even higher objectives. If the university discharges its duties adequately, then it is well with the nation and the people."

Nowadays, we adhere to the orthodox examination system. Scholars having knowledge of the different domain is declared 'failed' or of low ability in a particular set of examination". However, they have contributed a lot to the world in their life later. If we remember, Einstein has failed in high school mathematics; Maynard Keynes 'scored' the lowest marks in Economics in the British Civil Service Examination. George Mendel 'failed' in Biology twice and the second time his examiner wrote that Mendel "lacks insight and the requisite clarity of knowledge." The list can go on. We the teachers cum-examiners should ponder over our evaluation system, about how we classify and certify our learners? We are ignoring the hard fact that no two evaluators can assign the same marks to the same answer script if evaluated separately (falls 1928) as quoted by PanditaRamesh.

Apart from this, we are facing a lot of problems. If we have gone through various printed and non-printed media shall know the news like students committing suicide due to exam stress, leakage of question paper before exams, malpractices in the examination, etc. students not satisfied with their teachers' let's think, Why it is happening so? Who is responsible for it? Either our education system or mismanagement in the examination system. So it is the need of the hour for rebuilding the examination system. Although we know that, there is no standard or we can say the full proof system of examination, which may be considered perfect. In this case, we can follow the system of evaluation of our ancient India where a direct mode of the evaluation was implemented, but day by day we have diluted the concept and level of previously exams were conducted to assess the level of knowledge and skill(Ramesh. 2017)

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Background of the Study

Numerous research studies have been conducted on examination reform and suggested various measures of examination reform, simultaneously various committees and commissions were constituted for the sake of rebuilding of examination pattern, and most of them made strong recommendations. Apart from this UGC in its report entitled, "Examination Reforms-A plan of Action" recommended various measures for the rebuilding of the examination system, and more emphasis is given to internal assessment. In spite of the efforts of UGC, the recommendations could not be carried out wholeheartedly by the colleges and universities. The recommendations made by the Kothari commission 1964 can be quoted here, "Reform in examination or for the matter in the evaluation should be aimed to improve the reliability and validity of exam rather than certifying the performance at given in the moment of time."In National Workshop on "Examination Reforms in Higher Education" organized by the association of Indian Universities, New Delhi.8,2018 Prof. FurkanQamar, quoted that," trust the teacher, for assessment, examination, and evaluation. And recommended the concept of giving autonomy to the teachers themselves in conducting the examinations and opposed the idea of having a well-defined controller of the examination office. He cited the system followed by Sri Aurobindo School of International Education, Pondicherrry, and Leeds University, the U.K. where there are no examinations other than the entrance examinations. We should shift from the concept, School is not only a center of knowledge and knowing, but also a junction of a variety of sources of knowledge and different ways of knowing. We should move toward a system of learning outcome-based learning. In the year 2018, the University Grant Commission (UGC), the apex body of higher

education issued a public notice to take suggestions from various stakeholders on examination reforms. In this regard, UGC has constituted a committee to recommend and suggest reforms in the examination system. We all know that the Indian education system is one of the largest education systems in the world but an honest question that needs to be asked to all of us today is, does India well qualifies to avail the status of a developed nation with respect to education? In spite of numerous absurdities, there are still many causes for which we can feel to be privileged, to be proud of many accomplishments that match the most developed nations in the world. Many of the developed countries are far behind Indian achievements. We have the largest democracy; we serve as a place for the international market, the largest booming economy, the largest user of the internet, and many intellectual capabilities working outside India in a different capacity.

When we talk about the quality of the bulk of our graduates is appalling. The students are doing their best – they are studious and disciplined, they cram, clear entrance tests, pass examinations, and obtain degrees. But on the other hand in this scenario where, many university graduates do not have even rudimentary knowledge, conceptual understanding, or problem-solving skills in their own discipline. A culture of rote learning, lack of practical knowledge, and a poor examination system has undermined our higher education. Most graduates lack basic communication skills and have no problem-solving capacity. Educated unemployment is on the rise, largely because most graduates cannot promote wealth creation and are therefore unemployable. Annual Employability Survey 2019 report followed by AspiringMinds reveals that 80% of Indian engineers are not fit for any job in the knowledge economy and only 2.5% of them possess tech skills in Artificial Intelligence (AI) that the industry requires or we can see the data from another profession also.

Behind this, a fact related to students of higher education is the extreme pressure they feel as a result of cutthroat competition for survival of the fittest. Everyone wants good grades in fact outstanding grades, necessary to excel in today's competitive professional world. Not only students but parents and teachers' expectations of their children have also been influenced by this trend. They expect higher grades from their children and put pressure on them to perform better. The success of students is decided by their examination score rather than the knowledge or skill they acquire. It is generally believed that a fair amount of examination stress is beneficial for academic success but sometimes excess of it may lead to anxiety, depression, examination phobia, and many other psychological problems among students. The high level of stress during examination is not only the result of a student's aspirations or parental expectations, the archaic and disgraceful examination system for higher education is equally responsible for it.

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The stress is often on testing the student's memory and rote learning. A careful memorizing of answers to questions posed in the three previous years (excluding the immediate past year) will guarantee high grades! Analytical skills, application of knowledge, problem-solving capacity, and innovation are rarely tested. There is no stress on continuous appraisal and the student is only judged by his/her performance in a single final examination. There is an absolute disconnect between what is taught in the class and what is tested. One would imagine that the teacher who teaches the course is best suited to evaluate a student's performance in that course. But in the current system, a completely disconnected evaluator sitting somewhere else grades the student's exam.

In most western universities, the professor who teaches the course evaluates the students throughout the duration of the course, administers tests or exams, and grades the test papers! Very often, the student's final grade for the course is published within a week after the finals and there is a transparent mechanism for addressing any issues the student may have with the way his/her work is evaluated or graded. The tragedy is that Indian students are smart, ambitious, and hardworking and are just responding to what the system is demanding. The entire education infrastructure with the myriad coaching institutes is feeding this demand. If only the

nature of demand is altered, the students and the associated infrastructure will respond to adapt to the new conditions and improve supply. There are many models of examinations for evaluating the students skillfully and creating demand for better education by redefining success.

According to National Crime Records Bureau (NCRB), about 2% of the total suicides that happened in 2015 are because of failure in examinations. That number is about 2672. Following are the top 4 States contributing to the number i.e. Assam (414), Maharashtra (383), Tamil Nadu (322), and Karnataka (282)

Where Exams are becoming one major killer of the country among youth, then what is the sole purpose of the Education and testing mechanism that we had developed. Examination is just a tool taken by our system to test our Knowledge/Skill over a Subject, but our entire learning/ teaching process is defined by the structure of exams. Standardization is the biggest killer of Learning. I get a feel of the Observer Effect with our Exams, the very Act of Exams (Observing) itself is altering the way we Learn (behave). Our Pressure, Stress is always high during Exams and it is always projected that the 3 hours of our life are going to be a path decider. Then comes the next 3 hours and so on. The time has really come to pave way for new Open Assessment methodologies that is practically possible in every school in India. Assessment should be more of horizontal segregation and not of a vertical one. Assessment should help the student realize his strengths/skills and properly channel them. If that is the case, I will be proud of my competencies more than the % . That speaks for me and about me.

The examination system of India has remained unchanged for so many years. No doubt, this system is full of stress. That's why most Newspapers and Magazines publish articles on this topic during the examination session. In the education system of India, the ability of a student is decided by an exam. In this system, there is no place for the performance of a student in a full academic session. Scoring more and more marks in exams has become the only aim of a student.

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The impact of this stressful examination system is immense. Those who are in favor of this system should think about those bad impacts. First of all, if this system is good then all those who secure good marks in these must be brilliant and successful in life but the reality is different. Nowadays most institutions don't give admission on the basis of a mark. They have a separate test and this trend is growing rapidly because they have no faith in this examination system. This faulty examination system is forcing so many students to commit suicide every year. These incidents are growing rapidly.

Examination is a continuous and lifelong process of our educational system. It also occupies a central position in our educational system. From time to time, examinations in our educational system have come in for severe criticism. Since the time India attained independence the question of changing the pattern of examination along with changing the educational system in our country has been engaging the attention of the researchers, educationists, teachers as well as government. Unfortunately, the maxim happens to be misconceived and misinterpreted. It does not achieve the real objective of the curriculum. The majority of the students have come to look upon them as necessary evils-hurdles to be crossed by fair means or fouls. With increasing malpractices coming into vogue, examinations have actually become farcical in the character. Almost everybody feels convinced that, as conducted at present; they do not serve the purpose for which they are intended. A very convincing demonstration of this growing cynicism about the university, college, and school examinations is the increasing preference shown by employers for recruitment tests devised by them.

Significance of the Study

The main aim of education is to develop all domains of the student's personality including cognitive, affective, and psychomotor domains. The extent to which these three domains of personality have been developed and at which level the aim of education is achieved can be evaluated only by the mean of examination, it helps to measure the levels of development. To evaluate the three different domains the examination system should also be

designed in such a manner to analyze the three aspects of human personality. The examination system should include the interest, aptitude, intelligence, and emotions of the students but the present examination system is only cognitive-based, and affective and psychomotor domains lag behind.

We should have shifted from the concept of examination, and evaluation, to the concept of creation of knowledge and self-evaluation, in this process students can play a very important role in the rebuilding of the examination system & Quality of education. In order to implement a self-evaluation system, we use the concept of assessment as, Assessment as learning, whereas Assessment as learning emphasizes students' meta-cognition. In this students are active assessors of their learning.

Learning cannot be reduced to exams only. Our education must equip us to face various challenges of life as well I sincerely believe that anything that challenges us polishes us too. Here, I must quote the statement made by our honorable Prime Minister, about prakisha pecharcha 'How we deal with examination is only important. We should take it as an opportunity. Do not live life for the exam but should live life to attain knowledge', says Narendra Modi. If you treat exams as an opportunity, you will learn and enjoy them. Exams give you an opportunity to assess your own strengths, he adds.

Rebuilding Examination System : Above discussion provides us with a direction to invent a system whereas we can use the term evaluation to assess the creation of knowledge by the student, and their emotion in form of change rather than assess the information stored in his/her mind. Keep in mind that assessment stands for prediction. It's just (that Anumanlagana) means we can evaluate, and assess, we only predict what he /she will do on the basis of performance which is not accurate. we can measure all the domains of Knowledge.

Secondly, exam systems need to be given more autonomy and more flexibility to the teacher where the teacher can decide and students can accept her performance. We must accept that assessment only predicts not ensure a particular performance. Educational psychological principles suggest that different learners learn differently, and, hence, to test all learners through a written test of the same type in the subject after the subject is unfair to those whose verbal proficiency is superior to their writing skills, those who work more slowly but with deeper insight, or those who work better in groups than individually.

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Reduction of Exam Stress & Anxiety

The current pattern of examination is a form of orthodox that induce unnecessary anxiety A lot of stress among the learners leads to various kind of malpractices and we know education is all about making lateral linkages or creating an "ecology of knowledge in the brain A shift is required to test real understanding of core concepts. The student should be allowed to give the exam at their pace. And Teachers can assess the knowledge of students in their own way and can do more work to attain desired standards. A special chance should be provided to those students who have proved themselves that he/she can qualify the desired standards set by the teacher.

To start best 'best practices in exam' Ethical consideration is required from all the stakeholders of education. In this consideration, we need to take an oath that, we will have to follow honesty, transparency, and accountability to move forward in this direction, detailed mark schemes should also be made public through various modes, and marking should be done by experienced examiners.

A reform, which we believe to be of at least equal importance (as the issue of replacing marks by grades) is a fuller disclosure of how the student fares relative to his or her peers. To present a wider range of performance parameters on the marks sheet. Absolute marks/grade percentile rank among all candidates of that subject and percentile rank and among peers.

We often used the term merit although it is a more complicated concept. Can we honestly assert that two students who both attained 75% in their board exams are equally meritorious? The answer is No because they can differ with respect to their school, learning style, examiner subjectivity & individuality. But printing this data on the mark sheet constitutes a start toward a fairer definition of merit.

We should establish an evaluation system in which there where's, No stress on children. Provide autonomy to the teacher and students. Let them decide the mode of evaluation, Provide space for the teacher& Students.

