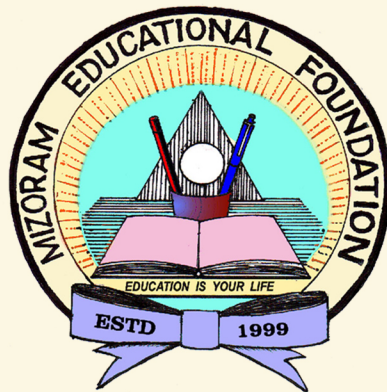


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CONTENTS

From the Desk of the Editor	v
Assessment of Quality of Early Childhood Care and Education in Mizoram <i>Laldampuii & Lallianzuali Fanai</i>	1
Evaluating Geotechnical Parameters for Geotourism Potential in Pukpui, Lunglei, Mizoram <i>Malsawmtluanga, John Blick, Lalhlimpuii & Rahul Verma</i>	16
Self Confidence and Study of Values Test among College Students <i>C. Chalthanmawii & V. Vanlalruati</i>	25
Awareness of Open Educational Resources among University Students <i>Rajesh Kumar & Pooja Walia</i>	38
Adjustment of Secondary School Students in Champhai District: Emotional, Social and Educational Aspects <i>Lalpekhui, F. Zonunmawii & R. Lalthankhumi</i>	50
Level of Depression Proneness Among the Students of Govt. Chaltlang High School and St. Joseph high school <i>C. Lalremmawii, Lalremtluangi & Saizampuii</i>	62
Attitude of Government Secondary School Teachers in Mamit District towards the Use of Information Technology <i>Lalnuntluanga Colney</i>	73
Age and Education as Determinants of Entrepreneurship: A Study of Micro and Small Enterprises in Aizawl District, Mizoram <i>Lalhunthara</i>	81

From the Desk of the Chief Editor

The Editorial Board, Mizoram Educational Journal, is proud to bring yet another issue to its readers. This issue has eight articles which have been submitted by researchers from different subjects besides education.

In their article on assessment of quality of early childhood care and education in Mizoram, Laldampuii and Lalianzuali Fanai used observation cum interview schedule prepared by Lalhmasai Chuaungo. The study revealed the quality of Early Childhood Care and Education (ECCE) in Mizoram with regards to quality of interaction, health, nutrition, personal care and routine and physical infrastructure. Overall, their findings indicated that the ECCE Centres in Mizoram is satisfactory, providing positive environment for children's learning and development.

Evaluating Geotechnical Parameters for Geotourism Potential in Pukpui, Lunglei, Mizoram, the research team comprising of John Blick, Malsawmtluanga, Lalhlimpuii and Rahul Verma highlighted issues related to land stability, foundation support, and soil behavior under different loading conditions. The study's outcomes provide valuable guidance for engineers, urban planners, and policy makers, ensuring that geotourism-related developments align with best geotechnical practices. By addressing soil-related constraints and recommending appropriate construction strategies, this research shall contribute a lot to the long-term viability of Lunglei town as a geotourism destination while promoting environmental sustainability and risk mitigation in infrastructure projects.

C. Chalthanmawii and V. Vanlalruati tested self confidence and values among college students. Data were collected from 100 college students. Descriptive analyses revealed that 52% of students exhibited below or slightly below average self-confidence, while 48% showed slightly above average to very high self-confidence. Theoretical and Economic values emerged as the most highly endorsed motivational dimensions, whereas social, political, and religious values showed greater variability, including notable proportions of poor to very poor value endorsement. Correlational analysis indicated a modest but significant positive relationship between self-confidence and study values ($r = 0.113$), underscoring their complementary roles in academic motivation. Their findings suggested the need for targeted interventions to enhance both confidence and value-driven engagement to improve academic outcomes.

Rajesh Kumar and Pooja Walia studied the awareness of open educational resources among University students to examine awareness level of university students on OER with its concept knowledge, licensing and source. They used descriptive survey method to achieve the objectives of their study with sample size of 364. A self-developed survey instrument was used to collect data. They found that only a small percentage (7%) of the respondents had a deep knowledge of OER as well as licensing systems (12%). Overall, awareness level of OER was found to be low among the University students.

Lalnuntluanga Colney studied the attitude of government secondary school teachers in Mamit district towards the use of information technology. A sample of 50 secondary school teachers in Mamit was selected. Attitude Scale towards Information Technology for Teachers (ASTITT-NI) by Nasrin and Islahi (2012) was used for data collection. The findings of the study revealed that there was a moderate favourable attitude among secondary school mathematics teachers in Mizoram towards the use of information technology. It was also revealed that there was no significant difference in the attitude of male and female secondary school mathematics teachers towards Information Technology.

C. Lalremmawii, Lalremtluangi and Saizampuii compared the level of depression proneness among the students of govt. Chaltlang high school and St. Joseph high school. They found that majority of the two high school students had below average depression proneness. Majority of male students in both high schools had low depression proneness and maximum number of female students in St. Joseph High School had low depression proneness while higher percentage of female students in Govt. Chaltlang High School had below average depression proneness. Yet, the paper also revealed that students, in spite of these afflictions, were successful in their examinations.

Last but not least, Lalhunthara studied age and education as determinants of entrepreneurship, focusing on micro and small enterprises in Aizawl district, Mizoram. He concluded that the need of the hour was to encourage entrepreneurship as the way of livelihood by the new generations not only for self employment but to provide employment to others. This paper identified the sources of entrepreneurship in Aizawl district of Mizoram by the socio-economic characteristics of the entrepreneurs such as educational level and age of the entrepreneurs.

All these articles revealed the varied interest of researchers in the present academic world. Each article has a value that is incomparable and has a relevance in educational development. The Editorial Board wishes the best to the contributors as well as readers all the very best.

Lynda Zohmingliani
Chief Editor

Assessment of Quality of Early Childhood Care and Education in Mizoram

Laldampuii*
Lallianzuali Fanai**

Abstract

The quality of education can be measured by the quality of its pre-schools, because it is the first step towards entering the world of knowledge and a healthy and purposeful life. Given its importance and implications, all the nations of the world are concerned about early childhood care and education. At present, in the Indian context, early childhood care and education is carried out mainly in two ways - private Pre-schools and Government Anganwadis. The main objective of the study is to examine the quality of ECCE in Mizoram, the present study seeks to contribute to the development of a high-quality ECCE system that supports the optimal development of young children in the state. By assessing the quality of Early Childhood Care and Education (ECCE) in Mizoram with regards to quality of interaction by using the questionnaire and interview schedule developed by the investigator. To find out the quality of Early Childhood Care and Education (ECCE) in Mizoram with regard to health, nutrition, personal care and routine and assessing the quality of Early Childhood Care and Education (ECCE) in Mizoram with regard to physical infrastructure, the investigator used observation cum interview schedule prepared by Lalhmasai Chuaungo. The sample of the study consists of 40 ECCE Centres from 7 districts of Mizoram to find out the quality of Early Childhood Care and Education (ECCE) in Mizoram. The collected data was used to find out the quality of the ECCE Centres within Mizoram using statistical method. The study revealed the quality of Early Childhood Care and Education (ECCE) in Mizoram with regards to quality of interaction, health, nutrition, personal care and routine and physical infrastructure. Overall, findings indicate that the ECCE Centres in Mizoram is satisfactory, providing positive environment for children's learning and development.

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Key words: *Private Pre-schools, Anganwadis, Early childhood Care and Education.*

Introduction

Early Childhood Care and Education (ECCE) is considered as a forerunner of school education. The pre-school plays a significant role in preparing children for formal school education. An effective ECCE contributes to enrolment; it helps in reducing dropouts during the early years and helps children acquire foundational literacy and numeracy in early grades. This period is the beginning and co-incides with the pre-conventional level of moral reasoning. Children judge an act as right or wrong based on the resulting consequences. (Kolhberg, 1969)

The first six years of life are critical years in human life since the rate of development during these years is more rapid than at any other stage of development. Global brain researches also inform us about the significance of early years for brain development. Early Childhood Care and Education (ECCE) makes positive contribution to children's long term development and learning by facilitating an enabling and stimulating environment in these foundation stages of lifelong learning. Parents as caregivers are critical in providing a stimulating learning environment to the child and the first two and a half to three years need not be in a formal learning environment. The National Curriculum Framework acknowledges the significance of involvement of parents, family and community. The National Early Childhood Care and Education (ECCE) Curriculum Framework for all children below six years of age is aligned with the Government's vision of ECCE as spelt out in the National Early Childhood Care and Education (ECCE) Policy. The National ECCE Curriculum Framework is informed by the Position Paper on ECCE (National Curriculum Framework, NCERT, 2005) and the curriculum detailed there under. The purpose of this framework is to promote quality and excellence in early childhood care and education by providing guidelines for child care and early educational practices. The framework is intended to be a guiding document for ECCE service providers across all regions. It wishes to lend support to early years' professionals, service providers, ECCE teachers/caregivers, communities and state governments in providing rich early stimulation and learning experiences for children from birth to pre- primary years. This document may also be of interest to families of young children too.

The quality Standard framework identifies the key principles, indicators and exemplary good practices required for assuring quality in Early Childhood Care and Education (ECCE) services. Defining these standards will allow for the progress towards self-assessment, accreditation and finally certification of ECCE provisions.

The SSA, Mizoram started setting up new ECCE centres which are Pre-Primary sections, attached to the Primary schools under the SSA since July, 2005. The

children covered, belong to 3 – 5 years of age. Some attempts are made to provide learning readiness programmes. The children in these Early Childhood Care and Education Centres are provided mid-day meals along with Primary school children. Pre-school under Private management have their presence too in Mizoram. The private management invariably run English Medium Institutions. These schools have been opening classes usually from Nursery/Kindergarten (KG) stage. Thus, before a child is able to sit in Class I, he/she has to attend the Nursery and KG Classes (for two years) which simultaneously provide chances for pre-school activities. The pre-schools in Mizoram have been implemented under the scheme of Integrated Child Development Services (ICDS) by the Department of Social Welfare since 1978. A non-formal pre-school education is one of the package of services rendered by the ICDS.

Rationale of the Study

The importance of a study on early childhood education is embedded in the value of early childhood education as it gives children good foundations upon which to build their succeeding years in schools; as besides their academics, they develop a sense of self and family and it teaches them how to communicate with others. It is a foundation and a preparatory stage for formal school education, personal development and social living.

Early Childhood Care and Education covers the period from birth of a child to the time they start schooling. It is a preparatory stage that focuses on the health condition and education development of a child and thus is fundamental in achieving holistic development. ECCE is a crucial stage where a child learns to interact with the outside environment away from the comfort of the parents, thereby preparing them to enter school. Good foundation for the future of a child starts with proper care from an early stage.

Mizoram, a small state in the north eastern corner of India with approximate population of 1.27 million (2011 Census), which is the second most literate state in the country, possesses adequate awareness regarding the importance of elementary education. A few enthusiasts of early child development have set up private pre-schools in different Districts with the intention of providing good foundation for children. The state government has no additional initiative in this regard apart from the centrally sponsored Anganwadi scheme and Sarva Shiksha Abhiyan Preschools. Little research has been done in this aspect, as a consequence of which no literature worth its salt has been published in recent years. Hence an in depth study of ECCE specifically focusing on Assessment of Quality will provide valuable insight into how pre-school education is implemented within the state thereby effecting general awareness and desirable changes wherever possible.

This study aims to investigate the quality of ECCE in Mizoram, with a focus on (specific aspects of ECCE, such as quality of interaction, health, nutrition, personal care and routine). By examining the quality of ECCE in Mizoram, this study seeks to contribute to the development of a high-quality ECCE system that supports the optimal development of young children in the state.

There are still vast unexplored areas relating to standards and practices regarding ECCE. Thus, the present study proves a great challenge in the study of Early Childhood Care and Education in Mizoram. It is expected that the findings of the study will reflect the strength and weaknesses of ECCE in Mizoram.

Statement of the Problem

The problem of the study has been stated as ‘Assessment of Quality of Early Childhood Care and Education in Mizoram’

Research Questions

1. What is the status of interaction of Early Childhood Care and Education in Mizoram?
2. What is the health, nutrition, personal care and routine of Early Childhood Care and Education in Mizoram?

Objectives

1. To assess the quality of Early Childhood Care and Education (ECCE) in Mizoram with regards to interaction.
2. To assess the quality of Early Childhood Care and Education (ECCE) in Mizoram with regard to health, nutrition, personal care and routine.

Method of the Study

A descriptive approach is employed to understand views on admission, teaching methods, school facilities, and health services etc.

Data is collected using structured questionnaires. For teachers and school heads, existing questionnaires are used to gather their views and experiences. The study is cross-sectional, meaning data is collected at one point in time and means that the study describes the current situation based on the information collected.

Sources of Data

The study utilizes primary and secondary sources of data for attainment of its objectives. Primary sources are direct contacts obtained through the Head of the

Institutions, teacher and parents of ECCE Centres. Secondary sources are institution office records.

Population of the Study

The population of the study comprises of all the ECCE Centres within the Mizoram.

Sample of the Study

Data was collected from 40 institutions within 7 districts of Mizoram.

Tools of data Collection

For the present study, observation cum interview schedule prepared by Lalhmasai Chuaungo was used. Interview schedule for Head of the Institutions prepared by the investigator was used.

Data Collection

The investigator personally visited the schools and permission were obtained from the Head of institutions of the school to collect the required data confidentiality was assured.

Data Analysis

The data were collected through observation, questionnaire, interview schedule and school records. It was further analyzed and tabulated for comparison to find out the differences, which are highlighted in the form of percentages.

Analysis And Interpretation

Analysis of the present study was done in accordance with the objectives of the study.

Objective No. 1 To assess the quality of Early Childhood Care and Education (ECCE) in Mizoram with regards to interaction.

The data were collected from 7 districts of Mizoram to find out the quality of Early Childhood Care and Education (ECCE) in Mizoram with regards to quality of interaction by using the questionnaire and interview schedule developed by the investigator. It was calculated through percentage method, which has been are presented in the following table and figure.

Table 1 Measurement of Quality of Interaction of Seven (7) Districts of Mizoram

Measurement of Quality of Interaction		No. of responses on YES	No. of responses YES in %	No. of responses on NO	No. of responses NO in %
1. Teacher/ Adult-Child Interaction (TACI)	i) teacher greets every child on the arrival	27	67.5	13	32.5
	ii) teachers have meaningful interaction with the children during meals/snacks time	32	80	8	20
2. Child-Child Interaction (CCI)	i) encourage social interaction among children during playtime	30	75	10	25
	ii) meaningful interaction between peers during meal/snack time	40	100	0	0
3. Child environmental/material interaction (CEMI)	i) utilizing waste materials for conducting play activities and have smooth social interaction	22	55	18	45
	ii) Children take care of the material and put the material back at the designated spot	21	52.5	19	47.5
4. Staff- family interaction (SFI)	i) organizing parents teachers meet	22	55	18	45
	ii) home visit	25	62.5	15	37.5
5. Intra Staff Interaction (ISI)	i) Staff members interact, collaborate and support each other as a team	40	100	0	0
	ii) Staff members are respectful and maintain high ethical standard	30	75	10	25

Assessment of Quality of Early Childhood Care and Education in Mizoram

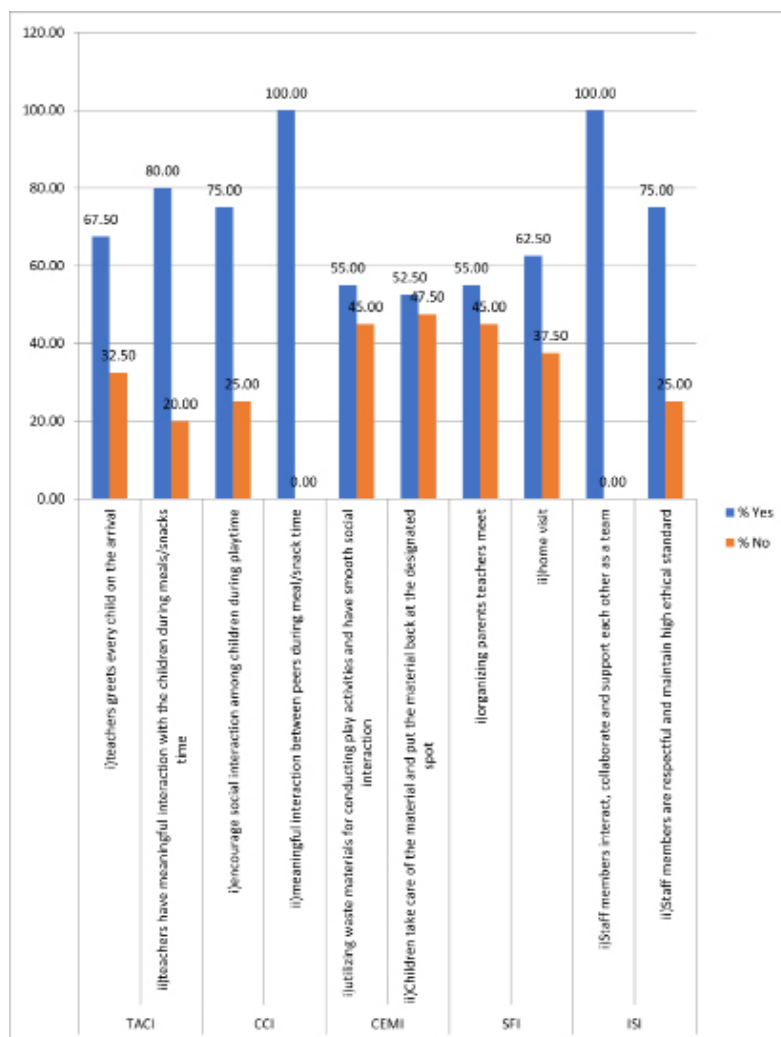


Figure 1: Measurement of Quality of Interaction of Seven (7) Districts of Mizoram

The data vide Table 1 and Figure 1 found that 67.5% of teachers greet every child on arrival, while 32.5% do not. It has also been reported that 80% of the teachers have meaningful interactions with the children during meals/snacks time, while 20% of the teachers do not interact with the children during lunch break.

Further, it was found that 75% of teachers encourage social interaction among children during playtime, while 25% do not. Additionally, 100% of responses indicate that there is meaningful interaction between peers during meal/snack time, with no responses indicating otherwise.

In terms of child environmental/material interaction, it was found that 55%

of teachers utilize waste materials for play activities and promote smooth social interaction, while 45% do not. Furthermore, 52.5% of teachers report that children take care of materials and put them back in designated spots, while 47.5% do not. Regarding staff-family interaction, 55% of staff organize parent-teacher meetings, while 45% do not. Additionally, 62.5% of staff conduct home visits, while 37.5% do not.

Finally, data reveal that 100% of staff members interact, collaborate, and support each other as a team, with no responses indicating otherwise. However, 75% of staff maintain respect and high ethical standards, while 25% do not.

The study reveals that from the data that were collected from 40 ECCE Centres from 7 districts, 80% of the teachers have meaningful interaction with their children. 75% of teachers encourage social interaction among children during playtime, 100% of responses indicate that there is meaningful interaction between peers during meal/snack time. Furthermore, 52.5% of teachers report that children take care of materials and put them back in designated spots. Regarding staff-family interaction, 55% of staff organize parent-teacher meetings. 100% of staff members interact, collaborate, and support each other as a team, with no responses indicating otherwise. This implies that the quality of Early Childhood Care and Education (ECCE) in Mizoram with regards to quality of interaction was satisfactory.

Objective No. 2 To assess the quality of Early Childhood Care and Education (ECCE) in Mizoram with regard to health, nutrition, personal care and routine.

The data were collected from 7 districts of ECCE Centre through Observation and Interview method prepared by Chuaungo, 2002, to find out the quality of ECCE centre in regards to their health, nutrition, personal care and routine. The data were calculated and the findings are presented through percentage method for fulfilling the objectives.

