

ISSN (P) 2395-731X
ISSN (O) 3139-9541

Mizoram Educational Journal

(A National Refereed Journal)



Vol. IX, Issue 3, September, 2023
&
Vol. IX, Issue 4, December, 2023

- Patron** : Dr. L.N. Tluanga, Eminent Educationist, Formerly: Director, School Education Department, Gov't. of Mizoram; Member, Mizoram State Planning Board; Member, State Advisory Board of Education, Mizoram; Member, Education Reforms Commission of Mizoram 2009-10;etc.
- Advisor** : Prof. R.P. Vadhera, Former Vice Chancellor, ICFAI University, Mizoram. Former Pro-Vice Chancellor, Mizoram University, Aizawl, Mizoram

EDITORIAL BOARD

- Chief Editor** : Prof. Lalhmasai Chuaungo
- Editors** : Prof. Lynda Zohmingliani
Dr. Lalhlimpuii
Dr. Prateek Chaurasia
Dr. Sian Lalchhandami
- Circulation Managers** : Ms. Lalramthari
Dr. Francis L.R. Puia Tlau
Dr. Zodinsanga Sailo
Dr. R. Zothanliana
Mr. HT. Malsawmtluanga
- Ex-Officio Member** : 1. Prof. Lalbiakdiki Hnamte,
President, Mizoram Educational Foundation
2. Dr. Lalzarmawii, General Secretary,
Mizoram Educational Foundation

NATIONAL ADVISORY BOARD

- Prof. K.K.Sharma** : Chairman, Council for Teacher Education, Haryana State Chapter & Former Pro-Vice-Chancellor, NEHU, Shillong. Residence: Kurukshetra, Haryana
- Prof. Swarnalata Das** : Former Professor & Head, Department of Education, Gauhati University, Guwahati, Assam
- Prof. M.D. Usha Devi** : ICSSR Sr. Fellow, Institute for Social and Economic Change, Bengaluru & Former Professor & Head, Centre for Human Resource Development, Bengaluru, Karnataka
- Prof. R.P. Shukla** : Professor, Head & Dean, Faculty of Education, Banaras Hindu University, Varanasi, U.P.
- Prof. Benudhar Chinara** : Professor & Head, Faculty of Education, Visva Bharati University, Santiniketan, West Bengal
- Dr. Sunil Behari Mohanty** : President, All India Association for Educational Research (AIAER) & Editor, Journal of AIAER, Puduchery.

ISSN (P) 2395-731X
ISSN (O) 3139-9541

Mizoram Educational Journal

(A National Refereed Journal)

Chief Editor : Prof. Lalhmasai Chuaungo
Editor : Prof. Lynda Zohmingliani
Dr. Lalhlimpuii
Dr. Prateek Chaurasia
Dr. Sian Lalchhandami

Vol. IX, Issue 3, September, 2023
&
Vol. IX, Issue 4, December, 2023

Annual Subscription

	Within India
Individuals	₹ 500
Institutions	₹ 500

Annual Subscription commences with January and ends with December every year.

Advertisement Tariff (For one issue)

Full page	₹ 1500
Half page	₹ 800

Mizoram Educational Journal, a national refereed journal is a publication of Mizoram Educational Foundation (MEF), Mizoram, Aizawl. Mizoram Educational Foundation is a body of professionals interested in promoting the cause of education for the overall development of Mizoram in particular and of the country in general. It was started way back in 1999 when the first adhoc Executive Committee consisting of college teachers in Aizawl as well as teachers from Department of Education, NEHU, Mizoram Campus, Aizawl, was constituted. It was registered under Societies Registration Act, 1860 with registration no. S.R./MZ-64 of 2005-06 on 6th September, 2005. Apart from providing a forum by organizing seminars, conferences, symposia and other related academic activities on various educational matters, Mizoram Educational Foundation disseminates educational ideas, knowledge, experiences and research findings through its journal named Mizoram Educational Journal.

Views and opinions expressed in the articles are those of the contributors and do not necessarily reflect the policies of Mizoram Educational Foundation.