Continued on Page 144

IMPACT OF TEACHING STRATEGIES ON REFLECTIVE THINKING: A META-ANALYSIS STUDY

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ABSTRACT

The main purpose of this meta-analysis was to examine the effectiveness of teaching strategies in term of reflective thinking. For this purpose, the present study included 14 experimental studies with a total of 794 students. The random effects model (Cohen d, 1988) was used in this meta-analysis study to analyze the effect size of teaching strategies. The findings revealed that teaching strategies have a positive impact on students' reflective thinking. According to the random-effects model, the overall effect size (Cohen's d, 1988) value from the studies was 1.022 (SE=0.236) with a confidence interval of 0.558 to 1.485. Further, out of 14 experimental studies, 12 studies had a significant impact whereas two studies had no significant impact on reflective thinking. Out of five teaching strategies on reflective thinking at the school level reviewed, the cloud-based learning Programme has more effect size (1.794) on reflective thinking. Similarly, out of nine teaching strategies for students at the higher education stage, problem-based learning has more effect size (of 2.74) as compared to other strategies. The study suggests the use of a cloud-based learning program as an effective teaching strategy for developing reflective thinking among school students whereas problem-based learning is an effective teaching strategy for improving reflective thinking among the students at the higher education stage.

Keywords: *Effect size, meta-analysis, reflective thinking, teaching strategies*

Introduction

Reflective thinking deals with intellectual and affective activities that lead to exploring past experiences in order to develop an in-depth understanding (Boud, Keogh, & Walter, 2005). Reflective thinking comes under higher order of thinking ability and helps the students to inquire and introspect within themselves for personal growth. It helps the learners to reduce the repetitive wrong-doing as well as optimizes learning from experiences by providing a platform to look back and think of the best strategies to achieve goals and their efficiency. Learners who think reflectively become aware of and control their learning by actively accessing what they know, what they need to know, and how they bridge that gap (Sezer, 2008). Reflective learning practice is the mentally disposed of the mode of learning in which learners actively think about framing and reframing the learning schemata from internal and external encounters through internal dialogues, critical experimentation, connections, and contact with themselves and others to foster a more nuanced and creative mentality that ensures the capacity to evolve.

Rationale for the Study

Reflective learning is closely linked to the concept of experiential learning. It helped in the development of self-awareness among learners which is a major element of emotional intelligence as well as a better understanding of others. Creative thinking, critical thinking, and active participation in the learning process are developed through reflective practices (Moon, 2004). Reflective learning is a meaning-making process where the learner has to construct, deconstruct and reconstruct their knowledge. By analyzing the above importance of reflective thinking, every teacher/teacher

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educator/instructor should think about different ways which provide a meaningful learning environment where students develop their reflective thinking ability. In the 21st century, many psychologists and experts developed different methods, applications, and activities which develop reflective thinking ability. A meaningful and effective learning environment is highly necessary to develop reflective thinking and make them skilled and knowledgeable individuals. This learning environment is dependent upon different types of strategies/ interventions/programs meant for developing reflective thinking. Now the concern is to analyze these methods/ strategies and examine their effectiveness before using them in the classroom. Therefore, the main objective of this paper is to analyze the effectiveness of teaching strategies in terms of reflective thinking ability.

Research Questions

The objective of this meta-analysis research was to compile the findings of an independent study that was conducted to determine the impact of teaching strategies on the reflective thinking of students. The following research questions were formulated for the meta-analysis;

1) Do teaching strategies affect students' reflective thinking?
2) Which is the better effective teaching strategy for reflective thinking at the school level?
3) Which is the better effective teaching strategy for reflective thinking at the higher education level?

Methods and Procedures

Method

Meta-Analysis : The current paper quantitatively synthesized the result of previous studies on the effect of teaching strategies on students' reflective thinking at different levels of education. For the above purpose, the investigator used the meta-analysis technique to combine the findings of different studies. The outcomes of individual experiments are compiled and re-analyzed (Glass & et al, 1981).

Publication Bias : For calculating the publication bias, the investigator employed the classic fail-safe N statistical technique, which estimates the number of studies with non-significant effects required to get the significance finding to P =0.05. In addition, a funnel plot was used in this paper to visually identify bias in publication.

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Data Collection

Literature Search Procedure : The investigator searched research papers related to teaching strategies for reflective thinking in several phases. First, the investigator examined the research article in online databases and resources (ERIC, JSTOR, Science Direct, SAGE Journals, Taylor & Francis, Shodhganga, Springer and Wiley- Blackwell as well as Google scholar). During the searching stage, the investigator used some key terms to search the literature such as 'intervention', 'teaching strategy', 'teaching method', 'instructional model' along with the linking term reflective thinking, and reflective learning. In the next step, the investigator included the research papers which are published in the International Journal of Social Science and Humanities; International Journal of Education and Practice; British Journal of Educational Technology; Anthropologist; Indian Journal of Applied Research; International Journal of Academic Research and Reflection; Journal of Education in Science, Environment and Health; European Journal of Educational Research; Participatory Educational Research. The search process was completed at the end of March 2021.

Inclusion Criteria : For the selection of relevant studies, the investigator adopted two phases in the screening process. In the first phase, the investigator was screening the title and abstract of studies and in the second phase, full articles were screened. The selection of research papers for review was made on the basis of the following inclusion criteria such as (a) teaching strategies focusing on the developing reflective thinking ability; (b) studies undertaken between 2010 to 2020; (c) studies have used quasi-experimental research design with two groups (experimental and control group); (d) The sample sizes, means and standard deviations of studies are given; (e) studies available in the English language.

Coding Process : At the beginning stage, the investigator developed a coding form to include the

relevant studies, then the studies that provided the selection criteria were coded in the year of publication, research design, target group, level of education, and statistical data (mean and standard deviation). As such, 68 papers were initially selected by applying the above coding procedure, but only 14 papers were selected for this Meta-analysis.

Data Analysis

Effect size : It is a statistical analysis technique that helps to compute the effectiveness of teaching strategies in this meta-analysis process. This analysis technique also provides information about the magnitude and direction of the difference between two groups or the relationship between two variables. There are several methods to calculate an effect size. One of the Cohen's d (1988) is based on sample average, especially small sample size (Balta & Sarac, 2016). In this meta-analysis paper, the average sample size per study was around 28 (below 30) which is considered a small sample size. Therefore, the investigator used Cohen's d (1988) method to calculate the effect size of the teaching strategy. CMA 3.3 (Comprehensive Meta-Analysis software) software was used by the investigator to calculate the effect size of teaching strategies in this meta-analysis.

Interpretation of Effect Size : Different authors interpret the effect size in different ways in their articles, but in this paper, the investigator follows Yasin & et al., (2019) guidelines to interpret the effect size. The category of low effect size lies between 0.0-0.4, the medium effect size is starting from 0.5-0.7 and the high Effect Size is valued from 0.8-2.

Homogeneity : Homogeneity statistics were used to examine if the outcomes of the studies shared the same effect size in the population or if all are different. On the basis of the Q statistics value, the investigator decided either the random effect model or fixed-effects model is used in the study. The result of the following table helped the investigator to decide whether to apply a random and fixed effect size model in the study to analyze the effect size in this study.

Table 1
Result of Random and Fixed Effect Model Statistics

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Model	Effect size	df	Q-value	SE	Z	P	I^2	Tau^2	95% confidence interval	
									Lower limit	Upper limit
Random	1.022	13	115.62	0.24	4.070	0.00	88.8	0.69	0.558	1.485
Fixed	0.946			0.08	12.32	0.00			0.792	1.099

The table 1 demonstrated that overall effect sizes of Random and Fixed effect model are 1.022 & 0.946 respectively which show high effect size according to Yasin & et al., (2019) guideline. Further, the significant value of Q-statistics Q (13) = 115.624 which is P<0.5 shows the heterogeneity of effect size. Therefore the investigator decided to apply the random-effects model to analyze the effect size.

Results

Study Characteristics : This Meta-analysis paper is based on 14 experimental studies comparing 794 students (Control group-383 & Experimental group-411). These studies were divided according to stages of education: school level-5 and higher education level-9 (teacher education-6 & university students-3). Regarding the result of these studies, 12 studies reported that teaching strategies had a positive impact on reflective thinking out of 14 studies and 2 studies reported no significant impact. The detailed descriptions of these studies are presented in **Appendix A.**

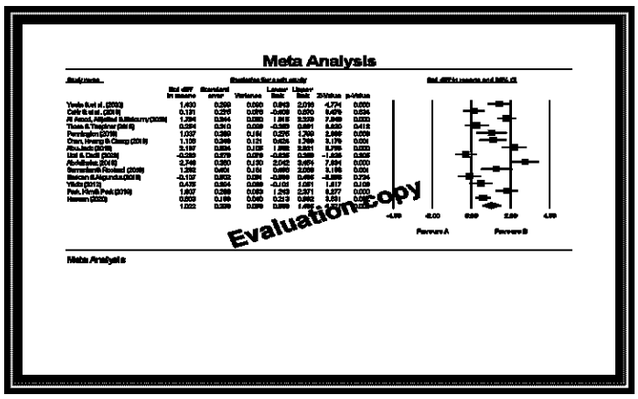
Analysis : Here, the investigator analyzed the research questions one by one

Research question1: Do teaching strategies affect students' reflective thinking?

The following figure 1 displays the effect size of individual studies along with other statistics;

Figure 1

Effect sizes of 14 experimental research papers

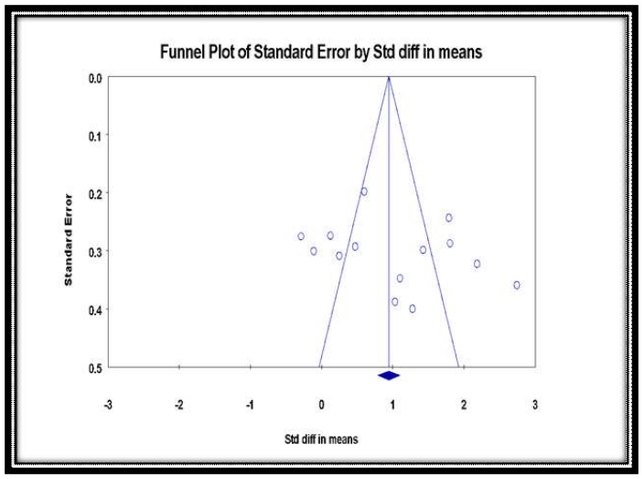


The individual effect size of the study is depicted by a square and the confidence intervals are depicted by a horizontal line across the square in this forest plot. After analyzing the effect sizes presented in the figure, the investigator found that Ural & Dadli (2020) study had the lowest effect size (-0.283) while Abdelhafez's (2018) study had the largest effect size (2.748). It is also found that out of all effect sizes two studies (Ural & Dadli, 2020; Sarican & Akgunduz, 2018) had no significant impact on the reflective thinking of students. The overall effect size of 14 experimental studies was found as 1.022 (SE=0.236) between confidence intervals of 0.558 to 1.485 which shows the high effect of teaching strategies. Therefore, the result of overall effect size indicates that teaching strategies had a positive impact on reflective thinking.

Publication Bias Evaluation : The investigator presented a funnel plot to examine the publication bias in this meta-analysis which contributed to the graphic representation of the publication bias. The following figure 2 explained that the circle outside the funnel plot depicts bias which is why this meta-analysis has publication bias.

Figure 2

Funnel Plot



Further, to examine the possibility of publication bias, the investigator used the classic fail-safe N analysis technique to find the number of research papers with non-significant results required to reduce the significant level to P=0.05. To nullify the effect size, 547 lost research papers with an average zero effect size would be necessary as shown in table 2. Overall, these findings showed that bias could not account for the consistently good results observed across all investigations.

Table 2

Results of Classic Fail-Safe N Test

Z value for observed studies	12.39771
P-value for observed studies	0
Alpha	0.05
Tails	2
Z for Alpha	1.95996
Number of observed studies	14
Number of missing studies that would bring P-value to > Alpha	547

Research question 2 : Which is the better effective teaching strategy for reflective thinking at school level?

The following table-3 shows the effect size analyses of teaching strategies for reflective thinking at the school level.

Table-3

Effect Size of Strategies for School Students

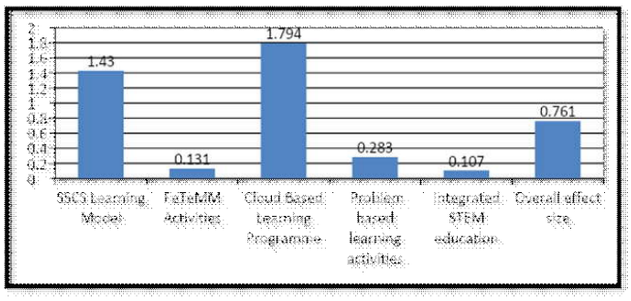
Researcher	Teaching Strategy	Effect size	Interpretation
Yasin & et al., (2020)	SSCS Learning model	1.43	High
Cakir & et al.,(2016)	FeTeMM	0.131	Low
(Al Arood, Aljallad & Baioumy, 2020)	Cloud Based Learning Programme	1.794	High
Ural & Dadli (2020)	Problem-based learning activities	0.283*	Low
Sarican & Akgunduz (2018)	Integrated STEM education	0.107*	Low
	Overall effect size	**0.761**	**Medium**

***No significant effect on reflective thinking**

The overall effect size of teaching strategies on reflective thinking is 0.761, indicating that teaching strategies have a medium effect. This is illustrated in Figure 3, which is shown as;

Figure-3

Bar Graph on Effect Size of Strategies on reflective thinking at school level



This fig.3 shows that cloud-based learning program has more effect size (1.79) as compared to other strategies on reflective thinking at school level. This result shows a significantly positive effect on reflective thinking when treatment is given through a cloud-based learning program. Therefore, a cloud-based learning program was more effective for reflective thinking at the school level which has a high effect size.