Table 2: Measurement for the quality of health, nutrition, personal care and routine of Seven (7) Districts of Mizoram

Measurement for the quality of health, nutrition, personal care and routine		No. of responses on YES	No. of responses YES in %	No. of responses on NO	No. of responses NO in %
Health (First aid material) (HFA)	a)Surgical cotton	40	100	0	0
	b)Antiseptic ointment	31	77	9	23
	c)Pain relieving medicine	40	100	0	0
	d)Bandages	24	60	16	40
	e)Sticking plaster	15	37.5	25	62.5
	f)Thermometer	5	12.5	35	87.5
Health service available (HAS)	a)Organization of immunization	9	22.5	31	77.5
	b)health check up	35	87.5	5	12.5
	c)Referral service to doctor or PHC	28	70	12	30
	d)Treatment of minor accidents and ailments	27	67.5	13	32.5
	e)Growth monitoring: Weight & Height Record	40	100	0	0
Nutrition (NTTN)	i)sufficient time to eat were given	40	100	0	0
	ii)ensure children have nutritious meals/snacks	40	100	0	0
	iii)nutrition are given regularly	30	75	10	25
Personal Care and Routine (PCR)	i)teachers inculcate habits in children such as washing hands	28	70	12	30
	ii) encouraging self discipline	22	55	18	45
	iii)putting materials back in their place after using them	18	45	22	55

fig 2

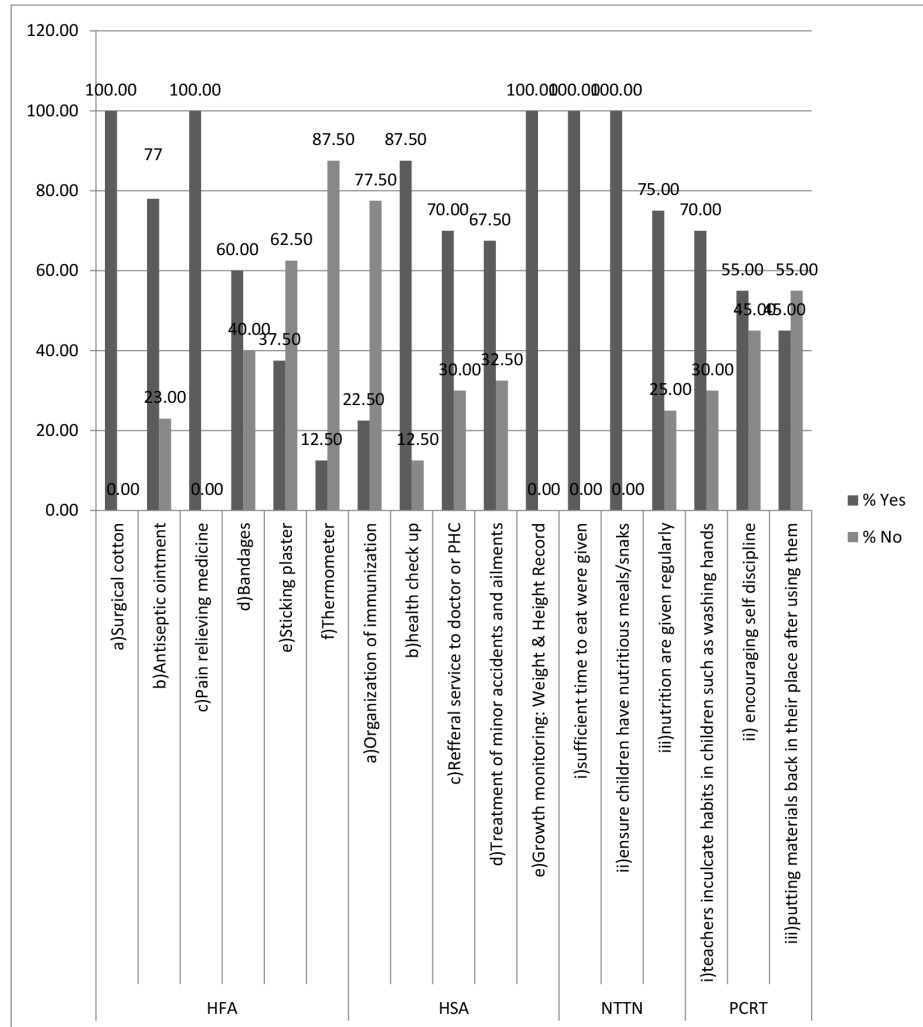


Figure 2: Measurement for the quality of health, nutrition, personal care and routine of Seven (7) Districts of Mizoram

As exposed in Data vide Table 2 and Figure 2 found the following measurements for the quality of health, nutrition, personal care, and routine in the seven districts of Mizoram:

Health (First Aid Material)

- Surgical cotton: 100% of the respondents indicated the availability of surgical cotton, while 0% reported it as unavailable.

Assessment of Quality of Early Childhood Care and Education in Mizoram

- Antiseptic ointment: 77% of the respondents confirmed the availability of antiseptic ointment, while 23% reported it as unavailable.
- Pain-relieving medicine: 100% of the respondents indicated the availability of pain-relieving medicine, with 0% reporting it as unavailable.
- Bandages: 60% of the respondents confirmed the availability of bandages, while 40% reported it as unavailable.
- Sticking plaster: 37.5% of the respondents indicated the availability of sticking plaster, while 62.5% reported it as unavailable.
- Thermometer: 12.5% of the respondents confirmed the availability of a thermometer, while 87.5% reported it as unavailable.

Health Service Available

- Organization of immunization: 22.5% of the respondents confirmed the organization of immunization, while 77.5% reported it as not available.
- Health check-up: 87.5% of the respondents indicated that health check-ups are available, while 12.5% reported them as unavailable.
- Referral service to doctor or PHC: 70% of the respondents confirmed the availability of referral services, while 30% reported them as unavailable.
- Treatment of minor accidents and ailments: 67.5% of the respondents indicated that treatment for minor accidents and ailments is provided, while 32.5% reported it as unavailable.
- Growth monitoring (Weight & Height Record): 100% of the respondents confirmed that growth monitoring, including weight and height records, is available.

Nutrition

- Sufficient time to eat: 100% of the respondents confirmed that sufficient time is provided for children to eat, while 0% reported it as not available.
- Ensure children have nutritious meals/snacks: 100% of the respondents indicated that nutritious meals and snacks are provided to children, with 0% reporting it as unavailable.
- Nutrition given regularly: 75% of the respondents confirmed that nutrition is provided regularly, while 25% reported it as unavailable.

Personal Care and Routine

- Teachers inculcate habits in children such as washing hands: 70% of the respondents indicated that teachers inculcate hand-washing habits in children, while 30% reported it as not happening.
- Encouraging self-discipline: 55% of the respondents confirmed that teachers encourage self-discipline, while 45% reported it as not encouraged.
- Putting materials back in their place after using them: 45% of the respondents indicated that children are encouraged to put materials back after using them, while 55% reported that this is not being practiced.

An analysis of the data from seven (7) district of Mizoram reveals that the quality of care provided by Early Childhood Care and Education (ECCE) Centres teachers. The study reveals that regards to health facilities Surgical cotton, pain relieving medicine, Growth monitoring (Weight & Height Record): 100% of the respondents indicated their availability. Antiseptic ointment: 77% of the respondents confirmed the availability. Bandages: 60% of the respondents confirmed the availability of bandages, Health check-up: 87.5% of the respondents indicated that health check-ups are available, Referral service to doctor or PHC: 70% of the respondents confirmed the availability of referral, Treatment of minor accidents and ailments: 67.5% of the respondents indicated that treatment for minor accidents and ailments is provided services. Sticking plaster: 37.5% of the respondents indicated the availability of sticking plaster, Thermometer: 12.5% of the respondents confirmed the availability of a thermometer. Organization of immunization: 22.5% of the respondents confirmed the organization of immunization. The study shows that health facilities' availability in the ECCE centres meets the expected standard.

The study reveals that regarding the Nutrition provides in the ECCE Centres were beyond expectation 100% of the eat nutritious meals and snacks provided to children and sufficient time were given to the children to have their meal. 75% of the respondents confirmed that nutrition is provided regularly.

Regarding Personal Care and Routine, the study reveals that the ECCE Centres were satisfactory which clearly shows that 70% of the respondents indicated that teachers inculcate hand-washing habits in children, 55% of the respondents confirmed that teachers encourage self-discipline and 45% of the respondents indicated that children are encouraged to put materials back after using them.

Discussion and Conclusion

Early Childhood Education, a pre-school education stage is an important stage as it is a preparatory stage to enhance holistic development in a child for future life. The main focus of ECCE are categorized as 0 – 3 years is health condition; 3 – 6 years, health condition and education. It is very essential that we provide special care and attention as it is the first phase in a child's life where interaction with others begin.

National Focus Group on Early Childhood Education NCERT, 2005 states that “This stage” of life is important as a foundation for the inculcation of social values and personal habits which are known to last life time.

The findings from the early childhood care and education (ECCE) programmes across Mizoram and its seven districts show that, overall, most teachers engage with children positively. In all districts, a high percentage of teachers greet children and interact with them during meals, while social play is encouraged in most areas. However, the use of waste materials for play is less consistent, with only about half of the teachers reporting this practice. Parent-teacher meetings and home visits are also less frequent, with some districts showing low levels of involvement in these areas. Collaboration among staff is widespread, and ethical standards are generally upheld, with the exception of a few districts. While the results highlight some strengths, there are clear differences in how ECCE programmes are implemented across the districts, with some areas needing more focus on using materials creatively and enhancing parental involvement.

Regarding health, nutrition, and personal care in the seven districts of Mizoram, it is seen that most respondents report the availability of essential medical supplies and services. In all districts, surgical cotton and pain-relieving medicine were readily available, and growth monitoring was confirmed in 100% of the cases. However, antiseptic ointment and bandages were available in varying percentages across districts, with thermometers and sticking plasters being less accessible. Health check-ups were generally available, but immunization was notably lower. Regarding nutrition, all districts reported sufficient time for meals and nutritious food. Teachers in most districts encouraged hygiene practices like hand-washing and promoted self-discipline. The practice of children returning materials to their place varied, with 45.5% to 60% of teachers encouraging this habit.

We can conclude by saying that, the overall findings of the study indicate that ECCE Centres in Mizoram are satisfactory, providing positive environment for children's learning and development.

References

- Aggarwal, J. C & Gupta, S. (2014). Early Childhood Care and Education. Shirpa Publications, India : New Delhi.
- Akhlar, M. (2013). A Comparative Study of government and private absenteeism at Secondary Level in District Bahawalpur. *Journal of education and vocational research*, 4(8), 225-229.
- Aydos, E. H., & Tugrul, B. (2015). Development of Personal Safety and First Aid, Hygiene-Self-Care, and Nutrition Subscales in Health Education Scale for preschool children. *Procedia - Social and Behavioral Sciences*. 186, 337–343. <https://doi.org/10.1016/j.sbspro.2015.04.114>
- Cassidy, D. J., Hestenes, L. L., Hegde, A., Hestenes, S., & Mims, S. (2005). Measurement of quality in preschool child care classrooms: An exploratory and confirmatory factor analysis of the early childhood environment rating scale-revised. *Early Childhood Research Quarterly*. 20(3), 345–360. <https://doi.org/10.1016/j.ecresq.2005.07.005>
- Daelmans, B., Manji, S. A., & Raina, N. (2021). Nurturing care for Early Childhood Development: Global Perspective and guidance. *Indian Pediatrics*. 58(1), 11–15. <https://doi.org/10.1007/s13312-021-2349-5>
- Gupta, A. (2019). Early Childhood Parental Philosophies and Practices in Urban India: Education, Care, and Well-Being of Young Children in a society shaped by Traditional and Global forces. In Palgrave Macmillan US eBooks (pp. 215–250). https://doi.org/10.1057/978-1-137-60041-7_6
- Hamre, B. K. (2014). Teachers' daily interactions with children: an essential ingredient in effective early childhood programs. *Child Development Perspectives*. 8(4), 223–230. <https://doi.org/10.1111/cdep.12090>
- Ishimine, K., Tayler, C., & Bennett, J. (2010). Quality and Early Childhood Education and Care: a policy initiative for the 21st century. *International Journal of Child Care and Education Policy/International Journal of Child Care and Education*. 4(2), 67–80. <https://doi.org/10.1007/2288-6729-4-2-67>
- Lalhmasai Chuaungo. (2002). An Analytical Study of Pre-school Education in Mizoram. M.Phil Dissertation. NEHU. Mizoram Campus.
- Megalonidou, C. (2020). The quality of early childhood education and care services in Greece. *International Journal of Child Care and Education Policy/International Journal of Child Care and Education*. 14(1). <https://doi.org/10.1186/s40723-020-00074-2>
- Office of the Registrar General & Census Commissioner, India. (2011). Census of India 2011: Series 12, Mizoram. Ministry of Home Affairs, Government of India.
- Ritwika, M. (2012). Exploring the impact of physical infrastructure on universal attainment of primary education in India: A Comparative analysis of West Bengal and Tamil Nadu.

Assessment of Quality of Early Childhood Care and Education in Mizoram

Indian Journals, 3(2230–7311), 67–70. Journal of General Education and Humanities. 1(3), 139–148. <https://doi.org/10.58421/gehu.v1i3.34>

Tania Ruby, M., Thomas, M., & Rajalakshmi, D. (2012). Development of an Early Care and Learning Centre Rating Scale to Assess Quality in Early Childhood Care and Education. *Language in India*. 20(1930–2940), 3.

Evaluating Geotechnical Parameters for Geotourism Potential in Pukpui, Lunglei, Mizoram

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Abstract

This study explores the geotechnical characteristics of soil in Lunglei town, Mizoram, to evaluate its suitability for construction, infrastructural development, and potential geotourism initiatives. A comprehensive series of field and laboratory tests were conducted to analyze soil composition, shear strength, compaction properties, and bearing capacity. The findings indicate significant variations in soil types, with a predominance of clayey and silty soils, which directly impact stability and foundation requirements. Given Lunglei's hilly terrain, slope stability is a key concern, as soil properties influence erosion susceptibility and the feasibility of large-scale development. This research highlights potential geotechnical challenges in establishing Lunglei as a geotourism hub, including issues related to land stability, foundation support, and soil behavior under different loading conditions. Understanding these parameters is essential for designing safe, resilient, and sustainable infrastructure in the region. The study's outcomes provide valuable guidance for engineers, urban planners, and policy makers, ensuring that geotourism-related developments align with best geotechnical practices. By addressing soil-related constraints and recommending appropriate construction strategies, this research contributes to the long-term viability of Lunglei as a geotourism destination while promoting environmental sustainability and risk mitigation in infrastructure projects.

Keywords: *Geotechnical index parameters, Geotourism, Soil characteristics*

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Introduction

Lunglei, a scenic town in southern Mizoram, Northeast India, lies between $92^{\circ} 42' 45''$ E to $92^{\circ} 50' 05''$ E longitudes and $22^{\circ} 48' 18''$ N to $22^{\circ} 56' 55''$ N latitudes, as mapped in Survey of India sheets 84B/09 and 84B/13 (Survey of India, 2005). Known for its lush green hills, dense forests, and rich biodiversity, the town boasts breathtaking landscapes and unique geological formations (Lalchhandama, 2018). Its undulating terrain, interwoven with rivers and waterfalls, enhances its appeal for nature lovers and geotourism. With its ecological and scenic significance, Lunglei holds great potential for sustainable tourism and scientific exploration.

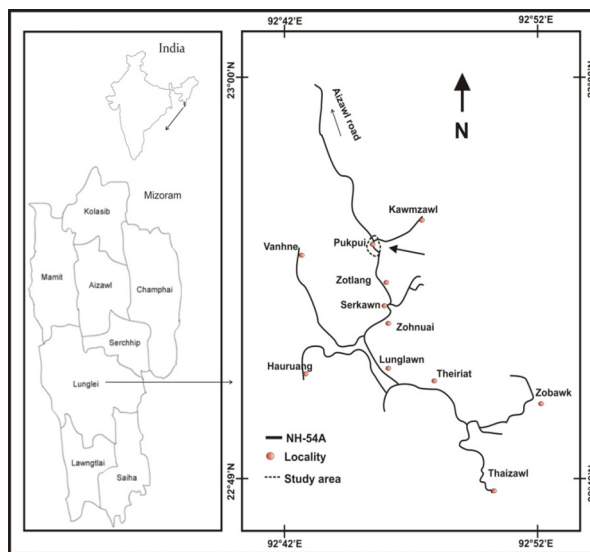


Fig No 1: Location of study area

Nestled amidst rolling hills and picturesque valleys, Lunglei boasts a captivating blend of natural beauty and serenity. Its location within the rugged terrain of the north-south trending Lushai Hills enhances its scenic appeal, offering dramatic landscapes shaped by steep slopes and verdant forests. The region is further enriched by pristine rivers, diverse flora, and abundant wildlife, making it a haven for biodiversity. Lunglei's cool, temperate climate creates a refreshing atmosphere, making it an ideal retreat for visitors seeking peace and tranquility. With its breathtaking panoramic views and unspoiled natural surroundings, the town stands out as a perfect destination for eco-tourism, adventure enthusiasts, and those eager to explore Mizoram's rich ecological and geological heritage.

Geology of Mizoram

Mizoram is geologically part of the Tripura-Mizoram accretionary belt, representing the southern extension of the Surma Basin, which formed due to the regional uplift of the Barail Group and was influenced by plate behavior in the subduction zone west of Arakan-Yoma during the Cenozoic era (Evans, 1964). The region consists of repetitive sequences of arenaceous and argillaceous sediments, including sandstone, siltstone, shale, mudstone, and occasional pockets of shell-limestone and intraformational conglomerates (Lalnuntluanga, Sangode & Meshram, 2012). These formations generally trend north-south (N-S) with dips varying between 20° and 50° towards the east or west. The Tertiary succession of Mizoram is classified into three major groups in ascending order: Barail Group (Oligocene), Surma Group (Lower to Middle Miocene), and Tipam Group (Upper Miocene to early Pliocene) (Barman & Rao, 2021). The Surma Group, covering most of the state, is further divided into Bhuban and Bokabil Formations, with the Bhuban Formation consisting of lower, middle, and upper units based on the ratio of argillaceous and arenaceous components (Bharali, 2019). Structurally, the Mizoram Hills (Lushai Hills) form part of a mobile belt with tight, elongated N-S trending anticlines alternating with broad synclines that exhibit slightly arcuate, westward convex trends. The resistant older rock units are predominantly exposed in the synclinal troughs, defining the rugged terrain of the region (Tiwari & Raj, 2012).

Rationale

Beneath Lunglei's stunning landscapes lie a complex and dynamic geotechnical framework that significantly influences its urban development. As the town undergoes rapid expansion and infrastructural growth, a thorough understanding of its soil characteristics and stability is crucial for ensuring safe and sustainable construction practices. The region's diverse terrain, coupled with heavy monsoon rainfall and occasional seismic activity, poses challenges in assessing soil strength, bearing capacity, and slope stability. These factors make geotechnical investigations essential to prevent risks such as landslides, foundation failures, and erosion. This study focuses on analyzing the geotechnical properties of soil in the Pukpui locality of Lunglei, providing valuable data to aid urban planners, engineers, and policymakers in making informed decisions for risk mitigation, sustainable growth, and environmental conservation.

The primary focus of this study is on the Pukpui area, located within Lunglei town, where comprehensive geotechnical investigations were conducted (Fig No 1). Various soil properties were analyzed through laboratory testing to assess their engineering behavior. The tests performed include the Liquid Limit, Plastic Limit,

Evaluating Geotechnical Parameters for Geotourism Potential in Pukpui, Lunglei, Mizoram and Plasticity Index, which determine soil consistency and plasticity characteristics. Additionally, Proctor Compaction tests were carried out to evaluate the optimum moisture content and maximum dry density of the soil. The Direct Shear test was conducted to measure the soil's shear strength parameters, while the Safe Bearing Capacity of Soils was determined to assess their suitability for construction. These tests were performed at the Geotechnical Laboratory, Department of Geology, Lunglei Government College, as part of a research project funded by DST-SERB.

Review of related literature

Lallawmsanga, Christopher, Lalthazuala, (2023) conducted a study on the geotechnical characteristics of soils in the Saron Veng area of Aizawl, Mizoram. They performed tests to determine the Liquid Limit, Plastic Limit, and Plasticity Index, providing insights into the soil's consistency and plasticity. Additionally, Proctor Compaction tests were conducted to assess the optimum moisture content and maximum dry density, which are critical for understanding soil compaction behavior. The findings contribute to a better understanding of soil properties in landslide-prone areas.

Lallianthanga & Laltanpuia, (2019) examined the impact of various land use systems on soil properties in Mizoram. The study analyzed physical properties such as soil texture, bulk density, moisture content, and water-holding capacity, as well as chemical properties including pH, organic carbon, nitrogen, phosphorus, and potassium content. The findings highlight how different land use practices influence soil health and fertility in the region.

