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NEP 2020 : Access to  
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Psychological  
Wellbeing and  
Professional Self Efficacy

Social Work and  
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To Be Distortion Free

Social Work:  
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### Respected Readers!



A quick perusal of the print and social media reveals the fact that during the last two years, the number of suicides in particular among the students has phenomenally increased. This is substantiated by the recent data supplied by National Crime Records Bureau (NCRB) which says that 'more students ended their lives in 2020 than 2019; While student suicides accounted for 7.4% of the 1.3 lakh total suicides in 2019, they account for 8.2% of the 1.5 lakh total suicides in 2020' (www.thehindu.com/profile/author/Serish-Nanisetti-664, Nov 27, 2021, Hyderabad). This is attributed to the reason that the 'students are restricted to homes because of the lockdown which caused sudden changes to their routines' (Chethan Kumar, The Times of India, Nov 11, 2021). The survey further says that the young adolescents and adults belonging to the age group of 14 to 25 of both genders are the most depressed and eventually decide to end their lives.

Though various reasons may be attributed for the hike in the suicidal cases, the major factor ultimately pointed out is the academic stress, created by the educational systems. The pandemic has completely remodelled the life pattern, especially the regular working pattern of the students, who were tuned earlier to a specified social, academic, cultural and health practices. The intermittent onset of different variates of COVID-19 forced the government authorities to initiate some stringent measures to contain the spread of viruses. While it is justified for the sake of the wider society, its repercussion on the younger generations in its academic growth has left the people in the lurch and the officials in a dilemma; for, not only the intellectual development but also the psychological dimensions have been gravely affected. As the academic climate remains unsettled, the students are not able to prepare themselves for the competitive exams and thus their dreams for higher studies are shattered; only those have the greater access for better resources or training centres perform better and move on the academic ladder. The unlucky students who become more depressed, irritated and disheartened adopt to the deadly decisions, leading to conclusion of their lives on this earth.

A few cases of recent self-destruction by the college students have become an event of concern as to why such a decision and how such a decision in spite of assurances of guidance and support from faculty, counsellor, parents and administrators. Perhaps the time has ripened to look into the needs for regular online and offline counsellor-student contact, in-depth study of change of life styles and behaviour patterns of students and involving the parents and peers in analysing and designing the strategies for the growth and development of the students.

This issue has very surprisingly become an assortment of research papers of wider areas such as students' admission, assessment, academic stress, pedagogy, case study on senior citizens, adolescents' problems, NEP, social work and professional wellbeing. It is going to be a fascinating and rewarding reading and do write to us if any, for our further enrichment of the journal. As ours is the UGC-CARE listed journal, every effort is taken to make it more standard and quality-laden but we regret to say, it involves a lot of language corrections and content alignments, resulting in publication-delay. May we request the contributors to pay attention on the above elements and help us in maintaining regular publications?

Thanking you for your support and understanding

In service

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# NEP 2020 : TOWARDS ACCESS TO QUALITY PRE-SCHOOL STAGE OF LEARNING

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## ABSTRACT

*Early years of children are vital for their development and brighter future ahead. It has been established that young minds are by nature creative and possess original thinking, and thus the early years of education can very much help nurture their creative talent. Children of today's are the future human resource of our nation. Thus it is required to develop a system of education that provides opportunities for assessing their abilities and nurturing their inherent creativity and potentials. Our very recent National Education Policy (NEP-2020) has rightly justified by changing the existing structure of the education system and bringing this age group (3 to 5 yrs.) of children in the formal setup of schools. The present paper has tried to present the picture of early childhood care and education shaped in our country after independence. Further, it has also presented the prospects of pre-school education in light of the recommendations of NEP 2020.*

**Key Words:** ECCE, Pre-School Education, NEP 2020 and Pre-Primary Education

## Introduction

Preschool Education plays a detrimental role towards the success of the child and brighter future. The tender early years of the child are susceptible, and thus both the physical and psychological development of the child is very much related to the way we nurture them. Young children possess curious minds and are eager to understand the world order. Quality preschool education helps in enhancing the social, cognitive and language development of the children (Manhas&Qadiri2010). As rightly recognised by Aristotle, the essence or potential of a child mind in the early years, he has stated, "Give me a child until he is seven, and I will show you the man". Children of today's are the future human resource of our nation. Thus it is required to develop a system of education that provides opportunities for assessing their abilities and nurturing their inherent creativity and potentials. Our very recent National Education Policy (NEP-2020) has rightly justified by changing the existing structure of the education system and bringing this age group (3 to 5 yrs.) of children in the formal setup of schools. This structural reform will help nurture the children's creative and original thinking potential and lead them towards utmost development.

## Importance of early years of learning

Citing the importance of early years of childhood, the General Assembly of UNO in a unanimously adopted

resolution on November 20, 1959, also popularly known as "Declaration of the Rights of the child" says that "Mankind owes the child the best it has to give ... All children without any expectations whatsoever shall be entitled to these rights, without distinction or discrimination." Our own nation's National Policy for children (1974) recognises them as "Nation's supremely important asset" and "their nurture and solitude as the nation's responsibility". We made many policies to safeguard the child rights so that the children of this age group achieve full physical, mental, emotional and social development. Still, despite all these constitutional laws and policies, we know the reality. We are still far behind when we talk about the welfare of this group of children. They are still vulnerable to different types of exploitation and practices.

The need or importance of pre-school education has been described by various Commissions and Committees, viz. Wood Committee (1937), Central Advisory Board of the Government of India (1944), International Study Conference on Child Welfare (1952), Central Social Welfare Board (1953), Committee of Members of Parliament on Education (1967), Report of the National Commission on Labour (1969), UNESCO

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(1976 & 79), etc. and eminent educationists and politicians like Zakir Hussain (1955), Murlidharan & Banarjee (1969) and A.P.J. Abdul Kalam (2012) pointed out that pre-school education is essential to develop the child's good physique; good health habits, social attitudes and manners, group participation, emotional maturity, to encourage aesthetic appreciation, intellectual curiosity, child independence and creativity.

### **Development of Preschool Education in India**

Preschool education in India was introduced by the western countries when the missionaries took initiatives and set up the first pre-schools or nursery schools in the late 19th century. Loreto Convent, Lucknow (1874) and Saint Hilda's Nursery School, Poona (1885) were few of the first schools providing preschool education. The kindergarten started by the missionary was later recognised as 'Balwadi' or 'Shishu Vihar'. Giju Bhai Bhadek started the first Montessori school in India in 1920, the first private Indian enterprise. During her stay in India from 1940 to 1948, Dr Maria Montessori gave a great boost to the establishment of pre-schools and training centres in India. The pre-basic scheme, which came in 1945, was a benchmark in preschool education in the country. After our country got independence and with the emergence of Five-year plans, many provisions were made towards financial allocations for the development of pre-schools in the country. In (1975) Integrated Child Development Services (ICDS) scheme was launched in 33 selected blocks of Rajasthan, concentrating on nutrition health and non-formal preschool education for young children. ICDS continues to be the main integrated National program for early childhood survival and development throughout the country to date. National Institute of Public Cooperation and Child Development (NIPCCD), New Delhi, which caters to the training needs of ICDS staff members in their study (1992), indicating a very positive impact of ICDS on the health and nutrition status of preschool children.

### **NEP-2020-Access to Quality Years of Learning**

For the nations like India to achieve the goals of becoming a developed and great nation, education is

the fundamental requirement that all have to attain. To achieve equality and equity, it is required that we start from the very beginning starting from early childhood care education through higher education. The very recent National Education Policy (NEP-2020) has been thrust upon to provide irrespective of their location, caste-creed, quality education system, focusing on marginalised, disadvantaged and underrepresented groups. It has promised the setting of schools and centres where every child feels welcomed and cared for, where a comfortable and safe environment can be provided. The schools being set up should welcome a multicultural value system and be equipped with infrastructural facilities.

As emphasised in UN, MDG (2005), Universalization of Primary Education is a must for the sustainable development of the society. The early years are very crucial and critical for the child's development. This idea only has led towards the recommendation by NEP 2020 for reframing the existing formal education system with an extended-time period starting as early as three years of a child. Malnutrition, under-development, and improper health status are the actual reasons behind the child's backwardness and low intelligence. Thus, it is required to provide them with an early intervention of education set up that provides the foundational knowledge and takes care of their health, love and care needs, nutrition and safety needs. Present below in Table 1 is the proposed structure of school education in comparison to the earlier system.

### **ECCE in NEP 2020**

If we specifically talk about the early childhood education program as proposed by the current policy, the foundational stages will focus on the 360-degree holistic development of the child. The foundational stage will be to have a single curriculum based on play and discovery-based learning pedagogy. More focus has to be given during the early years on Arts, Crafts, Games and Music. To better understand the kids' multilingual approach has to be adopted. According to NEP, 2020, school education should focus on a competency-based, inclusive, digitalised and ICT-integrated education



system, leading to developing the child's scientific temperament and problem-solving ability. The curriculum and pedagogy must engage the kids towards developing cognitive, mental, and emotional dimensions.

**Table 1**  
**Shifting from existing Academic Structure to the New Academic Structure**

Existing Academic Structure		Proposed Academic Structure as in NEP-2020			
Structure	ECCE in existing structure	ECCE in Proposed structure	Structure		
Not any Specific or organised structure of ECCE (Different models exists)	RTE covers class 1 to class 8	RTE from preschool (age 3 onwards) till class 12.	5 Years (Anganwadi/Preschools)	Foundational Stage	
	Anganwadi, preschools cover 3 to 6 age group.	Integrated primary school framework from age 3 to 8.	Age-3-6 Years (Class 1 & 2) Age-6-8 Years		
High School Stage	10 Years (Age 6-16)		3 Years (Class 3-5) Age-8-11 Years)	Preparatory Stage	
Sr. Secondary Stage	2 Years (Age 16-18)	Focus on health and nutrition in anganwadis	Anganwadis, preschool to be linked to local primary schools.	3 Years (Class 6-8) Age-11-14 Years)	Middle Stage
		Rote learning, Formal teaching in preschool	Focus on play and discovery-based learning	4 Years (Class 9-12) Age-14-18 Years)	Secondary Stage
		WCD ministry oversees anganwadis system.	MHRD to oversee educational aspects.		

NEP has proposed informal assessment through observations, inculcation of healthy habits for life and positive socialization of the young learners with their peers and must be based on parents feedback. It has also proposed to provide nutrition for all children with provisions of breakfast and mid-day meals. Parents, especially children of 2-6 years, may also access training to help support the children's learning. In addition, one year of preparatory programs for children who have not been able to access education earlier than five years of age will also be on offer to make them able to get admission in class I directly. It has also aspired to keep the teacher to students ratio 1:25 and exceed 1:30. Although private schools have contributed a lot towards pre-primary education but their overloaded curriculum and high parental expectations create problems for the young child. The child suffers mentally and physically and sometimes suffers from psychological issues when they fail to match the unreasonable demands of the school, teachers, and parents.

It is proposed that although methodology and curriculum content will be different, the goals of achieving fundamental mastery over numeracy, literacy, reading and communication will be given utmost importance. All the learning should be based upon learning outcomes that ensure the child's cognitive development and aesthetic and social development.



**Pre-Primary Teachers for the Success of ECCE**

The teachers are serving at the pre-primary level must possess some essential qualities to deal with the young kids justifiably. They should possess an engaging personality, be up-to-date, knowledgeable, energetic, and have lots of patience. They should be good listeners to the young inquisitive minds and should be flexible in solving student problems. Countries throughout the Globe have various programmes and training to prepare primary teachers. Some of the practices are summarised in the table-2 below:

**Table-2**  
**Global Practices for Teachers Preparation for ECCE Stage**

Country/Region	Practices for Teacher Preparation for ECCE
Finland	Pre School Teachers program as Bachelor Degree Program at the universities.
Iceland	First started with 3-Year Program at the college level, latest have been five Year Master's
Denmark	First offered in the course of three and half years later on it is being offered as a specialised course.
America	Bachelor's degree and Associate degree programs
China	Associate degree program
Nepal	Policy layout standards for ECE teachers: Grade 9 or higher and in-service training. (World Bank 2013c)
Philippines	ECE teachers are licensed only upon passing a licensure examination administered by the national-level Professional Regulation Commission (SEAMEO & UNESCO, 2016).

If we talk about pre-school teacher education programs in our country, several pre-service courses are being run by different state-owned private institutions. There are courses to train the functionaries of SSA/SCERT and ICDS those serving for the cause of early childhood care education. Several other certificates and diploma courses are being run by NIOS and IGNOU, well recognised by NCTE. NEP 2020 has also recommended training the Anganwadi and Balwadi staff to serve the cause of ECCE. Largely if we see we can say that there is a shortage or no course like bachelor degree, master degree or integrated courses available in our country which prepares teachers for teaching at this basic level.

**Discussion and Conclusion**

Assessing the importance and critical nature of the tender years of learning (0-8 years) have been rightly stressed in our present and new education policy to include ECCE in all the country's schools. NEP, 2020 has clearly and boldly stated that if the state-wise goal of foundational skills is not achieved by class 3, the rest of the policy is irrelevant. The right kind of foundational education can only provide a strong base for the goals of the later stages to be achieved successfully, and the policy in the paper can be successfully realised. The stakeholders like parents at home and teachers at school have to behave so that they become the role models for young ones to follow them. In this regard, we can cite a study conducted by Saikat (2019) on 1373 households of West Bengal, India. He found that parental lower level of education is a key factor affecting poor or absence of preschool education among children. Hence it is required that the parents be made aware of the importance of pre-school education. There is a need for a structured and detailed educational training program to prepare teachers to understand each young child and plan and instruct accordingly. The need is also there that teachers at this stage must be techno-savvy so that they can do justice to the present digital age learners and their diverse learning requirements. They must be worthy enough to take care of the health, nutrition and mental well-being of the child. In our country, children are either neglected or too pampered. It is hardly found that parents can identify the area of strength or interest of the young mind and plan strategies accordingly to nurture it. The teacher has to plan pedagogical strategies so that the students at the foundational level can take

initiatives in learning in their natural environment and cultural setup. They should not feel school or schooling is a separate setup full of complex rules and regulations to follow. Rather, the school should be their second home to enjoy learning and meeting with their friends to engage creatively. In schools, young children should see the teachers as their parents. The renowned psychologist Margaret Mead rightly said, "Children must be taught how to think, not what to think." They must develop learning skills, and if the knowledge around or the problem around will be interesting and challenging enough, they can decide to engage in it in their ways to discover learning. This approach can only lead them to become successful and civilised human beings in the global world scenario nowadays.

**References**

1. Cain, K. & Dweck, C. (1987). *The development of children's theories of intelligence*. Cited in Dweck, C. & Leggett, E. (1988).
2. Ghosh, S. (2019). *Inequalities in Demand and Access to Early Childhood Education in India*. *International Journal of Early Childhood*, 51(2), 145-161. doi:10.1007/s13158-019-00241-8
3. Kalam, A.P.(2012). *You are unique*. Puniya publishing private Ltd. Bangalore
4. Katz, Lilian G.(1987). *What Should Young Children Be Learning?* ERIC Digest. Retrieved from <https://files.eric.ed.gov/fulltext/ED290554.pdf> on 06th Jan 2021.
5. Manhas, S., & Qadiri, F. (2010). *A Comparative Study of Preschool Education in Early Childhood Education Centres in India*. *Contemporary Issues in Early Childhood*, 11(4), 443–447. <https://doi.org/10.2304/ciec.2010.11.4.443>
6. MHRD. (2020). *National Education Policy 2020 (Rep.)*. New Delhi: MHRD, Gov. of India.
7. Ministry of Labour and Employment and Rehabilitation Ministry of Labour and Employment and Rehabilitation (1969). Retrieved from <https://indianculture.gov.in/flipbook/2862> on 11th Jan 2021.
8. National Policy for Children, 1974. (1979). *Indian Journal of Public Administration*, 25(3), 919–921. <https://doi.org/10.1177/0019556119790357>
9. NIPCCD.(1992). *Research on ICDS: An Overview(1986-1995)*, Vol 2. Retrieved from <https://www.nipccd.nic.in/file/reports/icdsvol2.pdf> on 10th Jan 2021.

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# METHODS OF TEACHING ENGLISH IN ASSAMESE MEDIUM-HIGH SCHOOLS: A STUDY

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## ABSTRACT

*The teaching of English as a second language has undergone a significant paradigm shift. Now, as the language-learning goal has shifted from 'language comprehension' to 'communicative competence', overall demand has arisen for a 'need-based' syllabus and a 'client-centred' approach to teaching. The development of communicative competence in learners and the overall development of all four language skills is required. The teacher must be well aware of various methods of teaching English as a second language. But what is the reality of the Assamese medium-high schools of Assam? Are the teachers concerned about the multiple methods of teaching English? Are the methods used for classroom learning English effectively? This study tries to address such questions. In this survey-based study, the required data was collected from ten Assamese medium high schools, randomly selected from the Lakhimpur district of Assam.*

**Keywords:** *approach, communicative competence, effectiveness, teacher, learner-centred*

## Introduction

Language teaching emerged as an autonomous profession during the first half of the 20th century, and since then, it has been undergoing different stages of development. Various methods had been introduced and then replaced by some new techniques. Methods such as Translation Method, Direct Method, Bilingual Method, Situational Approach, Audio-lingual, Communicative Language Teaching were very popular during their times. The earlier methods were based on the structural approach, while most current methods are based on the communicative approach to language. Now, as the language-learning goal has shifted from 'language comprehension' to 'communicative competence', overall demand has arisen for a 'need-based' syllabus and a 'client-centred' teaching. In the earlier teacher-centred approach, the teacher dominated the classroom, and the learners were passive listeners; on the other hand, in the recent learner-centred approach, the focus is on 'active learning'. But what is the reality of Assamese medium High Schools? Do the English teachers apply various methods for classroom teaching of English, or do they follow the age-old tradition of teaching English? Do the students of those schools get sufficient exposure to learning English? Can they use English for day-to-day communication purposes? Can we call the teaching-learning of those schools effective?

## Background of the Study

Based on the medium of instruction, schools of Assam can be divided into two main groups- regional medium schools and English medium schools. Among the regional medium schools, most of the schools are Assamese medium schools. Assamese can be opted as the medium of instruction up to the undergraduate level. In contrast, English is the only medium of instruction at the master's degree level, except for the language subjects. Moreover, English is considered a compulsory subject up to the undergraduate level. In most Assamese medium schools and colleges, English is taught with the help of the student's mother tongue.

The Assamese medium schools of Assam can be broadly divided into two groups: the first group of schools follow Axom Sarba Siksha Abhijan. In contrast, the second group of schools follow their curriculum designed by their affiliating boards. The first group consists of government and private schools, while the

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second group commonly consists of private schools. Nowadays, in both schools, English is treated as a compulsory subject school in schools right from the beginning. Though different schools adopt different syllabi depending upon their affiliating boards, at the secondary school level (class IX and X), all Assamese medium schools, including some English medium schools which are affiliated to the Board of Secondary Education, Assam (SEBA), have to follow the same syllabus, therefore the same textbooks. In the HSLC examination also all those students have to answer the same question paper.

**Significance of the Study**

In the case of teaching English as a second language, the approach to language teaching determines the method to be followed. For the successful implementation of any strategy and other factors, the teacher’s role is always important. Therefore, teachers must be well aware of various forms of teaching English as a second language for effective teaching. For that, they must undergo teacher training from time to time. Now, as developing communicative competence in the learners is considered the primary goal of teaching, instead of focusing on particular skills such as reading and writing, overall development in all four language skills (listening, speaking, reading and writing) is desired.

Moreover, the paradigm shift from ‘teacher-centredness’ to ‘learner-centredness’ has redefined the role of a second teacher as a ‘facilitator’ or ‘manager of knowledge’ rather than a ‘source of knowledge. A loud classroom with a purpose is preferred to a school with pin-drop silence. But are our teachers ready to play this new role of a second language teacher, or are they still playing the same position they learned from their teachers?

It is observed that many students of Assam, who have completed their education from regional medium schools and colleges, can neither write nor speak English even after completion of their graduation. Though few students score good marks in English, most of them cannot use the language in real-life situations. All these suggest a gap between teaching and learning English in

the Assamese medium schools of Assam. In such cases, a study on teaching methods may help understand the problems related to teaching and learning English as a second language in the Assamese medium schools of Assam. The study's findings may also be relevant to the vernacular medium schools of different states of India as well.

**Objectives of the Study**

The present study attempts to find out.