Research question 3: Which is the better effective teaching strategy for reflective thinking at the Higher education level?

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The following table-4 shows the effect size analyses of teaching strategies for reflective thinking at higher education stage

Table 4

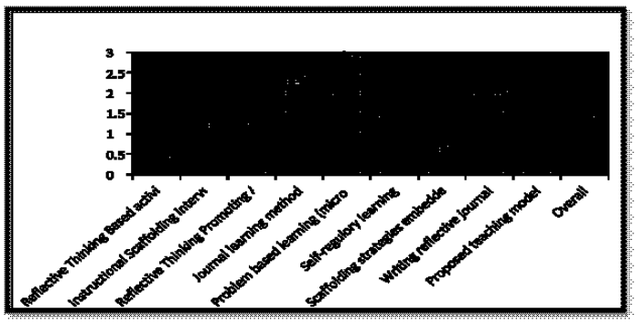
Effect Size of Strategies for Students at Higher Education Stage

Researcher	Teaching strategy	Effect size	Interpretation
(Tican & Taspinar, (2015)	Reflective Thinking Based activities	0.254	Low
(Pennington, 2010)	Instructional Scaffolding Intervention	1.037	High
(Chen, Hwang & Chang, 2019)	Reflective Thinking Promoting Approach	1.106	High
Abu Jado (2015)	Journal learning method	2.187	High
Abdelhafez (2018)	Problem based learning (micro-teaching)	2.748	High
Samanian & Roohani (2018)	Self-regulatory learning	1.282	High
Yildlz (2012)	Scaffolding strategies embedded with web-based peer evaluation system	0.475	Low
Park, Kim & Park (2019)	Writing reflective journal	1.807	High
Hassan (2020)	Proposed teaching model	0.63	Low
	Overall	**1.28**	**High**

The overall effect size of teaching strategies on reflective thinking is 1.28, indicating that teaching strategies have high effect. This can be clearly seen in figure 4, which is shown as;

Figure 4

Bar Graph on Effect Size of Strategies on reflective thinking at higher education stage



This fig.4 shows Problem based learning (micro-teaching) has more effect size (2.74) as compared to other strategies on reflective thinking of students at the higher education stage. This result shows a significant positive effect on reflective thinking when treatment is given through problem-based learning. Therefore, problem-based learning was more effective for reflective thinking at the higher education level which has a high effect size.

Conclusion

This paper presents the meta-analysis of 14 experimental studies, comprising 794 students. The result of the analysis of the effect size of studies revealed that the overall effect size (1.022) of teaching strategies had a positive impact on high effect size. Further, out of 14 studies, 12 studies had a positive effect whereas two studies (Ural & Dadli, 2020; Sarican & Akgunduz, 2018) had no significant effect on students' reflective thinking. Regarding the analysis of effect size of grade level, out of five teaching strategies on reflective thinking at the school level reviewed, the cloud-based learning program (Al Arood, Aljallad & Baioumy, 2020) had more effect size (1.794) on reflective thinking as compared to other teaching strategies. Hence, the cloud-based learning programs significantly improved the reflective thinking among school students. In this cloud-based learning program, a set of activities was included in each unit of the program, which could be divided into three phases i.e between oral and written classroom activities, behavioral activities, and homework. Communication assessment strategy, observation strategy, narrative record, self-revision strategy, learning process description log, performance-based assessment strategy as well as assessment strategies using software, tablets, digital, smartphones, and the Internet were used for evaluating the performance of students (Al Arood, Aljallad & Baioumy, 2020). Further, out of nine teaching strategies for students at the higher education stage, problem-based learning in micro-teaching (Abdelhafez, 2018) had more effect size (of 2.74) as compared to other strategies for reflective thinking of students at the higher education stage. This approach provides a platform to student-teachers to think beyond the information presented and draw conclusions from multiple sources of information. The procedure of problem-based learning consisted of six phases i.e. group setting (work in a small group with 5 to 7 members), problem identification (selection of problem), formulating learning goals (with the help of the group members and teachers, formulating the learning outcomes), self-study (independent study stage for exploring the solution of the problem), reporting (share ideas with other groups) and consensus (presentation of work). By understanding the procedure of these methods, it can be concluded that cloud-based learning programs and problem-based learning provide platform for developing reflective thinking.

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APPENDIX-A

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Sl no	Teaching Strategies	Researcher & year	Research Design	Target Group	No. of Participants	Duration of Intervention	Effect
1	SSCS learning model	Yasin & et al. (2020)	quasi experimental design of pre-test and post-test control group design	school students	56		Positive
2	FeTeMM activities	Cakir & et al. (2016)	quasi experimental design with pre-test and post-test method	7th grade students	53		Positive
3	Cloud based learning program	Al Arood, Alijallad & Baioumy (2020)	semi-experimental approach	10th grade	94		Positive
4	Reflective thinking based activities	Tican & Taspinar (2015)	Pre-test and post-test control group design	student-teachers	42	6 weeks	Positive
5	Instructional Scaffolding intervention	Pennington (2010)	Quasi-experimental cohort design	elementary teachers	30		Positive
6	Reflective thinking approach	Chen, Hwang & Chang (2019)	quasi-experiment	university students	38	18 weeks	Positive
7	Journals learning method	Abu Jado (2015)	Quasi-experimental	pre-service teacher	61		Positive
8	Problem based learning activities	Ural & Dadli (2020)	Quasi-experimental pre-test & post-test control	7th grade students	53	4 weeks	No significant effect
9	Problem based learning (micro teaching)	Abdelhafez (2018)	Quasi-experimental	student teacher	60		Positive
10	Self-regulatory Strategy	Samanian & Roohani (2018)	Experimental	Higher education	30	3 week	Positive
11	Integrated STEM education	Sarican & Akgunduz (2018)	Semi-experimental	6th standard students	44	5 weeks	No significant effect
12	Scaffolding strategies embedded with web-based peer evaluation system	Yildlz (2012)	Randomized pre-test post design control group design	pre-service teacher	48		Positive
13	Writing Reflection Journal	Park, Kim & Park (2019)	Non-equivalent control group pre-test & post-test design	undergraduate nursing	68	2 weeks	Positive
14	Proposed teaching model	Hassan (2020)	Quasi-experimental	student-teacher	117		Positive

BRAIN BASED LEARNING AND LEARNING VIVACITY: A STUDY ON STUDENT ATTITUDE TOWARDS LEARNING MAP READING.

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ABSTRACT

Researchers routinely praise brain-based learning methodologies for their capacity to significantly improve students' ability to learn and substantially improve their memory. Generative learning is one such brain-based strategy that enables students to re-conceptualize previously learned data, so producing a new learning experience. A sample of 60 students from 7th grade of a school from urban regions of Coimbatore city were used for the Quasi-experimental study using pre-test and post-test setup. Statistical tools such asSimple Percentage Analysis, Independent Samples T-Test, One-Way Anova Analysis were employed for the analysis.The study's results reveal that male and female students reacted differently to generative learning training. Male students had a higher level of receptivity to generative learning. Similarly, the respondent's age had a significant effect on the kids' ability to learn. Younger children were shown to be substantially more susceptible to generative learning strategies. Overall, significant increase in post-test scores was seen, demonstrating that generative learning methodologies outperformed conventional classrooms in terms of enhancing students' map reading ability.

Keywords: *Brain-based, learning, map reading skill, student performance, academic achievement.*

Introduction

The teaching-learning environment in schools is a demanding one for both instructors and pupils. Classrooms that encourage effort, determination, tool use, goal alignment, and a willingness to take chances can interrupt students' harmful cycle of disappointment, relieving their emotions of uncertainty and powerlessness (Devi, 1998). The importance of strategic learning has been demonstrated before by studies revealing that active learners use efficient knowledge processing mechanisms (Meltzer et al., 2004). Effective learning occurs when students combine their usage of certain learning processes with a variety of other strategic strategies, including automatic acquisition of essential information, appropriate attention in a learning environment, self-awareness, inspiration, and self-concept.

Techniques are crucial for supporting pupils in overcoming obstacles and relying on their strengths. Thus, students' capacity to use tactics in class and on assignments is dependent upon their comprehension of the critical nature of certain techniques.(Bos & Vaughn, 1994). Students should use ways to overcome their vulnerabilities and achieve their full potential. Strategies motivate students to explore new approaches and demonstrate the need of adjusting their techniques to new pursuits. Self-directed learning is facilitated by strategies. Students may become more productive and effective learners via the application of tactics(Foo & Hussain, 2010).

Map reading is a very important skill for almost everyone, whether camping outside or are a motorist who often must examine a traffic map. Due to the field research aspect of geography, geographers must be able to not only understand specialised topographic and geologic charts, but also regularly design and build their own maps based on their own field discoveries(John

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B., 1955).Learning map skills becomes critical for high school pupils since it enhances their survival capabilities after they graduate and has a high academic value. It is the teacher's obligation to provide suitable instructional techniques that make map reading abilities more accessible to pupils (AACTE & P21, 2013).

Review of literature

Wilhelm-Chapin & Koszalka, (2016) points out that according to Generative Learning Theory (GLT), learning happens when learners take an active role in organising and integrating new material into their current knowledge systems. The process of establishing connections between new and old information results in the formation of meaning, which results in a more complete comprehension of the subject. Thus, implementing GLT concepts into instructional tools should encourage learners to interact with instructional content more deeply. This article summarises key elements for the creation of learning tools based on GLT theoretical viewpoints, research, and practises.

Fiorella & Mayer, (2015)emphasise that over the last two decades, academics have made remarkable strides in identifying efficient learning techniques (i.e., activities the learner engages in during learning that are intended to improve learning). Logan Fiorella and Richard E. Mayer describe eight evidence-based learning practises that increase knowledge in Learning as a Generative Activity: summarising, mapping, sketching, envisioning, self-testing, self-explaining, teaching, and enacting. Each chapter outlines and illustrates a specific learning technique, delves into the underlying cognitive theory, assesses the method's efficacy via an analysis of recent research, identifies boundary conditions, and discusses practical consequences and prospects. Each instructional technique aims for generative learning, in which students actively make meaning of the content to apply it to new contexts.

Tobias, (2010) in his assessment of Wittrock's contributions to educational psychology demonstrates that his 1974 essay presenting generative learning theory was astonishingly prophetic. Wittrock laid the groundwork for the eventual paradigm shift away from cognitive to constructivist approaches to education in that paper. Additionally, his assertion that schools were the most suitable environments for testing learning principles is generally held by modern educational psychologists; it is worth noting that Wittrock also advocated for testing these concepts at training sites. Finally, Wittrock stressed the relevance of transfer, previous learning, and the interplay of student characteristics and instructional approaches in his generative learning approach, all of which remain relevant 35 years later. These factors, together with Wittrock's commitment to the field, demonstrate that he was the consummate educational psychologist.

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Need of the study

Several learning techniques and teaching strategies are discussed among the academicians recently. Brain based learning is one such strategy that claims to improve student learning substantially. The Indian education scenario gives much importance to the ability of reproducing what students have learnt and is considered to be the major metric of successful learning. Hence any teaching-learning strategy must also be accompanied by successful performance in evaluations to claim it as a success. Generative learning is one such strategy that helps students revisualize what they have learnt. It is necessary to back this claim with experimental data and the study endeavours to prove that generative learning-one of the brain-based learning techniques helps students score better in their evaluations. Also, for decades academicians and media claim that demographical factors influence learning and hence the researcher compares the performance of students based on gender and age group to test the hypotheses. The findings of the study will help academicians adopt appropriate teaching techniques in the classroom.

Objectives of the study

1. To understand the influence of demographical variables on the applied generative learning strategy.
2. To analyse the pre-test and post-test performance of students as a measure of learning student's learning dynamics.