Vinoth, Prasad, Mathur & Kumar, (2022) focused on the geotechnical investigation of a landslide in the Hunthar area of Aizawl. The researcher conducted subsurface explorations, including borehole drilling and sampling, to determine the soil profile and properties. Laboratory tests such as grain size analysis, Atterberg limits, and direct shear tests were performed to assess the soil's engineering behavior. The study provides recommendations for remedial measures to stabilize the landslide-affected area.

Methodology

The methodology for conducting the geotechnical tests on soil samples from Pukpui locality in Lunglei town involves several standard procedures to assess key properties such as consistency, compaction and shear strength.

Liquid Limit Test: The liquid limit is determined using the Casagrande method. A soil sample is mixed with water, and the liquid limit is found by repeatedly cutting

a groove in the soil and observing the water content at which the groove closes over a specified distance. This determines the soil's transition from liquid to plastic state.

Plastic Limit Test: For the plastic limit, soil is rolled into threads, and the water content at which the soil begins to crumble is recorded. This defines the boundary between the plastic and semi-solid states (ASTM D4318-17, 2017).

Plasticity Index: The plasticity index is calculated as the difference between the liquid limit and the plastic limit, providing insight into the soil's plasticity and behavior.

Proctor Compaction Test: The Proctor test is performed to determine the maximum dry density and optimum moisture content (Proctor, 1933). Soil samples are compacted in a standard mold at varying moisture contents, and the resulting dry densities are measured.

Direct Shear Test: To assess the shear strength, a direct shear test is conducted by placing the soil sample in a shear box and applying a normal load while monitoring the shear force required to cause failure.

Results and discussions

The results and discussions section presents a comprehensive analysis of the geotechnical tests conducted on soil samples from Lunglei town. These tests, including the liquid limit, plastic limit, plasticity index, Proctor compaction, and direct shear, provide essential data on the soil's consistency, compaction behavior, plasticity, and shear strength. Understanding these properties is crucial for assessing the soil's engineering suitability for construction, its stability under varying environmental conditions, and its response to external loads.

Furthermore, the discussion will interpret the findings in the context of Lunglei's unique topography and geological setting, highlighting key factors such as slope stability, settlement characteristics, and the influence of seasonal rainfall on soil behavior. Special emphasis will be placed on identifying potential geotechnical challenges associated with construction in the region and recommending appropriate measures to mitigate risks related to erosion, soil compaction, and foundation stability.

The Plasticity Index (PI) is calculated as:

$PI = LL - PL = 33.50 - 22.41 = 11.09\%$. According to the BIS soil classification system (BIS, 1970), a PI value between 10-20% indicates inorganic clay of medium plasticity, suggesting moderate cohesion and compressibility. The Maximum Dry Density (MDD) and Optimum Moisture Content (OMC) define the soil's compaction characteristics. A dry density of 1.80 g/cm^3 is typical for medium-plasticity clayey soils

(Das, 2013), while an OMC of 14% suggests that the soil requires a moderate water content to achieve maximum compaction, which enhances its stability in engineering applications (Murthy, 2017). The specific gravity (G_s) of 1.60 is relatively low, indicating the possible presence of organic content or lighter soil particles. Inorganic clays typically have G_s values between 2.6 and 2.75, so this result may suggest some unconventional soil characteristics. In terms of shear strength, the cohesion (C) of 0.130 kg/cm^2 is typical for medium-plasticity clays, providing moderate resistance against shear forces. The angle of shearing resistance (Φ) at 26.53° suggests reasonable load-bearing capacity but indicates the potential for moderate settlement under heavy loads. This classification confirms that the soil is suitable for moderate-load-bearing applications. However, due to its clayey nature, it may be susceptible to volume changes with moisture fluctuations, necessitating proper drainage measures in construction projects. The safe bearing capacity (SBC) of 19.25 T/m^2 is within an acceptable range for medium- to high-load structures, including low-rise buildings, pavements, and industrial floors. However, foundation design should account for potential settlement due to clay content. If high moisture content is expected, soil stabilization or deep foundation methods may be required (Table No 1).

Table No 1: Results of Geotechnical tests conducted

Sl.	Test	Unit	Sample	IS Code
1	Liquid Limit	%	33.50	IS: 2720 (Part 5)
2	Plastic Limit	%	22.41	
3	Plasticity Index	%	11.09	
4	Proctor Compaction			IS-2720 (Part-7)
	(i) Dry Density (Unit weight)	kg/cm ²	0.130	
		T/m ²	1.27	
	(ii) OMC	degree	26.53	
7	Type of soil	Inorganic clay of medium plasticity		BIS
8	Safe Bearing Capacity of Soil	T/m ²	19.25	IS : 6403
		kN/m ²	188.80	

Table No 2: Plasticity Index

<i>Characteristics of Soils With Different Plasticity Index (Coduto, 1999 Modified after Sowers, 1979)</i>				
PLASTICITY INDEX I_p	CLASSIFICATION	DRY STRENGTH	VISUAL - MANUAL TIFICATION OF DRY SAMPLE	Classification of the tested sample
0-3	Non plastic	Very Low	Falls apart easily	
3-15	Slightly plastic	Slight	Easily crushed with fingers	11.09
15-30	Medium plastic	Medium	Difficult to crush with fingers	
>30	Highly Plastic	High	Impossible to crush with finger	

The soil falls under the slightly plastic category, as its Plasticity Index (PI) is 11.09, placing it within the 3–15 range (BIS, 1970). This indicates the presence of some clay content, though the soil is not highly cohesive or expansive (Das, 2013). The dry strength of the soil is slight, meaning it has low resistance to crushing when dry. As a result, it may be prone to crumbling under mechanical stress. The soil sample is easily crushed with fingers, further confirming its slightly plastic nature. While it exhibits some plasticity, it lacks strong cohesion in a dry state. The slight plasticity of the soil suggests moderate shrink-swell potential, leading to minor volume changes with moisture fluctuations (Murthy, 2017). To enhance stability, proper drainage and compaction techniques are recommended before construction. Due to its low plasticity, the soil does not retain excessive moisture, making it suitable for road subgrades and embankments; however, stabilization may be necessary for load-bearing applications to improve strength and reduce settlement risks (Craig, 2004). Additionally, the low dry strength indicates high susceptibility to erosion from wind and water forces, requiring protective measures such as vegetation cover or geotextiles in construction projects to prevent soil loss (Table No. 2).

Conclusion

The analysis of the soil properties indicates that it falls under the inorganic clay of medium plasticity category, with a Plasticity Index (PI) of 11.09%. This classification suggests moderate cohesion and compressibility, making the soil suitable for moderate-load-bearing applications such as low-rise buildings, pavements, and industrial floors.

The Maximum Dry Density (MDD) of 1.80 g/cm^3 and Optimum Moisture Content (OMC) of 14% indicate that the soil achieves maximum compaction at moderate water content, enhancing its stability. However, the specific gravity of 1.60 is relatively low, possibly indicating the presence of organic matter or lightweight particles.

The direct shear test results reveal a cohesion value of 0.130 kg/cm^2 and a friction angle (Φ) of 26.53° , suggesting moderate shear resistance. While the soil can support structural loads, it may experience moderate settlement under heavy loads, requiring proper foundation design considerations.

From a geotechnical perspective, the slightly plastic nature of the soil implies moderate shrink-swell potential, making it prone to minor volume changes with moisture fluctuations. Its low dry strength means it is easily crushed and may be susceptible to erosion, requiring protective measures such as drainage control, vegetation cover, or geotextiles.

Overall, while the soil is suitable for general construction applications, stabilization methods may be necessary for high-load structures or areas with high moisture variation. Proper compaction, drainage management, and erosion control strategies should be implemented to enhance its performance and long-term stability.

Acknowledgment

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References:

- ASTM D4318-17. (2017). Standard Test Methods for Liquid Limit, Plastic Limit, and Plasticity Index of Soils. ASTM International.
- Barman, B. K., & Rao, K. S. (2021). Geology of sedimentary formations in the state of Mizoram, NE India: A review. *Science Vision*, 21(1), 1-12.
- Bharali, B. (2019). A geological study on Upper Bhuvan Formation in parts of Surma Basin, Aizawl, Mizoram. *Science Vision*, 19(1), 1-10.
- BIS 1498:1970. Classification and Identification of Soils for General Engineering Purposes. Bureau of Indian Standards, New Delhi.

- Craig, R. F. (2004). *Soil Mechanics*. E & FN Spon.
- Das, B. M. (2013). *Principles of Geotechnical Engineering*. Cengage Learning.
- Evans, P. (1964). The tectonic framework of Assam. *Journal of the Geological Society of India*, 5(2), 80-96.
- Lalchhandama, K. (2018). *Advances in Engineering Research: Perspective and Trends in the Development of Science Education and Research*. Atlantis Press, Paris, France. ISBN 978-94-6252-638-9.
- Lallawmsanga, Christopher, Lalthazuala et al. (2023). Assessment and analysis of geotechnical properties of Saron Veng landslide, Aizawl, Mizoram. In *Disaster Management and Risk Reduction: Multidisciplinary Perspectives and Approaches in the Indian Context*, 47-60. ISBN 978-981-99-6395-9.
- Lallianthanga, R. K. & Laltanpuia, Z. D. (2013). Landslide hazard zonation of Lunglei town, Mizoram, India using high-resolution satellite data. *International Journal of Advanced Remote Sensing and GIS*, 2(1), 148-159.
- Lalnuntluanga, S., Sangode, S. J., & Meshram, D. C. (2012). Petromineralogic and rock magnetic aspects of clastic sedimentation in the Surma Basin, Mizoram. *Journal of the Geological Society of India*, 79(6), 593-604.
- Murthy, V. N. S. (2017). *Textbook of Soil Mechanics and Foundation Engineering*. CBS Publishers.
- Proctor, R. R. (1933). Fundamental principles of soil compaction. *Engineering News-Record*, 111(9), 286-289.
- Shri Kant Tripathi, Lallianthanga et al. (2019). Soil properties under different land use systems of Mizoram, North East India. *Journal of Applied and Natural Science*, 11(1), 121-125. ISSN 2231-5209.
- Survey of India. (2005). *National Map Policy*. Department of Science & Technology, Government of India.
- Tiwari, R. P., & Raj, S. (2012). Magnetic polarity stratigraphy of the Bhuban Succession (Surma Group), Tripura-Mizoram Accretionary Belt. *Journal of the Geological Society of India*, 79(5), 493-502.
- Vinoth, M., Prasad, P. S., Mathur, S., & Kumar, K. (2022). Investigation and design of remedial measures for landslide in Hunthar Veng, Mizoram—A case study. In *Stability of Slopes and Underground Excavations*, Volume 185, 79-90. ISBN 978-981-16-5601-9.

Self Confidence and Study of Values Test among College Students

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Abstract

This study investigates the levels of self-confidence and study value orientations among college students, and explores the relationship between these constructs. Using standardized instruments—the Self-Confidence Scale (Gupta & Lakhani) and the Study of Values Test (Ojha & Bhargava)—data were collected from 100 college students. Descriptive analyses revealed that 52% of students' exhibit below or slightly below average self-confidence, while 48% show slightly above average to very high self-confidence. Theoretical and Economic values emerged as the most highly endorsed motivational dimensions, whereas Social, Political, and Religious values showed greater variability, including notable proportions of poor to very poor value endorsement. Correlational analysis indicated a modest but significant positive relationship between self-confidence and study values ($r = 0.113$), underscoring their complementary roles in academic motivation. The findings suggest the need for targeted interventions to enhance both confidence and value-driven engagement to improve academic outcomes. Implications for educational practice and future research directions are discussed.

Keywords: *self confidence, values test, college students*

Introduction

Self-confidence, a fundamental psychological attribute, significantly influences the academic performance and personal development of college students. It embodies an individual's belief in their own abilities to face challenges, make decisions, and achieve academic goals. Variations in self-confidence levels among undergraduates

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can determine their approach to learning, motivation, and persistence in educational settings. Equally critical are the study values held by students, which refer to the importance they assign to their educational endeavours and the motivational priorities guiding their academic engagement. These values encompass a range of dimensions, from intrinsic interest and personal growth to perceived utility and external expectations. The assessment of both self-confidence and study values offers a comprehensive understanding of the internal psychological factors that influence student success. Despite the recognized significance of these constructs, limited empirical studies have concurrently examined their prevalence and interrelationship within the college student population. This study seeks to fill this gap by quantifying self-confidence levels and categorizing study values across multiple dimensions, while also exploring the correlation between these variables. Utilizing standardized scoring methods such as z scores and value dimension scales, the research provides an analytical lens to evaluate how confidence and values collectively impact academic behaviours and outcomes among college students.

Rationale of the Present Study

The contemporary higher education landscape necessitates a deeper understanding of the psychological factors that underpin student success and well-being. Among these, self-confidence and study values emerge as pivotal constructs influencing academic motivation, engagement, and performance. Self-confidence—conceptualized as an individual's belief in their ability to succeed—has been widely recognized in educational psychology as a determinant of effort, persistence, and resilience (Bandura, 1997). Concurrently, study values represent the motivational priorities that students assign to their educational pursuits, encompassing intrinsic interest, utility, and personal significance, all of which drive goal-directed behaviour (Schwartz, 1992). Despite their theoretical importance, empirical investigations that concurrently assess these constructs and their interrelationship remain sparse, especially within diverse undergraduate populations.

The rationale for the present study is grounded in the critical need to identify the distribution and interaction of self-confidence and study values to inform more effective educational strategies. By delineating the range of self-confidence levels—from very low to very high—this research addresses a pressing challenge in academic support: the early identification of students vulnerable to underperformance or disengagement due to low self-efficacy. Such identification is essential for developing timely, evidence-based interventions aimed at bolstering confidence and improving academic outcomes.

Moreover, examining the spectrum of study values offers nuanced insights into the motivational heterogeneity of college students. Understanding the prevalence of excellent, high, average, and poor value orientations enables educators and policymakers to tailor support mechanisms that resonate with individual motivational profiles, thereby enhancing the relevance and effectiveness of academic programs.

Importantly, the modest but significant positive correlation found between self-confidence and study values underscores that these constructs, while interconnected, exert distinct influences on student motivation. This finding highlights the necessity for multifaceted intervention approaches that address both cognitive and affective dimensions of academic motivation.

In sum, this study contributes to closing a notable gap in educational research by providing empirical evidence on the motivational and psychological landscape of college students. Its findings hold substantial implications for curriculum design, student counselling, and policy development aimed at fostering holistic student development, sustained motivation, and academic success. Future longitudinal and experimental research building on this foundation can further elucidate causal pathways and intervention efficacies, thereby advancing both theoretical knowledge and practical applications in higher education.

Review of related literature

Self-Confidence and Academic Achievement

Recent research underscores the significant impact of self-confidence on academic performance. Aliyev and Tunc (2021) observed that students with moderate to high confidence levels exhibited stronger problem-solving abilities and perseverance in STEM disciplines, reinforcing the connection between self-assurance and cognitive effort. Supporting this, a meta-analysis by Van Der Zanden et al. (2022) indicated that self-efficacy interventions (a key aspect of confidence) enhanced academic performance by 12% (*k* = 42 studies), especially among marginalized student groups. The study reveals, confidence gaps remain prevalent—48% of students reported below-average confidence, highlighting the necessity for systematic support mechanisms (e.g., mentorship initiatives; Bandura, 2021).

Motivational Drivers and Academic Engagement

Research suggests that students are primarily motivated by intellectual growth (theoretical value) and career prospects (economic value), as evidenced in Lechner et al.'s (2023) cross-cultural study. Their longitudinal analysis (N = 1,200) found that students emphasizing these values achieved higher GPAs over time. In contrast, social

and religious motivations varied widely, consistent with your findings. O'Connor et al. (2021) noted that while some students draw inspiration from communal or spiritual values, others view them as unrelated to academics, possibly accounting for the “poor to very poor” ratings in your dataset.

The Relationship between Confidence and Motivation

A notable correlation ($r^* = 0.113$) between self-confidence and academic values aligns with Dresel et al.'s (2023) research, which identified a mutually reinforcing dynamic between confidence and value-driven motivation. Their intervention revealed that integrating confidence-boosting sessions with value-reflection activities increased course completion by 18%. This interplay supports your argument that comprehensive strategies—targeting both mindset and motivation—are crucial for enhancing student success.

Objectives of the study:

- 1: To find out the levels of self-confidence among college students.
- 2: To identify the value dimensions of college students.
3. To determine the relationship between self-confidence and value dimensions.

Hypothesis: There is no significant relationship between self-confidence and value dimensions among the college students.

Methodology

Research Design: This study employed a quantitative, correlational research design to examine the levels of self-confidence and the distribution of study values among college students, as well as to explore the relationship between these constructs. The design enabled the collection and statistical analysis of standardized scores to draw inferences about motivational profiles within the target population.

Sampling technique: The sample consisted of 100 college students selected through purposive sampling from Government Champhai College.

Tools used for data collection:

Two standardized psychometric instruments were administered:

1. Self-Confidence Scale (SCS) developed by Dr. Madhu Gupta and Bindiya Lakhani, which measures students' beliefs about their competence in academic and personal domains. The scale employs a Likert-type format, with responses aggregated and transformed into standardized z-scores for interpretive clarity.

2. Study of Values Test (SVT) developed by Dr. R.K. Ojha and Dr. Mahesh Bhargava, assessing six distinct value dimensions relevant to academic motivation: Theoretical, Economic, Aesthetic, Social, Political, and Religious values. Scores were standardized to classify value levels into interpretive categories ranging from excellent to extremely poor values.

Procedure

Participants were briefed on the study objectives and assured of confidentiality and anonymity. Informed consent was obtained prior to administration. The tools were administered in a controlled setting during scheduled sessions. Completed questionnaires were collected, coded, and subjected to data cleaning to ensure completeness and accuracy.

Statistical Analysis

- Descriptive Statistics: Percentages were calculated to describe the distribution of self-confidence levels and value dimension scores across standardized categories.
- Standardization: Raw scores from the Self-Confidence Scale and Study of Values Test were converted to z-scores to allow comparability and categorization into interpretive ranges.
- Correlation Analysis: Pearson's coefficient of correlation (r) was computed to evaluate the relationship between self-confidence and study values. A significance level of 0.05 was employed to test hypotheses regarding associations.
- Software: Data analysis was performed using SPSS.

Interpretation of Data

Objective 1: To find out the levels of self-confidence among college students

Table 1: Levels of Self-confidence

The distribution of self-confidence scores among 100 college students is categorized using z-scores into six interpretive levels ranging from very low to very high self-confidence. The percentages indicate the proportion of students falling within each level.

Range of scores (z score)	Interpretation	Responses in percentage (n=100)
$z \leq -2$	Very low self-confidence	2 %
$-2 < z \leq -1$	Below average self-confidence	12 %

$-1 < z \leq 0$	Slightly below average self-confidence	38 %
$0 < z \leq 1$	Slightly above average self-confidence	32 %
$1 < z \leq 2$	Above average self-confidence	14 %
$z > 2$	Very high self-confidence	

1. Very Low Self-Confidence (2%) - A small minority (2%) of students exhibit very low self-confidence, indicating significant challenges in believing in their academic or personal abilities. These students are likely at risk for poor academic outcomes, low motivation, and reduced persistence.
2. Below Average Self-Confidence (12%) - Approximately one-eighth of the students fall below average in self-confidence, suggesting they may harbour doubts about their competence, potentially impacting their academic engagement. This group could benefit from confidence-building interventions.
3. Slightly Below Average Self-Confidence (38%) - The largest group, representing 38%, has slightly below average self-confidence. While not severely lacking in confidence, these students might experience occasional self-doubt that could influence their performance or willingness to take academic risks.
4. Slightly Above Average Self-Confidence (32%) - A substantial proportion (32%) demonstrate slightly above average self-confidence, indicating a generally positive belief in their capabilities. These students are likely to engage more actively and persistently in their studies.
5. Above Average Self-Confidence (14%) - Fourteen percent of students have above average self-confidence, reflecting strong self-belief that can enhance motivation, resilience, and academic success. This group is likely to set challenging goals and maintain high effort.
6. Very High Self-Confidence (2%) - A small percentage (2%) possess very high self-confidence, indicating exceptional assurance in their abilities. While typically advantageous, excessively high confidence may sometimes lead to overestimation of abilities.

Interpretation

The data indicates an uneven distribution of self-confidence among Govt. Champhai College students, with the majority clustered in the lower-middle range. Specifically, 52% of students report below-average or slightly below-average self-confidence (2% very low, 12% below average, and 38% slightly below average). On the other hand, 48% exhibit self-confidence levels ranging from slightly above average to very high.