Published by Prof. Lalbiakdiki Hnamte, on behalf of The Mizoram Educational Foundation. Postal Add: Muka Section, Near Presbyterian Church, Mission Veng, Aizawl Municipal Council, Aizawl, Mizoram, 796001. Contact No: 9862344458; Email: mzut092@mzu.in

Printed at:



Lois Bet
Print & Publication
Chanmari, Aizawl
Ph : 2349250 / 2349970

CONTENTS

From the Desk of the Chief Editor	v
A Study of Parental Support among High School Students in Aizawl District	1
<i>K. Lalhlimawmi, F. Lalrinzuali & Vanlaldinpuia</i>	
Achievement Motivation of Prospective Elementary School Teachers in Aizawl District	13
<i>D. Sangzuala, J. Lalsangzuala, Lokanath Mishra & Vanlaltanpuui</i>	
A Study of the Attitude of Undergraduate Students towards Online Learning in Aizawl	22
<i>Pooja Walia & Vanlalmangaihzualla</i>	
Attitude towards E-learning among B.Ed Students of Mizoram University	37
<i>C.Lalsangpuui, Vanlalruatfela Hlondo, Vasty Lalthanpuui & Ms. Lalremsangi</i>	
Assessment and Accreditation in Higher Education: Perception by College Teachers	45
<i>H.Malsawmi, Ramhlupuii, Zonunmawii, Estherine Lalrinmawii & Lalchhuanmawii</i>	
Constructivism as an Approach in Teaching-Learning Process	57
<i>Lalhruaitluangi & Nitu Kaur</i>	
Job Satisfaction and Value System of Male and Female Secondary School Teachers in Mizoram	71
<i>Lalzarmawii</i>	
Feeding Practice and Malnutrition among Under-Five Children of Mizoram	79
<i>Laltanpuui, Vk Roy, Lukima S. & H.T. Lalthanthuami</i>	
Quality of Life and Depression among Caregivers of Children with Attention Deficit Hyperactivity Disorder (ADHD)	91
<i>Lalawmpuia, Lalnunpuui & Zokaitluangi</i>	

Emotional Intelligence of Higher Secondary School Students in Aizawl District: A Critical Study	102
<i>J. Lalhriatpuii, Francis L.R PuiaTlau & Venus Lalchhuanthangi</i>	
Mother's Religiosity Prediction on the Resilience of their Children	112
<i>Lalhmingliani Hlondo & Zokaitluangi</i>	
Education as a Medium for Indulging in Social Change	122
<i>Gautam Makwana</i>	

From the Desk of the Chief Editor

The significance of research and research-based papers presenting the outcomes of the research is well-known among teachers of higher education institutions and needs no exaggeration. The Editorial Board of Mizoram Educational Journal is bringing out Issues 3 and 4 of Volume IX of the journal in which 12 research-based articles are presented to the readers.

The indispensability of parental support for overall development of children in general and academic success in particular is undeniable. It is delightful to note that K. Lalhlhawmi, F. Lalrinzuali and Vanlaldinpuia in their study reported that majority (95%) of parents of high school students in Aizawl district of Mizoram gave high parental support to their children. Apart from parental support, achievement motivation plays a significant role in achieving a particular goal. The study on achievement motivation of prospective elementary school teachers in Aizawl District conducted by D. Sangzuala, J. Lalsangzuala, L. Mishra and Vanlaltanpuui came out with the finding that majority of the prospective elementary school teachers had low academic achievement motivation. The finding is quite discouraging and some measures for improvement of achievement motivation among them need to be taken.

The importance of online learning in today's education particularly at higher education level is well recognized. A study of the attitude of undergraduate students towards online learning in Aizawl was conducted by PoojaWalia and Vanlalmangaihzuala which revealed that most students had average attitudes towards online learning. Attitude towards e-learning among B.Ed students of Mizoram University studied by C.Lalsangpuui, Vanlalruatfela Hlondo, Vasty Lalthanpuui and Lalremsangi also revealed that the students had average attitude towards e-learning and that there was no significant difference in their attitude with respect to their gender or educational qualification.