Research methodology

Pre and post assessments not only help in tracking students' progress but may also serve as an invaluable diagnostic tool for more effective teaching. Pre- and post-test design is a kind of quasi-experimental research that enables the straightforward evaluation of an intervention administered to a group of study participants. Pre-Test setup: An evaluation for 30 points was conducted after traditional teaching Post-Test setup: Generative learning technique was used to train students for a period of 4 weeks. Students were taught a historical incident such as the conquests of the Chozha kingdom tracing the cities, districts, and states of India. Students were trained to verbally recite the story and connect to the map using visual aids such as pictures of the places. An evaluation for 30 points was conducted at the end of the 4-week generative teaching program.

Sample Size

Sixty responses collected from 7th Standard Students from Government School located at Urban region of Coimbatore city.

Analysis and discussion

Null Hypothesis 1: There is no significant mean score difference between Post-Test scores towards Generative Learning method with respect to Gender

Table 1

Difference between Post-Test scores towards Generative Learning method with respect to Gender

	Gender	N	Mean	S.D.	't' value	df	p-value	Remark
Post test - Generative Learning	Male	31	24.129	3.33409	2.054	58	0.045	Rejected
	Female	29	22.6207	2.28994				

From the above table 1, the resulted p value is 0.045 which is lesser than 0.05 significant level. Hence the null hypothesis is rejected and inferred that there is no significant mean score difference between Post-Test scores towards Generative Learning method with respect to Gender.

Null Hypothesis 2: There is no significant mean score difference among Post-Test scores towards generative learning method with respect to Age Group

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Table 2

Difference between Post-Test scores towards generative learning method with respect to age group

	Source of Variations	Sum of Squares	df	Mean Square	Calculated 'F' value	p-value	Remark
Post test - Generative Learning	Between	198.762	2	99.38	17.947	0.001	Rejected
	Within	315.638	57	5.538			

Interpretation

Table 2displays the Anova analysis based on age group. The P-value for the Post-test groups between age groups and within age groups are less than 0.05, at a 5% level of significance. Hence the null hypothesis is rejected for between groups and within groups. It concludes that there is a significant mean score difference between Post-Test scores towards generative learning method with respect to Age Group.

Null Hypothesis 3 : There is no significant mean score difference between Pre-Test and Post-Test scores towards Generative Learning method

Table 3

Difference between Pre-Test and Post-Test scores towards Generative Learning method

Descriptive Statistics			
	Mean	Std. Deviation	N
Pre-test - Generative Learning	7.78	2.05922	60
Post-test - Generative Learning	23.4	2.95274	60

	Correlations	Post-test - Generative Learning	Null Hypothesis
Pretest – Generative Learning	Pearson Correlation	0.087	
	Sig. (2-tailed)	0.009	Rejected
	N	60	

Interpretation

According to table 3, Comparing the mean values of pre-test group and post test group, The performance of Post-test group (23.4) is greater than the pre-test group (7.78) by a huge margin. Also, the correlation significance indicates that there is a significant difference between Pre-Test and Post-Test scores towards Generative Learning method and hence the null hypothesis is rejected.

Findings of the study

From the discussed results from analysis, it can be observed that Generative learning strategy, a brain-based learning technique has a significant impact on the learning capacity of the students. It can be comprehended that there is a significant difference due to gender and generative learning on the post-test results of students. Similarly, age group also had an impact on the generative learning capacity of the students. A notable improvement in map reading skill of students was observed from the pre-test and post-test performance of students.

Conclusion

Brain based learning strategies are frequently commended by researchers for their ability to increase the learning ability of students considerably in terms of remembering, recalling, visualising, and interpreting. Generative learning is one such brain-based technique that helps students comprehend already known facts in a new manner creating a fresh learning experience. The findings of the study indicate that students of different genders responded differently to generative learning training. Male students were more responsive to generative learning. Similarly, the age of the respondent also had a considerable impact on the learning capacity of the students. It was observed that younger students were much more receptive to generative learning techniques. Overall, a substantial improvement in post-test scores were observed indicating that generative learning techniques faired much better than traditional classrooms in improving the map reading skill of students.

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TYPES OF VIOLENCE AGAINST CHILDREN IN ARUNACHAL PRADESH

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ABSTRACT

This study explored the types of violence against children in Arunachal Pradesh. The most-read English daily – The Arunachal Times published from 2018 – to 2020 was reviewed and based on information on the cases of violence against children reported in the mentioned daily, the investigator drew the conclusion. The finding of study revealed that types of violence found committed against children in the state are rape, murder, abduction, physical assault, molestation, display of obscene material, psychological violence, abandonment, bonded labour, and child trafficking and child labour. Further, out of various types of violence against children, cases of rape have been found higher than other types of violence. Comparative analysis of the number of male and female victims revealed that the number of female victims is higher than the number of male victims. However, further in-depth empirical research is needed to verify the findings of this study as the effort is based on the data collected on a daily only. The present work is a part of a major research project entitled "Status of Violence against Children in Arunachal Pradesh" sponsored by the Indian Council of Social Science Research (ICSSR), New Delhi.

Keywords: *Violence, Children, Arunachal Pradesh.*

Overview

WHO defines violence as "the intentional use of physical force or power, threatened or actual, against oneself, another person, or against a group or community that either result in or has a high likelihood of resulting in injury, death, psychological harm, maldevelopment or deprivation" and violence against children as "All forms of violence against people under 18 years old, whether perpetrated by parents or other caregivers, peers, romantic partners, or strangers". In layman'sterms violence against children can be defined as any intentional or unintentional act or behaviour which causes physical, mental, psychological or emotional injury to a person under 18 years and which threatened her/his dignity, survival and development. Violence may be self-directed, interpersonal or collective. Violence against children occurs in different forms; physical, sexual, neglect, emotional, and psychological and at multiple levels; individual, household, institutional, and societal (Hyder & Malik, 2007). Violence against children is a global phenomenon as such South Asia is no exception (Hyder & Malik, 2007). It was further stated by them that in countries like India, Bangladesh, Bhutan, Nepal, and Pakistan, child labour, child sexual abuse and prostitution, child trafficking and homelessness are commonly reported issues. According to World Health Organization, 2018, globally 1 billion children aged 2-17 years have experienced physical, sexual, or emotional violence or neglect in the past year. These widespread incidences of violence against children, however, do not mean that governments in various states; regions or countries do not have concern for violence against children. In fact, for long children's rights and welfare concerns have been addressed not only at the national level but also in a number of international conventions. One of the instances is the United Nations Convention of the Right of the Child (UNCRC), 1989. Target 16.2 of the 2030 agenda for sustainable development which is to end abuse, exploitation, trafficking and all form of violence against and torture of children is another serious effort made by the

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international community toward this direction.

In the case of India, the country had ratified the UN Convention on the Rights of the Child (UNCRC) long before i.e. in the year 1992. 19% of the world's children population live in India, which constitutes 42% of India's total population (Sing, Parsekar & Nair, 2014). Despite the adoption of a number of laws and formulation of a range of policies to ensure children's protection and improvement in their situation but still, half of the total child population in India are in need of care and protection. A survey conducted by World Vision India revealed that one in every two children is a victim of sexual abuse and one in every five does not feel safe because of the fear of being sexually abused. The number of cases registered for child abuse raised from 8,904 in the year 2014 to 14, 913 in the year 2015, under the Protection of Children from Sexual Offences (POCSO) Act, sexual offenses and kidnapping account for 81% of the crimes against minors (Save the Children, 2016). Government figures showed that 18,862 cases of child rape were registered in 2016 or more than 50 each day. The largest number of working children in the world (between 40 and 115 million child workers aged 5-14 years) are found in India (Hyder & Malik, 2007). These facts make it evident that the rise in the number of reported cases of violence against children in India is a "national emergency".

The rationale of the study

Over the centuries, our view on Children has changed dramatically. During the middle ages, children were perceived as being basically bad, born into the world as evil beings. The goal of child-rearing was, thus, to provide salvation. Towards the end of the seventeenth century, children were perceived as "tabula rasa" as such childhood experiences were considered important in determining adult characteristics. Hence, it was advised that parents should spend time with their children and nurture them to imbibe good values to become contributing members of society. Since eighteen century, the innate goodness view gain prominence. It was stressed that children are inherently good, so, with little monitoring from parents and teachers children should be allowed to grow naturally. In the present century, children are perceived as an investment for a secure, safe, welfare, secular, just, productive, and peaceful society. Resultantly well-being and protection of children are one of the foremost global concerns. Children who do not reach their potential, who are unable to contribute effectively to society, and who do not take their place as productive adults diminish the power of society's future. A number of empirical studies conducted till now have proved that violence against children causes several developmental issues among children; accelerates suicidal tendency, stress, anxiety, anti-social behavior, alcoholism, and affects productivity and quality human capital development. So, if we want a better tomorrow, we must ensure the healthy physical, mental, emotional, and social development of every child irrespective of gender, religion, caste, creed, and other differences and protection from any sort of violence. There is myriad provision for the protection and welfare of children in the country but still, violence against children is a widespread phenomenon, this fact call for consistent and continuous efforts both from the government and the public for the protection and wellbeing of children. Sadly, Caritas India based on the report of the National Crime Records Bureau (NCRB), 2015, revealed that North-Eastern India is witnessing rampant growth in child abuse and child rights violation cases among the states of North-East, Assam, Manipur, Mizoram, and Arunachal Pradesh has hotspots of human trafficking or may say child trafficking. However, unless we gain an understanding of the phenomenon of violence against children, any initiative initiated in this direction would lose its credibility. Against the backdrop of this view, the present study has been carried out to answer the following question:-

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Research Question

What types of violence are committed against children in Arunachal Pradesh?

Method

Document review method has been used to collect the required information to complete the present piece of work. The investigator reviewed The Arunachal Times (English daily) published during the last three years

(2018 – 2020) and gathered information regarding cases of violence against children in the state as found reported in it. The main reason behind selecting this English daily as a source of information is that out of the existing thirteen English dailies in the state namely The Echo of Arunachal, Arunachal Express, The Arunachal Times, Arunachal Front, The Dawnlit Post, Independent Review, The Arunachal Pioneer, Eastern Sentinel, The Arunachal Age, The Arunachal Chronicle, Arunachal Observer and The Sentinel, The Arunachal Times is the most preferred and read English daily in the state.

Types of violence against children

Table 1

Showing the types of Violence against Children

Sl. No.	Types of Violence	2018	2019	2020	Grand Total
1	Rape	3	-	4	7
2	Murder	1	-	-	1
3	Rape-cum- murder	1	1	-	2
4	Abduction-cum-rape	1	-	1	2
5	Abduction-cum-physical assault-cum-rape	-	-	1	1
6	Physical assault	-	1	1	2
7	Molestation	-	1	-	1
8	Molestation –cum-physical assault	-	-	2	2
9	Physical assault-cum-murder	-	-	1	1
10	Display of obscene material-cum-molestation		2	-	2
11	Abduction-cum-physical assault-cum-psychological violence	-	3	-	3
12	Abduction	-	1	-	1
13	Abandon	-	2	-	2
14	Bonded labour	2	-	-	2
15	Traffic–cum-child labour	6	-	-	6
Grand Total		**14**	**11**	**10**	**35**

The table – 1 reflects that in the year 2018, out of 14 cases of violence against children in the state 6 were of child trafficking-cum-child labour, 3 cases were of rape, 2 were of bonded labour, another 1 was of rape-cum-murder and 1 more was of abduction-cum-rape. It is important to mention here that out of 3 cases of rape, 1 was of sodomy. In the year 2019, out of 11 cases of violence against children 3 were of abduction-cum-physical assault-cum-psychological violence, 2 were of display of obscene material-cum-molestation, and 2 were of abandon, 1 was of rape-cum-murder, 1 was of physical assault, 1 was of molestation, and 1 was of abduction. In the year 2020, out of 10 cases of violence against children 4 were of rape, 2 were of molestation-cum- physical assault, 1 was abduction-cum-rape, 1 was of abduction-cum-physical assault-cum-rape, 1 was of physical assault and 1 was of physical assault-cum-murder.

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Table 2

Showing the extent of violence faced by male and female children

Year	Male	Female	Total
2018	6	8	14
2019	5	6	11
2020	1	9	10
Grand Total	**12**	**23**	**35**

The table - 2 reveals that in 2018 out of 14 cases of violence against children 6 cases were found to reported committed against male children and 8 against female children. In the year 2019, out of 11 cases of violence against children 5 cases were found reported committed against male children and 6 were found committed against female children. In the year 2020, out of 10 cases of violence against children 1 case was found committed against a male child and 9 cases were found reported committed against female children.

Findings

1. Types of violence found committed against children in the state are rape, murder, abduction, physical assault, molestation, display of obscene material, psychological violence, abandonment, bonded labour, child trafficking and child labour. Further, out of various types of crime committed against

children cases of rape have been found higher than other types of violence during the study period (2018-2020).