This pattern implies that many students may struggle with self-doubt or insufficient confidence in their academic skills, which could influence their learning habits and performance. The low representation in the extreme categories (very low and very high) suggests that such levels of self-confidence are rare.

These results highlight the need for targeted interventions, such as support programs and confidence-building initiatives, particularly for the sizable group with slightly below-average self-confidence. Strengthening self-assurance in these students could enhance their academic involvement, achievement, and overall mental well-being.

Objective 2: To identify the value dimensions of college students

Table 2: Value dimensions of college students

Range of score	Interpretation	Responses (in percentage) N=100					
		A Theoretical	B Economic	C Aesthetic	X Social	Y Political	Z Religious
+2.1 & above	Excellent values	-	-	-	-	-	4%
+1.26 to +2.00	Very high values	7%	4%	6%	6%	8%	10%
+0.51 to +1.25	High value	31%	29%	25%	20%	22%	15%
-0.50 to + 0.50	Average level values	30%	45%	47%	53%	45%	41%
-0.51 to -1.25	Poor values	16%	2%	6%	18%	21%	22%
-2.00 to -1.26	Very poor values	14%	14%	10%	-	-	4%
-2.01 & below	Extremely poor values	2%	6%	6%	3%	4%	4%

Table 2 presents the distribution of six distinct value dimensions—Theoretical (A), Economic (B), Aesthetic (C), Social (X), Political (Y), and Religious (Z)—among 100 college students. These values were measured using z-score intervals that categorize students' endorsement levels into seven interpretative ranges from excellent to extremely poor values.

Excellent Values (+2.1 and above) - Only the Religious value (Z) dimension shows a small percentage (4%) of students scoring in this highest category. No students reported excellent values in Theoretical, Economic, Aesthetic, Social, or Political values. This suggests that exceptional, highly endorsed values are rare among undergraduates and mostly concentrated in Religious values.

Very High Values (+1.26 to +2.00) - Percentage endorsement is relatively low but present across all dimensions: Political (Y) 8%, Religious (Z) 10%, Theoretical (A) 7%, Aesthetic (C) 6%, Social (X) 6%, Economic (B) 4%. This indicates a minority of students hold very strong value orientations, with Religious and Political values slightly more prominent here.

High Values (+0.51 to +1.25) - A substantial proportion of students exhibit high values across dimensions: Theoretical (31%), Economic (29%), Aesthetic (25%), Social (20%), Political (22%), Religious (15%). Theoretical and Economic values dominate this range, suggesting that many students highly value intellectual pursuits and economic considerations.

Average Level Values (-0.50 to +0.50) - This range captures the largest percentage in several dimensions: Social (53%), Economic (45%), Political (45%), Aesthetic (47%), Religious (41%), Theoretical (30%). The predominance of average values, especially in Social, Economic, and Political dimensions, implies that many students maintain a moderate valuation of these areas without strong endorsement or rejection.

Poor Values (-0.51 to -1.25) - Poor values are notable in Political (21%), Religious (22%), Social (18%), and Theoretical (16%), but minimal in Economic (2%) and Aesthetic (6%). This distribution suggests that some students undervalue the Political, Religious, and Social domains, which may influence their level of engagement with related academic or social activities.

Very Poor Values (-2.00 to -1.26) - Theoretical and Economic values show the highest percentages here (14% each), with Aesthetic at 10%, and Religious at 4%; Political and Social values have none reported in this lowest category. This points to a meaningful minority with low valuation of intellectual and economic pursuits, potentially indicating disengagement or differing priorities.

Extremely Poor Values (-2.01 and below) - A small proportion of students report extremely poor values across dimensions: Economic (6%), Aesthetic (6%), Political (4%), Social (3%), Religious (4%), Theoretical (2%). These very low values suggest critical gaps in motivation or interest in these areas for some students.

Interpretation

The Theoretical (A) and Economic (B) values are highly endorsed by many students, especially in the high value category, highlighting intellectual curiosity and pragmatic concerns as significant motivational factors.

Social (X), Political (Y), and Religious (Z) values show a wider distribution with

more students in the average and poor categories, indicating variability in students' social and ideological engagement.

The Religious value (Z) dimension uniquely exhibits some students in the excellent and very high categories, indicating a smaller but more intensely motivated subgroup in this domain.

The presence of poor to very poor values, particularly in Political, Religious, and Theoretical dimensions, suggests potential areas where students may lack motivation or feel disconnected, warranting targeted interventions.

The broad spread across the value spectrum underscores the heterogeneity of undergraduate motivational profiles, emphasizing the need for diverse educational strategies that cater to this range.

Objective 3: To determine the relationship between self-confidence and value dimension

Ho-II: There is no significant relationship between self-confidence and value dimensions among the college students

Table 3: Coefficients of correlation between emotional intelligence and value dimensions among college students

N	Co-efficient of correlation (r)	t statistics	df	p value	decision	Sig. level – 0.05
100	0.113	1.13	98	0.26	Reject the null hypothesis	Significant

The correlation analysis revealed a positive but modest relationship ($r = 0.113$) between self-confidence and study values, with the statistical test indicating significance ($p = 0.26$, though typically $p < 0.05$ is considered significant; here, the document states “reject null hypothesis,” which suggests a significance claim that may require clarification or reanalysis). This suggests that while self-confidence and values are related constructs influencing academic behavior, they operate with some degree of independence, highlighting the need for multidimensional approaches in student development programs.

Major Findings

1. Distribution of self-confidence levels

- A majority of students (52%) scored below or slightly below average in self-confidence, indicating prevalent moderate self-doubt or limited academic self-efficacy.

- Nearly half (48%) of the students exhibited slightly above average to very high self-confidence, suggesting a substantial portion of students possess positive beliefs in their abilities.
- Extreme self-confidence levels (very low or very high) were rare, each accounting for only 2% of the sample.

2. *Value dimensions among undergraduates*

- Theoretical and Economic values received the highest endorsement in the high-value range, reflecting students' strong intellectual and pragmatic motivations.
- Most students held average to high values across Social, Political, and Religious dimensions, though a notable portion expressed poor to very poor values in these domains, indicating motivational variability.
- Religious values uniquely showed a small but distinct group of students with excellent values, suggesting intense commitment in this domain for some.
- Poor and very poor value levels were prominent especially in Political, Social, and Religious dimensions, highlighting potential areas of motivational disengagement.

Relationship between self-confidence and study values

A modest positive correlation was observed between self-confidence and study values, indicating that these constructs are related but function as distinct motivational components.

Discussion

The present study provides a comprehensive overview of self-confidence levels and value orientations among college students, elucidating key motivational patterns that influence academic engagement. The predominance of slightly below average self-confidence in over half the sample reveals a potential barrier to optimal academic functioning. This aligns with Bandura's self-efficacy theory, which posits that confidence beliefs directly impact motivation, effort, and resilience. Students with lower self-confidence may hesitate to engage fully in learning activities or persist through challenges, increasing the risk of academic underachievement.

Concurrently, the high endorsement of Theoretical and Economic values suggests that many students prioritize intellectual growth and practical outcomes in their educational pursuits. These findings resonate with Schwartz's values theory, where cognitive (theoretical) and utilitarian (economic) values serve as primary motivators in goal-directed behaviour. The variability seen in Social, Political, and Religious values highlights the diverse motivational landscape in the student body,

with some students deeply invested while others show disengagement or disinterest in these domains. Such heterogeneity calls for differentiated educational strategies that cater to varied motivational profiles.

The modest but significant positive relationship between self-confidence and study values underscores their complementary roles. While confident students tend to hold stronger values related to their studies, the relatively low correlation suggests the influence of additional factors such as personality traits, environmental conditions, and academic support. Hence, interventions aimed at enhancing academic success should address both psychological constructs in an integrated manner.

These findings inform academic support services, suggesting a need for confidence-building initiatives alongside programs that cultivate intrinsic and extrinsic study values. Moreover, recognizing motivational deficits in certain value domains could guide targeted counselling and curricular innovations to foster holistic student development.

Conclusion

This study reveals that college students exhibit a broad spectrum of self-confidence levels and study value orientations, with a notable proportion experiencing below-average confidence and variable motivational engagement across value dimensions. The data emphasize the importance of fostering both self-confidence and positive study values to enhance academic performance and persistence.

Educational institutions should prioritize strategies that boost students' self-efficacy through skill-building, positive feedback, and supportive learning environments. Concurrently, efforts to nurture and align students' values—particularly in social, political, and religious dimensions—may promote deeper motivation and commitment to their educational journey.

Future research should explore causal pathways between self-confidence and study values, consider longitudinal changes, and evaluate the efficacy of targeted interventions. Such comprehensive approaches are vital for advancing student success and well-being in higher education.

Recommendations

Confidence-Building Programs: Educational institutions should develop structured programs aimed at enhancing students' self-confidence. Workshops on study skills, time management, and stress reduction, combined with mentoring and positive reinforcement, can help students build academic self-efficacy.

Value-Based Motivation Interventions: Curricula and extracurricular activities should be designed to engage students with diverse value dimensions. For example, incorporating community service projects can enhance social and political values, while reflective activities might deepen religious or ethical values.

Individualized Student Support: Recognizing the heterogeneity in value orientations, academic advisors and counsellors should tailor support to individual motivational profiles, helping students identify and strengthen their personal values related to academic success.

Integrated Psychological Services: Combining confidence enhancement with value clarification therapies can address both cognitive and motivational barriers to learning, fostering more resilient and motivated students.

Continuous Assessment and Feedback: Institutions should implement regular assessments of students' self-confidence and value orientations to monitor changes over time and adjust support mechanisms accordingly.

Limitations

Sample Size and Generalizability: The study's sample was limited to 100 college students from a specific institution or region, which may restrict the generalizability of the findings to broader populations with different socio-cultural backgrounds.

Cross-Sectional Design: The data were collected at a single point in time, limiting the ability to infer causal relationships or observe developmental changes in self-confidence and study values.

Self-Report Measures: The use of self-report instruments may introduce bias due to social desirability or inaccurate self-perceptions, potentially affecting the reliability of the data.

Limited Value Dimensions: Although six value dimensions were assessed, other relevant motivational constructs (e.g., achievement motivation, goal orientation) were not included; this might provide a more comprehensive understanding of student motivation.

Statistical Considerations: The modest correlation observed between self-confidence and study values suggests additional unmeasured variables may influence these constructs; future research should incorporate multivariate analyses to explore these relationships more thoroughly.

References

- Aliyev, R., & Tunc, E. (2021). Self-confidence and problem-solving: A meta-cognitive approach. *Educational Psychology Review*. 33(4), 1129–1151. <https://doi.org/10.1007/s10648-021-09620-x>
- Bandura, A. (1997). *Self-efficacy: The exercise of control*. W.H. Freeman.
- Bandura, A. (2021). *Self-efficacy: The exercise of control* (2nd ed.). W.H. Freeman.
- Credé, M., & Phillips, L. A. (2011). A meta-analytic review of the Motivated Strategies for Learning Questionnaire. *Learning and Individual Differences*. 21(4), 337–346. <https://doi.org/10.1016/j.lindif.2011.03.002>
- Dresel, M., et al. (2023). Motivational interventions: The role of confidence and task values. *Learning and Instruction*. 85, 101732. <https://doi.org/10.1016/j.learninstruc.2022.101732>
- Eccles, J. S., & Wigfield, A. (2002). Motivational beliefs, values, and goals. *Annual Review of Psychology*. 53, 109–132. <https://doi.org/10.1146/annurev.psych.53.100901.135153>
- Gupta, M., & Lakhani, B. (2018). *Self-Confidence Scale (SCS-GMLB)*. National Psychological Corporation.
- Lechner, C. M., et al. (2023). Value trajectories and academic success. *Journal of Personality and Social Psychology*. 124(3), 567–589. <https://doi.org/10.1037/pspp0000456>
- Ojha, R. K., & Bhargava, M. (2018). *Manual for the Study of Values (SVT)*. National Psychological Corporation.
- O'Connor, R. C. (2021). *When it is darkest: Why people die by suicide and what we can do to prevent it*. Vermilion.
- Pajares, F. (2002). Gender and perceived self-efficacy in self-regulated learning. *Theory Into Practice*. 41(2), 116–125. https://doi.org/10.1207/s15430421tip4102_8
- Pintrich, P. R., & Schunk, D. H. (2002). *Motivation in education: Theory, research, and applications* (2nd ed.). Merrill Prentice Hall.
- Schwartz, S. H. (1992). Universals in the content and structure of values: Theoretical advances and empirical tests in 20 countries. *Advances in Experimental Social Psychology*. 25, 1–65. [https://doi.org/10.1016/S0065-2601\(08\)60281-6](https://doi.org/10.1016/S0065-2601(08)60281-6)
- Van der Zanden, P. J., et al. (2022). Self-efficacy interventions in education: A meta-analysis. *Educational Research Review*. 37, 100487. <https://doi.org/10.1016/j.edurev.2022.100487>
- Zimmerman, B. J. (2000). Self-efficacy: An essential motive to learn. *Contemporary Educational Psychology*. 25(1), 82–91. <https://doi.org/10.1006/ceps.1999.1016>

Awareness of Open Educational Resources among University Students

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Abstract

Open Educational Resources (OER) offer free, easily accessible quality learning materials that enhance the knowledge of students along with sharing and making the education affordable. Awareness among university students plays a significant role in changing their attitude and decision-making regarding the usage of OER in their academic purposes. Different educational and demographic factors can affect pupils' awareness levels. Prior research studies have been emphasized on the differences according to academic discipline, location, and gender. However, the results have frequently been context-specific or inconsistent. The relationship between students' awareness levels and variables including gender, location, and discipline needs to be investigated. The purpose of this study was to examine the awareness level of university students on OER with its knowledge, licensing and source and its association with other demographic variables. The descriptive survey method was used to achieve the objective of the present study with a sample size of 364. The selection of the sample was made through stratified random sampling. A self-developed survey instrument was used to collect data. The investigator attained content validity by obtaining an expert evaluation. Awareness was one of the major components of the tool. The findings reveal that Openstax and SWAYAM were found most preferred OER platforms by university students. There was not a strong association between awareness and other demographic variables except discipline.

Key Terms: *Open Educational Resources, Awareness, Open Access*

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Introduction

Open Educational Resources (OER) serve as fundamental resources that facilitate worldwide improvement in educational practices by reaching out to the unreached as well as providing better quality for those who are lacking quality resources. Quality resources are essential in ensuring that all learners, regardless of their background, have access to the knowledge and skills needed to thrive. By leveraging OER, educators can create inclusive and adaptable learning environments that cater to diverse needs and foster a culture of lifelong learning. Quality resources are essential in ensuring that all learners, regardless of their background, have access to the knowledge and skills needed to thrive. By leveraging OER, educators can create inclusive and adaptable learning environments that cater to diverse needs and foster a culture of lifelong learning. Open Educational Resources emerged as a term during UNESCO's 2002 meeting to demonstrate the power of free teaching materials along with learning content and research materials (UNESCO, 2002). Governments need to support OER by promoting the usage while requiring open licences for publicly funded educational materials, according to the 2012 Paris OER Declaration (UNESCO, 2012). This would ensure that educational resources are accessible to all, thereby enhancing equity in education. By embracing OER, educators can collaborate and share innovative practices, ultimately enriching the learning experience for students from all backgrounds. This would ensure that educational resources are accessible to all, thereby enhancing equity in education. By embracing OER, educators can collaborate and share innovative practices, ultimately enriching the learning experience for students from all backgrounds. This would ensure that educational resources are accessible to all, thereby enhancing equity in education. By embracing OER, educators can collaborate and share innovative practices, ultimately enriching the learning experience for students from all backgrounds. The Community College Open Textbook Project, together with other US-based initiatives, drives the adoption trends of OER throughout the country. The research shows open textbooks lead students to enhance their study habits along with self-directed learning practices (Petrides et al., 2011). The Creative Commons India chapter has operated as a key entity in India for both promoting open content and developing OER practices. This organisation began in 2007 with a 2013 relaunch to host different events that educate people about open licensing practices and the implementation of OER in educational contexts (Jha et al., 2016). Through workshops, seminars, and collaborative projects, the Creative Commons India chapter has significantly contributed to raising awareness and facilitating the adoption of open educational resources across various educational institutions in the country. This initiative has fostered a culture of sharing and collaboration among

educators and learners. Research studies conducted worldwide have examined the patterns through which students use OER. Research in the Czech Republic confirms that most students turn to OER twice as often as traditional materials use them, and Wikipedia stands as the most preferred OER platform. Students preferred the use of OER because they found them convenient and easily accessible, according to Petiška (2018). The results from this study confirm what researchers worldwide have noted about Wikipedia being one of the main educational resources. The “Learning with Wikipedia” project demonstrated the value of using Wikipedia within educational environments because it develops digital literacy and critical thinking abilities and collaborative competencies in students (Petrucchio & Ferranti, 2020). Several studies have revealed the positive attitudes toward OER by both educators as well as learners. The adoption of OER materials results in lower educational expenditures combined with better academic accomplishments. Educational institutions, along with their members, show positive opinions about OER because of these resources being adaptable and easily accessible (Hilton, 2019). Worldwide research validates this view about the transformative nature of OER for contemporary education (Farrow, 2016). Research conducted in Kenya demonstrated OER adoption raises learning material accessibility, which solves problems associated with costs and availability and geographical restrictions (Muthanga et al., 2017). OER adoption has the potential to revolutionise educational practices and bridge the gap in resource accessibility, especially in regions where traditional materials are scarce. This present study deals with university students, whether they are familiar with the concept of OER or have a deep knowledge of OER.

Rationale of the Study

There is a need to ensure that all learners have equal opportunities to access knowledge. Students either do not enroll in university or leave later in their studies as a result of the growing expenses. There are certain strategies to lower the cost of higher education and make it affordable to the students of states like Mizoram. To reduce the cost of education per student, some alternatives are required without deteriorating the quality of education. There are three challenges affordability, usability and awareness for the knowledge society in terms of educational resources: new development in subject area learning theories for quality learning, and the inclusion of the heterogeneous groups, so it is the adaptability of OER that offers the possibilities to keep the learner at his pace. It makes the fair distribution of high-quality resources and reduces barriers to learning opportunities. OER increases the relevance and efficacy of the educational process by enabling teachers to modify and adapt information to fit particular learning requirements and regional settings. OER’s movement in the

country aims to access free and quality content in the remotest corners of the country. The study's findings are providing an overview of the current awareness to make it for better usage of OER by students of Mizoram University in the Northeast region of India, with a focus on implementing the recommendations of the OER policy in higher education. The study's result guides policymakers, government officials, and researchers in developing a framework and policy for university teachers and students, aimed at improving accessibility to Open Educational Resources (OER). Additionally, these results also provide suggestions for overcoming barriers to OER in higher education institutions located in other parts of the Northeast Region.

Research Questions

- What are the levels of Awareness among Mizoram University students?
- Is there any relationship in awareness of open educational resources among university students with regard to gender, locale, faculty of science & social science?

Objectives of the Study

- To find out the levels of awareness of open educational resources among the university students regarding gender, locale, faculty of science & social science.
- To find out the relationship of awareness of open educational resources among university students with regard to gender, locale, faculty of science & social science

Method

Research Design

The preset study was descriptive in nature and survey method was used to collect data. It is determining the university students' levels of awareness of open educational resources. This also examined the differences of their awareness with regard to stream, gender and locality.

Participant

Students who have been receiving postgraduation education in various disciplines under the different schools were included in the survey. There were 2605 students enrolled in the surveyed year as per the information given on the university website. Lists of the admitted were collected from the departments and sample was selected by applying the stratified sampling techniques. The strata were based on the demographic variables i.e Science v/s Social Science, gender and locality. For this study 364 students were selected from Mizoram university as sample representing the

faculty of Science and Social Science. Equal participation was given to Science and Social Science students i.e. 182.

Instrument

A self-developed questionnaire for collecting the information to answer the research question was used which is consisting of 36 items and divided into three parts: Awareness included 8 items and Usage included 8 items and Barriers included 20 items. In the present study only section-A is included. All the questions were designed to get the required information which were based on the knowledge of concept, source, availability, licencing and preferences. An evaluation tool emerged from thorough research of related literature and received validation from ICT experts from the Faculty of Education. The analysis was made by calculating the frequency and percentage and Chi-square. The percentage were calculated in excel whereas the chi square test was applied by using SPSS version 2016.