It is well known that assessment and accreditation is the means through which higher education in our country is monitored. A study conducted by H.Malsawmi, Ramhlupuii, Zonunmawii, Estherine Lalrinmawii and Lalchhuanmawii reported that most of the college teachers in Mizoram had a positive view of the assessment and accreditation in higher education in the state. Some measures suggested by them are expected to bring about improvements in the assessment and accreditation of higher education in Mizoram. The emphasis on student-centred learning found in today's education may be the most important contribution of constructivism. The paper on constructivism as an approach in teaching-learning process contributed by Lalhrualtuangi and Nitu Kaur gives us insight into its approach and implication on teaching-learning process. In a study on job satisfaction and value system of male and female secondary school teachers in Mizoram, Lalzarmawii found that the male teachers' job satisfaction was significantly related with their economic and social values whereas job satisfaction of female teachers was found having a significant relationship with their economic, social and religious values.

The crucial role played by nutrition in the maintenance of health as well as the growth and development of the body is well known. In this context, Laltanpuui, Vk Roy, S. Lukima and H.T. Lalthanthuami studied feeding practice and malnutrition among under-five children of Mizoram. The results showed that there was significant association between a child's weight and height status and initiation of breastfeeding after birth and duration of breastfeeding after the introduction of complementary feeding ($P < 0.05$). Quality of life and depression among caregivers of children with Attention Deficit Hyperactivity Disorder (ADHD) was also studied by Lalawmpuia, Lalnunpuui and Zokaitluangi. Results revealed that parents of ADHD scored lower than parents of children with no mental illness on psychological quality of life whereas scores on depression were higher among parents of ADHD than parents of children with no mental illness. The results revealed the high need for psychological intervention among parents of ADHD.

Emotional intelligence has occupied a very important place in one's life as a high emotional quotient helps to build relationships, reduce stress, and defuse conflict. A critical study on emotional intelligence of higher secondary school students in Aizawl District carried out by J. Lalhriatpuui, Francis L.R PuiaTlau and Venus Lalchhuanthangi came out with the finding that majority of the students had a normal average level of emotional intelligence which needs to be upgraded. In a study titled 'mother's religiosity prediction on the resilience of their children', Lalhmingliani Hlondo and Zokaitluangi found that the mothers' religiosity and the resilience in children had a significant positive correlation. Moreover, mothers' religiosity had a role in predicting the resilience of their children. These findings portrayed the importance of maternal religiosity on the resilience of their children.

Gautam Makwana carried out a study to consider the ways in which education might change society. According to the findings, education is the cornerstone for bringing about social change. The paper concludes that sociology is the intellectual foundation that directs the course in the art and science of education; and teachers become protagonists of the change in thought. Education shapes societies and people, thoughts, problem-solving, and life patterns, leading to individual and social change.

Lastly, it is the wish of the Editorial Board of Mizoram Educational Journal that the data and findings presented in this issue would meet the requirements of many readers in their pursuit of knowledge and understanding.

Lalhmasai Chuaungo
Chief Editor

A Study of Parental Support among High School Students in Aizawl District

K. Lalhlimawmi*

F. Lalrinzuali**

Vanlaldinpuia***

Abstract

Parental support is an indispensable factor effecting the overall development of children in general and academic success in particular. The present study examines the parental support among high school students in Aizawl district. Stratified random sampling technique was employed for collecting the data. The sample consisted of 140 parents (70 parents from Government school and 70 parents from Private school) of Class 10 students in Aizawl district. The “Parental Support Scale” developed by Shobha Nandwana and Dr.Nimmi Asawa was used to measure the parental support in their children’s education. The findings showed that the majority of parents (95%) had high parental support. However, no significant differences were found in the parental support with regard to gender, educational qualification and the type of school.