2. Comparative analysis of the number of male and female victims revealed that the number of female victims remained higher than the male victims during the study period (2018-2020).

Discussion and conclusion

The present study showed that all types of violence such as physical, sexual, psychological, child trafficking, child labor, murder and abandonment have been found reported as committed against children in the state. However, cases of rape have been found higher than any other types of violence against children during the past three consecutive years. It is further observed that In case of the extent of violence against children with respect to their gender, the study showed that during the past three consecutive years in comparison to males, a higher number of violence was found reported as committed against female children. Another important thing observed is that in the majority of cases the victim child has experienced more than one type of violence. Apparently, the state has witnessed declined number of cases of violence against children during the past three years but still, this would be unwise to consider it conclusive because despite of the provision of civil law majority of people in the state leans on customary law to deal individual as well as their community issues. Consequently, many cases of violence against children go unreported and do not come into the limelight. As the present study is based only on the cases of violence against children as reported in The Arunachal Times, which is an English daily newspaper; therefore, it is suggested that further in-depth research is needed to verify the findings of this study. However, the investigator believed that the budding researchers interested to explore the concerned area in the days to come would for sure find this study as a guide for their venture in this area.

Acknowledgment

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REBUILDING THE...

Conclusion

The above discussion led down the foundation of that, Examinations system in India needs recondite in the light of reform in education, it should be recognized that exam reform has the potential to lead to educational reform. The present Examination System has many drawbacks which need to be debated to resolve certain trivial and ticklish issues. Performance of any student depends upon the various factor associated with education, and performance can be assessed through the exam in this vice-versa connection, Demand of reforming in all the components like teacher training, teacher quality, and teacher-student ratio. Curriculum etc. It is pride history of India that, we have a lot of Potential for making advancement in the system in a far better way, Assessment, as learning can be practiced in broad way to the effectiveness of both the concept of learning and teaching, Examination Reform in Higher Education, should go hand in hand with the structure of examination conducting mechanism. The teacher's role is of supreme importance in conducting speedy and secure examinations, and it should never be underestimated as Teachers are the backbone of any Examination system. It is recommended that there should be a uniform system of evaluation across the country to be practiced and implemented.

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THE ROLE OF SPECIAL OFFICER IN MOBILIZATION AND RETENTION OF DISADVANTAGED GIRLS FOR EDUCATION – A CASE STUDY OF KASTURBA GANDHI BALIKA VIDYALAYA IN RAJENDRANAGAR MANDAL OF RANGAREDDY DISTRICT, TELANGANA

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ABSTRACT

The introduction of Kasturba Gandhi Balika Vidyalayas (KGBV) in the educationally backward blocks of the country posed challenges for the heads in mobilization, retention, and educational activities. The children who are being admitted to these schools are completely different from mainstream schools. The socio-economic background of the girls has been indicated that they are child labor, never enrolled, dropouts, risk-ridden family background, single parent, orphans, migrant workers, labor families, BPL, and educational accessibility denied areas. The Special officer has been facing several issues. In this context, it would be highly relevant to document the field experiences of KGBV. Therefore, the key research question is whether the Special Officer of the institution is successful in making KGBV a viable place in providing education to the girl child labor or not. The paper broadly covers strategies for building awareness and mobilization of girl child labor to admit in KGBV, the strategies in retaining the girl child labor and motivating them for education, and the efforts of teaching and non-teaching staff in reaching the goal of Educational attainment. The important sources in the writing of the case study include a review of the literature on girl child labor, policy documents of the Government, evaluation studies of KGBVs, and personal experience of the researcher as head of the institution. The structure of the paper consisting a review of the literature to understand the concept of girl child labor, the initiation of KGBVs, and the strategies of the head of the institution in making it a successful one.

Key Words: *Educational backward blocks, civil society organizations, mobilization, retention.*

Introduction

In India, retrospectively, the education of women in general and girl children in specific is a neglected one. Over a period of time, in the post-independent period, there has been an increase in the percentage of education of women from well-to-do sections and those who are aware of the importance of education. However, in the case of low-income groups, excluded social categories, and backward areas, the existence of girl child labor was a phenomenon. Due to the efforts by the civil society organizations, policy guidance and financial support from the International organizations, the existence of the Right to Education Act, 2009, and policy initiatives of the National Government such as 'Beti Bachao and Beti Padav' (Save the girl and educate the girl) has led to the special attention on the education of girl child labor from the beginning of Millennium Development Goals in the year 2000. Under this backdrop, the paper is proposed to capture the field

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experiences of the Special Officer as head of KGBV in making it a successful one.

Review of the Literature

It is argued that the social belief that a female child is an economic liability can be countered by the argument that in rural India a girl works for nine hours a day and an average of 315 days a year in the fields and at home, providing the family annual labor which at minimum wages could have cost Rs 2200 to hire. By the time, she ceases to be a child she has provided economic help to the family worth Rs 39,600 surviving on food below nutrition level and struggling against prejudice and discrimination. (Bhattacharjee 1985: 2)

The customs and rituals under which girls are brought up and gendered into womanhood constitute a regime, which is incompatible with the normative view of childhood implicit in child-centered policies of education. The school-going child is treated primarily as a student and any work performed by him/her cannot be at the expense of his/her school activities. In other words, it is accepted that the primary activity of the child is that of a student and not a worker. Therefore, any program to increase literacy levels among children must necessarily also be a program to reduce the incidence of child labor (Sinha. Shantha, 2000).

The child labor of boys has visibility as they are working in workshops, factories, and hazardous conditions, whereas the girls' child labor has invisibility due to the nature of work. Girls accompany parents to the fields and help with sowing, transplanting, weeding, harvesting, and scaring away birds. And in addition to their domestic work, they are also involved in large numbers in the unrecognized sector industries such as match, coir, carpet, lock, beedi (local cigarettes), gem polishing, and Zari (gold thread embroidery) making, groundnut shelling, etc. In the urban areas, they work as domestic servants, rag-pickers, newspaper vendors, polishing industry, making of paper bags and garments, sub- assembling electrical and electronic items brassware industry, carpet industry, etc. (Weiner, Burra, Bajpai, 2006, pp.204)

The bulk of the female working child population is to be found in the rural areas where children are engaged in looking after younger siblings, cooking, cleaning, fetching, and carrying. In the rural areas, little girls can be seen carrying small pots on their heads, following their mothers or elder sisters to the well. Water carrying, which is little more than play begins with, nevertheless makes a useful contribution to the volume of work that has to be done in every household (ibid, 206-207).

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It is apparent from the evidence presented above that there is a clear-cut differentiation between the male and the female working child both in the stereotyping of work according to gender, and in the attitudes and aspirations of parents. For a complex of social and cultural reasons, parents undervalue the girl child. Several consequences fall from this attitude. The girl child is seen as an economic burden and is, therefore, exploited even by her own parents. She is made to work very hard at home and outside but her economic contribution is never recognized. So no value is placed on her need for education and as she grows up, her lack of education limits her opportunities in the labor market and she is relegated to low-paid, unskilled jobs. (Weiner, Burra, Bajpai, 2006, p.220).

The term Dropout broadly covers never enrolled as well as dropping from the school in order to enter into the pool of Child labor. MVF defines Child labor as those students who are not in the school (Mahajan. Sucheta, 2008). The issue of girl child education needs to be seen in a broader context of family, society, state, and policy perspective (Krishna Kumar, 2010).

Significance of the Study

Child Rights in India Law, policy, and practice (Bajpai, Asha, 2011) the analytical and in-depth historical study. It deals with the legal definition of a child, legal framework, and policies domestic and International. It also covers the role of courts, government, and non-governmental organizations. The legal dimension covers the adoption of child judgments relating to adoption, legal reforms, and interventions for non-institutional services, it also deals with the Right to the family environment including adoption right to parental care and guardianship, the Right against

economic exploitation- child labor, Right to Protection against to sexual abuse and exploitation, Juvenile justice, administration, and implementation, Right to development, Right to survival: health, nutrition, and shelter.

Up to 2004, the mass of information has identified several reasons for the existence of the Gender gap in Education. The factors include Cultural barriers, Poverty, distance from the school, the lack of female teachers, and frequently quoted stumbling blocks to female education (Wazir, Rekha, 2008, p.17) With the introduction of flexible school calendars, encouraging community participation, promoting parental literacy, reliance on multiple delivery systems, and increasing resources to primary education are the strategies evolved to promote the Girl-child Education(ibid).

Multiple strategies have been adopted by the States for enrolling girls in the scheme. Some of the strategies identified by stakeholders, but are not limited to community mobilization, include involvement of local media, door-to-door campaigns, interpersonal contact of teachers with parents, and success stories of pass-out girls becoming the agency of mobilization for their peers. The other initiatives for enrolling the girls included the proactive role of State officers, panchayat members, and other senior citizens of the block and district (Srivastava, Gouri, 2015. Pp. 96-97).

From the brief survey of the literature, it is glaring that the girl child labor is a historical fact, which was recognized. Despite having several efforts in the form of policies and programs for girl child education, there is a grey area in form of lagging behind in female literacy in educating backward blocks of the country. While realizing the need to fill the gap of low levels of female literacy at the national average, the Government of India introduced Kasturba Gandhi Balika Vidyalayas in 2004.

Objectives

1. To highlight strategies for building awareness and mobilization of girl child labourers to admit in KGBV.
2. To bring out the strategies in retaining the girl child labourers and motivating them for education.
3. To appreciate the efforts of teaching and non-teaching staff in reaching the goal of educational attainment.

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Methodology

In documenting the case study the experiences of Special Officer is the primary source on the functioning of KGBVs, for the last one and half decade, at least four types of studies have been conducted. These studies constitute a secondary source of information such as

a) The National level evaluation studies commissioned by the Ministry of Human Resource Development Government of India, in 2007 and 2008
b) The studies on KGBVs by the National and International, Independent and Academic Institutions.
c) The evaluation of KGBVs conducted by the Niti Aayog 2015
d) State-specific evaluation reports.

All these studies have been conducted from the perspective of operational, infrastructure, management, students' strengths, best practices, etc. However, the role of the head of the institution is being neglected. Therefore, the present case study examines the question of whether the role of the Special Officer makes a qualitative change through the mobilization, retention, and education of girl child labor or not? To highlight the role of the leader of KGBV, the case study approach is followed with specific reference to the personal experience of the Special Officer of KGBV and at present Ph.D. scholar on the same topic.

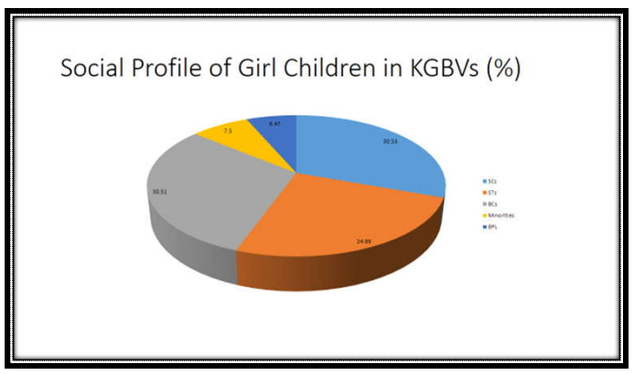
Kasturba Gandhi Balika Vidyalayas – At a glance: KGBVs have been established, while taking into account the following indicators as per the Hand Book of KGBV (MHRD).

1. Educationally Backward Blocks (EBBs) where the rural female literacy is below the national average (46.13%: Census 2001) and the gender gap in literacy is more than the national average (21.59: Census 2001). Among these blocks, schools may be set up in areas with:
2. The concentration of tribal population with low

female literacy and/or a large number of girls out of school;

3. The concentration of SC, ST, OBC, and minority populations, with low female literacy and/or a large number of girls out of school;
4. areas with low female literacy; or
5. Areas with a large number of small, scattered habitations that do not qualify for a school
6. Additional Educationally backward blocks with rural female literacy below 30%; and
7. Towns/cities have minority concentration (as per the list identified by the Ministry of Minority Affairs) with a female literacy rate below the national average (53.67%: Census 2001). The opening of KGBVs has been extended to all Educationally Backward Blocks (EBBs) during 2010-11.

As per the government of India's details (National Report, 2013), 3609 KGBVs have been sanctioned and 3569 have been functioning and there are about 4 lakh students who have been studying in these schools. The social profile of the girl children (see pie diagram-1), who are studying in KGBVs includes 30.53%, SCs, 25% STs, 30.51% OBCs, 7.5% Minorities, and 6.47% Below Poverty Line.