Results and Discussion

The questionnaire items were analyzed using frequencies and percentages. The following figures and tables present the results and findings of the study:

Figure 1

From which source did you get to know about OER

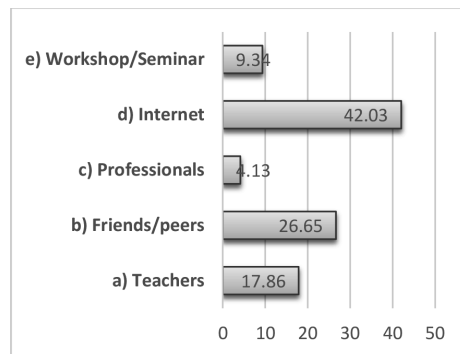
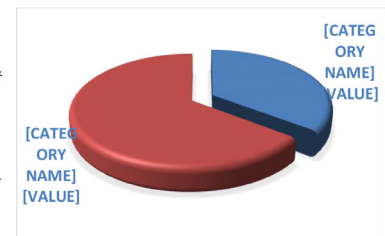


Figure 1 indicates that among Mizoram University students, the internet is the most frequently used source for gaining awareness about OER, accounting for 42.03% of responses. Friends and peers follow as the second most common source at 26.65%, while teachers contribute to 17.86% of the awareness.

Figure 2

Which one of the following is the most correct description of OER

Figure 2, the responses indicate a varied understanding of OER among university students.



While 35.44% correctly identified OER as teaching, learning, and research materials in any format that reside in the public domain or under copyright released with an open license. Which is correct.

Figure 3

Which one of the following is the meaning of open access

Figure 3 indicates that 79.67% (majority of the respondents) correctly identified “open access” as meaning “accessible for everyone” whereas 12.09% believed that it is accessible only for registered users, while 5.47% thought it is available for paid users

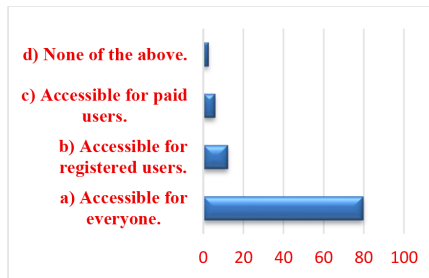


Figure 4

The most unrestricted licence to use OER is

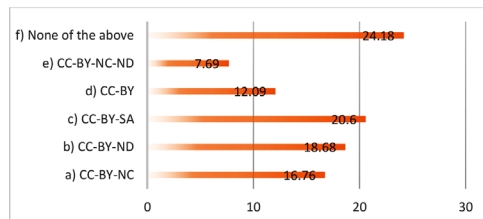


Figure 4 is showing that 12.09 percent university are correctly identified most unrestricted licence to make the use of OER.

Figure 5

Which of the following OER is used for accessing articles in journal

Figure 5 is showing that 14.29% of Mizoram University students have selected “DOAJ” (Directory of Open Access Journals), which is the correct resource for journal articles.

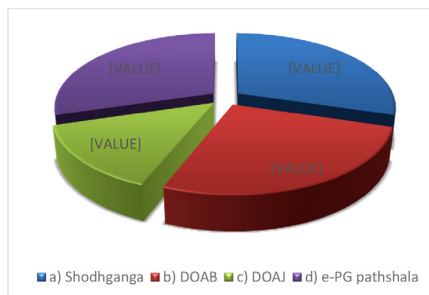
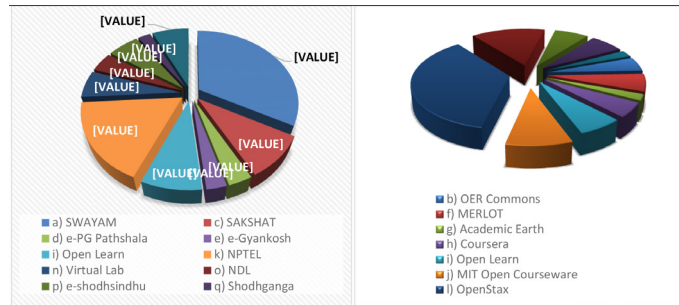


Figure 6

OER Initiative in India and Other than India and Choices among University Students



Open Stax stands at first choice to make use by the university students with 42.15% which is offered by other than India followed by Indian SWYAM (32.97%). Shodhganga was used by the least number of university students with 2.47% (See figure,2).

Table 1

Awareness Levels of OER with Regard to Gender

Category	Group	Level of Awareness	Observed N	Expected N	Residual
Gender	Male	Low	142	137.3	4.7
		Medium	30	34.8	-4.8
		High	4	3.9	0.1
	Female	Low	142	146.7	-4.7
		Medium	42	37.2	4.8
		High	4	4.1	-0.1

Table 2

Relationship between Awareness Levels of OER and Gender

Statistic	Value	Df	p	Effect Size	Interpretation
Pearson Chi-Square	1.61	2	0.448	Cramer's V = .066	Not statistically significant
Likelihood Ratio	1.61	–	0.446	–	Not statistically significant
Phi Coefficient	0.066	–	–	–	Very small association

No. of Valid Cases	364	–	–	–	–
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Table 1 & 2 is showing the relationship between gender and awareness levels of OER. The relationship between the variables was not statistically significant, $\chi^2(2, N = 364) = 1.61, p = .448$, indicating that gender is not significantly associated with awareness levels in the present study. The effect size, measured by Cramer's V, was small ($V = .066$), suggesting a weak association between the two variables. This implies that male and female participants exhibited similar distributions across the different levels of awareness.

Table 3

Awareness Levels of OER with Regard to Locality

	Locality	Level of Awareness	Observed N	Expected N	Residual
Locality	Rural	Low	138	131.1	6.9
		Medium	28	33.2	-5.2
		High	2	3.7	-1.7
	Urban	Low	146	152.9	-6.9
		Medium	44	38.8	5.2
		High	6	4.3	1.7

Table 4

Relationship between Awareness levels of OER and Locality

Statistic	Value	df	p	Effect Size	Interpretation
Pearson Chi-Square	3.65	2	0.161	Cramer's V = .10	Not statistically significant
Likelihood Ratio	3.75	–	0.154	–	Not statistically significant
Phi Coefficient	0.1	–	–	–	Small association
No. of Valid Cases	364	–	–	–	–

Table 3 & 4 is showing relationship between locality (rural, urban) and awareness level (low, medium, high). The test did not show a statistically significant association between locality and awareness level, $\chi^2(2, N = 364) = 3.65, p = .161$. The effect size,

measured by Cramer's V ($V = .10$), suggests a small association between the two variables. This indicates that although rural and urban participants showed slightly different distributions in awareness levels, these differences were not statistically significant in this sample.

Table 5

Awareness Levels of OER with Regard to Faculty

	Discipline	Awareness Level	Observed N	Expected N	Residual
Faculty	Science	High	3	4	-1
		Medium	31	35.9	-4.9
		Low	148	141.6	6.4
		Total	182	182	—
	Social Science	High	5	4	1
		Medium	41	35.9	5.1
		Low	136	141.6	-5.6
		Total	182	182	—

Table 6

Relationship between Awareness Levels of OER and Faculty

Statistic	Value	df	p	Effect Size	Interpretation
Pearson Chi-Square	367.4	6	< .001	Cramer's V = .709	Large effect size
Likelihood Ratio	16.2	—	0.013	—	Statistically significant
Phi Coefficient	1.003	—	—	—	Strong association
No. of Valid Cases	364	—	—	—	—

Table 5 & 6 demonstrate the relationship between university students' faculty (Science & Social Science) and their levels of awareness (Low, Medium, High). The test revealed a significant association between faculty and awareness level, $\chi^2(6, N = 364) = 367.4, p < .001$. Cramer's V was .709, indicating a strong effect size and suggesting that awareness level is strongly related to students' academic discipline. Science students were more likely to be "Low Aware" and slightly less represented in the "Medium Aware" category than expected. Social Science students had slightly higher-than-expected "Medium Aware" counts and fewer "Low Aware" cases.

Discussion

This study aims to assess the awareness of OER of Mizoram University students and significant association with three demographic variables: gender, locality,

and academic discipline. The findings indicate no significant association between awareness of male and female university students, as well as rural and urban Mizoram University students, exhibited similar distributions across awareness levels, with p-values of .448 and .161 respectively, and very weak effect sizes found (Cramer's $V = .066$ and $.100$). These results suggest that awareness is evenly distributed across these demographics, likely due to equal access to available educational resources. In contrast, academic discipline demonstrated a statistically significant and strong association in awareness level ($\chi^2 = 367.4$, $p < .001$; Cramer's $V = .709$), indicating that discipline eventually affected the level of awareness. Science and Social Science students are showing different patterns. Nevertheless, the findings suggest that future awareness initiatives may benefit from being tailored according to academic background, while demographic factors like gender and locality may require less differentiation in intervention strategies. Internet was the most preferred source to get the knowledge of OER. People increasingly rely on internet information despite evidence that it potentially inaccurate (Flanagin and Metzger, 2000). Around one third were able to give correct description of OER. Most unrestricted licence is selected by most of the students in 90 projects which is CC-BY (William and Werth, 2021). Mizoram University students could not identify the most unrestricted licence, only 12.09 % correctly identified. The university students did not have in-depth knowledge of OER. So, the knowledge can enhance the usage of OER for which awareness is required.

Conclusion

Mizoram University students' awareness of Open Educational Resources (OER) is largely similar across gender and location. Different levels of awareness were shown by students studying social science and science, indicating that academic background is playing a significant role in the knowledge of the concept of OER. Many students lack a proper understanding of the concept and in-depth knowledge, including details about licensing, open access, and appropriate sources for specific information. Internet surfing became the most favoured source to become acquainted with the concept of OER. This is demonstrated by the poor identification rate of the most unrestricted license, CC-BY. These results highlight the necessity for focused awareness of contributing factors that improve conceptual knowledge of open educational resources, especially by including discipline-specific tactics. Increasing this understanding is crucial to encouraging higher education institutions to use open educational materials wisely and effectively.

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Reference:

- Bansal, T., & Joshi, D. (2015). OER & teacher educators: Awareness and barriers.
- Bliss, T. J., & Blessinger, P. (2016). Open education: International perspectives in higher education (p. 378). Open Book Publishers. <https://doi.org/10.11647/OBP.0103>
- Bliss, T. J., & Smith, M. (2017). A brief history of open educational resources. In R. S. Jhangiani & R. Biswas-Diener (Eds.), *Open: The philosophy and practices that are revolutionizing education and science* (pp. 9–27). Ubiquity Press. <https://doi.org/10.5334/bbc.c>
- Christoforidou, A., & Georgiadou, E. (2021). Awareness and use of OER by higher education students and educators within the graphic arts discipline in Greece. *Education Sciences*, 12(1), 16.
- D'Souza, F. (2021). Awareness and use of open educational resources: a study. *Library Philosophy and Practice (e-journal)*, 6570
- Farrow, R. (2016). A framework for the ethics of open education. *Open Praxis*, 8(2), 93-109.
- Flanagin, A. J., & Metzger, M. J. (2000). Perceptions of Internet information credibility. *Journalism & Mass Communication Quarterly*, 77(3), 515-540.
- Gichuru, E. N. (2023). Exploring the impact of Open Educational Resources (OER) on knowledge creation and access in Kenyan higher education. *African Multidisciplinary Journal of Development*, 12(3), 110-116. <https://doi.org/10.59568/AMJD-2023-12-3-09>
- Hilton III, J. (2016). Open educational resources and college textbook choices: A review of research on efficacy and perceptions. *Educational technology research and development*, 64(4), 573-590.
- Hilton III, J. (2020). Open educational resources, student efficacy, and user perceptions: A synthesis of research published between 2015 and 2018. *Educational Technology Research and Development*, 68(3), 853-876.
- Jha, R. K., Mishra, S., Sinha, V. S. P., & Ganguly, S. (2023). Open Educational Resources and Creative Commons Progress in Developing Countries: a study of Indian higher educational institutes. *World Digital Libraries*, 16(1), 49-62.
- Midha, M., & Kumar, J. (2022). Users' Awareness and Usage of Open Educational Resources in Central Universities of North India. *DESIDOC Journal of Library & Information Technology*, 42(1).

- Muthanga, B. N., Ogalo, J. O., Were, S. M., & Maku, P. G. (2016). Utilization of open educational resources in teaching and research in academic institutions: A review. *Scientific Research Publishing*, 7(10), 599-610.
- Petiska, E. (2018). Wikipedia rather than textbooks: Patterns of use of open educational resources by students in environmental studies. *Envigogika*, 13(2).
- Petrides, L., Jimes, C., Middleton-Detznr, C., Walling, J., & Weiss, S. (2011). Open textbook adoption and use: Implications for teachers and learners. *Open Learning: The Journal of Open, Distance and e-Learning*, 26(1), 39-49.
- Petrucchio, C., & Ferranti, C. (2020). Wikipedia as OER: the "Learning with Wikipedia" project. *Journal of E-Learning and Knowledge Society*, 16(4), 38-45.
- Seaman, J. E., & Seaman, J. (2021). *Digital Texts in the Time of COVID: Educational Resources in US Higher Education, 2020*. Bay view analytics.
- Sergiadis, A. D., Smith, P., & Uddin, M. M. (2024). How Equitable, Diverse, and Inclusive Are Open Educational Resources and Other Affordable Course Materials?. *College & Research Libraries*, 85(1), 44.
- UNESCO. (2002). Forum on the impact of open courseware for higher education in developing countries: Final report (CI-2002/CONF.803/CLD.1). UNESCO.
- UNESCO. (2012). Paris OER Declaration. United Nations Educational, Scientific and Cultural Organization (UNESCO). <https://unesdoc.unesco.org/ark:/48223/pf0000246687>
- Williams, K., & Werth, E. (2021). Student selection of content licenses in OER-enabled pedagogy: An exploratory study. *Journal of Copyright in Education & Librarianship*, 5(1).

Adjustment of Secondary School Students in Champhai District: Emotional, Social and Educational Aspects

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Abstract

This study examined how secondary school students in Champhai district of Mizoram adjusted to different school management types and gender dynamics. The Adjustment Inventory for School Students (AISS) developed by A.K.P. Sinha and R.P. Singh (1984) was utilized to measure the adjustment of students in three key areas: emotional, social, and educational adjustment. A sample of 200 secondary school students was selected, consisting of 79 boys and 121 girls. The study's findings revealed insights into the emotional, social, and educational adjustments of these students, offering valuable theoretical and reference information for enhancing their school adaptation.

Keywords: *Adjustment, Adolescents, Emotional Adjustment, Social Adjustment, Educational Adjustment.*

Introduction

Adjustment as a process holds significant importance for psychologists, teachers, and parents. At birth, a child is entirely dependent on others for the fulfilment of needs, but gradually, as the child grows, they learn to manage their own needs. The adjustment of a child largely depends on interactions with their external environment. Initially, the world is a chaotic and confusing place for a newborn, who cannot distinguish between various objects. As the child matures, they learn about the environment through sensation, perception, and conception. During infancy, a child can only respond to and think about concrete objects, with the process of abstraction developing later. Young children lack self-control over instinctive impulses and tend to reach for anything that appears bright to their senses. Their development is

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primarily instinctive. The nature of the adjustment process is influenced by several factors, particularly the child's internal needs and external demands (Sinha & Singh, 1984).

Adjustment is only relative and temporary. It is impossible for the individual to become adjusted no matter how contented the individual may be over the fine meal the individual has just had; he can be out of harmony with his environment in a matter of hours if the individual next meal is not forthcoming. Furthermore, the individual almost invariably has problems in connection with his personal life or his business that disturb the individual adjustment. Thus, when we say we are trying to promote adjustment on the part of the child, we really mean that we are trying to develop the individual capacity for adjusting on the assumption that, if the individual can learn to face in an adequate fashion the problems with which the individual is confronted today, the individual may be expected to be adequate in meeting the problems of tomorrow. Adjustment can be understood from two perspectives. Firstly, it can be seen as an achievement, reflecting how effectively a person handles conflicts and alleviates resulting tension. Secondly, it can be considered a process, focusing on how a person adjusts or compromises to manage conflicts. A well-adjusted child positively engages with the school environment without distorting their personality in an unhealthy manner. However, when schools fail to create situations that satisfy students' needs, both high and low achievers react differently, leading to adjustment problems. Hence, adjustment issues always stem from the creation of needs and their subsequent non-fulfilment.

The main aim of education is to educate an individual and also to mould and shape the character of an individual where an individual experience in his schools. Many secondary schools have been set up in many places of Mizoram which includes the government schools, deficit schools and private schools which are being run by different bodies such as the education department of the state government, local managing bodies and private bodies. These various organizations strive to educate students, develop their personalities, help them adapt to new situations and changing environments, and foster proper adjustment in different areas, including emotional, social, and educational adjustment. During adolescence, both boys and girls face significant challenges as they try to navigate these problems, which can be mental, emotional, social, and physical. They also face many adjustment problems. In order to know their adjustment patterns, it is necessary to investigate the adjustment pattern of the students. The findings and the results will help administrators and the teachers to know the problems of each student and will enable them to guide them and give them personal counselling in order that they will be able to adjust to various situations in many ways.

Rationale of the Study

School is a primary socialization institution for any child. The growing child relies on the immediate environment, including the home and school, to meet developmental needs. Therefore, it is crucial to enhance and improve school facilities to cater to these needs. Adjustment is a learning process, and an effective teacher can foster positive adjustment, strengthening a child's personality. However, limited research has been conducted on adolescents' adjustment problems. These issues often revolve around physical appearance, health and physical development, academic performance, relationships with family members, teachers, peers, and home adjustment (Raju & Rahamtulla, 2007). Such maladjustments may result in absenteeism, truancy, low achievement, and other undesirable behaviours.

As children begin school, they encounter numerous challenges, such as adapting to a new environment, new teachers, academic activities, and diverse peer groups. Successful adjustment to school largely depends on past experiences at home and children's skills and knowledge. Emotional, social, and educational adjustments are necessary. Good adjustment helps overcome difficulties and fosters positive relationships with peers, society, and the school environment (Kaur & Malhotra, 2015).

Adjustment is an ongoing demand. Adolescents must continuously adapt to changing environments to maintain good social relationships, improve academic performance, and avoid emotional imbalance (Nongbri, 2019). During adolescence, students try to adjust to new situations and changing environments. This period involves developing proper adjustment in emotional, social, and educational areas, making it significant for study.

Methodology

The investigator employs descriptive study method, personally visiting the sampled institutions and obtaining formal permission from the principals and staff of the secondary schools. The purpose of the study and the instructions for completing the questionnaire were clearly explained to the participants. They were assured that their responses would remain confidential and be used solely for research purposes. To ensure that students felt comfortable responding, the investigator established good rapport with them before distributing the questionnaire.

Tool Used

The Adjustment Inventory for School Students (AISS), developed by A.K.P. Sinha and R.P. Singh in 1984, was utilized to measure the adjustment levels of school

students in three key areas: emotional, social, and educational.

Population

The study focuses on all secondary school students in Champhai district of Mizoram. Champhai has a total enrolment of 2162 students enrolled during 2022-2023 session in government and private schools at secondary level.

Sample

The sample was chosen through a stratified random sampling technique. A total of 200 students were randomly chosen, comprising 79 males and 121 females.

Table 1: Sample Distribution

Gender	Government School	Private School	Total
Male	39	40	79
Female	60	61	121
Total	99	101	200

Objectives of the Study

The objectives of the study are stated as under:

1. To determine the adjustment level of secondary school students in Champhai district.
2. To compare the adjustment levels of government and private secondary school students in Champhai district.
3. To compare the adjustment levels of male and female secondary school students in Champhai district.

Hypotheses of the Study

1. There is no significant difference between the adjustment level of government and private secondary school students in Champhai district.
2. There is no significant difference between the adjustment level of secondary school students in Champhai district with reference to their gender.

Analysis and Interpretations

1. To determine the adjustment level of secondary school students in Champhai district.

Table 2: Adjustment Level of Secondary School Students in Champhai District

Sl. No.	Level of Adjustment	Frequency	Percent-age
1.	Extremely/Unsatisfactory Adjustment	4	2%
2.	Unsatisfactory Adjustment	21	10.5%
3.	Below Average Adjustment	34	17%
4.	Average/Moderate Adjustment	80	40%
5.	Above Average Adjustment	38	19%
6.	High Adjustment	21	10.5%
7.	Extremely High Adjustment	2	1%

Table 2 provides a distribution of adjustment levels among a sample of 200 secondary school students in Champhai district.

Extremely/Unsatisfactory Adjustment: In this category, a total of 4 students (2%) fall into the extremely/unsatisfactory adjustment level.