- i) The methods of teaching English at Assamese medium-high schools
- ii) Effectiveness of the methods of teaching English at the high school level

**Methodology**

The paper is based on a field study. The data required for the study was collected from ten Assamese medium high schools, randomly selected from the Lakhimpur district of Assam. The study was undertaken among the ten teacher respondents, consisting of one English teacher from each school and a total of sixty student respondents, consisting of six students, randomly selected from each school; three from each class- IX and X. Two sets of the questionnaire- one for the students and another for the English teachers were prepared for the collection of data.

**Findings and Interpretations**

The major findings of the study are discussed below-

***Methods of Teaching English in Assamese Medium High Schools***

In our survey, questions are asked to both teachers and students to learn how English is taught in the classrooms of the Assamese medium-high schools. Responding to the questions, 73.33% of the student respondents say that their English teacher teaches a lesson by translating every sentence into Assamese. After completion of the lesson, 53.33% of student respondents say that their teacher dictates the answers of the questions/ activities given at the end of the lesson, and they have to write it down and learn by heart; 43.33% of the students

say that their teacher assigns the exercises as homework and later makes necessary corrections; only 3.33% students say that their teacher discusses the questions/ activities with them and then encourages them to write the answer in our own words. In the case of grammar, 83.33% of students say that their English teacher teaches grammar deductively; first, they give them a rule/ definition of grammar and then explain it with the help of examples, and in the case of composition, 50% of the student respondents say that instead of teaching how to compose something, their teacher selects some important questions on composition and gives the answers.

Justifying the use of mother tongue in the English classroom, 50% of the teacher respondents say that English can be taught more effectively by translating it into students' mother tongue. Again, though 60% of the teacher respondents consider an interactive classroom the ideal classroom, 40% of teacher respondents consider the classroom with pin-drop silence to be the perfect classroom environment for teaching and learning English. According to 60% of the teacher respondents, students keep silent when they can follow everything the teacher teaches. Regarding the necessity for the use of teaching materials in the English classroom, 30% of teachers feel that, for teaching English as a second language, only the textbook and a blackboard are enough, the 70% of teachers think that apart from textbook and blackboard, authentic materials, various audio-visual aids, projectors etc. are also required. But 56.67% of the student respondents say that their teacher sometimes uses these teaching aids in their classroom; 16.67% of students say that the teacher hardly uses any teaching aid in the classroom; while 23.33% of student respondents say that their teacher never uses any teaching aid in their classroom. Only 3.33% of students say that their teacher always uses these teaching aids in their classroom. Again 76.67% of student respondents say that their English teacher never uses role-play, language tasks or language games to teach them English.

Regarding the use of English in the English classroom, 60% of the teacher respondents say that the students speak in English only when they have to ask or answer a textual question. Therefore the lines extracted from the textbook is the only English that the students

use in the classroom; no student is found to use real English, nor does the teacher compel them to do so.

Answering the question- "Which language do you use in your English class?", 53.33% of the student respondents say that they use only Assamese in the classroom, 46.67% of students say they use both Assamese and English, while none of the students says that they use only English in the English class. Out of the total students who say that they speak both Assamese and English in their English class, 90% of students reveal that they use English only when the situation compels them to do so; or at the most, to discuss textual matters, otherwise they speak Assamese.

Regarding the use of English by the English teacher, 50% of the student respondents say that the teacher uses English only to discuss the text; on the other hand, 43.33% of students say that the teacher uses English only to read out the textbook, the textbook is taught by translating it into Assamese. This shows that neither the English teacher nor the students use English even inside the English classroom for any communicative purpose. The little English used inside the classroom is used only to read out the textbook, or at the most, to discuss the textual matters.

***Effectiveness of the Teaching of English***

The contemporary goal of teaching and learning English as a second language is to develop all four language skills in the learner. But, in our study, 66.67% of teacher respondents say that the students are more set in their writing skills, and 60% of the teacher respondents blame the teaching method for the uneven development of the language skills. Again, 66.67% of students say that they can speak only two/three sentences in English, while 30% say that they cannot speak English. Only 3.33% of students say they can use English for day-to-day communication. Here, as English is not used for daily communication, the students must learn it in the classroom. And the students' inability to use the language in a real-life context shows that English classroom teaching in the Assamese medium schools is not much effective. Neither the students nor the English teacher uses the language even for classroom communication.

Like other subjects, English is also taught in Assamese. Whatever may be the teacher's consideration of teaching English as a second language, in practice, most of them simplify their task by translating the text into the learners' mother tongue. This may be why even after completing their graduation and scoring good marks in English, the majority of the Assamese medium students cannot use the language for ordinary day-to-day communication. Though the methods of second language teaching have undergone different stages of development, in the case of Assam, most of the English teachers of the Assamese medium-high schools never apply those methods in their classroom teaching. In the survey, 50% of the teacher respondents say that instead of following a particular method of teaching English, they prefer to teach their students by applying their method; 20% of the teacher respondents admit that as they are not much familiar with the different methods of teaching English, they always prefer to teach in the method in which they were once taught. Though many of the teachers have undergone some kind of training, 80% say that they have not experienced any activity specifically related to teaching English.

**Conclusion**

Teaching is a bi-directional process where 'John teaches Mary English' may not mean that 'Mary learns English from John'. Despite all significant changes in second language teaching, the role of the teacher remains pivotal to language learning because nothing can replace a human teacher. For successful implementation of any method of teaching English as a second language, the teacher must be well-aware of their role in the classroom and prepare himself/themselves accordingly. Again, the lack of proper infrastructure makes second language teaching more challenging for English teachers. In such cases, the language teachers have to compensate for it by introducing innovative ways to make their teaching more effective.

Again, learning a language does not mean learning about the language. Mere simplification of the content of the text at best can help in scoring some good marks, but it cannot help in learning the target language. In classroom teaching of many Assamese medium high schools, the teacher dominates the classroom, and the

students remain passive listeners. The focus is on teaching rather than on learning, in the sense that the students get less scope to participate in the process. Though the teacher should be a role model for the students and a counsellor in learning, most of the teachers neither encourage the students nor do they use 'real English' inside the classroom. If the students do not get sufficient exposure to learn the language inside the English classroom, the scope for using it outside the English class is almost zero because all other subjects of the curriculum are taught in Assamese. Therefore, it can be said that for the upliftment of the present situation, the English teacher should be trained appropriately because mere knowledge of the content cannot make a good language teacher, where the main goal is to develop the language skills.

**References**

1. Breen, M., & Candlin, C. N. (1980). *Applied Linguistics*. Oxford: Oxford University Press.
2. Brooks, N. (1964). *Language and Language Learning: Theory and Practice*. New York: Harcourt Brace.
3. Brown, H. D. (1987). *Principles of Language Learning and Teaching*. New Jersey: Prentice-Hall.
4. Byrne, D. (1976). *Teaching Oral English*. London: Longman.
5. Littlewood, W.T. (1986). *Foreign and Second Language Learning*. Cambridge: Cambridge University Press.
6. Richards, J. C., & Rodgers, T. S. (2001). *Approaches and Methods in Language Teaching*. Cambridge: Cambridge University Press.
7. Rivers, W. M. (1968) *Teaching Foreign Language Skills*. Chicago: The University of Chicago Press.
8. Widdowson, H. G. (1983). *Learning Purpose and Language Use*. Oxford: Oxford University Press.

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10. UN.(2005). *The Millennium Development Goals Report 2005*, New York
11. UNESCO, (1976). *World Survey of Pre-School Education*, Paris: UNESCO. 17 UNESCO, (1979). *New Approaches to Education of Children of Pre-School Age Report of a Regional Meeting of Experts, Bangkok, UNESCO Regional Office for Education in Asia and Oceania*.
12. UNICEF.(1959). *Convention on the Rights of the Child*. Retrieved from <https://www.unicef.org/child-rights-convention/convention-text> on 06th Jan 2021.

# ACADEMIC STRESS OF GIRL STUDENTS: A CASE STUDY OF KGBVs AND NON-KGBVs

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## ABSTRACT

*Kasturba Gandhi Balika Vidyalayas (KGBVs) cater to girls' educational needs at the upper primary level who are primarily underprivileged belong to rural areas. The literacy level for females is deficient in India. Academic concerns were identified as the most common source of academic stress for pupils. The type of investigation undertaken is exploratory and descriptive survey research methods. The data is analysed using both qualitative and quantitative approaches. According to the study, students from rural areas studying in non-KGBVs had a proportionately greater academic stress than their counterparts in KGBVs. The students from higher classes in the study area have higher academic stress levels in KGBVs than students from lower classes.*

**Key Words:** Academic stress, Girl Students, KGBV, Non-KGBV and Secondary schools.

## Introduction

The Government of India, NGOs, and scholars have been working hard to identify, examine, and solve numerous areas of concern to provide access and quality education to the socially disadvantaged. Since independence, the elected governments have appointed various educational committees to identify and address the unique areas of concern. Girls' education has been identified as one of the areas of special concern as it roots out all ills in society and escalates their opportunities for better livelihood. India has been making efforts for access and quality education to girls through various programs. One such program is Kasturba Gandhi Balika Vidyalayas (KGBVs), which aims at equal and equal education in girls.

Several researchers in their study reported that stress is unavoidable in day to day activities and progressed as the prime cause for anxiety in general and academics in particular. According to Gupta & Khan (1987) and Sarita & Sonia (2015), "Academic stress is a mental distress with respect to some anticipated frustration associated with academic failure or even an awareness of the possibility of such failure" while as Bernstein et al. (2008) claims that "stress is viewed as a negative emotional, cognitive, behavioural and physiological process that occurs as a person tries to adjust to or deal with stressors". Various investigations reported the influence of medium of instruction,

institution management, the locale of residence, the demographic profile of the students, socio-economic variables on the academic stress. They suggested policymakers and academicians ebbing away from the academic stress among the students.

In July 2004, the KGBV Scheme was established to meet the educational requirements of girls in Upper Primary. They are predominantly from impoverished backgrounds and live in rural areas where low female literacy. Under this scheme, the students are provided with various free ships. The students of KGBVs and non-KGBVs in the Krishna district of Andhra Pradesh state may not be exempt from academic stress caused

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by various known and unknown reasons. Hence the present study is entitled ‘Academic stress of girl students: A case study of KGBVs and non-KGBVs’.

**Review of related studies**

According to Kartik Chandra Sarkar and K N Chattopadhyay (2017), “academic stress and self-efficacy are correlated” as Nihan Arslan (2017) reported that “there was a negative correlation between emotional self-efficacy and educational stress”. Jung, Inkyung et al. (2015) proclaimed that “a positive correlation between academic stress and academic burnout”.

V Roopa Gopal and P.K. Aruna (2017) reported that the “effect of self-efficacy and Academic stress on Process skills in physics is significant” while as Snehlata D. Ghatol (2017) testified in her study that “the students coming from joint families have a slightly higher mean of academic anxiety score than their counterparts coming from nuclear families”.

Sadananda Reddy et al. (2015) reported that that “students of government and private schools don’t have any difference in stress” and Sweta Sonali (2016) found in her investigation that “there is no significant difference exists in the academic stress of students in relation to gender, while as significant differences exist with regards to class and type of school organization”.

**Research methodology**

The research is exploratory and uses a descriptive survey method of investigation. The girl Students in the roll classes of class 7 and 9 in secondary schools in the Krishna district of Andhra Pradesh state form the Universe. Fifteen mandals in the districts covering ten from rural and five from urban localities were selected randomly to collect data. A census of the students in classes 7 and 9 in the sample institutions was considered for data collection, and 1366 students responded to the questionnaire in all respects and hence were selected for the study. The tool was developed and standardised by Sinha, Sharma and Mahendra (2001) consists of 30 statements relating to the students' academic stress besides their demographic profile is used to determine the level of academic stress. The data obtained is examined using both qualitative and quantitative

methodologies as this investigation is qualitative in nature.

**Objectives of the study**

The study's objectives are

1. To discern the levels of academic stress of students in KGBV and non-KGBV schools.
2. To compare the academic stress of students of KGBV and Non-KGBV schools based on residence of origin, medium of instruction (English medium), type of management (Government schools).
3. To examine the significance difference between levels of academic stress of students of KGBVs and non-KGBVs based on their class of study.

**Hypotheses**

The proposed hypotheses of the study are

1. Academic stress levels are not different between students of KGBVs and non-KGBVs.
2. There is no significant difference in academic stress levels between KGBV and non-KGBV students based on their locality (rural), medium of Instruction (English) and type of Management (Government).
3. There is no significant difference in academic stress levels between KGBV and non-KGBV students based on their class of study.

**Discussion**

Levels of Academic Stress of students in KGBV and Non-KGBV school students.

**Table 1**  
**Levels of academic stress of students in the study area**

Name of the School	Number	High	Average	Low
KGBVs	736	6 (0.82)	176 (23.91)	554 (75.27)
Non-KGBVs	630	6 (0.95)	180 (28.57)	444 (70.48)
Total	1366	12 (0.88)	356 (26.06)	998 (73.06)

**Source: Primary Data**

The table-1 reveals the levels of academic stress of students in the study area. The greater proportion of students' levels of academic stress was low with 73.06 percent. While as 75.27 percent of students had lower level of academic stress in KGBVs and 70.48 percent in Non-KGBVs. Hence it is inferred from the data that students of KGBVs have comparatively low academic stress than that of students of non-KGBVs in the study area.

Levels of Academic stress of students of rural areas study in KGBV and Non-KGBV schools.

**Table 2**  
**Levels of academic stress of students of rural areas study in KGBV and Non-KGBV Schools.**

Area	School	Number	M	S.D	t-value	p-value
Academic Stress	KGBV	736	7.98	4.62	0.89	0.37
	Non-KGBV	176	8.32	4.08		

Source: Primary data.

The 'p' value was 0.37 in table-2 pertaining to the difference in academic stress levels between students from rural areas who attend KGBV and non-KGBV schools. It is not statistically significant at any level. Therefore null hypothesis was accepted and inferred that the students of rural areas studying in KGBV and Non-KGBV schools did not differ significantly in their levels of academic stress. The students of rural areas studying in non-KGBVs have a proportionately higher level of academic stress.

Levels of Academic stress of students who study in English medium in Non-KGBVs and KGBVs.

**Table 3**  
**Levels of Academic stress of students, study in English medium in Non-KGBVs and KGBVs**

Area	School	Number	M	S.D	t-value	p-value
Academic Stress	KGBV	736	7.98	4.62	2.07	0.04
	Non-KGBV	560	8.52	4.67		

Source: Primary data.

The 'p' value was 0.04 in table-3 pertaining to the difference between the levels of academic stress of students studying in English medium in Non-KGBVs and KGBVs. It is statistically significant at the 0.05 level. Therefore the null hypothesis was rejected and inferred that the students study in English medium in Non-KGBVs and KGBVs differ significantly in their levels of academic stress. Further, the students of Non-KGBVs study in English medium had higher levels of academic stress than the students study in KGBVs.

Levels of Academic stress of students of Government-run Non-KGBVs and KGBVs.

**Table 4**  
**Levels of Academic stress of students of Government runs Non-KGBVs and KGBVs.**

Area	School	Number	M	S.D	t-value	p-value
Academic Stress	KGBV	736	7.98	4.62	2.05	0.04
	Non-KGBV	574	8.51	4.61		

Source: Primary data.

Table-4 discloses the difference between the levels of academic stress of students of government runs Non-KGBVs and KGBVs. The 'p' value was 0.04 which was statistically significant at 0.05 level. Therefore the null hypothesis was rejected and inferred that the students of government runs Non-KGBVs and KGBVs and differ significantly in their levels of academic stress and Non-KGBV school students have high level of academic stress the counterparts study in KGBVs.

**Class of study and Academic stress**

**Table 5**  
**Levels of Academic stress of students of different classes of study in KGBVs and non-KGBVs.**

Area	Class	Number	M	S.D	t-value	p-value
Levels of Academic Stress in KGBVs	7	360	7.38	4.56	3.5	0
	9	376	8.56	4.61		
Levels of Academic Stress in non-KGBVs	7	316	8.17	4.84	1.22	0.22
	9	314	8.62	4.4		

Source: Primary data.

Table-5 states the difference between the levels of academic stress of students of different classes of study in KGBVs and Non-KGBVs.

For the students of classes 7 and 9 in KGBVs, the 'p' value was 0.00 which was statistically significant at both 0.05 and 0.01 level. Therefore the null hypothesis was rejected and inferred that students of classes 7 and 9 in KGBVs differ significantly in their levels of academic stress. Class-9 students had proportionately higher levels of academic stress in KGBVs than the students of class-7.

For the students of classes 7 and 9 in non-KGBVs, the 'p' value was 0.22, which was statistically insignificant at 0.05 level. Therefore the null hypothesis was accepted and inferred that students of classes 7 and 9 in non-KGBVs do not differ significantly in their levels of academic stress.

### Findings and conclusions

The students of KGBVs have comparatively low academic stress than that of students of non-KGBVs in the study area. The students of rural areas studying in KGBVs and Non-KGBVs did not differ significantly in their levels of academic stress. The students studying in English medium of Non-KGBVs and KGBVs vary significantly in their levels of academic stress. The students of Non-KGBV schools studying in the English medium had high levels of academic stress than their counterparts in KGBVs. The students of government-run Non-KGBVs and KGBVs differ significantly in their levels of academic stress, and Non-KGBVs students have higher levels of academic stress than their counterparts study in KGBVs. The students of different classes in KGBVs differ significantly in their levels of academic stress, while as students of different classes in non-KGBVs do not differ significantly in their levels of academic stress. Higher class students had proportionately higher levels of academic stress in KGBVs than the students of lower classes.

### Educational implications

The study investigated the association of the different factors on academic stress of students in KGBVs and non-KGBVs viz., residence of origin, medium of instruction, management of school and class

of study. Therefore policy makers, administrators should make a serious note while designing and implementation of the curriculum about the role of various influential factors that trigger academic stress among the students. Government should establish a suitable institution/body to address the issues in dynamic manner to diminish the academic stress at all level of education for healthy and joyful learning.

### References

1. Bernstein, D.A., Penner, L.A., Stewart, A.C., & Roy, E.J. (2008). *Psychology (8th edition)*. Houghton Mifflin Company Boston: New York.
2. Gupta, K., & Khan, B.N.(1987). *Anxiety level as a factor in concept formation*.*Journal of Psychology Reports*, 31, 87-192.
3. Jung, Inkyung., Kim, Jung-hyun., Ma, Yuanyuan, & Seo, Chanran.(2015). *Mediating Effect of Academic Self-Efficacy on the Relationship between Academic Stress and Academic Burnout in Chinese Adolescents*.*International Journal of Human Ecology*, 16(2), 63-77.
4. Kartik Chandra Sarkar., & Chattopadhyay, K.N. (2017). *A study of academic stress and its effect on self-efficacy of the students*.*Bhatter College Journal of Multidisciplinary Studies*, 7(2), 22-26.
5. Nihan Arslan.(2017). *Investigating the Relationship between Educational Stress and Emotional Self-Efficacy*.*Universal Journal of Educational Research*, 5(10), 1736-1740.
6. Roopa Gopal, V., & Aruna, P.K.(2017). *Influence of Self Efficacy and Academic Stress on Process Skills in Physics of Higher Secondary School Students in Malappuram and Kozhikode Districts*. *Journal of Humanities and Social Science (IOSR- JHSS)*, 22(2), 69-73.
7. Sadananda Reddy., Prasad Kannekanti., & Md.Ameer Hamza.(2015). *A Comparative Study on Self Esteem and Stress among Private and Government High School Students*.*IJRSI*.2(3),18-22.
8. Sarita & Sonia. (2015).*Academic Stress among Students: Role and Responsibilities of Parents*.*International Journal of Applied Research*, 1(10), 385-388.
9. Snehlata D. Ghatol.(2017). *Academic Stress among Higher Secondary School Students: A Review*. *International Journal of Advanced Research in Education & Technology (IJARET)*,4(1), 38-41.
10. Sweta Sonali.(2016). *Impact of Academic Stress among Adolescents in Relation to Gender, Class and Type of School Organization*.*IJAR*, 2(8), 317-322.