(Source: Prepared by the author based on National Report second National Evaluation of KGBV Program of GoI, Nov-Dec 2013)

A Case Study of KGBV, Rajendra Nagar in Rangareddy district, Telangana

In the month of February 2009, KGBV was started in a leftover vacant elementary school building in Kismathpur village of Rajendra Nagar Mandal, Ranga Reddy District. The following strategies have been adapted in making KGBV from scrap to a successful model school by the Special Officer.

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a) Awareness Building

1. As part of awareness building about the existence of KGBV, an announcement was given in the local press of Telugu and Urdu with all contact details.
2. More than 1000 pamphlets have been published and circulated through the Newspaper distributors, local people, NGOs, local body schools, in all the Government and private Institutions.
3. Addressed in the series of meetings organized by the public and private educational institutions, women and child welfare, rural development, SC, ST, and BC welfare, Self-Help Groups, and other relevant Government departments.
4. Interacting and distributing pamphlets on the occasion of festivals, birthdays, marriages, and other public functions.

b) Mobilization

It was a very difficult task to convince the parents of girl child labor. They openly shut their doors upon the Special Officer, who had been to convince them to join their ward in KGBV. Some of the parents of the Girl child did not allow entering into their streets in the interior and sub-urban areas of Hyderabad, The parents were not ready to listen mobilizing team. In fact, some of the parents and local leaders sarcastically commented that you provide everything to the girl child for education and are you also going to make arrangements for marriage as well.

In course of time, it was realized that it is essential to take support field-based Non-Governmental Organizations such as MVF. MVF has got few decades of history in the mobilization of dropout girl children. At the request of the Special Officer, the MVF team entered into the field to mobilize the children by convincing their parents, local leaders, and the community to admit their girl child to KGBV. MVF has helped in mobilizing in the slums such as Rasulpura, Chintalmet, Pahadi, Rajendra Nagar, Chandrayana Gutta, Old City of Hyderabad, and Rural areas of Ranga Reddy District.

c) Parental background of the Girl Children

As a result of consistent effort, the KGBV was started with three children, and its strength was raised to more than 100 within three months. The Social profile of the children includes Orphans, single parents, drunken parents, divorcee families, multiple marriage family's children, rescued children from human trafficking, migrant workers children, children under sibling care, domestic workers, and marginalized sections of the society, children of BPL families, etc.

d) Strategies for Retention

1. It was a herculean task before the Special Officer and teachers in retaining the girl children who are admitted from the above background to socialize them for formal education. To retain these girl children following diversified strategies have been adopted.
2. The first strategy was for all the teaching and non-teaching staff from the women category to ensure the parents that the girl child is in a safe environment and under the protection of women.
3. The second strategy was to habituate them to healthy, hygiene, and tasty, nutritious food provided for breakfast, lunch, and dinner along with snacks.
4. In the process of retention the third strategy was making an arrangement for Radio, TV, and newspapers to change their mindset from child labor to some sort of recreation. They were also encouraged to sing songs, dance, and perform whatever cultural activity in which they are interested.
5. In order to prove that the Government has been providing free of cost two pairs of uniforms, textbooks, notebooks, and a stipend has been distributed as soon as they were admitted.
6. To take care of the health and physical fitness of these children immediately the women ANM, and PET were recruited and assigned the responsibility of not only health check-up but also games and sports. The ANM and science teacher asked to conduct awareness classes for mature girl children and maintain monthly periods register.

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7. Recording their height, weight, and blood group. Regarding the identification of blood groups, the L. V. Prasad Eye Institute extended voluntary service apart from the free distribution of spectacles.
8. Gradually habituating the students to inculcate the basics of educational curriculum as per their standards through bridge course and Listening, Speaking, Reading, and Writing skills have been started for about 4 to 6 months.
9. Moreover, the KGBV has started both English and Urdu mediums. Therefore, Urdu teachers were recruited and teachers who use to teach English medium are requested to teach as per the requirement, receiving the capacity of the student rather than putting pressure.
10. Another important strategy was that regular monitoring of the students and teachers on an individual basis to assess their performance to know the restraints and constraints in receiving the classroom inputs and educational performance in the form of internal assignments, unit tests, and other exams.
11. Apart from these strategies it also evolved a strategy of inviting guest speakers from NIRDPR, NGOs, and District, and State Officials to motivate the girl children. To have regular contact and interaction with the community, the local public representatives, community leaders, and parents' meetings were regularly conducted to appraise the activities of KGBV. Therefore the community also got mobilized and extended support in terms of the safety, and security of the Vidyalaya.
12. Over a period of time based on their interest and performance the children were exposed to sports and games, at the Mandal and district level. Karate programs, active participation in the cultural programs of the Annual Day celebrations of the prestigious Institute such as the National Institute of Rural Development and Panchayati Raj

(NIRDPR). The participants in the training programs of Andhra Pradesh Academy of Rural Development (APARD) and NIRDPR used to come for an Exposure visit to KGBV.

13. In order to ensure the exact attendance of students, and regularity of teaching and non-teaching staff, the Bio-Metric system was introduced and linked to the district and state offices of KGBV.

Findings

From the existing sources, discussed above, the following are the broad findings of KGBVs.

1. About the functioning of KGBVs, the parents and children have satisfied 100% due to all the teaching and non-teaching employees being women. Free accommodation, books, dress, skills, etc.
2. About 75% of the children's nutrition level has been increased.
3. More than 90% of children are able to read, write and speak about the subjects.
4. The hygiene level among the young girls has been increased and skill-building helped them to prepare their own sanitary napkins.
5. About 25% of children are confident about generating their own source of livelihood due to training in tailoring, computers, etc.
6. Exposure to games and sports and cultural activities, not only strengthened them physically but also habituated the disciplined in life.
7. The parents of the children informed that during vacations they are demanding for the toilets in their houses and
8. Another major contribution of KGBVs is the postponement of the marriage age.
9. As a result of all these efforts, the girl child who came from a dropout background of labor family was able to address in a public meeting in front of the then Chief Minister Kiran Kumar Reddy on the eve of National Education Day which is being conducted as birth anniversary of Moulana Azad within three years of her study in KGBV.
10. Another major achievement was achieving 9.7-grade points in X class results in the first batch of KGBV in the 2013-2014 academic year.

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11. In KGBV about 80+ percent of Students have been passing SSC.
12. The 10thpassed out girl children have been joining Junior College for Intermediate, Polytechnic, etc.

Conclusions and Suggestions

In the endeavor of providing education for disadvantaged girls, the Special Officers of KGBVs have been playing a significant role as head of the institution in terms of mobilization, retention, and education. From the social and economic family background point of view, KGBVs have been contributing a lot to the educational attainment of the girl children of marginalized social groups in terms of enhancing capabilities. However, there is a need to concentrate on the quality of education and food. However, only a limited number of children are entering into +2 and higher education. Therefore, it requires a state intervention for further promotion of higher education among the disadvantaged girl children for their brighter future.

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A STUDY ON WOMEN'S AWARENESS THROUGH KANYASHREE PRAKALPA IN NADIA DISTRICT OF WEST BENGAL

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ABSTRACT

Women today have more freedom than ever before, but there is still a long way to go. An attempt has been made in this paper to study the women's awareness issues in the context of West Bengal by measuring the change in the level of education and its impact on their economic aspects where socio-cultural issues act as moderators. For this study, a specific community development block named Kalyani in the Nadia district of West Bengal has been selected for the rigorous survey. Information was obtained from a CD block in Kalyani through a survey of sample questions from 100 respondents who received a one-time grant of Rs. 25,000 /- from Kanyashree Prakalpa. I did this analysis through SPSS software.

Keywords: *Freedom, Inequality, Wealth, Economic, Socio-Culture, Kalyashree Prakalpa, etc.*

Introduction

The capability of women, measured in terms of education, has to lead to a higher level of empowerment, measured in terms of their shifts from the status of agricultural laborers towards that of other workers i.e. factory workers, plantation workers, those in trade, commerce, business, transport, mining, construction, political or social work, all government servants, etc. The consequences of changes in the educational level have an impact on socio-cultural dynamism which ultimately leads to a higher economic level. The economic empowerment of women has given them the choice of taking decisions and their individual preferences. With this theoretical framework, the research objectives are to measure the impact of female education on women's empowerment. The increase in the female education ratio would lead to minimizing the gender disparity and ultimately, act as a catalyst for social inclusion. Female education would act as a capability of women that would lead to empowerment. Now, the literate women are more willing to take their own decision in life and they shift their jobs from household work to other sectors like industry, business, commerce and trade, government, etc. Women's economic empowerment through their participation in the educational growth path would lead to sustained empowerment of the women and social inclusion. In many developing countries, a large proportion of women seem to take up low-wage jobs, mainly due to poverty. If these poor women get adequate education then they can get the job of their choice. In order to empower women, first of all, they need real education and proper cooperation. The government has to take steps accordingly. Because without proper empowerment of women, the development of that government is impossible.

Review of Literature

Himalinidevi (2014) "Women Empowerment through Entrepreneur-Ship": She had studied various aspects of women empowerment in rural areas of the country which will solve the problem of unemployment & poverty eradication.

Rajeshwari Shettar (2015): "A Study on Issues Challenges of Women Empowerment India": The author has highlighted that the Empowerment of Women could only be achieved if their economic and social status is improved. This could be possible only by adopting definite social and economic policies with a view to total development.

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Suneetha (2007) has explained that the empowerment of women became necessary as they are almost fifty percent of the population and are being discriminated against on all fronts. Women play a vital role in the social & economic transformation of a country. She found that the implementation of the DWCRA program has empowered the women beneficiaries with significant growth in their income and employment in the backward districts.

Rizwana (2004) study states that MAVIM was established to facilitate the implementation of the activities for the development of women in Maharashtra, under various schemes leading to income-generating activities. The study also analyzed the impact of MAVIM on the empowerment of women.

Objective of the study

1. To assess the awareness of girls students who received a one-time Kanyashree grant in the Kalyani block.
2. To evaluate the socio-economic improvement among the girls who received several grants through the Government of West Bengal.
3. To analyze the impact of Kanyashree Prakalpa on women's empowerment as well as income-generating activity and their role in poverty eradication.

Data source

The study was carried out in one community development block namely the Kalyani block in the Nadia district of West Bengal. Among the selected block a random sampling technique will be applied to reach out to the respondents for the study area. The present study use only primary data. The 100 numbers of primary data will be collected from students who received one-time Kanyashree grants of Rs. 25,000/- (Twenty five thousand) in the study area. Questioners schedule was the main tool used to collect the primary data. After collecting data we used statistical devices i.e., correlation, regression, and step-down method, so as to make the study viable and accurate.

Result and discussion:

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Table 1

Correlation Analysis between dependent variable effectiveness of Kanyashree one time grant (Y) and 21 casual variables

Variables	'r' Value
Age of the respondent (X_2)	**-.3877 ****
Monthly income of the family (X_5)	**-.2195 ***
Electricity at home (X_8)	**-.2600 ****
Family consent for studying in a school or college (X_{14})	**-.2222 ***
Accessing village library (X_{18})	**-.2078 ***
Role of public libraries towards public services (X_{19})	**-.2886 ****

Critical value (2-Tail, 0.05) = +or- 0.197 *Significant at 5% level
Critical value (2-Tail, 0.01) = +or- 0.256 ** Significant at 1% level

From the above calculation it has been tried to understand how the independent variables are being affected by the Kanyashree one-time grant (Y) which is crucial to the effect of the interrelationship.

At this stage, the age of the respondent (X2) in the Kalyani Community Development Block of Nadia District does not indicate any positive result of awareness. At this point, the observation of the effectiveness of the one-time grant of Kanyashree has an incomparable significance.

The background of the monthly income of the family (X5), and electricity at home (X8) had a negative impact on the view of the opinion about the effectiveness of the one-time grant of Kanyashree. These are common occurrences. The same idea is found in families where due to economic conditions well-being does not exist. Although electricity is a basic requirement, in deep rural areas, accessibility of electricity indicates the good financial condition. So the utility of Kanyashree's one-time grant is less for them.

From the point of view of Family consent for studying in a school or college (X14), it is not clear to them what it means to empower girls. The definition of women's empowerment is not clear to them.

In the order, Access village library (X18) and Role of public libraries towards public services (X19) have denoted negative results. Due to this, there was a sudden lack of awareness about the effectiveness of Kanyashree's one-time grant.