Unsatisfactory Adjustment: A total of 21 students (10.5%) fall into the unsatisfactory adjustment category.

Below Average Adjustment: In the below-average adjustment category, 34 students (17%) are classified.

Average/Moderate Adjustment: A significant portion of students, i.e., 80 (40%), fall into the average/moderate adjustment category.

Above Average Adjustment: A total of 38 students (19%) fall into the above-average adjustment category.

High Adjustment: In the high adjustment category, 21 students (10.5%) are classified.

Extremely High Adjustment: Lastly, in the extremely high adjustment category, only 2 students (1%) are classified.

The investigator observes that a significant portion of secondary school students fall within the average/moderate adjustment category, indicating a generally balanced level of adjustment among the sample.

2. To compare the adjustment level of government and private secondary school students in Champhai district.

Table 3.1: Adjustment Level of Government and Private Secondary School Students in Champhai District

Sl. No.	Level of Adjustment	Govt.		Private	
		Frequency	Percentage	Frequency	Percentage
1.	Extremely/Unsatisfactory Adjustment	2	2%	1	1%
2.	Unsatisfactory Adjustment	10	10%	10	10%
3.	Below Average Adjustment	13	13%	23	23%
4.	Average/Moderate Adjustment	39	39%	33	33%
5.	Above Average Adjustment	25	25%	26	26%
6.	High Adjustment	9	9%	5	5%
7.	Extremely High Adjustment	2	2%	2	2%

The data from Table 3.1 provides insights into the levels of adjustment among students in government and private schools in Champhai district. In both types of schools, a significant portion of students fall within the moderate to above-average adjustment range. Specifically, 39% of government school students and 33% of private school students demonstrate average adjustment, while 25% of government and 26% of private school students show above-average adjustment. This indicates that large shares of students are adapting well to their educational environments, reflecting a generally stable and balanced level of adjustment. However, distinctions emerge when looking at the below-average adjustment category. A higher percentage of private school students (23%) are classified under below-average adjustment compared to government school students (13%). Conversely, in the high adjustment category, government school students (9%) outnumber their private counterparts (5%), potentially pointing to factors within government schools that support adaptability among certain students. Both school types have a minimal number of students at the extremes of adjustment levels. Those experiencing extremely unsatisfactory or unsatisfactory adjustment are relatively few, indicating that severe adjustment difficulties are not widespread. Similarly, extremely high adjustment levels are also rare, with an equal proportion of students (2%) in both government and private schools exhibiting exceptional adaptability.

In summary, the data reveals that students from both government and private schools are generally well-adjusted, with the largest proportions falling within the average and above-average adjustment levels. However, private school students display a higher proportion in the below-average adjustment range, while government school students show slightly higher percentages in high adjustment levels. Extreme adjustment levels, whether unsatisfactory or exceptionally high, are minimal across both groups.

Table 3.2: Comparison of Adjustment Level of Government and Private Secondary School Students in Champhai District

Group Compared	N	Mean	SD	df	t-value	Sig value
Govt.	100	51.95	11.13	198	0.26	0.05
Private	100	51.59	8.52			

(Not Significant at 0.05 level)

Analysis of Table 3.2 indicates that the 't' value relating to the comparison of secondary school students with reference to government and private schools is 0.26, which is not significant at the 0.05 level. Therefore, the hypothesis 'There is no significant difference between the adjustment level of government and private secondary school students in Champhai district' is accepted. The table shows no significant difference in adjustment levels between government and private school students, as indicated by the non-significant 't' value and the p-value of 0.05. However, the mean scores suggest that government school students have a slightly higher adjustment level (Mean = 51.95) compared to their private school counterparts (Mean = 51.59).

3. To compare the adjustment level of male and female secondary school students in Champhai district.

Table 4.1: Adjustment Level of Male and Female Secondary School Students in Champhai District

Sl. No.	Level of Adjustment	Male		Female	
		Frequency	Percentage	Frequency	Percentage
1.	Extremely/Unsatisfactory Adjustment	2	2.53%	2	1.65%
2.	Unsatisfactory Adjustment	8	10.13%	13	10.74%
3.	Below Average Adjustment	15	18.99%	19	15.70%
4.	Average/Moderate Adjustment	31	39.24%	49	40.50%
5.	Above Average Adjustment	15	18.99%	23	19.01%
6.	High Adjustment	7	8.86%	14	11.57%
7.	Extremely High Adjustment	1	1.26%	1	0.83%

Table 4.1 presents adjustment levels between male and female secondary school students in Champhai district. For both genders, a significant share of students falls within the moderate to above-average adjustment range. Among male students, 39.24% exhibit average adjustment, while 18.99% demonstrate above-average adjustment. Similarly, 40.50% of female students show average adjustment,

with 19.01% displaying above-average adjustment. These figures suggest that many students, regardless of gender, maintain a stable level of adjustment in their environments. Some distinctions, however, emerge between male and female students. Females have a slightly higher proportion in the unsatisfactory adjustment category (10.74% compared to 10.13% for males) and the high adjustment category (11.57% compared to 8.86% for males). This indicates that while females may face slightly more adjustment difficulties, they also have a larger proportion reaching higher levels of adjustment. The below-average adjustment category shows 18.99% of male students and 15.70% of female students. At the extremes of adjustment, both groups have minimal representation. Those with extremely unsatisfactory adjustment are at 2.53% for males and 1.65% for females, while students exhibiting extremely high adjustment are equally rare, with 1.26% for males and 0.83% for females.

In summary, the data reveals that many male and female students are well-adjusted overall, but males display a slightly higher proportion in the below-average adjustment range, while females show a marginally greater representation in both unsatisfactory and high adjustment levels.

Table 4.2: Comparison of Adjustment Level of Male and Female Secondary School Students

Group Compared	N	Mean	SD	df	t-value	Sig value
Male	79	49.2	10.62	198	-2.98	0.01
Female	121	53.49	8.85			

(Not Significant at 0.01 level)

Analysis of Table 4.2 indicates that the t-value relating to the comparison of secondary school students with reference to gender (male and female) is -2.98, which is significant at the 0.01 level. Therefore, the hypothesis 'There is no significant difference between the adjustment level of secondary school students in Champhai district with reference to their gender' is rejected. The table shows a significant difference in adjustment levels between male and female secondary school students, as indicated by the significant t-value and the p-value of 0.01. The mean scores suggest that female students have a higher adjustment level (Mean = 53.49) compared to their male counterparts (Mean = 49.2). This significant difference implies that, on average, female students tend to have better adjustment levels than male students. The standard deviations (SD) further support the findings. The SD for male students is 10.62, indicating more variability in adjustment scores within this group, compared to female students who have an SD of 8.85. Despite this variability, the overall difference in adjustment levels between the two groups is significant.

Major Findings of the Study

1. From the study, the investigator found that a large portion of secondary school students in Champhai district have average adjustment level. This means that most students (40%) are neither exceptionally well-adjusted nor poorly adjusted, but rather fall within a moderate range of adjustment.
2. There are no government students who fall in the extremely high adjustment. This indicates that while government school students may have varying levels of adjustment, none exhibit an exceptionally high level of adjustment.
3. The investigator found that a significant portion of male students fall within the average adjustment level (39.24%). Additionally, 18.99% of male respondents have below average and above average adjustment levels, suggesting that a significant portion of male students experience moderate adjustment difficulties or slightly better-than-average adjustment. Furthermore, 10.13% of male respondents have unsatisfactory adjustment levels, indicating a need for additional support for these students. 8.86% of male respondents have high adjustment levels, while 2.53% have extremely/unsatisfactory adjustment levels. Only 1.27% of male respondents fall into the extremely high adjustment category.
4. The investigator also found that a significant number of female students fall within the average adjustment level (40.50%). Additionally, 19.01% of female respondents have above average adjustment levels, suggesting that a significant portion of female students are well-adjusted. In contrast, 15.70% of female respondents have below average adjustment levels, indicating some adjustment difficulties. Furthermore, 11.57% of female respondents have high adjustment levels, while 10.74% have unsatisfactory adjustment levels. Only 1.65% of female respondents fall into the extremely/unsatisfactory adjustment category, and 0.83% fall into the extremely high adjustment category.
5. A t-test comparison of adjustment levels between male and female students indicates a significant difference in adjustment levels based on gender among secondary school students. The mean scores suggest that female students exhibit higher adjustment levels (Mean = 53.49) compared to their male counterparts (Mean = 49.2). This significant difference implies that, on average, female students tend to have better adjustment levels than male students. The variability in adjustment scores, as indicated by the standard deviations, further supports these findings.
6. A t-test comparison of adjustment levels between government and private school students shows that there is no significant difference in adjustment levels

between the two groups. The mean adjustment scores for government school students (Mean = 51.95) and private school students (Mean = 51.59) are very close, and the t-value (0.26) is not significant at the 0.05 level. This suggests that, on average, both groups exhibit similar adjustment patterns.

Discussion and Conclusion

The study concludes that most secondary school students in Champhai district have average adjustment levels, with significant differences observed based on gender but not on the type of school attended. This means that most students, approximately 40%, are coping relatively well with their school environment, balancing their academic, social, and personal responsibilities effectively. Female students generally exhibit higher adjustment levels compared to male students, suggesting that gender-specific factors significantly influence adjustment patterns. However, no significant differences were found between government and private school students, indicating that both groups face similar adjustment challenges.

The investigator found that the greater number of male students fall within the average adjustment level (39.24%). A significant proportion of male students, about 18.99%, are classified under both below average and above average adjustment levels. Additionally, 10.13% of male students exhibit unsatisfactory adjustment, and 8.86% fall into the high adjustment category. It is concerning that 2.53% of male students have extremely unsatisfactory adjustment, and only a small percentage, 1.27%, reach the extremely high adjustment level.

The study also found that the larger proportion of female students fall within the average adjustment level (40.50%). A substantial portion of female students, approximately 19.01%, are classified under above average adjustment, indicating a generally positive adjustment pattern among females. However, 15.70% of female students are categorized under below average adjustment, and 11.57% are in the high adjustment category. It is considerable that 10.74% of female students have unsatisfactory adjustment, while only 1.65% exhibit extremely unsatisfactory adjustment levels. The extremely high adjustment level is the least represented among females, with only 0.83% falling into this category.

The t-test comparison between government and private secondary school students indicated no significant difference in adjustment levels (t-value = 0.26, p-value = 0.05). The mean adjustment scores for government (Mean = 51.95) and private (Mean = 51.59) school students are very close, suggesting that both groups experience similar adjustment challenges. This finding implies that factors other than the type of school may play a more critical role in influencing student adjustment levels.

These findings emphasize the importance of considering gender-specific needs when developing interventions and support systems to enhance student adjustment levels. Tailored support programs that address the unique challenges faced by male and female students can help improve their overall well-being. Additionally, the lack of significant differences between government and private school students highlights the need for a comprehensive approach that considers individual student characteristics and broader environmental factors.

References:

- Anbesaw, T., Beyene, A. & Kefale, J. (2020). Adjustment problem and associated factors among first-year undergraduates at Wollo University Ethiopia. Creative Attributions License (CCBY). 7. <https://www.frontiersin.org/articles/10.3389/feduc.2022.946417/full>
- Cajee, B. (2011). Adjustment pattern of secondary school students in Shillong town. [Unpublished doctoral dissertation]. North-Eastern Hill University. <http://hdl.handle.net/10603/169845>
- Daniel, J. (2010). The academic and social adjustment of first-generation college students. [Unpublished master's thesis]. Seton Hall University. <https://scholarship.shu.edu/cgi/viewcontent.cgi?article=2497&context=dissertations>
- Hassan, D. & Rasool, S.K.N. (2017). A study of adjustment among government and private secondary school teachers in Ongole town of Prakasam district. International Journal of Research in Social Sciences, 8(11), 479-489. https://www.ijmra.us/project%20doc/2018/IJRSS_NOVEMBER2018/IJMRA-14684.pdf
- Kaur, J., & Malhotra, A. (2015). Adolescents' perception of adjustment problems and school counseling services. International Journal of Science and Research, 4(3), 172-176. <https://www.ijsr.net/archive/v4i3/SUB152172.pdf>
- Kumari, R. (2017). Academic adjustment among secondary school students in relation to time management competency. [Unpublished master's thesis]. Lovely Professional University. http://dspace.lpu.in:8080/jspui/bitstream/123456789/2972/1/11502966_5_12_2017%209_46_45%20AM_Complete%20dissertation.pdf
- Lakhani, P. & Chande, P.K. & Jain, K. (2017). School adjustment, motivation and academic achievement among students. International Journal of Research in Social Sciences, 7(10), 333-347. https://www.researchgate.net/publication/321741311_School_Adjustment_Motivation_and_Academic_Achievement_among_Students

- Lalsawmzuali, R. (2019). Status and challenges of district institutes of education and training in mizoram: A critical study. [Unpublished doctoral dissertation]. Mizoram University. <http://mzuir.inflibnet.ac.in/handle/123456789/912>
- Laltlanhlui E. & Vanlalruati, V. (2023). Adjustment level of JL high school students. [Unpublished master's thesis]. Government Aizawl College.
- Nestsiarovich, K., Pons, D. J., & Becker, S. (2020). Communication adjustment in engineering professional and student project meetings. *Behavioral Sciences*, 10(7), 1-24. <https://doi.org/10.3390/bs10070111>
- Nongbri, ATW. (2019). A study of adjustment among high school students in relation to their class and gender. *International Journal of Research in Engineering, Science and Management*, 2(8), 116-123. https://www.ijresm.com/Vol.2_2019/Vol2_Iss8_August19/IJRESM_V2_I8_30.pdf
- Parvati, K. K. (2014). A study of adjustment problem among working women and non-working women. *International Journal of Indian Psychology*, 1(3), 138-140. <https://doi.org/10.25215/0103.018>
- Prabhu, S. M. (2021). An analysis of the impact of student satisfaction level in arts and science colleges and engineering colleges in the district of Salem. [Unpublished doctoral dissertation]. Periyar University. <https://shodhganga.inflibnet.ac.in/handle/10603/379215>
- Raju, M. V. R., & Rahamtulla, T. K. (2007). Adjustment problems among school students. *Journal of the Indian Academy of Applied Psychology*, 33(1), 73-79. <https://jiaap.in/wp-content/uploads/2024/08/2007-January-JIAAP-78-84.pdf>
- Sekar, J.M.A. & Lawrence, A.S.A. (2010). Emotional, social, educational adjustment of higher secondary school students in relation to academic achievement. *i-manager's Journal on Educational Psychology*, 10(1), 29-35. <https://files.eric.ed.gov/fulltext/EJ1131806.pdf>
- Sinha, A. K. P., & Singh, R. P. (1984). Adjustment Inventory for School Students (AISS). National Psychological Corporation.
- Srinivasan, P. (2017). Time management and academic achievement of higher secondary students. *A Half Yearly International Refereed Journal of Education*, 3(2), 27-33. https://www.researchgate.net/publication/342381341_TIME_MANAGEMENT_AND_ACADEMIC_ACHIEVEMENT_OF_HIGHER_SECONDARY_STUDENTS
- Zhao, K. (2006). The impact of adjustment problems on academic achievement of international undergraduates at West Virginia University. [Unpublished master's thesis]. West Virginia University. <https://core.ac.uk/download/pdf/230461325.pdf>

Level of Depression Proneness Among the Students of Govt. Chaltlang High School and St. Joseph High School

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Abstract

One of the most prevalent mental health disorders is depression, which frequently coexists with anxiety. It may be moderate and transient or severe and protracted. Depression affects some people only once, but it may afflict others more than once. This paper compares the level of depression proneness among the students of Govt. Chaltlang High School and St. Joseph High School. It also studies the level of students' depression in their academic achievements. It was found out that the majority of the two high school students had below average depression proneness. Majority of male students in both high schools had low depression proneness and maximum number of female students in St. Joseph High School had low depression proneness while higher percentage of female students in Govt. Chaltlang High School had below average depression proneness. This paper also found out that majority of the students from Govt. Chaltlang and St. Joseph High Schools passed their last examination in first division.

Keywords: *Depression Proneness, Students, High School.*

Introduction

Depression is one of the most common mental illnesses in the world. While depression can occur at any age, the precise ethology of depression in certain people is not always known. The Centres for Disease Control and Prevention estimate that around one in five Americans has received a diagnosis of depression at some point in

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their lives. According to estimates from the World Health Organization, 5% of men and 9% of women may suffer from depressive diseases at any given time. High school students experience rapid physical and mental transformations. They are unable to control their body and mind as well as their own anticipations. They then tend to get concerned and depressed over these things. This further may cause the “clumsy” and “Stubborn” people to undergo major adjustments in their lives. Teachers and parents need some knowledge of psychology in order to provide children and pupils with the care they need during this developmental stage. Most students may suffer from depression and anxiety if adequate treatment is not given at this stage. We ought to offer them extra awareness-raising initiatives in addition to ensuring their academic achievement. Children in high schools will grow up to be happier, more productive, and better scholars if we can properly implement this program.

Review of Related Literature

Bhandari (2017) did a study on “Anxiety and depression among adolescent students at higher secondary school” and found out that the findings of the study revealed that there was significant correlation between total depression and total anxiety score i.e. Spearman’s rank correlation coefficient value was 0.554 ($p=0.000$). The study also found that the depression and anxiety were significantly associated with type of family ($p=0.005$ & $p=0.015$). The depression was significantly associated with academic performance of adolescent students ($p=0.030$) and major accident in the family ($p=0.009$). Similarly, the anxiety was significantly associated with parental fight ($p=0.007$), conflict with father ($p=0.019$), and death of family member ($p=0.016$). It can be concluded that adolescent anxiety and depression are significant mental health problems, and so, further studies are needed to validate the findings.

Harlak, Dereboy & Gemalmaz (2008) did a study on “Prevalence of and Factors Related to Depression in High School Students” found out that 141 students (17.5%) scored on and above the cut-off point on the Children Depression Inventory (CDI). In the first regression analyses low self-esteem, low grade point average (GPA) and low perceived social support from friends in boys, and low self-esteem, low paternal educational level and low social support from friends were the predictors of girls’ depression. When self-esteem scores were excluded, low GPA, low perceived social support from friends and family, and inefficient problem-solving skills were predictors of depression in boys; low perceived social support from friends and family, low paternal educational level, and inefficient problem-solving skills were the independent predictors of depression in girls.

Alexander & Higgins (1985) did a study on “Stress and depression in high school students” found out that the High School Social Readjustment Scale, a measure of

stressful life events, and the centre for Epidemiological Studies Depression Scale, a short self-report scale measuring depressive symptomatology were administered twice to 285 high school students over a 6-mo. Interval. Both measures were statistically reliable. On both test administrations, girls but not boys, displayed a significant relationship between stress and depression.

Bansal, Gupta, Sharma & Sood (2009) did a study on “Study of prevalence of depression in adolescent students of a public school” found out that 15.2% of school-going adolescents were found to be having evidence of distress (GHQ-12 score ≥ 14); 18.4% were depressed (BDI score ≥ 12); 5.6% students were detected to have positive scores on both the instruments. Certain factors like parental fights, beating at home and inability to cope up with studies were found to be significantly ($P < 0.05$) associated with higher GHQ-12 scores, indicating evidence of distress. Economic difficulty, physical punishment at school, teasing at school and parental fights were significantly ($P < 0.05$) associated with higher BDI scores, indicating depression.

Rationale of the study

Adolescence is the most crucial time in anyone's life, where most of us are attending secondary school/high school. Based on the achievements throughout this period, the student's future is usually shaped. High school stage is characterized by significant physical, emotional and intellectual changes and changes in social roles, relationships and expectations and is marked by stress. They could be experiencing anxious feelings and overwhelming sense of fear while others may have lack of confidence and feeling of un-wellness. That is why the Investigators chose this topic in order to know the real condition of depression proneness manifesting in high school students. The hope is that this study can help find out the true condition and the levels of depression proneness experienced by high school students in their everyday life.

Statement of the Problem

The problem under study can be stated as “Level of Depression Proneness among the students of Govt. Chaltlang High School and St. Joseph High School”.

Objectives of the study

1. To study the level of depression proneness among the students of Govt. Chaltlang High School and St. Joseph High School.
2. To find out the level of depression proneness between male and female students in Govt. Chaltlang High School and St. Joseph High School.

3. To compare the significant differences in depression proneness between the students of Govt. Chaltlang High School and St. Joseph High School.
4. To assess the level of depression proneness in terms of their latest academic achievement among the students of Govt. Chaltlang High School and St. Joseph High School.