# ASSESSMENT OF TEACHING-LEARNING PROCESS USING ROOT MEAN SQUARED LOSS

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## ABSTRACT

*Effectiveness of the teaching-learning process is reflected in the students' performance in the examination. There is no standard measure to quantify teaching-learning process capability in the present scenario. From the stakeholder's point of view, this paper extends root mean squared loss applications to measure teaching-learning process capability. For illustration purposes, the academic year 2018-19 science students' performance data has been considered from two reputed educational institutions to measure and compare teaching-learning process capability. It is found that these institutions' teaching-learning processes are low capacity, and root means squared loss can be effectively used to quantify the teaching-learning process.*

**Keywords:** *Teaching-learning process, process capability, students' performance, specified target, mean squared loss, root mean squared loss.*

## Introduction

The National Assessment and Accreditation Council (NAAC) was constituted in 1994 to assess and accredit the quality of higher educational Institutions (HEIs) in India. The concept of quality is widely used in the educational system, though it has its roots in the manufacturing industry. NAAC has identified seven criteria as the backbone of the assessment and accreditation. The seven criteria are i) Curricular Aspects, ii) Teaching-Learning and Evaluation, iii) Research, Innovations and Extension, iv) Infrastructure and Learning Resources, v) Student Support and Progression, vi) Governance, Leadership and Management and vii) Institutional values and Best Practices.

The critical aspects identified under each of the seven criteria reflect the various academic and administrative processes on which assessment is conducted. Out of these seven criteria, the second criterion, teaching-learning and evaluation, is given more weightage than other criteria. There is no standard measure to quantify teaching-learning process capability in the present scenario. From the stakeholder's point of view, this paper extends applications of root mean squared loss (RMSL) to quantify the capability of the teaching-learning process.

## Background of the Study

The main focus of the second criterion is the teaching-learning process, teacher quality, students' performance and learning outcomes. The real test of the extent to which teaching-learning has been effective and the realisation of learning outcomes in an HEI is reflected in the examination's students' performance (NAAC Manual, 2020, p.14). To quantify students' performance in the examination, NAAC uses the following formula:

This formula quantifies minimal information about students' performance in the examination and, hence measures the teaching-learning process's capability. This formula considers the only passing percentage of students in the examination and does not take into account actual grades/scores of the students in the examination. Here we propose RMSL as a measure to quantify teaching-learning process capability, which is based on the principle of "Quality Guru", Genichi Taguchi. He is the best known for developing a methodology to enhance

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quality and reduce costs in manufacturing industries. In manufacturing industries, the Taguchi capability index is used to measure process capability around a target (Boyles, 1991). This index cannot measure teaching-learning process capability as some assumptions of this index are not satisfied (Khadse & Shinde, 2009 and references therein). Measure variation around the target and then process improvement through reduction of that variation is the principle of Taguchi (Boyles, 1991 and references therein).

### Significance of study

One of the important steps in the process improvement model is measuring process capability. The teaching-learning process is the most important in every educational institution. There is no standard measure to quantify teaching-learning process capability in the present scenario. Here, we propose RMSL to measure teaching-learning process capability.

### Objectives of the study

1. Analyze teaching-learning process capability through students' performance in the examination data by applying statistical quality control techniques.
2. Understand the difference between teaching-learning process variation and the variation from the specified target.
3. Propose teaching-learning process capability measure based on process mean, process standard deviation and target.
4. Illustrate the procedure to compute, interpret and test the significance of the proposed capability measure.

### Hypotheses

1. Testing of teaching-learning process distribution
2. Testing equality of proportions of passed students
3. Testing equality of teaching-learning process capability measures

### Methodology

Data collection: For process capability analysis demonstration purposes, data from the academic year 2018-19 regarding B.Sc. students' performance in final examination has been taken from two reputed educational

institutes (say College A and College B), on a sample basis using simple random sampling without replacement. As per the university pattern, the total number of papers in the B. Sc. examination is 18, 9 per semester. Each paper carries 100 marks, of which 60 marks are external, and 40 marks are internal. Out of 18 papers, 12 are theory papers, and six are practical papers. The total number of students appeared in the B.Sc. examination are 415 and 243 from 'college A' and 'college B' respectively. Using Minitab 16 software, random samples of sizes 83 and 49 have been taken respectively from 'college A' and 'college B' by applying proportional allocation. A total number of passed students out of 83, in 'college A' was 63 and out of 49, in 'college B' was 34. Each student's average marks out of 100 marks represent the marks in the eighteen papers.

In a statistical context, the population is the total set of subjects the researchers are interested in, and a sample is the subset of that population. The researchers used random sample to conclude the population. In Statistical Quality Control (SQC), the word processes are used instead of populations (Moore, McCabe & Craig, 2009).

**Created variables:** Two variables are defined as marks A: B.Sc. marks of students from 'college A' and marks B: B.Sc. marks of students from 'college B'. While constructing these variables, only marks of the students who have passed are considered.

**Analytic method:** To apply traditional statistical methods wherever needed, the Minitab 16 software was used. The teaching-learning process of 'college A' and 'college B' is referred to as process A and B.

1. The probability distribution of each defined variable is tested using the distribution identification tool.
2. Equality of two population proportions test, based on normal distribution, is used to test the equality of passed students' proportions in 'college A' and 'college B'.

3. If the variable under study X follows a normal distribution with unknown mean  $\mu$  and unknown variance  $\sigma^2$ , then in practice, parameters  $\mu$  and  $\sigma$  are replaced by their estimators  $\hat{\mu}$  and  $\hat{\sigma}$  computed from the sample  $X_1, X_2, \dots, X_n$ . Estimators of  $\mu$  and  $\sigma$  are

$$\hat{\mu} = \bar{X} = \frac{1}{n} \sum_{i=1}^n X_i \quad \text{and} \quad \hat{\sigma} = \sqrt{\frac{1}{n-1} \sum_{i=1}^n (X_i - \bar{X})^2}$$

3. While applying SQC techniques, a measure of variation from target value is denoted by  $\sigma_T$  and is defined by  $\sigma_T = \sqrt{\frac{\sum_{i=1}^n (X_i - T)^2}{N}}$  the manufacturing industry. It is estimated by their estimator  $\hat{\sigma}_T$  from the sample  $X_1, X_2, \dots, X_n$  using the formula: where T is the target of X.

Considering deviation from the target (T) as a loss of society, here we propose  $\sigma_T$  as a measure to quantify teaching-learning process capability. Here  $(X-T)^2$  is a squared loss, and its meaning are given by  $\frac{\sum_{i=1}^n (X_i - T)^2}{N}$ , taking the square root of this quantity is nothing, but root mean squared loss (RMSL). The best choice naturally would be a zero value of RMSL ( $\sigma_T$ ) and a small value of RMSL ( $\sigma_T$ ) is desirable. A smaller value of RMSL shows that values of X are clustered nearly to its target T, and a larger value of RMSL reflects that values of X are clustered distantly from its target T. The  $\sigma$  measures variation from mean and  $\sigma_T$  measures variation from target T. Statistic  $\sigma_T$  is based on process mean, process standard deviation and target, so this statistic carries information regarding the process of these three in a single number.

**Analysis of data**

Marks A follows a normal distribution with a mean of 73.4710 and a standard deviation of 6.8080

Marks B follows a normal distribution with a mean of 73.0539 and standard deviation of 8.6285

H0: Proportion of passed students in ‘college A’ ( $P_A$ ) is equal to the proportion of passed students

in ‘college B’ ( $P_B$ ). An alternative hypothesis is  $H1: P_A \neq P_B$ .

Calculated  $Z=0.81$  and P-Value is 0.422

Conclusion:  $H_0$  is not rejected at 5% level of significance. Hence, there is no significant difference between the proportion of passed students in ‘college A’ and ‘college B’.

Remark: Proportions of passed students are a crude measure of teaching-learning process capability. To support this claim, consider the following two artificial colleges (say college P and college Q) students’ performance data.

College	Variable	Proportion of passed students	Marks out of 100 follows the following distribution with estimated parameters
P	Marks P	78%	Normal with mean=80 and Std. deviation=2
Q	Marks Q	78%	Normal with mean=75 and Std. deviation=5

According to proportions of passed students (crude measures), both colleges teaching-learning processes are the same but taking into account distribution of marks of students, ‘college P’ is more capable as compared to ‘college Q’ because the distribution of marks of ‘college P’ is clustered nearly to target  $T=100$  as compared to the distribution of marks of ‘college Q’. To quantify the capability of each process, we suggest computing RMSL.

Here we illustrate the computation of RMSL and suggest a simple test to test the equality of two RMSLs based on the central limit theorem.

$H_0$ : The teaching-learning process capability of ‘college A’ is equal to the teaching-learning process capability of ‘college B’. Alternatively, root means squared loss of ‘college A’ ( $\sigma_{TA}$ ) equals root mean square loss of ‘college B’ ( $\sigma_{TB}$ )

$$H_0: \sigma_{TA}^2 = \sigma_{TB}^2 \Leftrightarrow H_0: \sigma_{TA}^2 = \sigma_{TB}^2 \quad \text{and} \quad H_1: \sigma_{TA}^2 \neq \sigma_{TB}^2$$

$$\hat{\sigma}_{TA}^2 = \frac{1}{n} \sum_{i=1}^n (X_i - \bar{X})^2 = 46.3488 + (73.4710 - 100)^2 = 750.1366; \text{ or } \hat{\sigma}_{TA} = 27.3886$$

$$\hat{\sigma}_{TB}^2 = \frac{1}{n} \sum_{i=1}^n (Y_i - \bar{Y})^2 = 74.4510 + (73.0539 - 100)^2 = 800.5433; \text{ or } \hat{\sigma}_{TB} = 28.2938$$

To test H0:  $\sigma_{TA}^2 = \sigma_{TB}^2$  there is no standard test of significance. But  $\hat{\sigma}_{TA}^2$  and  $\hat{\sigma}_{TB}^2$  are the means of two random marks defined (marksA-T)2 and (marksB-T)2, and sample sizes are large. Applying the central limit theorem, we have tested H0:  $\sigma_{TA}^2 = \sigma_{TB}^2$  using the equality of the two means test.

The calculated value of test statistic is -0.53 and P-Value=0.60

Conclusion: H0 is not rejected at a 5% level of significance. Hence there is no significant difference between the root mean squared loss of 'college A' and 'college B'. In other words, there is no significant difference between the teaching-learning process capability of 'college A' and 'college B'. Secondly, both processes are low capacity  $\hat{\sigma}_{TA}$  and  $\hat{\sigma}_{TB}$  are too large compared to the best value of RMSL.

We have identified 'college A' marks (marksA) distribution which is normal with an estimated mean=73.4710 and std. deviation=6.8080. For comparison purposes, one dummy college (say college D) marks (marksD) with normal probability distribution having estimated mean=92 and std. deviation=2 is considered.

Let us measure the capability of the teaching-learning process of 'college A' and 'college D' using RMSL and test whether this difference is significant or not.

$$\text{For 'college A', } \hat{\sigma}_{TA} = \sqrt{\hat{\sigma}_A^2 + (\bar{X}_A - T)^2} = 27.3886$$

$$\text{For dummy college, } \hat{\sigma}_{TD} = \sqrt{\hat{\sigma}_D^2 + (\bar{X}_D - T)^2} = \sqrt{4 + (92 - 100)^2} = 8.2462$$

$$H_0: \sigma_{TA}^2 = \sigma_{TD}^2 \Leftrightarrow H_0: \sigma_{TA}^2 = \sigma_{TD}^2 \quad \text{and} \quad H_1: \sigma_{TA}^2 > \sigma_{TD}^2$$

Calculated value of test statistic is 14.98 and P-Value=0

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Conclusion: H0 is rejected at 5% level of significance and H1 is accepted. Hence teaching-learning process capability of dummy college is significantly better than the teaching-learning process of 'college A'.

### Findings and interpretations

There is no standard measure to quantify teaching-learning process capability in the present scenario. From the stakeholder's point of view, root mean squared loss (RMSL) is suggested to quantify the teaching-learning process. Additionally, a testing procedure to test the equality of two RMSLs is given. It is found that RMSL is an improved measure as compared to the proportion of passing students to quantify the teaching-learning process.

### Educational Implications

Root Mean Squared Loss (RMSL) is an effective measure to quantify the teaching-learning process, which considers process variation from the target. This measure is based on the philosophy of "Quality Guru" Taguchi.

### References

1. *Revised Manual for Self Study Report Autonomous Colleges (2020) Published by NAAC.*
2. *Russell A. Boyles (1991) The Taguchi Capability Index, Journal of Quality Technology, Vol. 23(1), pp. 17-26, DOI: 10.1080/00224065.1991.11979279*
3. *Khadse, K. G. and Shinde, R. L. (2009) Probability-based Process Capability Indices, Communications in Statistics - Simulation and Computation, Vol. 38(4), pp. 884-904*
4. *David S. Moore, George P. McCabe and Bruce A. Craig (2009) Introduction to the Practice of Statistics, Sixth ed., W.H. Freeman and Company, New York*

**AN ANALYSIS OF STUDENTS' ACCESS WITH DIFFERENT SOCIO-ECONOMIC PROFILES TO MAJOR STREAMS IN HIGHER EDUCATION: A CASE STUDY OF MOHANLAL SUKHADIA UNIVERSITY IN UDAIPUR**

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**ABSTRACT**

*This study attempts to examine the access of students from different socio-economic backgrounds to the three major streams of higher education by collecting data from a sample of 272 students of Mohanlal Sukhadia University, a State Public University of Rajasthan. The Chi-Square test of homogeneity was used for Hypothesis Testing. The research reveals variations in access patterns to the three streams of higher education vis a vis gender, social category, area and generation of students.*

**Keywords:** Higher Education, Access of Students, Streams, Mohanlal Sukhadia University

**Introduction**

Economic prosperity and academic excellence can be realised by flourishing higher intellectual capabilities of human beings, and higher education plays a major role in this regard. The studies or programmes in higher education can be mainly classified in three streams or faculties in India- Science and Technology, Commerce and Management, Social Sciences and Humanities (popularly known as Arts). These streams are equally crucial for the holistic development of society. Studies in technology and science provide students with insight into how different knowledge and innovative technologies are initiated, developed and employed. Commerce and Management Studies help in practising and learning other skills vital to business and industry development. Studies in Social Sciences and Humanities expand students' critical thinking and imagination by developing human qualities and desirable attitudes. It makes the students well-informed citizens by making them accountable, participative and reflective towards society. Thus all the streams or faculties are equally important. Higher education is also an essential instrument for achieving inclusive growth.

In India, from National Policy on Higher Education (1986) to Twelfth Five Year Plan, emphasis was placed to ensure equal access to higher education for all segments of the society. But many research studies done earlier provide evidence about disparity or social divide in higher education in India based on caste, religion,

ethnic and regional identities (Ovichegan, 2013; Rao, 2013; Sabharwal, Thorat, Balasubramanyam and Diwakar, 2014; Misra and Bal, 2014; Malish and Ilavarasan, 2016; Sabharwal and Malish, 2018).

But it is also necessary to understand that to make higher education inclusive, all the sections of the society should have equal access in all the streams of higher education. So the present research paper tries to explore whether students with different socio-economic characteristics have equally utilised the opportunity of getting access to higher education in different streams in India by taking a sample of students from Mohanlal Sukhadia University (MLSU), a state public university in Udaipur district of Rajasthan catering to the needs of a tribal region in the state.

**Significance of the Study**

The faculty of Social Sciences and Humanities, even though having the highest enrolment of students (AISHE. 2018-19), is the most neglected sector of higher education in India. As explained earlier, the study of Social Sciences and Humanities is also equally crucial for the development of society. Every human being has

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a different capability and skillset, and the goal of higher education is to promote all kinds of intellectual talents. That is why all streams should be given equal preference in funding and policy-making in India. Each individual should be provided equal opportunity to take education in the stream of their choice for the overall development of a nation. This research paper will try to ascertain whether higher education in India benefits students from marginalised society by providing them with the necessary access to all the streams.

**Objective:** The major objective of this paper is to analyse the students' access to different socio-economic backgrounds to all the three major streams of higher education in India. To attain this objective, the sub-objectives are as follows:

1. To analyse the socio-economic profile of students in all three streams of higher education in MLSU.
2. To examine whether students of all the sections of society and different socio-economic profiles have equal distribution in all the three streams of MLSU or not.

**Hypotheses**

1. The proportion of male and female students is similar in all three streams at MLSU.
2. The distribution of students in social categories is similar in all three streams at MLSU.
3. The proportion of first-generation learners students is similar in all three streams at MLSU.
4. The proportion of students having schooling (6th to 12th class) from a rural area is similar in all three streams at MLSU.
5. The income distribution of students is similar in all three streams at MLSU.

**Methodology**

**Sample Selection:** This research was part of a National Project of CPRHE, NIEPA on Quality of Higher Education in India, conducted by the authors in Mohanlal Sukhadia University, Udaipur (MLSU). This University was selected in Rajasthan since it has undergone two cycles of NAAC assessment and Internal Quality Assurance Cell had been in place in the institution for

more than five years. It is a State Public University. Further, within the selected university, five departments, i.e. Accountancy and Statistics, Botany, Chemistry, Geography and Hindi, have been sampled for investigation. These five departments have a sizeable number of teachers and students at present. All the teachers in these departments have more than three years of teaching experience. Out of these five departments, a sample of 272 students was selected randomly, taking at least 50 students from each department. The sample from each department includes at least 30 regular students of UG final year, 15 students of PG third or fourth Semester, and five research scholars. For the present writing, the five departments are classified into three main streams- Science, Commerce and Social Sciences & Humanities.

**Data Collection and Analysis Tools:** It is an empirical study where primary data have been collected through a questionnaire. For the data analysis, frequencies and percentages were computed to show the share of different categories of students. The Chi-square test for homogeneity (at 5 per cent significance level or  $\alpha=.05$ ) was used to test hypotheses.

**Analysis of Data**

**Null Hypothesis 1:** The proportion of male and female students is similar in all three streams at MLSU.

**Table1**  
**Gender-wise Distribution of Students in All Streams at MLSU (n=272)**

Gender	Stream			Total
	Com merce	Science	Social Sciences & Humani ties	
Female	29 (53.7%)	72 (61.0%)	28 (28.0%)	129 (47.4 %)
Male	25 (46.3%)	46 (39.0%)	72 (72.0%)	143 (52.6%)
Total	54 (100.0%)	118 (100.0%)	100 (100.0%)	272 (100.0%)
Chi-Square=24.730 <sup>a</sup> df= 2      p-value=.000				

**Source: Primary Survey of Students of MLSU**

\*0 cells (0.0%) have expected count less than 5. The minimum expected count is 25.61.

Table 1 shows almost an equal distribution of male and female students in the University sample. What, however, is worth pointing out is that in the Science and Commerce streams, the females outnumber male students whereas in Social-Sciences and Humanities proportion of male students is much higher than girls. The rejection of the null hypothesis ( $p$ -value  $< .05$ ) by the Chi-square test also suggests that the proportion of male and female students is not similar in all the three faculties in MLSU.

**Null Hypothesis 2:** The distribution of students in social categories is similar in all the three streams at MLSU.

**Table 2**

**Social Category-wise Distribution of Students in All Streams at MLSU (n=272)**

Social-Category	Stream			Total
	Com merce	Science	Social Sciences & Humanities	
SC	13 (24.1%)	17(14.4%)	18(18%)	48 (17.6%)
ST	2 (3.7%)	14 (11.9%)	30 (30 %)	46 (16.9 %)
OBC	19 (35.2 %)	35 (29.7 %)	32 (32 %)	86 (31.6 %)
General	20 (37 %)	52 (44.1 %)	20 (20 %)	92 (33.8 %)
Total	54 (100 %)	118 (100 %)	100 (100 %)	272 (100 %)
Chi-Square=29.291 <sup>a</sup> df= 6      p-value=.000				

**Source: Primary Survey of Students of MLSU**

\* 0 cells (0.0%) have expected count less than 5. The minimum expected count is 9.13.

Table 2 gives us an insight into the social background of the sampled student community of MLSU. The Science stream has the highest proportion of non-reserved category students (44.1 per cent) among all three streams. On the other hand, the ST students constitute a bulk of the students in Social Sciences and Humanities (30 per cent). The OBC students are almost

evenly distributed among all the faculties. The SC students have the least representation in Science (14.4 per cent). Overall the share of reserved category students is highest in Social Sciences and Humanities (80 per cent). The  $p$ -value of the chi-square test here is less than the level of significance ( $p$ -value  $< .05$ ), so the null hypothesis is rejected, which means the distribution of students in social categories is not similar for all the three streams at MLSU.