Table 2

Multiple Regression Analysis

Variables	"β" value	"t" value
Age of the respondent (X_2)	-0.426435	**-3.166 ****
Electricity at home (X_8)	-0.318991	**-3.171 ****
Role of Block Development Office in getting public services (X_{21})	0.225438	**2.326 ***

Critical value (2-Tail, 0.05) = +or- 1.987 *Significant at 5% level

Critical value (2-Tail, 0.01) = +or- 2.637 ** Significant at 1% level

Multiple R	R Square	Adjusted R Square	Standard Error
0.66963	0.44841	0.29991	1.86406

Analysis of Variance	df	Sum of Squares	Mean Square
Regression	21	220.33114	10.49196
Residual	28	271.02886	3.47473
F =	3.0195 Signif F = 0.0002		

From Table 2 we found that all twenty one (21) variables explain their regression effects with ß and subsequent t values. It was observed that all twenty-one causal variables could explain 44.84 percent of the total combined effect (R2 = 0.44841) toward the utility of the Kanyashree one-time grant (Y). Three of these variables are very important, like the Age of the respondent (X2), Electricity at home (X8), and the Role of the Block Development Office in getting public services (X21), which are the explicate results of total regression and predictor variable.

Conclusion

Primarily, Kanyashree Prakalpa was introduced to give recognition to the female community. Earlier, girls were neglected. A girl's fetus was inhumanly killed. If these do not happen, start a project with the goal of women's empowerment in mind. Thus, even after eighteen years, girls can become self-reliant through education. According to the scheme, all unmarried girls from classes VIII to XII will get Rs. 1,000/- in one year and at the end of eighteen years they will receive a one-time grant of Rs. 25,000. The main goal of this project is to protect and empower all adolescent girls and to support their healthy environment by creating and enabling an environment for their participation and meaningful contribution to society. The situation has changed a bit over time but the girls have not yet gotten full freedom. Under the changed situation, it has been proved that girls do not get married while in school. But that is not enough. The administration and the voluntary organizations need to continue to campaign more frequently. Occasionally workshops need to be organized so that this social disorder can be eradicated. When I went to collect the data, I saw that many students get these 25,000 rupees and help their parents in different ways. Some have paid for the repair of the mud house, some have paid for the cultivation of paddy land, and some have helped the people of the house to run small businesses.

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YOGA AS AN EDUCATIONAL TOOL TO TACKLE INFORMATION OVERLOAD

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ABSTRACT

This article discusses the relevance of Yoga and its application in the current techno-cultural societies which are characterized by excessive flow of information. Technological progress coupled with free information market has resulted in information overload which could be detrimental to the educational system. The article argues that the integration of the 'knowledge of Yoga' with the Indian education system could empower the students by providing them with the strategies of effective mind management followed by time and knowledge management.

Key Words: *Information Overload, Techno-cultural Society; Knowledge of Yoga; Mind management.*

Introduction

Contemporary societies are characterized by the excessive flow of information mediated by communication and internet technologies. Internet media, which is an 'encyclopedia of information' overpowers and edges all other conventional forms of media. The fundamental benefit associated with access to the new technologies is the increase in the supply of information. Information is shared and disseminated to a larger audience. The information revolution has profound implications for economic and social development. As a result of these new technologies, several areas of human lives namely; Education and Training, Governance and Management, Environment, Finance, Rural Development, Health, Infrastructure, etc., have an overreaching impact. Not surprisingly, we have nomenclatures of our current society as the 'Age of Information, 'Age of Internet' 'Age of Cyberspace', 'Age of Apps', etc. No matter what we call it, it is certainly also the Age of 'Information overload'. With the opening up of the information floodgates, content from across the globe flash in a split of a second through Text messages, Twitter tweets, Facebook alerts LinkedIn updates, Voicemails, Apps, etc., besides regular emails, and several social media platforms. This paper is an attempt to understand the nature and consequences of the 'Information Overload' on human society, and the effective ways and mechanisms to deal with it. The paper argues that the science of Yoga can be a powerful tool to train students with mind management and information management techniques that can be applied to their academic pursuits and endeavor. The first part of the paper discusses the 'Information Overload' and its effects. The second part of the paper discusses the role of yoga in the educational system and argues for the need to revitalize our ancient yogic tradition to encounter new technological challenges. The third part points highlight the ways to integrate yoga with the curriculum and in the classroom to empower students with techniques, tools, and awareness required to tackle 'Information Overload' followed by the conclusion.

Information Overload

The term 'Information Overload' was first used by Betram Gross (1964) which was later popularized by Alwin Toffler (1970) in his book Future Shock. It refers to the excessive flow of information which is detrimental to individuals who are unable to cope and results in anxiety. According to Wurman (1989), 'Information anxiety' occurs when there is a wide gap between what the individuals understand and what they think they should understand. It happens when information does not tell us what we want or what we need to know. Wurman warns that information anxiety will result in people being only the seekers of knowledge but without deeply reflecting upon the meaning of the

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knowledge due to lack of time. The obsessive quest for information and knowledge has led to Information addiction (Reuters, 1997). In such information-driven societies, most individuals tend to possess abundant information and knowledge but lack wisdom.

An important characteristic of our present information society is the incredible speed with which it changes. Even the most intelligent minds have failed to cope with the changes and gaps generated by scientific, technological, cultural, and social innovation. Alvin Toffler (1970), a futurologist who had predicted the current scenario has made a detailed study of the acceleration of change and its consequences on the individual's mind. Too much change might be counter-productive and lead to undesirable consequences. The acceleration of change is accompanied by an increase in the information flow leading to psychological, physical, and social problems. The best way to articulate Information Overload is by comparing it with overstuffed food. Data are like food and the food which is overstuffed may not leave one satisfied. Information Overload may assume a variety of forms that include: (a) Excessive quantity of Information flow; (b) Complexity of the Information (resulting in the individual's inability to grasp the Information; (c) Authenticity of the information (not sure whether the Information is correct resulting in confusions).

The problem of Information Overload is indeed a result of technological advances. The retrieval, production, and distribution of information have been made so easy that sometimes it could be a menace and nuisance. We are already witnessing the explosion of large amounts of irrelevant, inaccurate, and unclear data in fragmented pieces. An overabundance of low-quality information is referred to as 'Data Smog'. Psychologists have proposed a new term 'Information Fatigue Syndrome' to describe the resulting symptoms of Information overload upon the individual. According to researchers, the stress of not being able to process information as soon as it arrives coupled with personal and social expectations generally results in deleting the individual's energy and often demoralizing the individual. There are claims that a relentless cascade of information flow lowers the individual's intelligence (Paul, 2009). We have arrived at a situation where we have more information than we can process and most of it is irrelevant leading to confusion and chaos.

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Information Technology and Education

In the field of education particularly, Information and Communication Technologies (ICT) are playing an important role in the learning process. By offering powerful tools for expanding educational access and improving skills and knowledge, they have been an integral part of the educational system especially in recent times through 'virtual classrooms and online education. Online databases maintained by universities, governments, and private organizations contain enormous amounts of readily accessible information. E-mail allows students with similar interests and ideas to share knowledge and collaborate with other students around the globe. On the whole, these technologies are fundamentally transforming the nature and culture of education.

However, technological progress coupled with free information market has resulted in Information overload which could be detrimental to the educational system. With the easy access and excessive exposure to the high quantity of information on a daily basis, the decision-making power of an average individual student has largely deteriorated. An average human brain is not evolved to process large amounts of information at such a high speed. One of the consequences of information overload is the decrease in our attention span. Since there is excess information, it is impossible to process all of it efficiently with attention. This results in the individual's loss of the ability to concentrate on one thing as he/she is constantly searching for new things to occupy one's mind. Herbert Simon, an American economist rightly points out: 'A wealth of information creates a poverty of attention". A couple of decades ago, the Indian educational system suffered due to the inability to disseminate information. Now, the system is suffering due to the excessive availability of information. The challenge now is to provide the students with the knowledge of discrimination enabling them to be discreet in their navigation. Pedagogy and Curriculum

need to involve tools that shall empower students to tackle the 'Information overload' and continue to benefit from the new technologies.

The Knowledge of Yoga in the Information Era

The word 'Yoga' refers to 'Union' in the Sanskrit language indicating the union between mind, soul, and the body. In simple words, Yoga can be defined as a way of life that balances health, harmony, and bliss. It is a spiritual practice and a discipline that helps the individual to unite his body with soul and mind. With Yoga, one can experience the vast interrelatedness of life. Yoga is not just a physical exercise, but a transformation that can train individual minds to appreciate life and instill peace, wisdom, and grace in it. The regular practice of yoga shall train the individual to reach a certain state of mental equanimity, where responses to favorable and unfavorable external events are under the individual's control; and also the responses are moderate in intensity (Narendra and Nagarathna, 1997).

Psychologically, the practice of Yoga can help one become more mentally and emotionally centered. It leaves one feeling emotionally grounded and, at the same time, helps the individual release bound-up tension and emotion that creates illness and dysfunction in both body and the mind. Yoga helps the practitioner to enjoy a purification of the physical impurities and harmful emotions that are trapped in the system. It enables the practitioners to achieve radiant physical health and a serene mind and fosters spiritual upliftment. Yoga could be a powerful exercise to rejuvenate the joy of life and learning among the youths who are largely the victims of 'Information Overload'. It is unfortunate that a large number of youths are unaware of their state of being trapped in the cycle of Information overload and its consequences. Too much information is leading to chaos, confusion, and ambiguity. In such a scenario, an attempt to integrate Yoga with a basic education could help in training the young minds to successfully align with the relentless dynamics of the ever-changing Information Society.

The Role of Yoga in education

The knowledge of yoga enhances individuals' learning ability by disciplining the mind; increasing concentration levels and developing determination, patience, etc. Yoga provides comprehensive knowledge and understanding of oneself and assists in developing stamina and flexibility besides emotional stability and intellectual and creative abilities. It is not just confined to the physical domain but has a deeper impact on the psychological and emotional aspects of an individual's life. The following table below provides details of the impact and effects of yoga on human development.

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Table 1
Effects of Yoga on Human Development

Physical	Mental	Emotional	Creative
Vitalizes and improves brain	Improves Concentration	Regulates hyperactive behavior	Enhances imagination
Strengthens and balances skeletal, muscular, nervous, and endocrinal systems.	Enhances recall	Harmonizes mental energy	Focuses thought and intuition
	Works on conscious and unconscious	Activates vital energy	Develops personal self-system
	Stimulates left and right brain	Builds character	

Following are the assumptions of the several schools of yoga which, though different in approaches, are similar in their overall objectives namely: (a) Body and mind are connected; the health of one affects the other; (b) Regular practice of Yoga has revitalizing and tranquilizing effects on the system; (c) Yogic exercise leads to discipline of both body and mind; (d) Practice of Yoga helps one to have a balance in one's life. There is neither indulgence nor deprivation; (e) Yoga and its practice eventually leads to clarity of thought, understanding, and awareness; (f) Yoga brings harmony within oneself.

Research reveals that the Indian educational system until recently laid over-emphasis on linguistic and mathematical intelligence; and indeed most of the

IQ tests are based on these aspects. This has resulted in ignoring the other complementary facets of intelligence. These issues can be addressed through Yoga. The eight limbs of yoga cover the different facets of intelligence. The eight limbs include Yama (interpersonal code of an individual); Niyama (personal observances); Asana (postures); Pranayama (regulation of breath and bio-energy); Pratyahara (disengagement of senses); Dharana (concentration); Dhyana (meditative awareness); Samadhi (higher consciousness). Yoga practice also includes Kriyas (cleaning processes), Mudras (certain interval attitudes), Bandhan's (i.e., neuromuscular locks), and Meditation techniques. All the practices are intended to train the individual in developing a certain type of awareness within oneself. This shall eventually result in positive changes in emotional and visceral functions, and the changes will be reflected in intellectual and somatic functions in the individual. It is argued that academic performances improve with the right intervention of yoga practices by reducing stress levels. Studies suggest that the yoga modules should be a regular feature in the schools and curricula (Kauts and Sharma, 2009).

Yoga in Classrooms

The introduction of yoga in schools for all children has to be through simple practices appropriate to the ages of the children. The aim is to help children free their mental and creative energies in a constructive manner to enhance their self-confidence and self-awareness. (Additional classes can be arranged during the spare time outside the class hours for those students who show more interest in learning more about yoga.) In general, the sessions should include rhythmic movements and some selected simplified asana for stretching, toning the muscles, and creating flexibility within the skeletal system, as well as the development and maintenance of healthy nervous and endocrinal systems. The overall effect would be heightened sensitivity, balanced energy, and improved attentiveness. Students should be encouraged to express themselves by sharing their experiences in the classroom which can be insightful to both students as well as the teachers. It should be noted that the actual imparting of the practices needs to be extremely simple and basic. It is critical and mandatory that teachers are provided with rigorous pedagogy skills to impart the knowledge of yoga. Teachers should experience the benefits of this knowledge system before they impart it to their students. The authentic experiences they possess enhance the effectiveness of each yoga session.