Hypothesis

H1: There exists a significant difference between male and female students in the level of depression proneness in Govt. Chaltlang High School and St. Joseph High School.

Null Hypothesis

HO1: There exists no significant difference between male and female students in the level of depression proneness in Govt. Chaltlang High School and St. Joseph High School.

Methodology

The present study employs Descriptive Survey Method.

Population and Sample

The population of the study involves all the students of Govt. Chaltlang High School and St. Joseph High School. 120 students were selected as representative sample, 60 students (30 males and 30 females) from Govt. Chaltlang High School and 60 students (30 males and 30 females) St. Joseph High School using a cluster sampling method.

Tool Used

The detail of the tool used is given as under:

Name of the tool:	Depression Proneness Scale
Author:	Dr. Niranjana Prasad Yadav
Year:	2005
Published by:	National Psychological Corporation

The Depression Proneness Scale had 30 statements.

Scoring System and Norms for Interpretation

Scoring System

Never	Seldom	Often	Very Often	Always
1	2	3	4	5

Norms for Interpretation of the Level of Depression Proneness

Sl.No.	Range of z-scores	Grade	Level of Depression Proneness
1	+2.01 and above	A	Extremely High Depression Proneness
2	+1.26 to +2.00	B	High Depression Proneness
3	+0.51 to 1.25	C	Above Average Depression Proneness
4	-0.50 to +0.50	D	Average Depression Proneness
5	-1.25 to -0.51	E	Below Average Depression Proneness
6	-2.00 to -1.26	F	Low Depression Proneness
7	-2.01 and below	G	Extremely Low Depression Proneness

Statistical Treatment of data

For analysis of the collected data, descriptive statistics like percentage frequency distribution and measures of central tendency were used. T-test was also employed to find out significance of difference.

Analysis of data and results

Analysis and interpretation of data was done in accordance with the objectives as follows:

Objective-1: To study the level of depression proneness among the students of Govt. Chaltlang High School and St. Joseph High School.

- (i) The total number and percentage of the level of depression proneness among the students in Govt. Chaltlang high school and St. Joseph high school are as shown in Table-1:-

Table-1

Level of Depression Proneness among Govt. Chaltlang High School and St. Joseph High School

Sl. No.	Level of Depression Proneness	Govt. Chaltlang High School	St. Joseph High School
		No. & % of Respondent	No. & % of Respondent
1	Extremely High Depression Proneness	0	0
2	High Depression Proneness	0	4(6.66%)
3	Above Average Depression Proneness	3(5%)	2(3.33%)
4	Average Depression Proneness	14(23.33%)	13(21.67%)
5	Below Average Depression Proneness	25(41.67%)	19(31.67%)
6	Low Depression Proneness	16(26.67%)	19(31.67%)
7	Extremely Low Depression Proneness	2(3.33%)	3(5%)
Total		60(100%)	60(100%)

Source: Field Survey

Table 1 shows that the degree of depression proneness at St. Joseph High School and Govt. Chaltlang High School students. Not a single student at any of the two high schools was at the significantly depressed risk level. There are no students in extremely high depression proneness while 3.33% Govt. Chaltlang and 5% St. Joseph High School students had extremely low depression proneness. 6.66% students in St. Joseph High School had high depression proneness while Govt. Chaltlang High School had none. There are 5% Govt. Chaltlang and 3.33% St. Joseph High School students who had above average depression proneness. Govt. Chaltlang High School had highest depression proneness in below average (41.67%) meanwhile St. Joseph High School had highest depression proneness in below average and low depression (31.67%).

Objective-2: To find out the level of depression proneness between male and female students in Govt. Chaltlang High School and St. Joseph High School.

- (ii) The total number and percentage of the level of depression proneness between male and female students in Govt. Chaltlang High School and St. Joseph High School are as shown in Table-2:-

Level of Depression Proneness Among the Students of Govt. Chaltlang High School and St. Joseph High School

Table-2

Level of Depression Proneness between male and female students in Govt. Chaltlang High School and St. Joseph High School

Sl. No.	Level of Depression Proneness	Govt. Chaltlang High School		St. Joseph High School	
		No. & % of Respondent		No. & % of Respondent	
		Male	Female	Male	Female
1	Extremely High Depression Proneness	0	0	0	0
2	High Depression Proneness	0	0	3 (10%)	1 (3.33%)
3	Above Average Depression Proneness	1(3.33%)	2(6.67%)	1 (3.33%)	1 (3.33%)
4	Average Depression Proneness	5 (16.67%)	9 (30%)	6 (20%)	7 (23.34%)
5	Below Average Depression Proneness	11 (36.67%)	4 (46.67%)	9 (30%)	9(30%)
6	Low Depression Proneness	12 (40%)	4 (13.33%)	9 (30%)	1 (36.67%)
7	Extremely Low Depression Proneness	1 (3.33%)	1 (3.33%)	2 (6.67%)	1 (3.33%)
Total		30 (100%)	30 (100%)	30 (100%)	30 (100%)

Source: Field Survey

Table-2 highlights level of depression proneness between male and female students in Govt. Chaltlang High School and St. Joseph High School. Fortunately, there are no students with extremely high depression proneness level in the two high schools. St. Joseph High School had 10% male and 3.33% female students who had high depression proneness while Govt. Chaltlang High School had none. Govt. Chaltlang High School and St. Joseph High School had 3.33% male students in above average depression proneness meanwhile Govt. Chaltlang high school had higher number of female students in above average depression proneness level. Both high schools had highest number of male and female students in below average depression proneness level. 40% male and 30% male students and 13.33% female and 36.67% female students in Govt. Chaltlang and St. Joseph High School had low depression proneness level. There are 3.33% female students and 3.33% male and 6.67% male students in Govt. Chaltlang and St. Joseph High School had extremely low depression proneness level.

Objective-3: To compare the significant differences in depression proneness between the students of Govt. Chaltlang High School and St. Joseph High School.

- (iii) Significance of differences between male and female students in Govt. Chaltlang High School and St. Joseph High School are as shown in Table-3

Table-3

Significance of differences between male and female students in Govt. Chaltlang High School and St. Joseph High School

		Male	Female
Mean		69.344	71.482
S.D		24.154	16.052
Mean Difference		2.138	
SE.D		3.74	
t-value		0.571	
df		59	
Significant 2tailed	0.01 level	NS	NS
	0.05 level	NS	NS

Source: Field Survey

The calculated 't'-value in table-3 was smaller than the critical 't'-value. Hence, the null hypothesis was accepted. It was inferred that there exists no significant difference between male and female students in Govt. Chaltlang high school and St. Joseph High School in the level of depression proneness. This study revealed that female students had a higher mean value (71.482) than male students (69.344). It can be concluded that female high school students had more depression proneness level in both high schools.

Objective-4: To assess the level of depression proneness in terms of their latest academic achievement among the students of Govt. Chaltlang High School and St. Joseph High School.

- (iv) The total number and percentage of the level of depression proneness between Govt. Chaltlang High School and St. Joseph High School in terms of their latest academic achievement are as shown in Table-4:-

Table-4

Level of Depression Proneness between Govt. Chaltlang High School and St. Joseph High School in terms of their latest academic achievement

Latest Academic Achievement	GCHS	Level of Depression Proneness	St. JHS	Level of Depression Proneness
	No.&% of Students		No.&% of Students	
D	12(20%)	50% BA&L	11(18.33%)	45%BA,37%L,9%A&AA
I	27(45%)	15%A,40%BA,L,5%EL	30(50%)	40%BA,6%H,30%A,4%EL,20%L
II	12(20%)	6%AA,24%A,L,43%BA,3%EL	16(26.67%)	57%L,12%A,12%BA,12%H,7%EL
III	9(15%)	12%AA,BA,50%A,26%L	3(5%)	33.33%EL&L,33.34%A
Total	60(100%)		60(100%)	

Source: Field Survey

Table-4 showed that level of Depression Proneness between Govt. Chaltlang High School and St. Joseph High School students in terms of their latest academic achievement. Govt. Chaltlang High School had 20% students passing out in Distinction, and among them, there was 50% below average and low depression proneness levels. Meanwhile, St. Joseph High School had 18.33% students passing out in Distinction, and among them, the highest depression proneness level was found in below average depression proneness level. Govt. Chaltlang High School had 45% students passed out in first division within them 40% had below average and low depression proneness. In comparison, 15% had average depression proneness level and St. Joseph high school had 50% students passed out their last examination in first division within them 40% had below average. In comparison, 30% had average depression proneness level. Govt. Chaltlang High School had 20% students passing out their latest examination in second division. Among them, 43% had below average. In comparison, 6% had above average depression proneness level and St. Joseph High School had 26.67% students passed out their last examination among them 57% had low depression proneness level. In comparison, 12% had high depression proneness level. Students of Govt. Chaltlang High School had 15% passing out their last examination in third division; within this bunch, 50% had average and 26% had low depression proneness meanwhile students in St. Joseph High School had 5% passing out their last examination in third division, among whom 33.34% had average depression proneness level.

Discussion

The above table shows that there is no serious depression proneness level in Govt. Chaltlang High School and St. Joseph High School students. Both high schools had highest level of depression proneness students in below average level which is quite good. Luckily, they do not have high and extremely high depression having students in their high schools. The Investigators found zero percentage of students in extremely high depression proneness level between male and female students in Govt. Chaltlang and St. Joseph high schools. This paper found a healthy result for students in their depression proneness level. It also showed that there is no significant difference between male and female students in Govt. Chaltlang and St. Joseph High Schools. Their latest examinations showed that highest percentage of students was found among the first division students which may incidentally also be the reason for their low depression proneness levels.

Conclusion

It is common for children to feel depressed from time to time; this is a natural aspect of growing up. However, if these feelings persist for extended periods of time and have an impact on a child's social, familial, or academic life, they may be concerning. It can occur commonly, causing suffering, functional impairment, increased risk of suicide, added health care costs and productivity losses. Most people experience awkwardness and clumsiness during their teenage years in high school. And each of us often experience some form of it after periods of despair and anxiety. For this reason, parents, teachers and educators must be aware of the insecurities that exist in their students. In this day and age, and for the sake of the pupils' mental health, we must provide better programs and activities for overcoming depression proneness level. If we can improve this, both the lives of the students and the inhabitants of our state will be better and more productive.

Reference

- Alexander, C., & Higgins, E. T. (1985). Stress and depression in high school students. *Psychological Reports*, 57(2), 535–541. <https://doi.org/10.2466/PR0.1985.57.2.535>
- Bansal, R., Gupta, P., Sharma, S., & Sood, S. S. (2009). Study of prevalence of depression in adolescent students of a public school. *Indian Psychiatry Journal*, 18(1), 43–46. <https://doi.org/10.4103/0972-6748.57859>
- Bhandari, M. (2017). Anxiety and depression among adolescent students at higher secondary school. *BIBECHANA*, 14, 103-109. <https://doi.org/10.3126/bibechana.v14i0.16019>
- Goldman, L. (2023, October). What is depression and what can I do about it? *MedicalNewsToday*. <https://www.medicalnewstoday.com/articles/8933>
- Goldman, L. S., Nielsen, N. R., & Champion, H. C. (1999). Awareness, diagnosis, and treatment of depression. *Journal of General Internal Medicine*, 14(9), 569–580. <https://doi.org/10.1046/j.1525-1497.1999.03478.x>
- Harlak, H., Dereboy, Ç., & Gemalmaz, A. (2008). Prevalence of and factors related to depression in high school students [Article in Turkish]. *Turkish Journal of Psychiatry*, 19(4), 382-389. [https://doi.org/\[insert](https://doi.org/[insert)
- Schimelpfening, N. (2023, June 16). Causes and risk factors of depression. *Verywell Mind*. <https://www.verywellmind.com/common-causes-of-depression-1066772>
- UNICEF. (n.d.). What is depression? <https://www.unicef.org/parenting/mental-health/what-is-depression>
- Depression (mood). (2024, November 27). In Wikipedia. [https://en.wikipedia.org/wiki/Depression_\(mood\)](https://en.wikipedia.org/wiki/Depression_(mood)).
- College. (2024, December 2). In Wikipedia. <https://en.wikipedia.org/wiki/College>.
- Yadav, N. P. (2005). *Depression Proneness Scale*. National Psychological Corporation. India: New Delhi.

Attitude of Government Secondary School Teachers in Mamit District towards the Use of Information Technology

Lalnuntluanga Colney*

Abstract

This study aims to find out the level of attitude among government secondary school teachers in Mamit district towards information technology. It also tries to find out whether gender has effect on the teacher's attitude towards information technology. A sample of 50 secondary school teachers in Mamit was selected. Attitude Scale towards Information Technology for Teachers (ASTITT-NI) by Nasrin and Islahi (2012) was used for data collection. The findings of the study revealed that i) there is a moderate favourable attitude among secondary school mathematics teachers in Mizoram towards the use of information technology. ii) there is no significant difference in the attitude of male and female secondary school mathematics teachers towards Information Technology

Keywords: *Information technology, Attitude, Secondary school teacher, Gender, Mamit District.*

Introduction

In the ever-changing world, technological advancement influence all of our life and we cannot pass a day without using at least one information technological device. Information technology (IT) is the use of any computers, storage, networking and other physical devices, infrastructure and processes to create, process, store, secure and exchange all forms of electronic data ("Wikipedia," 2022). According to 'Merriam Webster' Dictionary Information Technology is the technology involving the development, maintenance, and use of computer systems, software, and networks for the processing and distribution of data. Thus, Information Technology is a term that encompasses all form of technologies used to create, store and exchange information of all kind.

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In today's education, information technology plays a significant role in the teaching learning process. With the covid-19 pandemic inhibiting school going for more than a year, information and technological tools have become the mode of transaction of knowledge for teacher and students. There is an increase in pressure to use new technology in our educational system as the new technology provides various applications to be used in the educational sector. The use of information technology in education opens a new era of knowledge and offers a tool that has the potential to change many of the existing educational methods.

In India, Various commissions and committees have recommended various methods for improvements in the quality of education. As a result, the teachers are inspired, motivated, to develop better curriculum, text books and teaching aids. As per the NEP 2020, technology in education shall be given major emphasis, the National Educational Technology Forum (NETF) is going to be created to supply a platform for the free exchange of ideas on the utilization of technology to reinforce learning, assessment, planning, administration, and so on, both for college and better education. Information technology also changed the ways that school subject is taught and learned.

Pierce and Ball (2009) on their research paper reports the responses of a diverse cohort of 92 secondary mathematics teachers who chose to respond to an Australian state-wide survey (Mathematics with Technology Perceptions Survey) developed using a Theory of Planned Behaviour framework. They conclude that despite an overall positive attitude towards the use of technology for teaching mathematics, some perceived barriers to change are notable. It is, therefore, helpful if those responsible for professional development, promoting the use of technology, recognise and address these barriers as well as working to strengthening enablers.

Rana (2012) conducted a study to assess the teacher educators' attitudes towards technology integration in classrooms. The results show that most of the teacher educators have positive attitudes towards the general role that information and communication technology can play in education and in the educational process. The findings also reveal that no gender differences exist on attitudes towards ICT in teacher training.

Muhanna and Nejem (2013) conducted a study aimed at investigating the attitudes of mathematics teachers toward using a smart board in teaching mathematics and also to determine the effect of gender, experience, and qualification of teachers on their attitudes. The results of the study revealed that the mathematics teachers have positive attitudes toward using a smart board in teaching mathematics. Results showed that there is no statistically significant difference due to gender variable.

Fanai and chhangte (2016) conducted a study to find out the attitude of secondary school teachers of Aizawl district, Mizoram towards ICT. It is found that the teachers have positive attitude towards ICT and also that there is no significant difference between junior and intermediate teachers, intermediate and senior teachers and junior and senior teachers.

Meher et. al. (2020) investigated the attitude of teachers teaching in Gangadhar Meher University, Sambalpur towards the use of ICT both descriptively and comparatively. In this study attempt has been taken to compare the attitude of teachers on the basis of their sex and stream. The findings of the study revealed that near about 60% teachers expressed strong positive attitude and rest 40% positive attitude towards the use of ICTs in teaching-learning process. The findings of the study also revealed no significant difference among the attitude of teachers with reference to their sex and stream.

Al-zboon et.al. (2021) conducted research aims to identify science and mathematics teachers' attitudes towards integrating Information and Communication Technology (ICT) in their educational practice through applying the Unified Theory of Acceptance and Use of Technology (UTAUT). The results showed the attitudes of science and mathematics teachers towards integrating information and communication technology in the educational process were high and positive. In addition, the results showed that science and mathematics teachers had positive and high perceptions of integrating information and communication technology in the educational process in all dimensions (performance expectancy, effort expectancy, social influence, and facilitating conditions).

Goswami (2021) conducted a study related to the secondary school teachers' attitude towards ICT in Meerut City. Attitude Scale towards Information and Communication Technology for Teachers was used to collect the data. The findings showed that secondary school teachers have a favourable attitude towards ICT. The results indicated that there is no significant difference in the secondary school teachers' attitudes towards ICT in relation to stream, gender and areas of school.

Rationale of the Study

For those teachers, who already are used to their own method of teaching, imbibing information and technology as a new way teaching may pose difficulty as it not only requires them to change their old way but also, they need to acquire new knowledge regarding information and technology thus requiring change of attitude and more effort from the teachers for successfully implementing information technology in an educational programme. Research studies indicate that the success

of technology integration in education depends greatly upon the attitudes of the teachers and their willingness to embrace such technology (Rana, 2012).

The Government of India implements different technology integration programme to the schools through different schemes. However, before implementation of the programmes, there has been few research regarding the use of information and technology in the school. What is missing in particular, are the studies on teachers' reaction to the new tool, without this information, there may be unforeseen consequences for IT dissemination in school.

Statement of the Problem

The problem under study can be stated as “Attitude of Government Secondary School Teachers in Mamit District towards the Use of Information Technology”.

Objectives

- i. To find out the attitude of government secondary school teachers in Mamit district towards information technology.
- ii. To compare the attitude of government secondary school teachers in Mamit district towards information technology with respect to Gender.

Hypothesis

H1: There is a significant difference between the attitude of Male and Female government secondary school teachers in Mamit district towards information technology.

Null Hypothesis

HO1: There is no significant difference between the attitude of Male and Female government secondary school teachers in Mamit district towards information technology.

Methodology

The study is a descriptive survey technique which involves the collection of primary data about subjects through the use of a questionnaire.

Population and Sample

This study had been carried out from 15 government secondary schools in Mamit district, Mizoram. Thus, all the government secondary school teachers in

Mamit district comprises of the population of the study, 50 teachers were selected as a sample by using simple random sampling technique.

Tool Used

Attitude Scale towards Information Technology for Teachers (ASTITT-NI) by Nasrin and Islahi (2012) was used for data collection. The items were categorised in term of the several dimensions of attitude towards information technology as given below:

- a) Impact of IT
- b) Usefulness for students
- c) Productivity for teaching
- d) Teacher's interest and acceptance of IT.

The test was administered through online mode and offline mode by sending the link of google form to the selected sample teachers by using WhatsApp and by collecting data personally. Participants were asked to respond to 30 Likert-type statements dealing with their attitudes toward Information Technology. 58 responses were recorded from the participants. The scheme of scoring response categories involved differential weightage such that the response category, Strongly Agree (5) represents the maximum score of the scale and Strongly Disagree (1) represents the minimum score. Higher scores indicate more positive attitudes and lower scores indicate fewer positive attitudes. Out of the total of 30 items 12 items were negatively stated, which needs reversing of polarity. Prior to analysis of the data negatively stated items were reversed. The maximum and minimum possible score ranges from 30 to 150. High score indicated the favourable attitude towards using online resources.

Analysis and Findings

The analysis and major finding of the study is discussed in the following paragraph based on the objectives.

Analysis and Findings on Objective No 1: To find out the attitude of secondary school mathematics teachers in Mizoram towards information technology.

The following table (Table 1) shows the level of attitude towards information technology among government secondary school teachers in Mamit district.

Table-1
Teachers Attitude Towards Information Technology

Raw Score Range	Grade	Level of Attitude	No. of teachers	Percentage
143 & More	A	Extremely Favourable	1	2
126 – 142	B	Highly Favourable	4	8
109 – 125	C	Positively Favourable	21	42
85 – 108	D	Moderate Favourable	22	44
68 – 84	E	Unfavourable	2	4
50 – 67	F	Highly Unfavourable	0	0
49 & Less	G	Extremely Unfavourable	0	0

Source: Field Survey

From Table 1, it is evident that only 2 percent of the sample has extremely favourable towards information technology and 4 percent of the sample has highly favourable attitude towards information technology. Majority of the sample teachers attitude falls on positively and moderate favourable attitude towards information technology i.e. 86 percent and only 4 percent of the sample has unfavourable attitude towards information technology. The overall mean of the entire sample is 108.76, which is Grade C as per the norms of the scale and it can further be interpreted that the attitude of secondary school teachers in Mamit district towards information technology is positively favorable attitude.