**Null Hypothesis 3:** The proportion of first-generation learners students is similar in all three streams at MLSU.

**Table 3**

**Streamwise Status of Students of MLSU as First-Generation Learner in HE (n\*=271)**

Whether First Generation learner in Higher Education?	Stream			Total
	Com merce	Science	Social Sciences & Humanities	
Yes	19 (35.2%)	58 (49.2%)	57 (57.6%)	134 (49.4%)
No	35 (64.8%)	60 (50.8%)	42 (42.4%)	137 (50.6%)
Total	54 (100.0%)	118 (100.0%)	99 (100.0%)	271 (100.0%)
Chi-Square=7.015 <sup>a</sup> df= 2      p-value=0.02997				

**Source: Primary Survey of Students of MLSU**

\*0 cells (0.0%) have expected count less than 5. The minimum expected count is 26.70.

\*one student did not respond to this question.

The students who accepted that they are first-generation learners are 49.4 per cent in MLSU. Among the three streams, a clear majority of the students who are the first in their families to enrol themselves in Higher Education is in the faculty of Social Sciences and Humanities (Table 3). while in the stream of Commerce, only 35.2 per cent of students are first-generation learners. In Science, the ratio of first-generation learners is just half of the total students' strength in this stream.

The null hypothesis of similarity of the proportion of first-generation learners in all the three streams of MLSU is rejected ( $p\text{-value} < .05$ ).

**Null Hypothesis 4:** The proportion of students having schooling (6th to 12th class) from a rural area is similar in all the three streams at MLSU.

**Table 4**  
Area of Schooling of 6th to 12th class students in All Stream sat MLSU (n=272)

Area	Stream			Total
	Com merce	Science	Social Sciences & Humanities	
Rural	10 (18.5%)	49 (41.5%)	60 (60%)	119 (43.8%)
Urban	34 (63%)	50 (42.4%)	28 (28%)	112 (41.2%)
Both Rural and Urban	10 (18.5%)	19 (16.1%)	12 (12%)	41 (15.1%)
Total	54 (100%)	118 (100%)	100 (100%)	272 (100%)
Chi-Square=25.644 <sup>a</sup> df= 4 p-value=.0.000				

**Source: Primary Survey of Students of MLSU**

\* cells (0.0%) have expected count less than 5. The minimum expected count is 8.14.

In the sample of MLSU, almost 44 per cent of the students did their schooling from schools in rural areas. The variation of the area of schooling is highest between the stream of Commerce and stream of Social Sciences and Humanities. In Commerce, only 18.5 per cent of the students have done their schooling in the rural area whereas this ratio is 60 per cent in Social Sciences and Humanities. Rejection of the null hypothesis ( $p\text{-value} < .05$ ) also proves that the proportion of students having schooling (6th to 12th class) from a rural area is not similar in all the three streams at MLSU.

**Null Hypothesis 5:** The income distribution of students is similar in all three streams at MLSU.

**Table 5**  
Monthly Household Income of Students in All Streams at MLSU (n\*=270)



Monthly Household Income (in Rs.)	Stream			Total
	Com merce	Science	Social Sciences & Humanities	
Below 5000	6 (11.1%)	13 (11%)	20 (20.4%)	39 (14.4%)
5000 to 10,000	12 (22.2%)	29 (24.6%)	25 (25.5%)	66 (24.4%)
10,000 to 25,000	15 (27.8%)	25 (21.2%)	23 (23.5%)	63 (23.3%)
25,000 to 50,000	12 (22.2%)	30 (25.4%)	19 (19.4%)	61 (22.6%)
50,000 and above	9 (16.7%)	21 (17.8%)	11 (11.2%)	41 (15.2%)
Total	54 (100.0%)	118 (100.0%)	98 (100.0%)	270 (100.0%)
Chi-Square=7.122 <sup>a</sup> df = 8 p-value=.0.523				

**Source: Primary Survey of Students of MLSU**

\* 0 cells (0.0%) have expected count less than 5. The minimum expected count is 7.80.

\*Two students did not respond to this question

Table 5 depicts that stream-wise there is a slight difference in the monthly household income of students. But the Chi-square test does not provide the statistical evidence for a difference in the income distribution of students among different streams since the p-value is greater than the level of significance ( $p\text{-value} > .05$ ) so the null hypothesis cannot be rejected. It is concluded that the income distribution of students is similar in all the three faculties of MLSU.

### Findings and Interpretations

**The Major findings of the study are as follows:**

1. The proportion of female students is much higher in Science stream whereas the proportion of male students is much higher in the stream of Social Sciences and Humanities.
2. The proportion of ST students was highest in Social Sciences and Humanities whereas the proportion of

non-reserved general category students is highest in Science and Commerce streams.

3. The proportion of first-generation learners was highest in Social Sciences and Humanities stream whereas it was lowest in Commerce stream.
4. Most of the students in Social Sciences and Humanities belong to the rural area from where they have done their schooling (from class 6th to 12th ) whereas most of the students in Commerce belongs to the urban area.
5. Not much difference was found in the income level of students of various streams. To conclude, it can be said that gender-wise, category-wise, area- wise and generation wise variations were found in access of students to all three streams of higher education at MLSU.

### Educational and Policy Implications

The students of rural background and marginal section of the society are mostly first-generation learners and their highest representation has been found in Social Sciences and Humanities rather than other streams. If it is by choice then there is a need to create interest for streams of Commerce and Science also among the students of the rural area who generally have a poor educational and social background. But if it is not a choice rather a compulsion to choose Social Sciences and Humanities due to the non-availability of subjects of choice at the school level or undergraduate level then it is concluded that equality of opportunity and access to education cannot be claimed in the rural area. On the other side, it is also required to provide quality education and more opportunities for the students who are doing their higher education in Social Sciences and Humanities so that this stream can also attract students from the urban area.

### References

1. Chattopadhyay, S. (2009). *The market in higher education: concern for equity and quality. Economic and Political Weekly*, 53-61.
2. Malish, C.M. and P.V. Ilavarasan (2016): “Higher Education, Reservation and Scheduled Castes: Exploring Institutional Habitus of Professional Engineering Colleges

in Kerala”, *Higher Education*, 72(5), pp. 603–617.

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3. Misra, S. N., & Bal, M. (2014). *Excellence through equity: Challenges before higher education in India. International Journal of Educational Planning & Administration*, 4(1), 67-77.
4. Ovichegan, S. (2013): “Social Exclusion, Social Inclusion and Passing: The Experience of Dalit Students at one Elite Indian University”, *International Journal of Inclusive Education*, 18(4), pp. 359–378.
5. Rao, S.S. (2013): “Structural Exclusion in Everyday Institutional Life: Labelling of Stigmatised Groups in an IIT”, in Geetha Nambissan and S. Srinivas Rao (eds.), *Sociology of Education in India: Changing Contours and Emerging Concerns. Delhi: Oxford University Press*, pp. 199–223.
6. Sabharwal N.S.&Malish C.M. (2018). *Student Diversity and Social Inclusion: An Empirical Analysis of Higher Education Institutions in India (CPRHE Research Papers 10)*. Retrieved from CPRHE, NIEPA website: [http://cprhe.niepa.ac.in/sites/default/files/Report-Files/CPRHE-Research%20Paper-10 on 11.7.2020](http://cprhe.niepa.ac.in/sites/default/files/Report-Files/CPRHE-Research%20Paper-10%20on%2011.7.2020).
7. Sabharwal, N.S., S.K. Thorat, T. Balasubramanyam and Dilip D. Diwakar (2014): “Diversity, Academic Performance, and Discrimination: A Case Study of a Higher Educational Institution”, *IIDS Working Paper*, 8(4). New Delhi: Indian Institute of Dalit Studies.
8. Varghese N.V., Sabharwal N.S.&Malish C.M. (2019). *Equity and Inclusion in Higher Education in India (CPRHE Research Papers 12)*.

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# PSYCHOLOGICAL CORRELATES OF PROBLEMS FACED BY ADOLESCENTS OF SINGLE PARENTS

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## ABSTRACT

*Adolescents of Single Parents (ASPs) face several concerns, and numerous studies have been reported compared to adolescents from two-parent families. However, the association between their Emotional Health (EH), Meta Emotion (ME) or Meaning in Life (MiL) with the problems that adolescent's face (attachment to family, academic performance, emotion management, sociability and self-esteem) has not been explored. Hence, the current study explores this association among a sample of senior school adolescents (n = 229; mean age = 16.35 years) chosen from six districts in the State of Tamilnadu, South India. Results of the descriptive analysis reveal academic performance as the major problem area for ASPs of this particular category. The results of the multiple linear regression establish a significant negative association between the search for meaning and problems in academic performance, between ME and emotion management deficits and sociability deficits, between the presence of meaning and self-esteem deficits. The article proposes certain key implications for implementing strategies to enhance the wellbeing of ASPs.*

**Keywords:** *Adolescents; Single-parent families, Senior school adolescents, Emotional wellbeing, Meta emotion, Meaning in Life.*

## Introduction

The number of adolescents raised in single-parent households is on the rise. In India, it is estimated that 5% of households are managed by single parents [1]. Adolescents who normally struggle with issues of identity, autonomy, sexuality and relationships during this period in the developmental lifespan, when faced with challenges of the loss of a parent, may have trouble gaining mastery over their emotions, building up their emotional health and finding meaning in life.

## Background of the Study

Earlier studies have proved that growing up in a post-divorce family is detrimental to the adolescents' emotional adjustment [2]; that growing up in single-parent families results in poor emotional and intellectual development [3], high level of depression [4], lower life satisfaction and psychological health [5], lower self-esteem [6], and lower academic performance [7].

Emotional Health (EH) is the quality of a person to become aware of his or her emotions, accept and manage feelings through challenge and change [8]. Studies among adolescents have proved that low parent-child connectedness results in low EH [9], and being

raised in single-parent families [10] is a risk factor for the EH of adolescents. The concept of Meta emotions (ME) refers to feelings about feelings. It was first introduced by Gottman et al. within family therapy research [11]. Meaning in life (MiL) consists of two dimensions of comprehension and purpose [12] and having a sense of purpose or MiL is vital to the formation of adolescent wellbeing [13], to their self-esteem [14], and that it is related to optimism and life satisfaction among adolescents [15-16].

## Objectives of the Study

With those like the aforementioned problems faced by adolescents raised in single parent families, five particular problems were chosen in a tool that has been constructed and standardized by the authors themselves.

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They are attachment to family, academic performance, emotion management, sociability and self-esteem. Hence, the present study aims to investigate if there is any relationship between the levels of EH, ME, the presence of MiL or search for MiL, with the problems ASPs.

**The hypothesis of the Study**

The level of EH, ME, presence, and search for MIL among ASPscan predict the type of problems they will face with regard to their level of attachment, academic performance, emotion management, sociability and self-esteem.

**Materials and Methods**

**Participants**

The study included 229 adolescents (Boys = 118 and Girls = 111), between 15 and 18 years(Mean age = 16.35 years),from single-parent families. The students were randomly chosen from six districts from the north, central and south part of Tamilnadu, India, studying in higher secondary schools (n = 24 schools) of classes XI and XII.

**Measures**

The following are the tools used for the study, which were all translated to Tamil and validated for the population of senior school adolescents between 15 and 18 years by the researchers themselves.

Questionnaire on the problems faced by adolescents of single parents (Constructed and validated by the researchers); Emotional Health Scale [17]; Meta emotion Assessment Scale[18]; and Meaning in Life Questionnaire[19].

**Procedure**

The tests were administered to the adolescents from single-parent families, and the data was subjected to descriptive analysis and multiple regression analysis. The association of EH, ME and MIL against the problems faced by adolescents of single parents were analysed in the current study using SPSS version 26.

**Results**

**Descriptive Statistics**

Results of the descriptive analysis of the data for each tool is seen in Table 1. The Cronbach’s alpha

reliability for academic performance, sociability and self-esteem exhibit moderate reliability. Inter-item correlation was calculated for each problem area, and the mean of the inter-item correlation was found to be 0.412 for academic performance, 0.352 for sociability and 0.336 for self-esteem. As it lies within the range of 0.2 to 0.4 [20].

**Table 1**  
**Descriptive Statistics for Each of the Tools**  
**Used (n = 229)**

Scale/ Subscales	Mean	SD	No. of Items	$\alpha$	Score range
Problems in Attachment	4.55	1.84	2	0.866	2-8
Problems in Academic Performance	5.74	1.49	2	0.576	2-8
Problems in Emotion Management	4.28	1.91	2	0.809	2-8
Problems in Sociability	3.98	1.45	2	0.515	2-8
Problems in Self-esteem	4.1	1.69	2	0.5	2-8
Emotional Health	102.42	12.74	32	0.759	63 – 135
Metaemotion	84.51	9.59	25	0.644	60 – 115
Presence of Meaning	21.12	4.66	5	0.506	7-35
Search for Meaning	22.76	5.25	5	0.875	9-35

**Multiple Linear Regression**

A multiple linear regression was calculated to predict the problems among ASPs based on their level of EH, ME and presence and search for MiL.

**Table 2**  
**Regression Analysis: Problems in Attachment**  
**(N=229)**

Predictor variables	Beta	SE (Beta)	B	SE(B)	t(224)	p-level
Intercept			6.159	1.191	5.17	0
Emotional Health	-0.015	0.091	-0.002	0.013	-0.164	0.87
Metae motion	-0.085	0.082	-0.016	0.016	-1.041	0.299
Presence of meaning in life	0.079	0.078	0.034	0.033	1.015	0.311
Search for meaning in life	-0.085	0.069	-0.03	0.024	-1.232	0.219
<i>R = 0.130; R<sup>2</sup> = 0.017; F(4,224) = 0.9669; p&lt;0.426; SE of estimate = 1.839</i>						

With regard to problems in attachment, only 1.7% of variance in the data can be explained by the predictor variables which are EH, ME and MIL. The results of the ANOVA as indicated in Table 2, show that the model was not a significant predictor of problems in attachment and none of the predictor variables have contributed significantly.

**Table 3**  
**Regression Analysis: Problems in Academic Performance (N=229)**

Predictor variables	Beta	SE (Beta)	B	SE(B)	t(224)	p-level
Intercept			6.737	0.955	7.052	0
Emotional Health	-0.075	0.09	-0.009	0.01	-0.834	0.405
Metaemotion	0.079	0.081	0.012	0.013	0.974	0.331
Presence of meaning in life	-0.001	0.077	0	0.027	-0.017	0.987
Search for meaning in life	-0.174	0.068	-0.049	0.019	-2.547	0.012**
<b><math>R = 0.192</math>; <math>R^2 = 0.370</math>; <math>F(4,224) = 2.1506</math>; <math>p &lt; 0.076</math>; <math>SE</math> of estimate = 1.4746</b>						

The ANOVA results indicate that the model was a significant predictor of problems in academic performance ( $p < 0.076$ ) at 90% confidence interval. As indicated in Table 3, only search for MiL ( $p = 0.012$ ) was a significant predictor of the problem in academic performance for adolescents from single parent families with  $p < 0.05$ .

**Table 4**  
**Regression Analysis: Problems in Emotion Management (N=229)**

Predictor variables	Beta	SE (Beta)	B	SE(B)	t(224)	p-level
Intercept			9.066	1.172	7.736	0
Emotional Health	-0.101	0.086	-0.015	0.013	-1.18	0.239
Metaemotion	-0.311	0.077	-0.062	0.015	-4.025	0.000**
Presence of meaning in life	0.114	0.074	0.051	0.033	1.541	0.125
Search for meaning in life	0.122	0.065	0.045	0.024	1.874	0.062
<b><math>R = 0.348</math>; <math>R^2 = 0.121</math>; <math>F(4,224) = 7.716</math>; <math>p &lt; 0.000</math>; <math>SE</math> of estimate = 1.809</b>						

**Table 5**  
**Regression Analysis: Problems in Sociability (N=229)**

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Predictor variables	Beta	SE (Beta)	B	SE(B)	t(224)	p-level
Intercept			8.251	0.896	9.206	0
Emotional Health	-0.066	0.087	-0.007	0.01	-0.758	0.449
Metaemotion	-0.262	0.078	-0.039	0.012	-3.34	0.001**
Presence of meaning in life	-0.018	0.075	-0.006	0.025	-0.246	0.806
Search for meaning in life	-0.008	0.066	-0.002	0.018	-0.128	0.898
<b><math>R = 0.305</math>; <math>R^2 = 0.093</math>; <math>F(4,224) = 5.763</math>; <math>p &lt; 0.000</math>; <math>SE</math> of estimate = 1.623</b>						

ANOVA results indicate that the model was a significant predictor of problems in emotion management ( $p < 0.000$ ) and sociability ( $p < 0.000$ ) at 95% confidence interval. As indicated in Tables 4 and 5, only meta emotion was a significant predictor of problems in emotion management and sociability among ASPs with  $p < 0.01$ .

**Table 6**  
**Regression Analysis: Problems in Self-esteem (N=229)**

Predictor variables	Beta	SE (Beta)	B	SE(B)	t(224)	p-level
Intercept			8.646	1.052	8.219	0
Emotional Health	-0.066	0.087	-0.009	0.012	-0.764	0.445
Metaemotion	-0.133	0.079	-0.024	0.014	-1.698	0.091
Presence of meaning in life	-0.148	0.075	-0.058	0.029	-1.97	0.050**
Search for meaning in life	-0.069	0.066	-0.022	0.021	-1.038	0.3
<b><math>R = 0.314</math>; <math>R^2 = 0.099</math>; <math>F(4,224) = 6.154</math>; <math>p &lt; 0.000</math>; <math>SE</math> of estimate = 1.384</b>						

As indicated in Table 6, the model was a significant predictor of problems in self-esteem ( $p < 0.000$ ) at 95% confidence interval. Only the presence of MiL ( $p = 0.050$ ) had a significant association with self-esteem among ASPs with  $p < 0.05$ .

## Discussion

The results from the sample of ASP support the hypotheses partly that the level of EH, ME and the presence of MIL and search for MIL predicts the problems they face with regard to their academic performance, emotion management, sociability and self-esteem. Results of ANOVA have been significant for all the dependent variables except for the problem in attachment, signifying that the model is an essential predictor for most of the outcome variables under study.

The descriptive statistics display that the mean score of problems in academic performance for ASPs is much higher than the mean score in any other problem area. This is supported by the researches done, which establish that single parenting affects the academic performance of adolescents [21].

The results from multiple regression analysis indicate no association between EH and any of the problems that ASPs face. A significant negative association was found between ME problems in emotion management and sociability. One of the components of meta emotion is communicating to others one's emotions [22], which certainly involves building good social relationships and hence the negative association.

The significant negative association found between the search for meaning and academic performance explains that less search for meaning predicts an increase in deficits in academic performance. It is very consistent with the findings of Steger et al., who established a correlation between the search for meaning and well-being deficits [23]. Similarly, the negative association between the presence of MiL and self-esteem deficits is consistent with the findings of studies stating that self-esteem was strongly and inversely associated with depression, anxiety and stress [24]; and meaning in life [14].

This explorative study can pave the way to understand the trends between the EH, ME and MiL, of ASPs and the problems they face about attachment, academic performance, emotion management, sociability and self-esteem.

## Conclusion

This study can be considered the first published study that has explored the association between the EH, ME and MiL of ASPs and the problems they face. School authorities can examine the level of ME and MiL among ASPs and design intervention strategies that can aid to enhance the same, preventing thus problems concerning academic performance, emotion management, sociability or self-esteem. Techniques to learn meta emotion and its components or working with meaning therapy for ASPs can enhance their holistic well-being. Future research could look for any moderating effect in this association and aid school management in paying considerable attention to the wellbeing of the students from single-parent households.

## References

1. Kramer, S. (2019, December 12). *The U.S. has the world's highest rate of children living in single-parent households*. Pew Research Center. <https://www.pewresearch.org/fact-tank/2019/12/12/u-s-children-more-likely-than-children-in-other-countries-to-live-with-just-one-parent/>
2. Vandervalk, I., Spruijt, E., De Goede, M., Meeus, W., & Maas, C. (2004). *Marital status, marital process, and parental resources in predicting adolescents' emotional adjustment: A multilevel analysis*. *Journal of Family Issues*, 25(3), 291-317.
3. Falana, B.A., Bada, F.O., & Ayodele, C.J. (2012). *Single-parent family structure, psychological, social and cognitive development of children in Ekiti state*. *Journal of Educational and Developmental Psychology*, 2(2), 158-164.
4. Siddiqui, R. Z., & Sultana, S. (2011). *Single parenting is a risk factor for depression in adolescents*. *Pakistan Journal of Psychology*, 42(1), 87-100.
5. Cecen-Erogul, A. R., & Dingiltepe, T. (2012). *The comparison of adolescents from single-parent families and intact families in life satisfaction and quality of life*. *Elementary Education Online*, 11(4), 1077-1086.
6. Alami, A., Khosravan, S., Sadegh Moghadam, L., Pakravan, F., & Hosseni, F. (2014). *Adolescents' self-esteem in single and two-parent families*. *International Journal of Community Based Nursing and Midwifery*, 2(2), 69-76.