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Conclusions

Technical solutions may not be the answer to the problem of Information overload. Time management, knowledge management, and mind management are largely behavioral processes affecting an individual's personal productivity. No technology or software can teach different aspects and dimensions of mind management. Technology can only help the human mind to improve one's efficiency but cannot substitute the human mind. Individuals need to train their minds to adapt to the rapid changes of the new information society. The science of Yoga if rightly integrated into the curriculum during different stages of education can be a promising tool to address the issues of mind management followed by time management and knowledge management.

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ASSESSING SOFT POWER IN INDIA'S FOREIGN POLICY UNDER NARENDRA MODI

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ABSTRACT

Soft power, or the ability to persuade, convince, and set the agenda, is becoming increasingly significant in international relations and in India's foreign policy. It is proved by history that great powers lost in wars because of underestimation of the soft power are sometimes said that, the country that tells the better story wins, rather than the country whose army can prevail on the battlefield. Having an ability to shape a broader narrative in bilateral and multilateral diplomacy, it remains a vital instrument in foreign policy by itself or as a complement to the application of "hard power", that is, military power or other types of compelling diplomacy. India is using its soft power in foreign policy boldly with its culture, diaspora, media, yoga, education, touristic place, and other capabilities. India's hold on its soft power is evaporating from its rich cultural heritage, its great civilization, its political values, and its public diplomacy. In Modi's era, many soft power tools and projects have been taken in order to extend the scope of soft power in India's foreign policy. The present paper tracks the changes in Indian foreign policy over the last few years to show how soft power strategy, tools, and institutions have been given a more prominent place in India's foreign policy under Narendra Modi. Both primary as well as secondary sources data will be used.

Keywords: *Soft power, foreign policy, Diplomacy, Hard power, Diaspora*

Introduction

The expression "soft power" may be understood in terms of a usable national capacity to advance foreign policy objectives and priorities of a country by non-coercive means. As a new form of power "soft power" has become increasingly discussed in the post-Cold War era. The term 'soft power' was first coined by the American Scholar Joseph Nye (1990), in his book, "Bound to Lead: The Changing Nature of American Power". Soft power in foreign policy arises from factors such as the dominant values, internal practices and policies, and the manner of conducting international relations of a State. Soft power is getting others to want the outcomes that you want, co-opting people rather than coercing them (Naya, 2004: 5). It is the ability to establish preferences that tend to be associated with intangible assets such as an attractive personality, culture, political values and institutions, and politics that are seen as legitimate or having moral authority (Naya, 2004: 6). Moreover, the success of the implementation of soft power depends on the reputation of the states in the international system as well as the utilization of diplomacy between states. In fact, soft power is frequently related to the rise of globalization and neoliberal theory. Culture and media are identified as sources of soft power since they can extend national language or a particular set of normative structures. Therefore, the nation with a large amount of strength of soft power and determination of winning other states' inspiration will avoid the requirement for expensive hard power expenditures. Foreign Policy can be the source of enhancing one's soft power through various techniques like establishing bilateral relations in which the countries agree on cultural transmission through

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programs, meetings, conferences, etc. India's Soft power can be traced back to its history, and its rich civilization which offered accommodation to any person irrespective of religion, caste, and creed. India is known for its diversity, political values, and foreign policy around the world today. People of every religion are living in India; the Indian mind has knowledge and influence of Hinduism, Christianity, Islam, and many other religions. Indian civilization evolved as a hybrid civilization. [Tharoor 2012]. After independence, India under Nehru adopted the strategy of establishing peaceful relations and became the champion of decolonization which determined his Foreign policy. India did not prefer any bloc from East-West but rather preferred independent Foreign policy and promoted soft power by supporting public diplomacy, self-determination, and peaceful relations. India received a lot of setbacks since its independence but continued to protect the instruments of soft power. In the 21st century when the world order has changed India is no longer a passive player in international politics, its strength is seen by the combination of soft power with hard power. Soft power is guiding our Foreign policy to have an unending influence on foreign countries, one among the largest economies is not trading its economy, and it is also trading its culture along with it.

Objectives

1. To assess the Potential of soft power in India's Foreign Policy.
2. To examine the process of soft power in India's foreign policy under Narendra Modi.

Methodology

To achieve the aforementioned objectives, both primary, as well as secondary sources of data, would be used. The primary analysis will be conducted within the broad parameters of survey research by using two of the most convenient research techniques of data collection, namely questionnaires, and interviews. Secondary sources of data have been collected from government policies, reports, and other regulations. Moreover, owing to the limitations effectuated by the Covid-19 pandemic, mailed questionnaires and telephonic interviews become a preferred choice to get the information pertaining to this paper.

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Potential of Soft Power in India's Foreign Policy

Since its Independence, India has been successfully functioning as a democracy considered the largest practicing democracy in the world. The aim of the adoption of democratic essence was the accommodation of all classes, caste, color, religion, etc and continuous preservation of democratic values is appreciable for enhancing its Soft power. The history of soft power can be traced back to its ancient times when the term was not derived. The presence of soft power today in India's foreign policy is also known by the obligation and announcement of international rules at international institutions. India was a separate member of the League of Nations and is also the founding member of the United nations India has always endeavoured to promote international peace and security, maintain good relations with other nations, respect international law, and settle international disputes by peaceful means. India has huge potential for Soft power in view of its largest youth population, gigantic middle class and purchasing power, prodigious economic potential, and its spiritual and cultural history which is an abundant source of Soft Power. The impact of India's Soft power on an international platform was perceived before the term was placed in the public domain in the 21st century. Generally, many factors influence the country's foreign policy be it history, culture, or geography all these have conclusively influenced India's Foreign policy. Many external relations of India are based on ancient cultural and civilization links, history always has its relevance, and the ancient link influences the policy continuously till now. Nehru adopted the policy for the promotion of a common Asian identity. In the form of a political movement called NAM, Soft power has always been reflected in the Foreign policy of India. Joseph Nye regards that Western democratic countries show democratic priorities and people believe democracy can bring free and equal life.

Before independence, India practiced non-violence which led achievement of independence and it is named a soft power element since nonviolent methods

have influenced the development of peace studies. Besides democratic values, India's soft power is enhanced by its anti-colonial history and democratic values are enhancing its soft power continued with a free press, independent judiciary, vibrant civil society, multi-ethnic polity, secularism, pluralism, food, handicraft, and yoga. India's status as a responsible nuclear power, the rapid growth of the information technology sector, and the existence of a large Indian Diaspora in certain western centers. Thus, the Indian Diaspora is a recognized source of soft power, India decided to celebrate the day as Pravasi Bharatiya Divas in 2003 to enhance the status of overseas Indians in India and Abroad. India is one among few countries having the largest diaspora working outside India who is progressing leaps and bounds in developed nations, hence enhancing India's relations with these countries. In addition to soft power strength in its diaspora or democratic values, Indian soft power is visible in its technological and space mission by launching the South Asian satellite by ISRO, this will strengthen its relations with its immediate neighbors which have always an endangered its sense of security despite widespread mutual heritage. This type of diplomacy will ensure India pursues its interests in its neighborhood. India has much potential for the utilization of Soft power and has shown many prospects. There are various sectors where India could generate soft power tourism sector, which holds great promise, more people-to-people interaction would be fruitful for enhancing soft power. India has many pilgrimage sites of different religions which have worldwide recognition. India also has potential in its Bollywood industry which is not driven by state so-called non-state driven soft power. Bollywood is an important source to achieving many goals outside India, it is considered a living example of the success of cultural openness, and has all the traits to emerge as India's Soft power of the future. Indian films are popular in Asia, the Middle East, and Africa and have the largest global reach after Hollywood. India is a melting pot of world religions which provides a spiritual link for other countries to India. Deepening ties with other nations on the basis of religious teachings could potentially feed into the government's larger policy objectives like Act East Policy. Recently, India emerged as an economic power which itself is a Soft power asset. India is a rapidly growing economy with great potential, recently going downwards substantially has become the flaw that needs to be seen with freedom orientation that could make it a reference model for the present century. It is true fact that India possesses all the resources which Nye considered necessary soft power sources like culture, political ideology, and good foreign policy- all of these have immense potential in the field [Lin, Li, and Hongta, Leng 2017]. Therefore, proper utilization of these possessions will be incredibly important and beneficial for India.

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Soft Power under Modi

Despite the huge potential of India's soft power, it has not been optimally used thus far. Prime Minister Narendra Modi, through his high visibility and extensive foreign travels, has made soft power and outreach to the Diaspora key objectives of his Foreign policy. Since the assuming of power by Narendra Modi by his landslide victory in 2014, everything was expected to get re-positioned. Indian soft power gets a boost but at the same time, it cannot be ignored that certain historical democratic and political values got a big blow. To see how Modi's role in shaping foreign policy on soft power lines, we clearly experienced this through his visits to other nations. These visits have given India a new identity in the Outside World by strengthening its relations enhanced India's Soft power. Analysts say soft power has the Potential "to multiply the efforts of Indian diplomacy and in this regard should be pursued as an important objective" [Mukherjee 2014]. Modi's s plans have to revive national pride in the country's ancient values while enhancing the country's hard power by using its soft power assets [Pant 2015]. Indian Diaspora received special attention under Modi, they have a strong foothold in societies abroad, they got a new identity from this Prime minister who since his tenure organized various events to gather the Indian population outside. Indian Diaspora also played an important role in making the International yoga day celebrated on 21st June every year [Mohan 2014]. Modi claimed that Yoga was India's gift to the world and it led to a peaceful harmony of the

body and the mind and helped "discover the sense of oneness with yourself, the world and the nature" [Mohan 2014]. Yoga is now practiced as a requirement for hygienic health all around the world the participation of the armed forces in world Yoga day was the projection of a peace-loving army which increases international goodwill for India. The trend towards the ethos of India has increased since Modi came to power by re-focussing on the Indian Diaspora, multicultural ethos, and revival of ancient practices like Yoga.

Besides this mode also tried to make foreign countries aware of the cultural heritage of India, by giving speeches outside India and showing Cultural sites to foreign leaders we have many examples like when the Chinese President come here in 2014, he was taken to Sabarmati Ashram by Prime Minister Modi and was shown Gandhi Charkha. Another example is when Shinzo Abe visited India, Modi took him to Banaras where both witnessed the religious ritual called Ganga Aarti. [PIB 2016]. Modi did not promote it on the basis of any communal ideology but rather was more secular in his foreign policy. Hassan Rouhani visited India and delivered lectures to Indian clerics and visited other historical places which shows how the Indian government is promoting rich cultural heritage along with political values. The Modi government mainly relied on culture and political values to enhance Indian soft power which is not different from his predecessors the only thing that makes his Foreign policy different is a representation of India in a new way. Nehru's Foreign policy was based on Panchsheel while Modi designed on this model another doctrine called Panchamrit, this shows Modi's confidence in Indian power. Besides stressing on Indian Diaspora Modi also emphasizes Buddhism the Indian's ancient heritage. Modi has explicitly claimed that without Buddha this century cannot be Asia's century". [Pethiyagoda 2015]. He used the Charm of Buddhism in India's immediate neighborhood by reviving the cultural connection between India and Sri Lanka. Nepal was given a Bodhi sapling by Prime Minister Modi to reiterate the cultural angle of their relationship. [Pethiyagoda 2015]. He also gifted this to China to Xian Government and it is said he played a cultural card in China to fulfill economic interests which have not resulted in success analysts conclude. Bollywood is also India's biggest market for exporting its culture to all regions in immediate as well as extended neighborhoods. The movies have played important role in solving many issues in view of India-the Pakistan rivalry.

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Conclusion

It is difficult to quantify the intangible source of power, its impact, and its presence. The nature of soft power always remains fluctuating, so it is impossible to measure it, the country's values, its culture, and its institutions both state and non-state-driven. Despite these difficulties, some Foreign policy analysts have been able to analyze their impact on Indian foreign policy and how these elements have influenced India to gain foreign attention. Over the last few decades, the Indian government has made an afford to revive the new desirable image of India based on ancient rich civilization. Many Indian features of life have become prominent in many parts of the world, like music, food, style, and religions. Having all the elements of soft power still does not make India impressive power due to many fault lines one is domestic performance and the other is the absence of sufficient hard power which Nye himself said without which a Country cannot develop Soft power. Modi is trying to use soft power for promoting relations with foreign countries by stressing Indian values and culture but has a yet limited impact in terms of boosting ties with those countries. India still has an insecure neighborhood, domestic underperformance, and an unimpressive economy which prevent its Soft power to be exemplified. India can therefore be qualified as a defensive soft power that puts a stronger emphasis on its capacities rather than its capabilities. It is regarded as an asset that is promoted to increase India's attractiveness to foreign investors. Using the soft power capacities as a strategy would also require a domestic debate on how to strike a balance between national interests, on the one hand, and political norms and values, on the other hand.

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