Thus, it can be concluded that government secondary school teachers in Mamit district has a positively favorable attitude towards information technology.

Findings on Objective No 2: To compare the attitude of government secondary school teachers in Mamit district towards information technology with respect to Gender.

Null Hypothesis(H1) : There is no significant difference between the attitude of Male and Female government secondary school teachers in Mamit district towards information technology.

Table-2**Attitude of Male and Female Secondary School Teachers towards Information Technology**

Gender	No. Of Teachers	Mean	Variance	Pooled Variance	t-value	Significance level
Male	43	108.53	127.54	170.7	0.302	Not Significant
Female	7	110.14	472.81			

Source: Field Survey

Table 2. shows the comparison of the attitude of male and female government secondary school teachers in Mamit district towards information technology. There is a gender imbalance in the government secondary school teachers in Mamit district, majority of the population comprise of male teachers. The calculated t-value was found to be 0.302 with degrees of freedom 48, which is smaller than the critical value at the required level of significance i.e. 2.02. So, the null hypothesis, “There is no significant difference between the attitude of Male and Female government secondary school teachers in Mamit district towards information technology” is accepted. Thus, it can be concluded that attitude of government secondary school teachers in Mamit district towards information technology is not affected by the gender.

Conclusion

The present investigation evaluated secondary school teachers’ views on the application of ICT in the classroom and it concluded that government secondary school teachers in Mamit district has a positively favorable attitude towards information technology. The attitudes of teachers, who ultimately decide how they are utilised in the classroom, play a significant role in how successfully educational innovations are implemented. Thus, it is believed that the latest introduction to the installation of smart classroom at government secondary school in Mamit district have a positive result in the future.

References

- Al-zboon, H. S., Gasaymeh, A. M., & Al-Rsa'i, M. S. (2021). The Attitudes of Science and Mathematics Teachers toward the Integration of Information and Communication Technology (ICT) in Their Educational Practice: the Application of the Unified Theory of Acceptance and Use of Technology (UTAUT). *World Journal of Education*, 11(1), 75-85.
- Fanai, L., & Chhange, R. (2016). A Study of the Attitude of the Secondary School Teachers towards ICT with respect to Teaching Experience and Professional Qualification. *International Journal of Engineering Science and Computing*, 6(8), 2878-2880.
- Goswami, S. (2021). Secondary school teachers' attitude towards information and communication technology (ICT) in Meerut city: A comparative study. *International Journal of Applied Research*, 7(1), 385-388.
- Information technology. (2022, May 20). In Wikipedia. https://en.wikipedia.org/wiki/Information_technology
- Meher, V., Baral, R., & Suna, G. (2020). Attitude of Teachers about the Use of Information and Communication Technology (ICTs) in Teaching-Learning Process.
- Koul, L. (2009). *Methodology of Educational Research*. Sector-8, Noida -201301 India: Vikas Publishing house Pvt.Ltd.
- Mangal, S.K. (2002). *Statistics in Psychology and Education*. Patparanj Industrial Estate, Delhi : PHI Learning Private Limited.
- Merriam-Webster. (n.d.). Information Technology. In Merriam-Webster.com dictionary. Retrieved May 18, 2022, from <https://www.merriam-webster.com/dictionary/information%20technology>
- Ministry of Human Resources Development. (2020, 29 July). National Education Policy 2020. Retrieved from https://www.education.gov.in/sites/upload_files/mhrd/files/NEP_Final_English_0.pdf
- Muhanna, W., & Nejem, K. M. (2013). Attitudes of mathematics teachers toward using smart board in teaching mathematics. *Contemporary Issues in Education Research (CIER)*, 6(4), 373-380.
- Nasrin and Islahi, F. (2011). *Manual for attitude scale towards information technology for teachers*. Agra: Manasvi.
- Pierce, R., & Ball, L. (2009). Perceptions that may affect teachers' intention to use technology in secondary mathematics classes. *Educational studies in mathematics*, 71(3), 299-317.
- Rana, N. (2012). A study to assess teacher educators' attitudes towards technology integration in classrooms. *MIER Journal of Educational Studies Trends and Practices*, 2(2), 190-205. DOI:10.52634/mier/2012/v2/i2/1569

Age and Education as Determinants of Entrepreneurship: A Study of Micro and Small Enterprises in Aizawl District, Mizora

Lalhunthara*

Abstract

Age and educational level of an individual are considered as important determinants of entrepreneurial activity. Entrepreneurship among the tribal communities in the North Eastern Region of India is gradually gaining popularity with the growth of education and contraction of job opportunities in the public sector. Industrialization through entrepreneurship development is now considered the most effective means of achieving economic development not only of a country but also of various regions in a balanced manner. It has a crucial role to play in generating employment, poverty reduction and exploitation of natural resources for economic development in the backward region like Mizoram. In spite of the North Eastern Region endowed with rich resources, it remains backward economically and industrially mainly due to inadequacy of supply of entrepreneurship. The reservation for the underdeveloped communities in government jobs is going to be less significant because job avenues in the government or public sector are gradually shrinking in the context of liberalization, privatization and globalization. Therefore, the need of the hour is to encourage entrepreneurship as the way of livelihood by the new generations not only for self employment but to provide employment to others. This paper identifies the sources of entrepreneurship in Aizawl district of Mizoram by the socio economic characteristics of the entrepreneurs such as educational level and age of the entrepreneurs.

Keywords: *Entrepreneurs, entrepreneurship, micro enterprise, micro and small enterprises, age of the entrepreneurs, education.*

Introduction

The entrepreneurial activity at any time depends on a complex and varying mixtures of socio economic, psychological, and other factors (Gangadhara Rao, 1986). A mul-

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titude of factors affects entrepreneurial spirit among people and they, in turn cast their influence on environment. The process of interaction and adaptation between the individual and his environment goes on. At any given time, the individuals take meanings from the situations in which they find themselves through the media of social roles, group norms and cultures, past experience and future expectations. The age and the level of education, as components of the individuals human capital, are considered to be important factor of entrepreneurial activity by most studies of entrepreneurship (Parker, 2009).

The period after independence has witnessed tremendous social, economic and political changes in India. These changes had their profound influence on entrepreneurial activity in different regions of the country. Several new entrepreneurial communities not known for mercantile background traditionally came foreword to start economic activities in trade, manufacturing and service sectors. Their scale of operation is generally small. The small business has been playing a key role in industrialization in Indian economy and will continue to be so in the future. Therefore, an analysis of factors which prompted the entrepreneurs under the study to start their business may provide a clue to the influences to which these new and small entrepreneurs reacted to (Narasimha Murthy, 1989)

The status of entrepreneurship development in Mizoram is not much different from other north east states; rather it is yet to find a place on the industrial map of India being 'a no industry area' at the national level. In Mizoram, there are no large scale industries. The industry of Mizoram is dominated by tiny industries, village and cottage industries, handloom and handicraft industries etc, with small investment. Mizoram did not make much progress in the development of industries of any type big or small. There is a high dependence on government jobs. Besides this, the few public sector enterprises in the state are making heavy losses every year and they failed to expand their activities and can not be taken as a role model for future entrepreneurs. This may be due to political and social factors-lack of entrepreneurial mind and future vision. Mizo are known to be sincere, courageous, industrious, intelligent and capable of learning but lack specialization and are averse to physical labour. Mizo people love white-collar jobs. One solution to the problem of educated unemployed may be development of entrepreneurship. The government policy makers should take this as a challenge for them. There is a need to change the mindset of the new generations. Their horizons are to be opened up by bringing change in their thought.

Objective

The objective of this paper is to study the age and educational level of the micro and small entrepreneurs in Aizawl district, Mizoram.

Methodology

The study covers diverse range of micro and small enterprises in Aizawl district. Since it is an exploratory study, it is mostly based on primary data collected from the entrepreneurs of micro enterprises. As per the Third Census of Small Scale Industries, there were 2718 registered small scale industries in Mizoram, out of which 2027 were in Aizawl district (1914 were in Aizawl urban and 113 were in Aizawl rural). Precisely all these enterprises constituted the population from which the sample for the purpose of the present study had to be chosen. The number of entrepreneurs engaged in activities like manufacturing, printing/publications, food processing, handlooms, tailoring etc are found to be abundant in Aizawl district of Mizoram. Almost 75% of the registered enterprises (2027 out of 2718) are located in Aizawl district. Therefore, it was thought that Aizawl district represents the whole of Mizoram. The size of the sample was fixed at 20% of the enterprises in Aizawl district. Accordingly, a total of 406 enterprises (383 enterprises in Aizawl urban and 23 enterprises in Aizawl rural) were covered. Then the sample was drawn by using random sampling technique. However, in the course of identifying the sample enterprises in the field study it was found that some of the enterprises were either non-functional or closed units. In such instances, those sample units were selected randomly again. Another practical problem faced at the time of selection of sample units was relating to the nomenclature used in the records kept by the Directorate of Industries, government of Mizoram. In these records micro, small and medium enterprises were not differentiated because such data were based on the nomenclature used prior to the enactment of the Micro, Small and Medium Enterprise Development (MSMED) Act 2006. Hence the researchers had to take the difficulty of eliminating medium enterprises from the list with a view to confine to only micro and small enterprises. It was to be noted that such type of small enterprises are very few in the data provided by the Third Census of Small Scale Industries in respect of Mizoram.

Information from the sample entrepreneurs was collected by administering a schedule. Data were collected at the place of work of the entrepreneurs. The data thus collected were further supplemented by unstructured interviews with the entrepreneurs. The sample units drawn on the basis of random sampling technique fall under seven groups of business activities as such as food items, wooden, repair services, steel/metal products, printing/publication, handlooms, tailoring.

Findings and Discussion

It is identified the sources of entrepreneurship in Aizawl district of Mizoram by the socio economic characteristics of the entrepreneurs such as educational level and age of the entrepreneurs.

Age of the entrepreneurs

With regard to the age of entrepreneurs, the age of entrepreneurs is divided into five groups; the first group representing those below 30 years, the second group in the age group of 31 – 40, the third group in 41 – 50, the fourth group in 51 – 60 and those 60 years above are in the fifth group. The age at which the entrepreneurs entered the business is shown in Table 1. The age group 31 – 40 has the highest proportion (30%) among the entrepreneurs. The maximum number of the entrepreneurs started their business at a comparatively younger age, below 40 years of age, after completing their education., discharging their matrimonial engagements (getting married) and also after acquiring some years of experience. This indicates the early or late entry into entrepreneurial activity which has its own effect on the future of the enterprise.

This was followed by the age group 41 – 50 years which is 28.1%. The entrepreneurs in this group were matured and seem to have given more importance to gain enough experience before launching their ventures and also to their initial lot of commitments at home front when the children are more dependent on the parents. The third age group was found to be those of the entrepreneurs in the age group of younger ones who started their entrepreneurial pursuits at an early age of less than 30 years of age, which is 19.2%. They were bitten by the entrepreneurial bug rather early in their lives and were much more enthusiastic enough to wait for either getting married or gaining some experience before launching their business. On the other hand, lesser percentage of the entrepreneurs in this group may be attributable to the fact that at younger age, the potential entrepreneurs are not fully confident and are not well determined to run their own business. Compared with the fact that 15.8 % of the entrepreneurs entered into the entrepreneurial activity before fiftieth years of age, 6.9% of the entrepreneurs started their business at sixty years above. These entrepreneurs seem to have discharged all their duties at the home front and started their business with a view to pass their time in a productive way.

Overall data indicates that the entrepreneurs have the tendency to start their entrepreneurial activities at young age as almost 50% of the entrepreneurs ventured into entrepreneurship at the age of 40 years or below. However, going by the whole picture, age does not seem to be a bar so far as one's entry into business profession is concerned.

Table - 1**Age of the entrepreneurs' at the commencement of business**

Age of the entrepreneurs' at the commencement of business			
	Age of the entrepreneurs (in years)	No. of entrepreneurs	%
1	Below 30	78	19.2
2	31 – 40	122	30.0
3	41 – 50	114	28.1
4	51 – 60	64	15.8
5	Above 60	28	6.9
	Total	406	100.0

Source: Field survey

Education of the entrepreneurs

While studying the socio economic characteristic of entrepreneurs, it was considered important to evaluate the level of formal education because the formal education has always been considered as an important plus-point of an individual in building his entrepreneurial career. A higher level of education can positively affect the success of entrepreneurial ventures (Pragg, 1999). The formal education not only helps in the gaining the required knowledge for a job which demands non-traditional skills but also imparts knowledge about the different occupational opportunities. In Mizoram, the formal education is looked upon as a means to improve one's socio economic position in the society. People have now aware of the importance of education in the development of human resources. If one rejects the notion that investment in education must be productive, then he should also be prepared to reject the goal of rapid economic progress (Frederick Harbiton and Charles A. Myers, 1968)

The beginning and spread of education in Mizoram was mainly due to the hard labour and sincere efforts of the western Christian missionaries who came to Mizoram not long after the annexation of the land by the British in 1890 (Know Your Own Land, 1982). The history of education in Mizoram started with the coming of two Christian missionaries, Rev.J.H. Lorrain and Rev. F.W. Savidge who arrived at Aizawl, on the 11th January, 1894. Immediately they erected a small hut on a suitable hillock, now called Mac Donald Hill at Aizawl. In this humble hut they began their first mission of imparting education to the Mizo people. In the beginning of 1895 they ventured to prepare Mizo alphabet in Roman script. Few Mizo began to learn the preliminary lesions in this hut. The then Superintendent of Lushai Hills, Col. J.Shakespeare erected another hut for the hostel near Fort Aijal (Aijal was the

previous name of Aizawl). The hostel accommodated only few learners mainly the chiefs and the sons of the chiefs. The two missionaries, however stayed only for four years and returned to their country in December 1897. During their four years stay in Mizoram the missionaries started preparation of Dictionary of the Lushai Language. They were succeeded by another missionary, Rev. D.E. Jones in 1897 (Parry 2009).

Rev.D.E. Jones started schools afresh in 1898. Towards the end of the year, Rev. Edwin Rowlands joined him who was deputed to look after education in Mizoram. The first school was started on the hill behind the present Synod Bookroom, Aizawl. By 1900, there are six lower primary schools in different localities of Aizawl. In 1904, a separate school for girls was established on the opposite hillock. In 1901 census, there were 25 women literates against 736 men. According to the first School Report in October 1903, there were 15 (fifteen) lower primary schools in Mizoram, 6 (six) in Aizawl and the rest in various parts of the interior places. The first lower primary school exam was conducted in June 1903 where two females passed among the 19 successful examinees (Mizo Women Today, 1991).

One had to go outside Mizoram to pursue higher studies against odds and difficulties as there had not been any way of doing beyond Middle School level, and that was afforded only by a few wealthy people. The nearest High School had been the Government High School at Shillong (Meghalaya) which required about a 180 km by boat to reach the nearest railhead from Aizawl (Lalhmuaka 1981). With a steady progress and growing demand of students for higher studies, the first High School in Mizoram called Mizo High School was started in 1944. In spite of the benefits of Mizo High School, one's ambition for higher studies above matriculation was still to be met and even the bright ambitious matriculated students could not proceed further. A generation elapsed between the first high school and the opportunity of having a college. The main difficulty thereof being the disadvantageous just after the Second World War immediately following the departure of the British from India followed by independence with the vexed political atmosphere in Mizoram at that time.

In this background, it was thought prudent to study the educational level of the entrepreneurs. Education aimed at bringing out the best from man and thereby helping the development of a nation. Development of a nation is in turn the development of man. Man means his resourcefulness. Resourcefulness means initiative to find new and better ways and the plan to look for opportunities and turn them into reality. This is the relationship between education, entrepreneurship and development. Education is the best source of development of man's resourcefulness which makes him well balanced. Education is not for making people wealthy but for productive and for making people an asset and not a liability (Choudhury, 2000). This is the importance of education for entrepreneurial development.

In the present study it is ascertained the educational level of the entrepreneurs by the examinations they have passed or the degrees they have obtained from schools and colleges. The level of education has been indicated into five broad categories: (1) Illiterate - those who can neither read nor write (2) School - those who completed their higher secondary school in any discipline (3) College - those who completed their graduation in any course other than professional course (3) University - those who have obtained their master degree from any recognized university other than professional course (4) Professional - this includes diploma, degree or post-graduate degree in management and engineering. The educational level of the entrepreneurs are shown in table – 2.

Table – 2

Entrepreneurs' educational level

Entrepreneurs' educational level			
	Educational level	No. of	%
1	Illiterate	25	6.2
2	School	281	69.2
3	College	83	20.4
4	University	15	3.7
5	Professional	2	0.5
	Total	406	100.0

Source: Field survey

From the above tale it could be observed that only 6.2% of the entrepreneurs are illiterate. Their innate skills and talents may have encouraged them to enter business scene. Their low level of formal education did not act as a barrier to their entrepreneurial career. Majority of the entrepreneurs which is 69.2% had education only up to school level and slightly more than one-fifth of them had college education. While 3.7% completed education up to university, only 0.5% had professional education. Entrepreneurs with professional qualifications are not much coming forward into entrepreneurship probably because of their good job prospects.

Most of the parents send their children to schools with the intention of preparing them for government jobs. In a less developed state like Mizoram the first choice job is government job because of assured and regular income. But with the growth of population and increase in the number of educational institutions in the state, a large number of educated youths are produced by these institutions every year, it is not possible for the government to provide employment in government services to all the educated youths. Fortunately there are few institutions like polytechnic, ICFAI and

DoEACC where students can study various applied subjects. These institutions foster entrepreneurship among educated unemployed. Now, the Mizoram state government has and enforced the New Industrial Policy of Mizoram 2000. Under this policy the new and existing units can avail incentives and various types of subsidies. It is also expected that this industrial policy of the state encourage many educated unemployed to come forward to entrepreneurship.

Conclusion

From the present study it can be seen that the entrepreneurs have the tendency to start their entrepreneurial activities at young age as almost 50% of the entrepreneurs ventured into entrepreneurship at the age of 40 years or below. Age and educational level are introduced are explanatory variables in choice of entrepreneurship as work engagement option. However, going by the whole picture in the present study, age does not seem to be a bar so far as one's entry into business profession is concerned. It cannot be said that entrepreneurship finds no place among educated youths as about one-fourth of the entrepreneurs in the present study are graduates or post graduates. Therefore, it is interesting to note that the degree holders coming forward in such a significant proportions is an encouraging trend. Our data also indicates that a good educational background and success in business are positively related. Good formal education background enables the entrepreneurs to handle the problems in business in an efficient manner. Besides, in an economy where opportunities are few, education plays a significant role in shaping aspirations, ambitions, and a sense of achievement among entrepreneurs.

References

- Choudhury, Hira Neog (2000), 'Women Entrepreneurship in Assam', in 'Entrepreneurship Development in North East', [D.D. Mali (Ed)], Indian Institute of Entrepreneurship, Guwahati, pp. 168 – 169.
- Frederick Harbiton and Charles A. Myers, (1968), 'Education, Manpower and Economic Growth'. Oxford and IBH Publishing Co, Culcutta, p. 13
- Gangadhara Rao, N (1986), Entrepreneurship and Growth of Enterprises in Industrial Estate, Deep & Deep Publications, New Delhi
- Know Your Own Land : Mizoram, Series – iv (1982), Tribal Research Institute, Government of Mizoram, Aizawl, p. 8
- Lalhmuka (1981), Zoram Zirna Lam Chhinchhiahna [The Records of Zoram Education(in Mizo)] Tribal Research institute, Government of Mizoram, Aizawl

- Narasimha Murthy, BEVV (1989) "Entrepreneurship in Small Towns" Mittal publication, New Delhi, pp. 51-52
- Parker, S.C (2009), 'The Economics of Self employment and Entrepreneurship', Cambridge: Cambridge University Press
- Parry, N.E (2009), A Monograph on Lushai Customs and Ceremonies, Tribal Research Institute, Government of Mizoram, Aizawl, p.43
- Pragg, M (1999), 'Determinants of Willingness and Opportunities to start as Entrepreneurs' Kyklos, 48 (4), p. 513-540
- Third Census of Small Scale Industries (2001-02), Ministry of Small Scale Industries, Government of India, New Delhi

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