7. Malima, J. G. (2016). *The effect of single parenting on students' academic performance in secondary schools in Arusha City, Tanzania* [Master's Thesis, University of Arusha]. Grin. <https://www.grin.com/document/370979>
8. Miller, K. (2021, May 13). *What is emotional health? 11 activities and assessments to enhance it*. Positive Psychology.Com. <https://positivepsychology.com/emotional-health-activities/>
9. Ackard, D. M., Neumark-Sztainer, D., Story, M., & Perry, C. (2006). *Parent-child connectedness and behavioural and emotional health among adolescents*. *American Journal of Preventive Medicine*, 30(1), 59-66. <https://doi.org/10.1016/j.amepre.2005.09.013>
10. Herrmann, J., Vogel, M., Pietzner, D., Kroll, E., Wagner, O., Schwarz, S., Müller, E., Kiess, W., Richter, M., & Poulain, T. (2018). *Factors associated with the emotional health of children: High family income as a protective factor*. *European Child & Adolescent Psychiatry*, 27(3), 319–328. <https://doi.org/10.1007/s00787-017-1049-0>
11. Gottman, J. M., Katz, L. F., & Hooven, C. (1996). *Parentmeta emotion philosophy and the emotional life of families: Theoretical models and preliminary data*. *Journal of Family Psychology*, 10(3), 243-268. <https://doi.org/10.1037/0893-3200.10.3.243>
12. Steger, M. F. (2012). *Making meaning in life*. *Psychological Inquiry*, 23(4), 381-385.
13. Krok D. (2018). *When is meaning in life most beneficial to young people? Styles of meaning in life and well-being among late adolescents*. *Journal of Adult Development*, 25(2), 96–106.
14. Bajaj, V. & Lall, S. S. (2018). *The relationship between identity self-esteem and meaning in life among late adolescent women*. *International Journal of Indian Psychology*, 6(4), 100-119. <https://doi.org/10.25215/0604.013>
15. Ho, M. Y., Cheung, F. M., & Cheung, S. F. (2010). *The role of meaning in life and optimism in promoting well-being*. *Personality and Individual Differences*, 48(5), 658-663.
16. Blau, I., Goldberg, S., & Benolol, N. (2019). *Purpose and life satisfaction during adolescence: The role of meaning in life, social support, and problematic digital use*. *Journal of Youth Studies*, 22(7), 907-925. <https://doi.org/10.1080/13676261.2018.1551614>
17. Angadi, A., Yadav, V. S., & Khadi, P. B. (2016). *Development of emotional health scale*, *International Journal of Applied Social Science*, Vol. 3, No. 5 & 6, pp. 132-144.
18. Brindha, P. (2014). *Developing a Strategy by combining Metacognition and Metaemotion and finding its effects on students' mental health of IX standard*. [Unpublished doctoral thesis]. Tamil University.
19. Steger, M. F., Frazier, P., Oishi, S., & Kaler, M. (2006). *The Meaning in Life Questionnaire: Assessing the presence and search for meaning in life*. *Journal of Counseling Psychology*, 53(1), 80-93. <https://doi.org/10.1037/0022-0167.53.1.80>
20. Piedmont, R. L., & Hyland, M. E. (1993). *inter-item correlation frequency distribution analysis: A method for evaluating scale dimensionality*. *Educational and Psychological Measurement*, 53(2), 369–378. <https://doi.org/10.1177/0013164493053002006>
21. Odeyemi, B. S. D. (2019). *Impact of single parenthood on adolescent academic performance in secondary school students*. *Asia-Pacific Collaborative Education Journal*, 15(1), 23-38.
22. Yeh, K. H. (2002). *Parental meta-emotion philosophy styles and measures*. In T. L. Hu, M. Hsu, & K. H. Yeh (Eds.), *Affect, emotion and culture: Anthropological and psychological studies in Taiwanese society* (pp. 268-297). Taipei, Taiwan: Institute of Ethnology Academia Sinica.
23. Steger, M. F., Oishi, S., & Kashdan, T. B. (2009). *Meaning in life across the life span: Levels and correlates of meaning in life from emerging adulthood to older adulthood*. *The Journal of Positive Psychology*, 4(1), 43-52. <https://doi.org/10.1080/17439760802303127>.
24. Mohammadzadeh, M., Awang, H., KadirShahar, H., & Ismail, S. (2018). *Emotional health and self-esteem among adolescents in Malaysian orphanages*. *Community Mental Health Journal*, 54(1), 117–125. <https://doi.org/10.1007/s10597-017-0128-5>

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# SENIOR CITIZENS' AWARENESS, ATTITUDE AND THEIR LEVEL OF UTILIZATION OF GOVERNMENT SCHEMES FOR THE ELDERLY— A CASE STUDY OF TELANGANA

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## ABSTRACT

*The paper intended to investigate the level of awareness of the elderly, their attitude and their level of utilization of the welfare schemes. The empirical study was cross-sectional, descriptive using a survey to solve the current problem. A sample of 488 had been drawn from Telangana using simple random sampling technique. An Awareness Scale, an Attitude Scale and a Structured interview developed and validated by P. Prasad(2021) were used to collect data. The data analysed employed statistics like mean, SD, 't-test, F ratio and Karl Pearson's product-moment correlation. The finding was that the awareness, attitude and utilisation of Government schemes were unsatisfactory. The senior citizens significantly differ in their awareness and attitude towards welfare schemes with regard to gender, location of residence and their level of education. There is a significant correlation between awareness, attitude and the utilisation of Government welfare schemes of the elderly.*

**Key Terms:** Awareness, Attitude, Utilization, Welfare Schemes, Senior Citizens

## Introduction

India is the second-largest sub-continent in the world in land and population next to china. India undergoes a dramatic change in the demographic scenario. The research indicates that senior citizens in India will increase by 12% in 2030. In 2050 India's senior citizens' population is looking ahead to increase to 19.4% says UN Population Fund. It also implies that the number of women elderly will also go up. By 2050, due to increased longevity, around six lakhs seniors will touch 100 years in India. As there is steady growth in the population of elderly was 10.38 Crore in 2011, 17.3 Crore in 2026 and 30 Crore in 2050 (senior citizens delhi.org), increases the necessity for programmes for their welfare (Elderly News, July,2020).

## Background of the Study

Thingnam Subadani Devi et al. (2021) investigated the awareness and utilisation of Government Schemes of senior citizens and found out that most of the elders were aware of old-age pension schemes in Punjab, Haryana, Chandigarh and Himachal Pradesh and found a gap between awareness and utilisation of various schemes by senior citizens. Srinivasa M (2021)

reported the findings of the report of the Karnataka Evaluation Authority that among IGNOAPS beneficiaries, 57.2% ranked themselves as happy or very happy. Anil Kumar Goswami et al. (2019) found out that (86.9%) participants were aware of any one of the schemes. The elderly aged 75 years and above utilised the social welfare schemes better than their counterparts. Agrawal (2019) studied the awareness and utilisation of welfare schemes of the elderly among the urban population and found poor awareness and even poorer utilisation of geriatric welfare schemes among the elderly people of urban slums. Sweta D'Cunha et al. (2019) found low awareness among the elderly population regarding the various health and welfare.

## Need and Significance of the Study

Welfare schemes don't work if the people do not know about them. There is an information deficit in India.

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There is a need for a dedicated platform where awareness of the welfare schemes would be spread among the masses, says Union Minister Shri Prakash Javadekar. Awareness is the key to utilization. So the study will help the policymakers about the level of awareness, their attitude regarding the schemes and their level of utilisation so as to reach the unreached.

### Objectives of the Study

- ❖ To find out the level of awareness of Government Schemes, the attitude of senior citizens towards Government Schemes and their level of utilisation by the senior citizens
- ❖ To find out a significant difference in the awareness, attitude and utilisation of the Government Schemes with regard to Gender, Location and Level of Education.
- ❖ To find out a significant relationship, if any, between awareness and utilization of Government Welfare Schemes and attitude of the elderly and utilization of Government Welfare Schemes

### Methodology

The study is empirical and essentially cross-sectional. The investigator had used a descriptive method employing a survey as a technique to collect data. The survey was carried out in both Rural and Urban areas of MedchalMalkajgiri, Mahabubnagar and Nizamabad districts of Telangana State. A random sampling method was used to draw a sample of 488 senior citizens. An Awareness Scale, an Attitude Scale and a structured interview developed and validated by P.Prasad (2021) were used to collect data. The qualitative data were quantified and analysed using descriptive and inferential statistics like mean, SD, 't-test, F ratio, Scheffe test and Karl Pearson's product-moment correlation.

### Analysis of Data

#### Directional Hypothesis:1

The level of awareness, attitude and utilisation of Government welfare schemes by senior citizens is satisfactory.

**Table 1**  
**Level of Awareness, Attitude and Utilization of Government Welfare Schemes for Senior Citizens**



Variables	Count	Unsatisfactory		Moderate Satisfactor		High Satisfactory	
		No	%	No	%	No	%
Awareness	488	311	63.7	102	20.9	75	15.4
Attitude	488	321	65.8	94	19.3	73	14.9
Utilization	488	372	76.3	78	15.9	38	7.8

From the above table it is inferred that among the elders sampled, 63.7% have unsatisfactory aware of the Government schemes for them and only 15.4% are highly aware of the schemes.

Further, 65.8% have an unsatisfactory attitude towards the welfare schemes. It is evident from the table that with regard to the level of utilization, 76.3% reported using the schemes at at least or unsatisfactory level and only 7.8% has utilized at the highly satisfying level.

**Null Hypothesis: 2** There is no significant difference between senior citizens in their awareness, attitude and utilisation of the Government Schemes with regard to Gender

**Table 2**  
**Difference between senior citizens in their awareness, attitude and utilisation of the Government Schemes with regard to Gender**

Variables	Gender	Count	Mean	S.D	t-Value	p-Value
Awareness	Male	202	72.21	18.781	5.279	0.001
	Female	286	77.92	15.895		
Attitude	Male	202	86.18	20.296	2.44	0.05
	Female	286	89.19	19.565		
Utilization	Male	202	88.85	20.22	1.353	0.856
	Female	286	86.49	19.556		

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

The calculated values for awareness and attitude were greater and for utilisation is lesser than the table values. Hence the stated hypothesis is partially accepted. The study concludes that the senior citizens significantly differ in their awareness and attitude

towards Government welfare schemes launched for their benefits. Comparing the mean scores the female are aware of the schemes better than male and their attitude is also positive than the male. But the senior citizens do not significantly differ in their utilization of the schemes with regard to gender.

**Null Hypothesis: 3** There is no significant difference between senior citizens in their awareness, attitude and utilisation of the Government Schemes with regard to Location of Residence

**Table 3**  
**Difference between senior citizens in their Awareness, Attitude and Utilisation of the Government Schemes with regard to Location**

Variables	Location of Residence	Count	Mean	S.D	t-Value	p Value
Awareness	Rural	293	72.58	17.333	6.818	0.002
	Urban	195	80.01	16.829		
Attitude	Rural	293	85.47	18.767	4.902	0.012
	Urban	195	91.87	21.292		
Utilization	Rural	293	83.25	21.616	2.106	0.034
	Urban	195	87.3	19.045		

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

The calculated 't' values for awareness and attitude and utilization were greater than the table values. Hence the stated null hypothesis is not accepted. Their study reveals that the senior citizens significantly differ in their awareness and attitude towards Government welfare schemes launched for their benefits. Comparing the mean scores, the senior citizens in Urban areas are better aware of the schemes, have a better attitude towards the scheme and utilise most welfare schemes than the elders in Rural areas.

**Null Hypothesis: 4** There is no significant difference among the senior citizens in the awareness, attitude and utilisation of the Government Schemes with regard to their level of Education

**Table 4**  
**Difference among senior citizens in their Awareness, Attitude and Utilisation of the Government Schemes with regard to Level of Education**

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Variables	Education	Count	Mean	Sum of squares	df	F	R	Scheffe
Awareness	Higher Education	58	77.54	16879.38	2	28.982	S	1&3
	School Education	84	77.76	306343.3	486			2&3
	Illiterate	319	68.52					
Attitude	Higher Education	58	89.68	8678.37	2	11.109	S	1&3
	School Education	84	89.28	410927.6	486			2&3
	Illiterate	319	82.95					
Utilization	Higher Education	58	75.99	700.22	2	1.142	NS	-
	School Education	84	75.59	322522.5	486			
	Illiterate	319	73.36					

(At 5% level of significance the table value of 'F' is 3.00)

The calculated F ratio is greater than the table value for awareness and attitude and lesser for utilization. Therefore the hypothesis stated was partially accepted. The Scheffe test proves that the senior citizens qualified with school and higher education are better aware and have a better attitude than the illiterates. But there is no significant difference among senior citizens in their utilisation of welfare schemes with regard to different educational qualifications.

**Null Hypothesis: 5** There is no significant relationship between awareness, attitude and utilization of Government Welfare Schemes

**Table 5**  
**Relationship between Awareness, Attitude and Utilization of Government Welfare Schemes**

Utilization of Welfare Schemes	Count	Table value	'r' value	Result
Awareness	488	0.99	0.135	S
Attitude	488	0.99	0.123	S

The calculated correlation coefficient was greater than the table value at 488 degrees of freedom and 5% level of significance. The study concludes a significant positive correlation between awareness and utilisation and attitude and utilisation.

Continued on Page 35



# IS GAME-BASED LEARNING-A TEACHING METHODOLOGY FOR MILLENNIAL'S?

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## ABSTRACT

*“Today’s classrooms are filled with pedagogy that is musty, dull and almost entirely material from the past (Prensky M., 2005)”. Nowadays, learners are- technology addicted and want to be involved and engrossed. Instructors are searching for ways to integrate technology in lecture rooms to engage learners. Engaging learners is not so easy; whether it be millennial’s or others, specific attributes of millennials make it more complicated to engage them. The author is trying to determine the scope of using game-based learning as a pedagogical intervention for millennials, especially in the VUCA world. The paper tries to figure how can we use game-based learning to enhance the efficiency of the instruction-studying procedure, especially for millennials. The paper provides a theoretical background based on which further empirical research can be conducted.*

**Keywords:** Game-Based Learning, Game, Millennial’s, Deep Learning

## Introduction

“The millennialsem body nearly seventy-five percent of the workforce by 2025 (Mihelic, 2016)”. So, a larger understanding of millennia and millennial actions is an area of attention. The millennial generation has gathered tons of attention for their distinctive options compared to previous cohorts. “A prominent characteristic is that the millennials were born into the world of technology. They’re delineated as digital natives (Berge, 2011) (Epstein, 2010)”; as a result of this, they belong to a generation who are never comfortable with a world where there will not be any computers or different hand-held electronic devices. Since they were born into technology, they need the superb capability to soak up data quickly through technology. (Strauss, 1991)are inferable with authoring “Millennials”. Before understanding what teaching and learning methodologies are fitted to millennials, we must always understand the foremost drawbacks of this education system. Massive talk courses have been a very much utilised system for sharing data and, it has become the foundation of personnel guidance. However, a developing assemblage of proof suggests that these substantial talk courses probably won’t be appropriate for enabling understudies to grow profound understandings of the data being given (e.g.(Education, 1980), (Murray, 1983), (Education N. C., 1983), (Wittrock, 1983), (Committee, 1986),

(National Research Council Commission on Life Science, Board of Biology, 1990), (Heuvelen, 1991), (Wandersee, 1994).

The chief concern was that standard teaching had relied preponderantly on badgering facts and sometimes needed learning of long lists of specific nomenclature (Leonard et al., 2001). In general, the results of such teaching were that student motivation was absent, and restricted learning mirrored on poor content holding, few scientific skills, and inability to use concepts. "Traditional Teaching": wherever a teacher-centred state of affairs triumphed, and course instruction highlighted content narration, while not permitting time for college students to replicate upon the fabric given, relate it to previous data, or apply it to the real-world state of affairs (Patricia A. Burrowes, 2003).

However, its impact was worse for millennials due to their unique characteristics. Millennials may be a cluster of individuals who are hard to manage when they cannot be explained concerning the connectedness

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of education. This will result in a situation wherever the learners will lose genuine interest in learning; then, it's tough to make them learn. This means that they will get bored and disinterested students.

Learning, each one of us knows, can be fun. We have to see that the kids try to grasp the "why" behind everything. Thus, at earlier ages, we find that there will be a smaller number of youngsters with "motivational deficits". In any case, these same kids have entered school/secondary school exclusively two or after three years, their inspiration to learn become a problematic issue. A few of these students understand that scholarly exercises must be tiresome and exhausting.

Moreover, these difficulties appear to extend more and more as youngsters progress through higher studies. It could also get worse after they enter school. One distinguished clarification offered for this decline in intrinsic motivation at school is that schools/colleges involve decontextualisation of instruction. In colleges and schools, lecturers typically teach in most non-concrete or decontextualised kind; on the face of it, they believe that learning during this non-concrete context within which each learner will sense its utility and its links to an everyday situation. As a result, students realise it is tough to grasp the connectedness of what they are learning. They cannot recognise when and where to use this in real life.

Learners live in a world that unexpectedly connects with them compared to the world their folks experienced. They react to this world, which has changed throughout the most recent twenty years because of their commitment to an innovation-rich society and changes in childhood nearly abandons saying. "How schools react to this circumstance is critical to learner achievement. Thus, they leave school unequipped for or caught off guard for a healthy and solid life in the "Information Society" in which they will live and lead (Gilbert, 2007)". On the off chance that we neglect to change our instructional method, educational program, and appraisal systems, we bomb our learners and imperil our prospects (Willms, 2003); (Robinson, 2009); (Tapscott, 1998); (Prensky, 2005); (Gilbert, 2007). Engaging, motivating, and making things relevant for a

highly technology-friendly student community with a very different set of characteristics is a very tedious task.

### **Need for the study**

The millennials are very different in their attitude, approach, and characteristics. This has posed severe challenges in higher education attracting and retaining them. Their concept of immediacy, motivation, engagement, and commitment is different from their previous generations. Although it is not clear precisely what approaches this group would take, there is ample evidence to indicate that practices with other generations may not be applicable for them. Research suggests millennials prefer loads of lively learning methods. One of the biggest responsibilities for instructors when teaching millennials is to communicate subject matter to the existing situation and make learning outcomes and activities appropriate and significant. So, it is always good to think about an alternative method that can, to a certain extent. This is how the concept of game-based learning or gamification is emerging as a pedagogical intervention that can appease millennials.

### **Objectives of the study**

1. To find out whether game-based learning can be considered as a pedagogical intervention to appease millennials in a better way.
2. What is the relevance of game-based learning as a pedagogical approach for millennials living in the VUCA world?
3. What characteristics of millennials make game-based learning more appealing to them?

### **Research methodology**

A systematic review methodology was used to organise how game-based learning systems have been used in education. The authors wanted to recognise the most widely recognised benefits and components of gamified learning. We have also covered articles that had studied the characteristics, interests, and personality traits of millennials. It is critical to identify the contexts in which game-based learning systems prosper/ succeed and factors for their active application. The systematic review approach suggested by Materla, Cudney, and

Antony (2017) was performed. All papers included in the literature review were published after 2007. Articles were selected based on some common themes and findings. The study began by evaluating each of the A-Z databases relevant to the research area, with the initial search of keywords “Game-based learning” “AND” “Education”, “Millennials” in the “All Text” field of the advanced search for each database and limiting the search to comprise only peer-reviewed journal articles listed in ABDC. These databases were selected as they widely cover the broad base of application areas of game-based learning. A detailed review of the title and abstract of the papers was conducted to remove those that did not meet the inclusion criteria. Only papers found in the databases through the authors' institutional library were included.

### **Game-Based Learning & Millennial’s in VUCA World**

VUCA represents instability, vulnerability, multifaceted nature, and vagueness. It portrays the state of consistent, whimsical change that is currently the standard in specific ventures and territories of the business world. The term VUCA has been going on for quite a time – over three spans, to be exact. But its importance has never been felt and experienced as much as it is today. The VUCA world with an impact and of the level of COVID-19 pandemic has never seemed earlier.

Millennial's qualities of restlessness, sharp criticism, development, accomplishment acknowledgement, and capacity to perform various tasks make GBL more appropriate for them. Millennial's, likewise called Digital locals, are typically the early adopters of any innovation gadgets or contraptions that enter the market. They are regularly not all that stressed over the gadget itself; however, what the gadget permits the users to do (Berge F. &, 2008); (Fairhurst, 2008); (Barton, 2006). These are a couple of the impacting factors that make GBL a much decent picking-up showing philosophy for millennials.

Millennials are more allowable than past ages, and they are not kidding about the individuals who are more experienced and more educated (Holm, 2012). In the study hall, they anticipate the best

help. It has become apparent that understudies are taking less responsibility for their schooling. Millennials have filled in our current reality, where many seek undergrad instruction. Never again are secondary school confirmations enough. Presently, Millennials are even ready to procure higher educations on the web. This is not limited to bachelor’s certificates. Understudies can procure their master’s and Doctorate certificates on the web. Millennials usually feel qualified to go to college. They do not consider the school insight as an advantage.

With all these outwardly invigorating media and innovation, it is recommended that Millennials may have developed to turn out to be fundamentally visual students. There are rearranging explanations in the scholastic world proposing that millennial's lean toward visual designs over writings when learning (Brumberger, 2011).

Games have highlights which make them more possible for millennials. The inspirational capacity of games is their most significant trademark. Games can rouse students. Motivation is an important variable that influences all phases of learning and practice. Motivation is an unmistakable idea that causes us to comprehend why individuals act positively, and it is an internal state that rouses, coordinates, and holds conduct. Motivation is a setting-off force for learning.

Games have features that help to make them attractive. This element or component incorporated into learning contexts will make learning also equally interesting. Following are the features of a game: Fantasy, Rules/Goals, Sensory Stimuli, Challenge, Mystery and Control. Besides these common features, games have some peculiar features that make them more suitable for millennials: Interactivity, Achievements, Progress, and Teamwork.

This recommends that the GBL not imply that an instructive computer game should be converted into an educational plan. GBL strategies are advantageous and can be used in a more theoretical way. For instance, the educational program itself can incorporate the numerous fruitful gaming mechanics, causing the class to feel like even more a game, thereby making it additionally

engaging for millennials.

## Conclusion

Pulling in, creating, and spurring millennials is arising as a critical test for schools and associations. We frequently need to see the needs and attributes of the millennials. If we can do this, we will set them up to confront the VUCA world. Can GBL be a decent strategy for instructing learning? Is it a significant territory to be surveyed and explored in detail?

## References

1. Abdulhadi Shoufan. (2019). *What motivates university students to like or dislike an online educational video? A sentimental framework*. *Computers & Education*, 132–144. <https://doi.org/10.1016/j.compedu.2019.02.008>
2. Adnan Tasgin, Göksel Coskun. (2018). *The Relationship between Academic Motivations and University Students' Attitudes towards Learning*. *International Journal of Instruction*, Vol.11 (No.4), 935–950. <https://doi.org/10.12973/iji.2018.11459a>
3. Alden J. Edson, Elizabeth Phillips, Yvonne Slanger-Grant, Jacqueline Stewart. (2018). *The Arc of Learning framework: An ergonomic resource for designing and enacting the problem-based curriculum*. *International Journal of Educational Research*. <https://doi.org/doi.org/10.1016/j.ijer.2018.09.020>
4. Andreas Alexiou & Michaëla C. Schippers. (2018). *Digital game elements, user experience and learning: A conceptual framework*. *Educ Inf Technol*, (23), 2545–2567. <https://doi.org/10.1007/s10639-018-9730-6>
5. Barnett, W. S., Epstein, D. J., Carolan, M. E., Fitzgerald, J., Ackerman, D. J., & Friedman, A. H. (2010). *The State of Preschool 2010: State Preschool Yearbook*. National Institute for Early Education Research. Rutgers The State University of New Jersey, 73 Easton Avenue, New Brunswick, NJ 08901.
6. Barton, D., & Tusting, K., Eds. (2005). *Beyond communities of practice: Language, power, and social context*. Cambridge: Cambridge University Press.
7. Berger, L., Rothstein, J., Lee, H., & Rogers, T. (2006). U.S. Patent Application No. 11/275,988.
8. Burrowes, P. A. (2003). *A student-centered approach to teaching general biology that really works: Lord's constructivist model put to a test*. *The American Biology Teacher*, 65(7), 491–502.
9. Chia-Wen Tsai and Ya-Ting Fan. (2013). *Research trends in game-based learning research in online learning environments: A review of studies published in SSCI-indexed journals from 2003 to 2012*. *British Journal of Educational Technology*, Vol 44(No 5), E115–E119.
10. Chin-Chung Tsai, Xiao-Fan Lin. (2018). *Chinese undergraduate students' perceptions of mobile learning: Conceptions, learning profiles, and approaches*. *Journal of Computer Assisted Learning*, 1–17. <https://doi.org/10.1111/jcal.12333>
11. Ching-Huei Chen. *The impacts of peer competition-based science gameplay on conceptual knowledge, intrinsic motivation, and learning behavioral patterns*. *Education Tech Research Dev*, 67, 179–198. <https://doi.org/10.1007/s11423-018-9635-5>
12. Chin-Wen Liao, Ching-Huei Chen, Sie-Jhih Shih. (2019). *The interactivity of video and collaboration for learning achievement, intrinsic motivation, cognitive load, and behavior patterns in a digital game-based learning environment*. *Computers & Education*, 43–55. <https://doi.org/10.1016/j.compedu.2019.01.013>
13. Chrysi Rapanta, Dany Badran. (2016). *Supporting Emirati females' leadership skills through teaching them how to debate: Design, assessment, and considerations*. *The International Journal of Management Education*, (14), 133–145.
14. Claudio Dondi and Michela Moretti. (2007). *A methodological proposal for learning games selection and quality assessment*. *British Journal of Educational Technology*, Vol 38(No 3), 502–512.
15. Culiberg, B., & Mihelic, K. K. (2016). *Three ethical frames of reference: insights into Millennials' ethical judgements and intentions in the workplace*. *Business Ethics: A European Review*, 25(1), 94–111.
16. Dickey, m. D. (2003). *An investigation of computer games strategies for engaged learning*. Paper presented at the

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annual meeting of the American Educational Research Association. Chicago, il.

17. Dickey, m. D. (2005). *Engaging by design: how engagement strategies in popular computer and video games can inform instructional design. Education training research and development*, 53(2): 67-83
18. Farrell, L., & Hurt, A. C. (2014). *Training the millennial generation: implications for organizational climate. E Journal of Organizational Learning & Leadership*, 12(1).
19. Gilbert, J. (2011), "The Millennials: A new generation of employees, a new set of engagement policies", *Ivey Business Journal*, Vol. 75 No. 5, pp. 26-28.
20. Ketelhut, D. J., & Schifter, C. C. (2011). *Teachers and game-based learning: Improving understanding of how to increase efficacy of adoption. Computers & Education*, 56(2), 539-546.
21. Murray, J. (2004). *Nursing: The net generation. Nursing Education Perspectives*, 25(3), 106.
22. Ng, E. S., Schweitzer, L., & Lyons, S. T. (2010). *New generation, great expectations: A field study of the millennial generation. Journal of business and psychology*, 25(2), 281-292.
23. Prensky, M. (2001). *Digital natives, digital immigrants. On the Horizon*, 0(5), 1-2.

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## SENIOR CITIZENS' AWARENESS, ATTITUDE AND THEIR LEVEL . . . . .

### Conclusion

At present, the Government of Telangana spends Rs.1000 crores per month providing different pension schemes to 37.48 lakhs people. The Government has also reduced the age for eligibility to avail old-age pension (Asara) from 60 to 57 years. Still, 7.8 lakh applications are pending with the Government for sanction. Awareness of Government welfare schemes among elderly persons in both the Rural and Urban areas of MedchalMalkajgiri, Mahabubnagar and Nizamabad districts of Telangana was unsatisfactory. Their attitude towards the welfare schemes was not favourable due to

their inability to benefit. The elderly lack proper awareness and guidance, the utilisation is also not satisfactory. Economic independence may be achieved among senior citizens through social welfare schemes. Knowledge of social welfare schemes and their utilisation needs to be improved among female, rural elderly people and illiterates.

### References

1. Agrawal, Deepika; Tyagi, Neha; Dhakar, Jagmohan Singh; Chaturvedi, Manish (2019). *Awareness and utilisation of Geriatric Welfare Schemes among urban elderly population of District Gautam Budh Nagar, Indian Journal of Community Health*, Vol. 31 Issue 3, pp 315-321.
2. Anil Kumar Goswami, S. Ramadass, Mani Kalaivani, BaridalyneNongkynrih, Shashi Kant, Sanjeev Kumar Gupta(2019). *Awareness and utilisation of social welfare schemes by elderly persons residing in an urban resettlement colony of Delhi, Journal of Family Medicine and Primary Care*, Vol. 8, Issue 3, pp 960-965.
3. *Elderly News*, July (2020) Vol.7, Issue 79 enior citizens delhi.org/elderlynewsjuly2020.pdf
4. Shrinivasa M (2021) Karnataka Evaluation Authority report, *Times of India*, August 26, 2021.
5. Sweta D'Cunha, Sucharita Suresh, Chitra Yathindra (2019) *Rights of the Elderly: Awareness Study among Elderly, International Journal of Health Sciences & Research*, Vol.9 Issue: 6. [www.ijhsr.org/IJHSR\\_Vol.9\\_Issue.6\\_June2019/38.pdf](http://www.ijhsr.org/IJHSR_Vol.9_Issue.6_June2019/38.pdf)
6. ThingnamSubadani Devi, Ravinder Kaur, Anjali Thakran, Bharti Gudwalia, Manisha Kumari, Ishwar Singh Gurjar, Sukhpal Kaur, Amarjeet Singh, Manisha Nagi (2021). *Awareness and utilisation of various schemes launched by the government of India for the welfare of senior citizens, International Journal of Community Medicine and Public Health*, Vol.8, Issue 4. [www.ijcmph.com/index.php/ijcmph/issue/view/75](http://www.ijcmph.com/index.php/ijcmph/issue/view/75)

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# PSYCHOLOGICAL WELLBEING AND PROFESSIONAL SELF EFFICACY OF PROSPECTIVE MATHEMATICS TEACHERS

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## ABSTRACT

*Professional self-efficacy refers to an individual's belief in his abilities to achieve professional goals and activities, which its formation is affected by many factors. One of the factors is psychological well being. This study aimed to examine the relationship between psychological wellbeing and professional self-efficacy of prospective mathematics teachers. In this descriptive correlation analysis, the participants of the study are 64 (female n= 45; male 19) prospective mathematics teachers from St. Xavier's college of education (Autonomous) and St. Ignatius college of education (Autonomous) were selected through simple random sampling. The data was collected through; Ryff's Psychological Well-Being Questionnaire and Professional self-efficacy scale constructed and validated by the investigators. The collected data were analysed using the 't'-test and Pearson correlation coefficient test. The Pearson correlation coefficient test showed a positive and significant relationship between prospective mathematics teachers' professional self-efficacy and psychological wellbeing ( $r=0.403$ ).*

**Key Words:** Professional self Efficacy, Psychological well being, prospective Mathematics teachers.

## Introduction

Quality education opens the doors to lifetime opportunities in the fast-changing 21st century. Passionate, motivating, effective teachers are the foundation of quality education. Teachers educate the youth of a society, who become the leaders of the next generation. They impart knowledge upon students and play an extraordinary role in moulding students into responsible citizens. Indian Society is rapidly improving with the process of westernisation and modernisation. Teachers have to perform several duties besides teaching for better adjustment and understanding. In this exciting function, teachers significantly need psychological well-being, which is the key to perform their professional activities. Shengji (2021) describes the psychological wellbeing (PWB) of teachers as the judgment and satisfaction of an individual with their happiness, physical and mental health, and profession (Huppert, 2009). The well-being of teachers goes beyond the simple absence of setbacks and stressors at work and concerns healthy and functional teachers. In simple terms, wellbeing refers to the capability of teachers to strike a positive and dynamic balance between their resources and professional challenges (Benevene et al., 2020). The well-being of today's teachers may affect the well-being

of tomorrows' society. Unless the well being of individual teachers is improved, standards of education, the educational experience of young people and the professional self-efficacy of teachers will suffer, and the nation has to face the consequences in future. Teachers with a strong sense of professional self-efficacy tend to be better planners, more resilient, open-minded, and supportive of students. Hence, as a mathematics teacher educator, the researcher aims to analyse the relationship between prospective mathematics teachers' psychological well-being and professional self-efficacy.

## Objectives of the present study:

1. To find out the difference in the psychological well-being and professional self-efficacy of prospective mathematics teachers in terms of gender.
2. To find out the relationship between Psychological well being and Professional self-efficacy of prospective mathematics teachers.

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## Hypotheses of the study

1. There is no significant difference between male and female prospective mathematics teachers in their Psychological Well Being.
2. There is no significant difference between male and female prospective mathematics teachers in their Professional Self-efficacy.
3. There is no significant relationship between Psychological well being and Professional self-efficacy of prospective mathematics teachers.

## The rationale of the study

Through the comprehensive exploration of this study, the relationship between Psychological well being and Professional self-efficacy of male and female prospective mathematics teachers is scrutinised. This research will elucidate a new perspective in approaching professional self-efficacy issues of prospective mathematics teachers.

In this regard, Prospective mathematics teachers will be directly benefited from this research as its findings may encourage them to consider their Psychological well being as an approach to boost their Professional self-efficacy levels. This study will give awareness to teacher educators and ease positive professional self-efficacy among prospective mathematics teachers. Moreover, through the analysis made by this study, Teacher education institutions will get some awareness on recognising psychological well-being and alleviate professional self-efficacy programs and advocacies regarding psychological wellbeing that can help the prospective mathematics teachers deal with their self-efficacy; an addition to this, the findings presented in this research will push for an in-depth analysis of the curricular framework of the secondary teacher education program to mod which will bring happy feelings during the course and the activities given in the secondary education curriculum shall have some meaning and purpose.

## Methodology

### Sample

For the present study, the sample of 64 prospective mathematics teachers from St. Xavier's college of education (Autonomous), Palayamkottai and St. Ignatius

College of Education (Autonomous), Palayamkottai were selected.

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## Tools used

### For data collection, two tools were used

1. Professional self efficacy scale (2021) developed by the investigators consisting of 69 items in six dimensions namely Instructional planning efficacy, Instructional practice efficacy, Classroom management efficacy, Relationship management efficacy, Evaluation efficacy, and Emotional efficacy, was used.
2. Psychological well-being scale developed by Ryff (1989) was adopted to suit the study population. The scale consists of 25 positive and 17 negative items under six dimensions: self, acceptance, Positive relations with others, Autonomy, Environmental mastery, Purpose in life, and Personal growth.

## Statistical Techniques used

For getting meaningful results statistical techniques like mean, standard deviation and 't'-test and Pearson correlation coefficient test were used.

## Analysis, Interpretation and Discussion

Appropriate analysis along with its interpretation is being drafted as follows:

**Null Hypothesis 1:** There is no significant difference between male and female prospective mathematics teachers in their Psychological well being

**Table 1**  
**Difference in Psychological well being of prospective mathematics teachers in terms of gender**

Dimensions	Gender				Calculated 't' value	Remark
	Male (N=19)		Female (N=45)			
	Mean	S.D	Mean	S.D		
Autonomy	27.42	4.073	20.24	7.752	4.829	S
Environmental mastery	19.53	7.677	20.38	8.737	0.389	NS
Personal growth	23.42	8.94	24.44	3.622	0.656	NS
Positive relations with others	23.32	8.499	22.87	7.588	0.209	NS
Purpose in life	20.16	5.346	22.24	8.337	1.795	NS
Self acceptance	18.84	8.623	23.73	2.658	3.466	S
Psychological Wellbeing	132.68	19.661	133.91	17.4	0.248	NS

(At 5% level of significance the table value of 't' is 1.99)

**Findings and discussion**

It is inferred from the above table that there is no significant difference between male and female prospective mathematics teachers in their Environmental mastery( $t=0.389$ ), Personal growth( $t=0.656$ ), Positive relations with others ( $t=0.209$ ), Purpose in life ( $t=3.466$ ) and Psychological well being as a whole ( $t= 0.248$ ).

But there is a significant difference in the Autonomy ( $t=4.829$ ) and Self-acceptance ( $t=3.466$ ) of prospective mathematics teachers.

The present finding contradicts the findings of Rathwa Mukesh (2014), who revealed that there is no significant difference in the psychological well being of male and female B.Ed College students.

The present study's findings reveal that the male prospective mathematics teachers are better in their autonomy than female prospective mathematics teachers. This may be due to the fact that men hold more freedom in doing their works at any time needed. There are not more restrictions provided to them in the society like females. So this may be the reason for male being better in autonomy.

But female prospective mathematics teachers are better in self acceptance than male prospective mathematics teachers. This may be due to the fact that the women hold all the responsibilities for a smooth running of their family. Hence they accept themselves and adjust with others in all the situations. So this may be the reason for female showing better in self acceptance

**Null Hypothesis 2:** There is no significant difference between male and female prospective mathematics teachers in their Professional self efficacy

**Table 2**  
**Difference in Professional self efficacy of prospective mathematics teachers in terms of gender**



Dimensions	Gender				Calculated 't' value	Remark
	Male (N=19)		Female (N=45)			
	Mean	S.D	Mean	S.D		
Instructional planning efficacy	66.63	5.861	46.44	16.38	7.242	S
Instructional practice efficacy	67.37	6.534	66.53	7.509	0.446	NS
Classroom management efficacy	46.21	18.489	35.69	4.039	3.653	S
Relationship management efficacy	57	4.842	56.89	8.778	0.065	NS
Evaluation efficacy	39.47	3.963	39.8	4.994	0.278	NS
Emotional management efficacy	47.68	18.729	39.07	5.726	2.816	S
Professional Self Efficacy	324.37	33.591	284.42	30.749	4.62	S

(At 5% level of significance the table value of 't' is 1.99)

**Findings and discussion**

It is inferred from the above table that there is no significant difference between male and female prospective mathematics teachers in their Instructional practice efficacy ( $t = 0.446$ ), Relationship management efficacy ( $t = 0.065$ ) and Evaluation efficacy ( $t = 0.278$ ).

But there is a significant difference in their Instructional planning efficacy ( $t=7.242$ ), Classroom management efficacy ( $t=3.653$ ), Emotional efficacy ( $t=2.816$ ) and Professional efficacy as a whole ( $t=4.620$ ) of prospective mathematics teachers.

The present finding coincides with Lavadores et al. ( 2017), which revealed that men had higher self-efficacy regarding Math, Science, and English as a second language than women.

The findings of the study reveal that male prospective mathematics teachers are better in Instructional planning efficacy, Classroom management efficacy, Emotional efficacy and Professional self-efficacy as a whole than female prospective mathematics teachers. This may be because males have good planning skills and believe in managing any critical situation



without being much emotionally affected. So naturally, they rule over any difficult situation. Hence this may be the reason for males being better than females in Instructional planning efficacy, Classroom management efficacy, Emotional efficacy and professional efficacy as a whole

**Null Hypothesis 3:** There is no significant relationship between Psychological well being and Professional self-efficacy of prospective mathematics teachers.

**Table 3**

**Relationship between Psychological well being and Professional self efficacy of prospective mathematics teachers.**

Variables	df	Calculated $\gamma'$ value	Remarks
Psychological wellbeing Vs Professional self-efficacy	62	0.403	S

(At 5% level of significance, the table value of  $\gamma'$  is 0.250)

**Findings and discussion**

It is inferred from the above table that there is a significant relationship between Psychological well being and Professional self-efficacy of prospective mathematics teachers.

Previous research work by Grobelny and Narska (2021) reveals a relation between self-efficacy and teachers' psychological well-being. Also, the present study's finding is supported by the survey made by Salimirad and Srimathi (2016), which showed a relationship between psychological well-being and occupational self-efficacy among teachers in the city of Mysore. Also, the present finding is in accordance with the result of Punitha and Antonyraj (2020), which revealed a significant relationship between psychological well-being and stress coping behaviour of higher secondary students.

This may be because prospective mathematics teachers having a good state of mind and having believed in their potential usually show a high level of performance on their academic side. They naturally can solve the problem without being more stressed, so they

exhibit a positive psychological well being. They believe in their potential in completing all the tasks professionally. Hence naturally, there is a significant relationship between Psychological well being and Professional self-efficacy of prospective mathematics teachers.

**Educational implication of the study**

The study reveals a significant relationship between Psychological well being and Professional self-efficacy of prospective mathematics teachers. Hence it is evident that self-efficacy is a vital personal resource that determines how teachers can use their skills and abilities. It is also strongly linked with psychological well being (Grobelny and Narska, 2021). Professional self-efficacy and psychological well being are found as facilitators that affect the prospective teachers' performance in their teaching field. For all these reasons, it is very important to pay attention to the development of all competencies during the pre-service training programmes of teachers. Administrators, policy makers, educationalists and other stake holders can take necessary steps to improve the professional self-efficacy of the prospective teachers. Special training programmes may be imparted in teacher education programmes, which will yield better psychological well-being, which in turn encourages prospective teachers as human resource trainers of society.

**References :**

1. Agnieszka Lipinska Grobelny & Marta Narska, (2021). *Self-efficacy and Psychological well being of teachers*, *E-mentor nr, Vol 3(90)* retrieved from <http://www.e-mentor.edu.pl/artukul/index/numer/90/id/1517>
2. Fatemeh Salimirad & N. L. Srimathi, (2016). *The relation between Psychological well being and occupational Self-efficacy among teachers in the city of Mysore, India*, *The International Journal of Indian Psychology, Vol 3( 2), 14-21* retrieved from <https://ijip.in/wp-content/uploads/2019/02/18.01.038-20160302.pdf>

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**ABSTRACT**

*Social work as a discipline stands out owing to its inherently interdisciplinary nature. Feminist studies also transcend disciplinary boundaries. However, despite such an overbearing characteristic that underlines them, somehow feminist perspectives in social work had been a laggard. Since women are a majority in the social work profession, the assumption that it will naturally entail due care of feminist scholarship is a misnomer. This article looks at the unity between social work and feminist approaches and how new epistemological changes within social work itself has opened up new vistas for feminist social work. It advocates an epistemological continuum along which feminist social work must tread.*

**Keywords:** *Feminist social work, interdisciplinary, epistemological continuum, reflexivity*

**Social Work Research and Feminism**

Social work as a discipline has grown beyond our imagination and now encompasses issues of extreme contemporary relevance. Michael Reisch(2019) notes that these can range from economic, demographic, and cultural aspects to something as colossal as climate change. Social workers, therefore, had to relook at their functioning, whether it was in terms of organised social welfare or its zeal to enhance its professional status. The fallouts of neoliberalism and anti-welfare proponents had to be countered. Just as social work was evolving, so was feminism.

Research on women’s issues did not always have a feminist angle in social work. However, contemporary understandings of social work have changed and embraced the notion that women’s problems concern women and the larger society. Laura Bronstein (2003) notes that social work has been interdisciplinary right from the beginning. Molly Strothmann(2010)also adds that social work research and education focus primarily on other fields' literature. Joan Orme (1998), in her essay on “Feminist Social Work”, contends that historically. However, social work engaged more women in the profession, both as providers and users of the social services, adopting a gendered approach has been relatively recent. She notes that Horobin (1987), in “Sex, Gender, and Care Work”, tried to understand the

gendered underpinnings in policy and legislation and how it can impact social work practice. However, much remained uncovered under the contemporary feminist perspectives. Orme(1998)informs that most research was stereotypical in their interpretations concerning men and women and their roles and behaviour in society. Feminist social work set the ground for change within the discipline. Barbara Collins (1986) also asserted that social work is essentially feminist, and that must be brought to the fore. She further laid out how the ethos and value systems of social work and feminism are concurrent to each other. Both perspectives talk about transcending dichotomy; and advocate anti-compartmentalization of knowledge and an interdisciplinary knowledge base.

**Epistemological Changes Within Social Work**

Anita Gibbshighlights the economic and political undercurrents are sweeping upon social work theory and practice, thus resulting in epistemic restructuring. She also emphasises practitioners' role as researchers note the vast array of literature on research epistemology, paradigms, discussions on social work practice as a profession and as a body of knowledge. She underlines

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how feminist research considers the gendered nature of social work and deconstructs knowledge bases and societal structures within the mainframe of social work research. Feminists advocate the active participation of women as researchers and as the researched. Women bearing the burden of welfare work, oppressive and sexist institutional practices, the need to promote women-centred practices are also advocated as thrust areas (Gibbs, 2001).

Stephen Hicks (2015) reiterates that social work must further gender and make it integral to it. He laments how social work is misconstrued as a female-dominated profession, whereas contrarily, the women are actually 'handled' by men. Hicks, therefore, cites Orme (2001), who refuted looking at femininity and masculinity as dichotomous opposites. Hence, engendering gender within social work is pertinent.

### **An Epistemological Continuum**

Gita Mehrotra (2010) advocates that intersectionality serves as a suitable framework to understand multiple identities and the interconnectedness of oppressive systems in women's lives. She suggests that such a multiplicity can be viewed and examined better if feminist social work scholars work on an intersectionality continuum. A range of epistemologies can be purposefully applied to suit the research problem's nature, time, and context. Interdisciplinary feminist scholarship looks at a web of oppressive factors, multiple identities, and the social inequalities in women's lives. Feminist social work scholars are likewise increasingly focussing on this multiplicity of experience, social positionality, and context.

What is noteworthy is that Mehrotra's (2010) proposal of an intersectionality continuum has an overarching reach beyond that of race, class, and gender. She proposes including sexuality, ability, nation, and other facets of diversity and social identity. Social workers must understand that human subjects can undergo varying life experiences at different times ranging from being oppressed to being powerful. An epistemological

intersectional continuum helps capture the different contexts of space and time (Mehrotra, 2010).

Feminist social work and its focus on gender-based social justice, with women across diverse communities, help theorise a multiplicity of intersecting oppressions faced by women.

Mehrotra (2010) also notes the works of Collins (1990) and Hooks (1984), who challenged mainstream and dominant feminist notions of "woman". They expounded upon the inter-twined positions of race and gender oppression and women of colour's unique positionalities. There is also an emphasis on pluralism as an approach that can be tailored to meet the specificities of any social inquiry (Bohman, 1998; Borden, 2010; Orme, 2003). Such a pluralism can unearth hidden meanings of social phenomena that seem difficult to unravel. Adopting a range of paradigms will help adopt a multi-faceted approach to feminist social work and further facilitate critical inquiry (Mehrotra, 2010).

### **Feminist Methodology**

The epistemology of what is knowledge is being severely challenged by feminists. What has always been belittled as women's stories are now resurging with vitality. Fonow and Cook (2005) emphasise the significance of intersectionality of gender with race, sexuality, and class. They also discuss the vexing problems of research at every step in justifying the rationale of feminist methodology. Thus, they focused on epistemology as the core. They emphasise an authentic voice to represent the diversities of diverse women who can also bridge theory and practice.

Fonow and Cook (2005) enlist a multitude of methods that feminist scholars employ. These range from autoethnography, biography, case study, content analysis, deconstruction, historiography, discourse analysis, ethnography, needs assessment, oral history, participant observation etc., to name a few. This reflects the diversity of approach and allows for reiteration of the

“epistemological continuum” advocated by Mehrotra (2010). Locating the female body as the site of oppression is an exemplary achievement in feminist scholarship. Reproductive rights, motherhood, rape, manipulating women’s bodies to promote popular youth culture have their pivot as the female body in feminist research (Fonow & Cook, 2005). This further spawned a varied range of epistemologies to studying the female body.

### Walking the Epistemological Tightrope

Feminist approaches draw many parallels with social work. The emphasis on social action and policymaking is one of them. Feminists believe in actively partnering with their subjects. Just as social work accords a high value to participatory action research, feminists believe that such involvement of subjects can help erode the power hierarchy; and the resultant body of knowledge can bring about social change. However, in this earnestness to capture the authentic voices of the oppressed subjects, who are subsumed within an array of intersectional forces, the dilemma of quantitative versus qualitative methods prevail. Westmarland (2001) also notes how quantitative feminist research is breaking new ground by emphasising the need to be sensitive towards women’s experiences. The stark vulnerabilities of women, such as physical and sexual abuse that can burden their lives differently, are also noted. These are thus new vistas in feminist research across disciplines.

With these new waves sweeping quantitative research, what is now gaining strength is the triangulation method or what is referred to as the mixed method (Jenkins, 2000). Susan Hanson and Geraldine Pratt (1995) combined census data with in-depth interviews to understand the gender-wise occupation patterns in their study, thus successfully applying the mixed method (as cited in Fonow and Cook, 2005).

### Conclusion

Feminism looks at the world through a distinctive approach. Despite their differences, Martin Hammersley

(1992) closely examines some common grounds that feminists tread upon. The first is gender as a central concern. Second is the premium according to experience in women’s lives. Thirdly, the researcher and research must be freed from a hierarchy. And fourthly, the overarching goal of feminist research is emancipation. Thus, in this multi-layered understanding of feminist scholarship, feminist social work research can find assistance by partnering with the research subjects themselves. Confronting social issues and enhancing societal well-being is the essence of social work. Feminist social work can further this plan by breaking the hierarchical glass ceiling. Indigenous research must be welcomed as it can generate a wealth of knowledge of the hitherto unknown in dominant research paradigms.

### References

1. Bohman, J. (1998). *Theories, Practices, and Pluralism: A Pragmatic Interpretation of Critical Social Science*. *Philosophy of the Social Sciences*, 29(4), 459–480. <https://doi.org/10.1177/004839319902900401>
2. Borden, W. (2010). *Taking multiplicity seriously: Pluralism, pragmatism, and integrative perspectives in clinical social work*. In W. Borden (Ed.), *Reshaping theory in contemporary social work: Toward a critical pluralism in clinical practice* (pp. 3–27). Columbia University Press. <https://psycnet.apa.org/record/2009-17170-001>
3. Bronstein, L. R. (2003). *A Model for Interdisciplinary Collaboration*. *Social Work*, 48(3), 297–306. <https://doi.org/10.1093/sw/48.3.297>
4. Collins, B. G. (1986). *Defining Feminist Social Work*. *Social Work*, 31(3), 214–219. <https://doi.org/10.1093/sw/31.3.214>
5. Fonow, M. M., & Cook, J. A. (2005). *Feminist Methodology: New Applications in the Academy and Public Policy*. *Signs: Journal of Women in Culture and Society*, 30(4), 2211–2236. <https://doi.org/10.1086/428417>
6. Gibbs, A. (2001). *The Changing Nature and Context of Social Work Research*. *British Journal of Social Work*,

- 31(5), 687–704. <https://doi.org/10.1093/bjsw/31.5.687>
7. Hammersley, M. (1992). *On Feminist Methodology*. *Sociology*, 26(2), 187–206. <https://doi.org/https://doi.org/10.1177%2F0038038592026002002>
8. Hanson, S., & Pratt, G. (1995). *Gender, Work and Space*. In *Gender, Work and Space*. Routledge. <https://doi.org/10.4324/9780203397411>
9. Hicks, S. (2015). *Social work and gender: An argument for a practical account*. *Qualitative Social Work*, 14(4), 471–487. <https://doi.org/10.1177/1473325014558665>
10. Hill Collins, P. (1990). *Black Feminist Thought*. Routledge. <https://doi.org/10.4324/9780203900055>
11. hooks, bell. (1984). *Feminist Theory: From Margin to Center*. Routledge.
12. Jenkins, S. R. (2000). *Toward theory development and measure evolution for studying women's relationships and HIV infection*. *Sex Roles*, 42(7–8), 751–780. <https://doi.org/10.1023/a:1007011825627>
13. Mehrotra, G. (2010). *Toward a Continuum of Intersectionality Theorizing for Feminist Social Work Scholarship*. *Affilia*, 25(4), 417–430. <https://doi.org/10.1177/0886109910384190>
14. Orme, J. (1998). *Feminist social work*. In R. Adams, L. Dominelli, M. Payne, & J. Campling (Eds.), *Social Work: Themes, Issues and Critical Debates* (pp. 218–228). Macmillan Education UK. [https://doi.org/10.1007/978-1-349-14400-6\\_18](https://doi.org/10.1007/978-1-349-14400-6_18)
15. Orme, J. (2001). *Gender and community care?: social work and social care perspectives*. Palgrave.
16. Orme, J. (2003). 'It's Feminist because I Say So!'. *Qualitative Social Work*, 2(2), 131–153. <https://doi.org/10.1177/1473325003002002002>
17. Reisch, M. (2019). *Lessons from social work's history for a tumultuous era*. *Social Service Review*, 93(4), 581–607. <https://doi.org/10.1086/706741>
18. Strothmann, M. (2010). *Use of Non-Social Work Journals in Social Work Research: Results of a Citation Analysis*. *Behavioral & Social Sciences Librarian*, 29(4), 244–266. <https://doi.org/10.1080/01639269.2010.521011>
19. Westmarland, N. (2001). *The Quantitative/ Qualitative Debate and Feminist Research: A Subjective View of Objectivity*. *FQS Forum: Qualitative Social Research*, 2(1), 1–10. <https://doi.org/https://doi.org/10.25595/455>

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3. Punitha & Antonyraj, (2020). *Psychological well being and Stress coping behaviour of higher secondary students, Research and reflections on education, Vol 18(02A), 31-33.*
4. Shengji Li, (2021). *Psychological Wellbeing, Mindfulness, and Immunity of Teachers in Second or Foreign Language Education: A Theoretical Review*, *Frontiers in Psychology*, vol 12:720340 retrieved from <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC8320729/>
5. Benevene et al., (2020). *Editorial: Well being of school teachers in their work environment*, *Frontiers in Psychology*, vol 12 retrieved from file:///C:/Users/ELCOT/Downloads/Editorial\_Well\_Being\_of\_School\_Teachers\_in\_Their\_W.pdf
6. Rathwa, Mukesh C. (2014). *Psychological Well Being Among B.Ed College Student. The International Journal of Indian Psychology, Vol 2(2). Retrieved from http://ndl.iitkgp.ac.in/document/MDI5cHdNUUlnZHN0QXl vOG5lRngvRGk1ZmNIN1dmU3RuNDVzbnZRT0*
7. Lavadores et al., (2017). *Academic Self-Efficacy of High Achieving Students in Mexico. Journal of Curriculum and Teaching, Vol 6(2) 84-89. Retrieved from https://eric.ed.gov/?q=self+efficacy&pg=3&id=EJ1157482*

**ABSTRACT**

*Every human being has an aspiration to become successful in life. For conquering this goal, one should minimise negative thoughts. The raw material for the distortion to be developed in the minds paves a path to the entire discomforts in thought, body and life. The root cause for the distortion is that the knowledge acquired from the world enables one to lead a fearless life. Knowledge is obtained when individuals feel that they know nothing or want to know more. If an individual dwells in that as oneself knows nothing, it will lead to distortion, and if any individual is fond of knowing further, it will lead to an anxiety-free life. External purity is done regularly; internal purity is also required to show a peaceful and happy life. Obedient individuals will be able to achieve the fruit of sanctity. Humans expect to live problem-free life. But it is an unachievable task since problems are part of everyone's life. It continues from the womb to the tomb, as it is unavoidable in the life of a human being. Humans can attain problem-free life by acquiring knowledge and being sanctified and obedient.*

**Keywords:** *knowledge, foreknowledge, sanctification, obedience, distortion*

**Introduction**

Empty mental content is the absence of obstacles and lets reality. Deviation from the previously planned affirmative path is distortion. The bases to be distorted, namely knowledge, sanctification, and obedience, are often attacked by negative emotions. These foundations are the building stones using a healthy internal and external life. The ultimate aim of humans is to live a peaceful and stress-free life. The moment one thinks to live in sanctification comes the negative thought: it should be ridden before it leads to the adverse action, which is the next step after the thought. This can be succeeded by focusing on healthy positive thoughts – I can, I will. If not today, tomorrow never comes. So joyful living can be attained by humans, utilising the current moment, and one can do great things. One should be aware of the resolution in every moment of life.

**Cognitive Distortion – Its Spectrum**

Humans are always conscious in interpreting the surrounding world and trying to make sense of the things that occur in which thought and cognition play a vital role. Cognitive Distortions (CDs) or simply biased opinions are how the brain takes shortcuts and reports completely inaccurate reports. CDs include polarised

thinking, over generalisation, catastrophising, personalisation, mind reading, mental filtering, discounting the positive, 'should' statements, emotional reasoning and labelling (Healthline, 2019). Different cognitive shortcuts result in bias or distortions in thinking (Whalley, 2019).

Ten common CDs contributed much to the negative emotions. All-or-nothing thinking will fall at two extremes, either on the white side or black (Hartney, 2020), which can best be comprehended by interpreting an event, situation or experience (Whalley, 2019). Overgeneralisation occurs when a rule is made after an event or a series of coincidences. Mental filters hone all the negative aspects to enter the mind—discounting the positive discards without considering the virtuous stuff in life. Jumping to conclusions is that without any

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proof, evidence or rational thinking making a decision or judgement based on the individual's insight. Magnification amplifies the forthcoming events and problems while diminishing the importance of needed qualities. Emotional reasoning is a way in which emotion plays a vital role in the circumstance's judgment. Self-judging or situation judging will be purely based on self-emotions. 'Should' Statements' primary focus is on the unachievable standard for which one talks in a self-defeating way to ourselves. Labelling involves making a judgment about oneself or someone else as a person, apart from seeing the person's behaviour didn't define them as an individual. Personalisation and blame are taking responsibility for the guilt, shame and blame oneself or others for a situation in which many factors are involved for the guilt, shame and blame. It is entirely out of one's control (Hartney, 2020).

These common distortions can be overcome by deleting the negative thoughts at the first level, which is the thought level, before it gets into action. Then regarding the other things, if they decide to kill and are sharply aware of the decision, they can be successfully defeated (Reddit, 2020). While getting into distorted situations, an individual's freeness of taking decisions is a gift by nature, to obey or accept it. Acceptance of any distorted situation leads to blaming the situation or the person involved. The situation can also be opted by denying with the help of sanctity. Sanctification (Lei, n.d.) requires internal purity (Burrough, 1989). For inner purity, the unfinished task that does not allow the individual to concentrate on the other focused assignments should be settled. To complete the unfinished task successfully, acquiring knowledge is inevitable for human beings.

### **Interconnecting Three Components**

Cognition, the thought process that happens in one's head, maybe fruitful and destructive. The faulty cognitions can be converted with the help of sanctification. Sanctification helps get rid of distorted thinking (Thomas, 2018). In this world, an individual has freedom, which sometimes leads to disobedience, a form of distorted expression that obedience can overcome (Kearney, 1995). This obedience directs to another critical aspect, sanctification, which is very

important for human maturity.

Knowledge, a base for thinking, is a top product in eliminating cognitive distortion and improving the thought process. It also enhances the formation of mental models of an individual regarding how the world works (Seager, 2018). The convergence of Obedience, Sanctification and Knowledge plays a vital role in achieving a mind free from CDs.

### **Obedience**

Obedience, the basic structure of social life, in compliance with an order, request or law, or submission to another's authority. Obedience is the determined behaviour relevant to our time. Indeed, it is a deeply ingrained behaviour tendency, a prepotent impulse overriding training in ethics, sympathy, and moral conduct. Obedience may be ennobling and educative and refer to acts of charity and kindness, as well as to destruction (APA PsycNet, 1963). It is vulnerable to all kinds of ideological distortion or perversion (Velde, 2017). Because obedience directs trusting one, we can have blind fate on emotional and logical bases; it can be parents, siblings, or partners can be. The critical role of obedience is to know the beneficial happenings behind being obedient. Obedience shows one's belief and love; it is a witness to others, and eventually, obedience brings blessing. (Sorgius, n. d.). There are four types of obedience — Soldier obedience (the soldier will blindly obey the command of the captain; the soldier will do only his duty, no wh questions), Servant obedience (since the servant is gaining over through the salary in the form of money, it is the obedience for the pay), Slave obedience (this type of obedience is found in most of the institutions. It is because of the punishment) and Love obedience (It is the highest level of obedience and unconditional too which can be achieved only through the love which is the common feature for all living things (Grant, 1958)).

### **Sanctification**

Sanctification starts with obedience. It occurs slowly with twists and turns when the individual surrenders to the understanding of the limitations of humans for leading a stress-free life (Lunn, 2013). The

transition of the human creation with a degree of compensation from nature is sanctity. It does not exist naturally. For soaring aloft to the highest level of sanctity, one should transform from the initial life stage to the final through their effort. It relies on persistence rather than perfection (Ford, 2018). It is a lifelong process through which the justified sinner acquires the progressive holiness and is delivered from guilt (Christianstudylibrary, 2014). Man can sanctify certain things that belong to this world and cannot cleanse the whole world. Water purifies the external man and the values (VBM, n.d.). Internal sanctification is done by being obedient to the ultimate source of our creation. When we take steps to obey, it increases sanctification.

**Knowledge**

Ignorance is overpowered by knowledge. Knowledge is a powerful weapon used wisely to conquer wars without making the sword rinse in the blood (Dictionary2, 2020). The actual quality and disposition of mind in a particular kind of knowledge is found when there is a fondness of knowledge (Mason, 1745). It is divided into two syllables, know and ledge. Know means recognise, identify, familiar with, distinguish, and ledge means ridge reaching the edge of the knowing fact. Based on the sources of perception, memory, consciousness, and reason, there are four types of knowledge: declarative, procedural, contextual, and somatic (Bakken, 2016). The information available on the web is abundant because everybody can distribute information of varying quality on social online (Svalastog, 2014). The base for information is knowledge; wisdom can be built on the foundation of knowledge, creativity is the raw material for wisdom, and innovation is the source of creativity (Bhar, 2018). The growth of knowledge gives the ability to reason and wipe away the irrational thoughts from the distorted mind and take proper moral decisions amid the adversities. This basic knowledge leads to foreknowledge which alerts before something happens in advance of the act of happening. To conquer the fruit

of foreknowledge, one should be sanctified (Dictionary2, 2020).

**Conclusion**

The base of the distortion should be rectified to strengthen the life of humans with happiness to spread around like a sweet fragrance. The hungry person will enjoy this sweet fragrance to learn new things in every part of life. The motive for obedience upsurges the internal sanctification of an individual. This internal sanctification of mind leads to the space of foreknowledge, thereby helping to live a peaceful life by taking logical decisions in life. Knowledge as the gravels and sanctification as water and obedience as the cement is interconnected to lay the foundation for a distortion-free mind. If an individual is a failure, depressed, or overwhelmed, the place to be focused is the foundation. This foundation helps to free negative cognitive patterns by rectifying through the hand-in-hand process of interlocking knowledge, sanctification and obedience.

**References**

1. *APA PsycNet. (1963). Behavioural Study of obedience. Retrieved from <https://psycnet.apa.org/record/1964-03472-001>.*
2. *Bakken, R., & Dobbs, J. (2016). The relevance of four types of knowledge for leader preparation in radically different settings: Reflections on data from a case study.*
3. *Bhar, G. C. (2018). WISDOM or EYE of Knowledge. Retrieved from <https://www.esamskriti.com/e/Yoga/Meditation/Wisdom-Or-Eye-Of-Knowledge--1.aspx>*
4. *Bluering media, Vector — Sketch of the human brain. Retrieved from [https://www.123rf.com/photo\\_16771583\\_sketch-of-the-human-brain.html](https://www.123rf.com/photo_16771583_sketch-of-the-human-brain.html)*
5. *Burrough, P. A. (1989). Fuzzy mathematical methods for soil survey and land evaluation. Journal of soil science, Wiley Online Library. Retrieved from <https://onlinelibrary.wiley.com/doi/abs/10.1111/j.1365-2389.1989.tb01290.x>*
6. *Christianstudylibrary. (2014). The Importance of Sanctification. Retrieved from <https://www.christianstudylibrary.org/article/importance-sanctification>*



7. Dictionary1,3. (2020, June 27). Knowledge, Sanctification. Retrieved from <https://www.dictionary.com/browse/knowledge?s=t/sanctification>.
8. Dictionary2. (2020, June 27). Foreknowledge <https://dictionary.cambridge.org/dictionary/English/foreknowledge>.
9. Ford, C. (2018). 6 things every Christian needs to know about sanctification. Retrieved from <https://equip.sbts.edu/article/6-things-every-christian-needs-know-sanctification/>
10. Grant, J. A. (1958). Four types of obedience. Retrieved from <https://www.avatarmeherbaba.org/erics/whowouldobey.html>
11. Hartney, E. (2020). 10 Cognitive Distortions Identified in CBT. Retrieved from <https://www.verywellmind.com/ten-cognitive-distortions-identified-in-cbt-22412>
12. Healthline. (2019, Dec 18). What Are Cognitive Distortions and How Can You Change These Thinking Patterns? Retrieved from <https://www.healthline.com/health/cognitive-distortions#labeling>.
13. Kearney, C. A. (1995). Casebook in Child Behavior Disorders. Retrieved from [https://www.google.co.in/books/edition/Casebook\\_in\\_Child\\_Behavior\\_Disorders/oC0pAAAYAAJ?hl=en&gbpv=0&bsq=Casebook%20oi%20Chi%20B%20ehavi%20Disorders%20By%20Christopher%20A.%20Kearney%201995](https://www.google.co.in/books/edition/Casebook_in_Child_Behavior_Disorders/oC0pAAAYAAJ?hl=en&gbpv=0&bsq=Casebook%20oi%20Chi%20B%20ehavi%20Disorders%20By%20Christopher%20A.%20Kearney%201995)
14. Lei, Z. (n.d.). On the Sanctity of Private Right. CNKI Retrieved from [https://en.cnki.com.cn/Article\\_en/CJFDTotl-CDXB201209025.htm](https://en.cnki.com.cn/Article_en/CJFDTotl-CDXB201209025.htm)
15. Mason, A.M. J. (1745). Self-knowledge. London: Printed for B. Reynolds, 1818.
16. Reddit. (2020, June 27). Where to find distorted in foundation endgame. Retrieved from [https://www.reddit.com/r/controlgame/comments/g6apol/where\\_to\\_find\\_distorted\\_in\\_foundation\\_endgame/](https://www.reddit.com/r/controlgame/comments/g6apol/where_to_find_distorted_in_foundation_endgame/).
17. Seager, T. P. (2018). The 9 Cognitive Distortions Taught in College. Retrieved from <https://tpseager.medium.com/the-9-cognitive-distortions-taught-in-college-d1cfa81053ea>
18. Sorgius, K. (n. d.). Teaching your child the Importance of Obedience. Retrieved from <https://www.notaconsumer.com/teaching-children-to-want-to-obey/>
19. Svalastog, A. L., Allgaier, J., Martinelli, L., and Gajovic, S. (2014). Distortion, confusion, and impasses: could a public dialogue within Knowledge Landscapes contribute to better communication and understanding of innovative knowledge? *Croatian Medical Journal*. 55(1): 54–60.
20. Thomas, J. C. & Zondervan. (2018). *Counseling Techniques: A Comprehensive Resource for Christian Counselors*. Retrieved from [https://books.google.co.in/books?id=ZChQDwAAQBAJ&pg=PT42&lpg=PT42&dq=cognitive+distortion+and+sanctification&source=bl&ots=XXmavoWo7K&sig=ACfU3U1G2Hsj-snLUWe9rxb7V5otxq\\_htQ&hl=en&sa=X&ved=2ahUKEwjip579w6H1AhWyzjgGHUPTCuU4ChDoAXoECCgQAw#v=snippet&q=faulty%20cognition%20the%20spiritual%20work%20of%20sanctification%20and%20formation.&f=false](https://books.google.co.in/books?id=ZChQDwAAQBAJ&pg=PT42&lpg=PT42&dq=cognitive+distortion+and+sanctification&source=bl&ots=XXmavoWo7K&sig=ACfU3U1G2Hsj-snLUWe9rxb7V5otxq_htQ&hl=en&sa=X&ved=2ahUKEwjip579w6H1AhWyzjgGHUPTCuU4ChDoAXoECCgQAw#v=snippet&q=faulty%20cognition%20the%20spiritual%20work%20of%20sanctification%20and%20formation.&f=false)
21. VBM. (n.d.). The Difference between Sanctity and Purity. Retrieved from <https://www.etzion.org.il/en/difference-between-sanctity-and-purity>.
22. Velde, R. (2017). Obedience as a Religious Virtue: An essay on the binding of Isaac from the perspective of Thomas Aquinas. Retrieved from [file:///C:/Users/FACULT~1/AppData/Local/Temp/\[26573555%20-%20European%20Journal%20for%20the%20Study%20of%20Thomas%20Aquinas\]%20Obedience%20as%20a%20Religious%20Virtue.pdf](file:///C:/Users/FACULT~1/AppData/Local/Temp/[26573555%20-%20European%20Journal%20for%20the%20Study%20of%20Thomas%20Aquinas]%20Obedience%20as%20a%20Religious%20Virtue.pdf)
23. Whalley, M. (2019). Cognitive distortions: an introduction to how CBT describes unhelpful ways of thinking. Retrieved from <https://www.psychologytools.com/articles/unhelpful-thinking-styles-cognitive-distortions-in-cbt/>

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# SOCIAL WORK PROFESSION, PROFESSIONAL HIERARCHIES, AND THE GHOST OF FLEXNER

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## ABSTRACT

*This article presents the chequered history of social work as it tries to shake itself off Flexner's definitional cast of a profession. The paper argues that such is the philosophy and values of social work that measuring it against the Flexner criteria is ill-suited. No profession must be pitted against another. The hierarchies of the world continue to favour some and rile the rest. Social work still has a long way to go, as it belongs to the unfortunate latter group. However, the richness of its practice in a plethora of settings is certainly paving the way towards its place in the sun.*

**Keywords:** *Social Work Profession, History, Hierarchy, Flexner*

## Introduction

Social work is still struggling to find its foothold. Since a holistic view of social welfare encumbers social work, it has been subject to political swings. Tempered with multi-disciplinary theories, the understanding of social work has grown today and broken from the mould of charity and philanthropy. It has also shaken off the person-centric approach and embraces a holistic influence of the social context or environment. Counselling, social welfare planning, community organisation became integral to social work practice. Different occupational and specialist roles were being taken by social workers, which further enhanced the standing of social work (Jones, 2014).

This paper looks at the struggles of social work in trying to establish itself as a profession. To capture this, David Austin's (1983) careful and comprehensive critique of Flexner's speech has been discussed extensively. A brief discussion about the philosophy and values of social work is also presented.

## Social Work Philosophy

Paul Tillich (1962), in his deliverance for Self-help Inc., a firm that was helping German refugees, underlined how one must reflect upon the ethics of social work practice. He also emphasised how the problems of human life, in general, are encompassed within social

work practice—considering the uniqueness of each social issue and that of each individual, the society's need for social work was emphasised.

## Values in Social Work

Charles Levy (1973) remarks that William Gordon (1965) had pointed out the lack of wholesomeness of the then existing social work definitions, which emphasised practice rather than the profession. Gordon (1965) had highlighted the value dimension of social work, as all of its purposes and methods stemmed from it. Social work values are neither random nor prescribed. Instead, it ought to reflect a sense of collective responsibility inherent in the very character of social work. Thus, he aptly put forth that social work values are not testable, nor is there any intent to test them (as cited in Levy, 1973).

Talcott Parsons' (1968) also states that values may not be the sole basis for action but a significant force. To have a set of codified values, he proposes distinguishing knowledge from values and emphatically stressing upon the values that pertain to social work. He

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lays down a three-dimensional view of values, with people at the centre stage. They are: “1) conceptions of people; 2) outcomes for people; and 3) instrumentalities for dealing with people” (Levy, 1973, p. 38). However, he cautions that these are not exhaustive looking at values but relatively generalisable ones.

### **Flexner and Social Work History**

Having discussed how overarching the philosophy of social work is and how its value base works towards such a philosophy, a discussion about the turn of events in the backdrop of Flexner’s speech is presented. The idea behind the ensuing discussion is to illustrate that given the kind of sublime philosophy and the value base that places people at the centre with intangibility that cannot be tested as Gordon (1965) advocated, a measurement of social work against the Flexner model of what a profession ought to be, is perhaps not the best measurement. David Austin(1983) lucidly critiques how Abraham Flexner(1915) had denounced that social work cannot be an entire profession. However, that point in history marked a critical juncture in the history of social work and its overall advancement. Social workers then milled together to raise the bar and cross the threshold put forth by Flexner.

In rebutting Flexner, Austin (1983) says that the background in which Flexner presented his ideas must be examined thoroughly. It was when social work was growing at a very fast pace. Women who wanted a career rather than just looking forward to marriage were foraying in social services. Social work education was just blossoming too. Social theory, social welfare for all, fieldwork, and a close liaison with the social welfare agencies were being advocated. In particular, Mary Richmond(1917) was an influential proponent of incorporating case records into the teaching curriculum and highlighted the need to learn from the professional expertise of experienced social workers. Thus, the concept of social work education was born, with an emphasis on regular classes and fieldwork. The social

work academic program was visualised as a generic first year and a specialised second year. Moreover, the need for fieldwork as an essential component grew as it was expounded that studies on individual problems, their families, their disabilities etc., necessitated field-level exposure and understanding. Social movements, health, legislation, an understanding of statistics to help decipher socio-economic data, social administration were included aggressively in the curriculum (Austin, 1983).

Another milestone was that in 1911, a group of colleges for women in New England and the York area set up the Intercollegiate Bureau of Occupations, New York City. The main task was to facilitate social work graduates to secure jobs. They also set up the Social Worker's Exchange in 1917. This encouraged the American Association of Social Workers to come into being in 1921. In 1916, the National Conference of Charities and Corrections had renamed the National Conference of Social Work (Austin, 1983).

### **Battling Professional and Gender Hierarchies**

Around that time, most of those running the social work program and the graduate practitioners were women, which hindered professionalisation. Due to the complex nature of the work involved, social workers constantly liaised with medical practitioners and legal experts. But such efforts were looked at as philanthropic volunteerism. The prevailing dynamics of professional hierarchies and gender hierarchies made them occupy a lower rung. Since firm academic leadership at the top was missing, it continued to pose a massive challenge to accord professional status to social work (Austin, 1983).

It was then that Flexner was called upon to deliberate whether social work is a profession. He was then the most influential man regarding professionalism, particularly in the medical field. Around this time,

medical education itself was surging ahead immensely. Research-based programs were being incorporated, and inventions and discoveries made medical science turn gigantic corners as millions flowed in from funders like the Rockefeller Foundation. Thus, medical science was almost touted as the only true profession, with a lethal combination of knowledge, skills, and money (Austin, 1983).

**Breaking Free of Flexner**

What Flexner presented was priorly coloured by his weak opinion and grasp of the field of social work. He underlined the vastness of social work but used it to emphasise that no educational discipline can encompass it. Hence, it is impractical to grant it a professional status. He also emphasised that professional training must be rewarded with adequate returns in the form of decent wages, which was not so in social work (Austin, 1983).

However, Mary Richmond highlighted the arbitrariness of so-called established professions. Whether it was Flexner or Carr-Saunders and Wilson(1933)or Goode(1968) or Roth(1974), each of them embraced a different set of professions as established professions, thus causing further arbitrariness. And ambiguity. Glazer(1974)too argued that medicine is the only ‘true profession’ and the rest are ‘minor professions’. Likewise, Flexner used the medical profession as the only gold standard to measure the professionalism of social work.

**Balancing the Tilted Scale**

Before World War I, social work emerged from the shadows of a morality-based practice to one of practice wisdom. Mary Richmond(1917), in her “Social Diagnosis”, also emphasised the significance of practice wisdom rather than morality. Schools of social work education were gaining a firm foothold owing to practice wisdom. The uniqueness of a range of professions must be duly recognised. Unfortunately, Flexner’s model of determining professionalism continued to etch itself

within the understanding of social work as a profession at each crucial juncture(Austin, 1983).

**The Flexner Criteria**

So beholden were everyone with the Flexner criteria that there was almost a scramble to establish social work associations in the early 1920s. In 1955, the first issue of Social Work was established under the aegis of the National Association of Social Work. Etzioni(1969)also rues how traditional professions continue to impede the rise of new professions. This is paramount in the case of the medical profession, which is being held up as the ultimate parameter. Flexner's giant propelled social workers to gain acceptance as per his criteria.

The virtues of what makes a profession cannot be measured on a scale; particularly, a scale constructed by one who himself declares less aware of the concerned profession he is set to examine. A profession acquires its cult status with time and must not be examined through the lens. Each of them should have its legitimacy and established functionalities in society. It is time that we get out of the Flexner time warp and move on to develop our unique standpoints in social work as a profession.

**Hierarchies of the World**

Donald Fisher (1990) reviews Bourdieu’s(1984) classic “Homo Academicus” and brings to light how unity and interconnectedness must be maintained in the social world for scientific contribution in the true spirit; what we need to draw explicit attention to is how Bourdieu highlights that social life is best perceived and understood by people “who are located in their ‘field’ of study” (Fisher, 1990, p. 3). Such an involvement facilitates the intuitive process, and not only the professional involved in research is gaining from it and the discipline and the institution. Thus, Bourdieu

advocated integrating the “practical” with the “scholarly”. This echoes Mary Richmond’s firm stance to legitimise field experiences within the social work curriculum.

### Conclusion

An editorial in the *Nordic Social Work Research*(2020) journal talks about how the authors explore and reflect upon the various challenges that social workers meet in their professional practice. Increasing market economies are also posing a challenge to the welfare goals of social work. It ends by highlighting how the profession of social work continues to face a spate of challenges, stemming mainly from scarce resources and multiple trade-offs. The continuing need for research to advance the philosophy, values and goals of social work is thus underlined(Berggren et al., 2020). Whether Flexner reflected that his pronouncements were ill-conceived or wanted to trivialise social work further is best left to Flexner’s ghost to decide. However, in the meantime, social work marches on in gusto, embracing new avenues of practice and new ways of looking at the world, empowered and enriched by its fieldwork, just as Mary Richmond would have liked it.

### References

1. Austin, D. M. (1983). *The Flexner Myth and the History of Social Work*. *Social Service Review*, 57(3), 357–377. <https://doi.org/10.1086/644113>
2. Berggren, U. J., Carter Anand, J., & Bjerger, B. (2020). *Dilemmas in social work practice*. *Nordic Social Work Research*, 10(3), 201–203. <https://doi.org/10.1080/2156857X.2020.1776499>
3. Bourdieu, P. (1984). *Homo Academicus*. Stanford University Press.
4. Carr-Saunders, A., & Wilson, P. (1933). *The Professions*. Oxford University Press.
5. Etzioni, A. (1969). *The semi-professions and their organisation: Teachers, Nurses* (A. Etzioni (ed.)). Free Press.
6. Fisher, D. (1990). Review Essay [Review of the book *Homo Academicus* by P. Bourdieu translated by P. Collier]. *The Journal of Higher Education*, 61(5), 581–591. <https://doi.org/10.2307/1981978>
7. Flexner, A. (1915). *Is Social Work A Profession?* *Social Welfare History Project*. <https://socialwelfare.library.vcu.edu/social-work/is-social-work-a-profession-1915/>
8. Glazer, N. (1974). *The schools of the minor professions*. *Minerva*, 12(3), 346–364. <https://doi.org/10.1007/BF01102529>
9. Goode, W. J. (1968). William J. Goode, "The Theoretical Limits of Professional... - Google Scholar. In A. Etzioni (Ed.), *The Semi-professions and their Organisation* (pp. 266–313). Free Press.
10. Gordon, W. E. (1965). *Knowledge and Value: Their Distinction and Relationship in Clarifying Social Work Practice*. *Work*, 10(3), 32–39. <https://www.jstor.org/stable/23708256>
11. Jones, R. (2014). *The Best of Times, the Worst of Times: Social Work and Its Moment*. *British Journal of Social Work*, 44(3), 485–502. <https://doi.org/10.1093/bjsw/bcs157>
12. Levy, C. S. (1973). *The value base of social work*. *Journal of Education for Social Work*, 9(1), 34–42. <https://doi.org/10.1080/00220612.1973.10671941>
13. Parsons, T. (1968). *On the Concept of Value-Commitments*. *Sociological Inquiry*, 38(2), 135–160. <https://doi.org/10.1111/j.1475-682X.1968.tb00679.x>
14. Richmond, M. E. (1917). *Social Diagnosis*. In Russell Sage Foundation. Russell Sage Foundation.
15. Roth, J. A. (1974). *Professionalism: The Sociologist’s Decoy*. *Sociology of Work and Occupations*, 1(1), 6–23. <https://doi.org/10.1177/073088847400100102>
16. Tillich, P. (1962). *The Philosophy of Social Work*. *Social Service Review*, 36(1), 13–16. <https://about.jstor.org/stable/30016761>

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