Keywords: Parental support, children’s education, high school students

Introduction

Family is the most important component in a child’s life among the influences and factors that shape and affect a child’s existence. Families and parents care for their children by meeting their needs and keeping them from harm from the moment they are born. Children’s initial relationships are with their parents and family. They serve as a child’s first teachers in life and serve as role models for experiencing and comprehending them. Families are crucial in providing early care and education for children, as well as ensuring that they are prepared to learn when they start school. Therefore, parents that actively encourage their children’s growth and development are successful parents since parents and families hold a major responsibility as far as children’s education and upbringing is concerned (Durisic&Bunijevac, 2017). The

*K. Lalhlimawmi, Research Scholar, Department of Education, Mizoram University

**Dr. F. Lalrinzuali, Assistant Professor, Department of Education, Mizoram University

***Vanlaldinpuia, Research Scholar, Department of Education, Mizoram University

opportunity for a child to grow more in life are provided by the way they are loved, cared for, and nurtured at home. A family's parenting style or method has an effect on a child's development similar to creating a foundation that may assist determine a child's future.

Children's education depends on parental encouragement and support for learning activities at home, as well as parental involvement in schools. In fact, a strong relationship between parents and educators is the most impactful factor and indicator of effective parental support and involvement (Davies, 1996; Emeagwali, 2009; Epstein, 2009). A positive relationship between home and school, no doubt fosters the education and overall development of children (Edwards & Alldred, 2000; Henderson & Berla, 1994; Richardson, 2009; Sanders & Sheldon, 2009; Sheldon, 2009)..It is one of the most significant contributions that parents can make to their child's development. Parents can help their children in a variety of ways, including physical affection, friendship, and consistent contact. Improving learning outcomes requires strong collaborations between parents, families, and schools to enhance children's learning. Parents are their children's first and most important educators.

Parental engagement, in its broadest sense, refers to collaborations between families, schools, and communities aimed at boosting parental awareness of the benefits of participating in their children's education and equipping them with the necessary skills. Muller (2009) writes, "Family-school and community partnerships are redefining the boundaries and roles of education." They increase the capability of parents and communities, as well as the settings in which children can learn more successfully. In this sense, they extend education outside the classroom.

The education of a child begins at home. Parents are their first teachers and play an important part in forming their personalities. A student's actual learning is shaped by a balance between home and school education. Assist them in their educational endeavours and accompany them with sincere inspiration. Encouragement from parents has played a critical role in the achievement of students. They play an important role not just at home, but also in school.

Parents' engagement in their children's education begins at home, with parents providing a secure and healthy environment, suitable learning opportunities, support, and a positive attitude toward school. This can be seen in several studies (Greenwood & Hickman, 1991; Henderson & Berla, 1994; Rumberger et al., 1990; Swap, 1993; Whitaker & Fiore, 2001; Epstein, 2009)

Students with supportive parents are more successful, have a more favourable attitude towards school, and have more self-esteem and self-confidence. Poor school achievement, violent behaviour, high suspension rates, and poorer graduation rates

can all result from a lack of parental participation. Increased parental participation is the key to improving children's academic performance.

Rationale of the study

Parental support is an indispensable factor in maximizing the potential of students to succeed academically. Therefore, the enhancement of parental support in education has become a fundamental issue in educational policy and research. Parental support and partnerships between the family and the school have come to be regarded as one of the most successful educational strategies by which student achievement is guaranteed. Since research findings have established the correlation between parental support and educational success, there is a focus on improving student success while reducing educational inequities. However, current knowledge regarding the nature and magnitude of the effects of parental support in secondary education is inconsistent and limited in scope. Presently, although parental support has been widely supported in educational policies and practices, its implications are not always clearly established. Thus, the study aims to conduct further study into the parental support in children's education and to detect good practices. It will focus on the role played by the parents of the students in the private and government school and on both male and female students individually.

Research questions

The following research questions have been generated:

1. What is the level of parental support among the high school students in Aizawl district?
2. What is the parental support of high school students of Aizawl district with reference to gender?
3. What is the parental support of high school students of Aizawl district with reference to parental qualification?
4. What is the parental support of high school students of Aizawl district with reference to type of school?

Statement of the problem

The problem has been stated as "A Study of Parental Support among High School Students in Aizawl District."

Objectives

1. To find out the parental support of high school students in Aizawl district.
2. To compare the parental support of high school students of Aizawl district with reference to gender
3. To study and compare the parental support of high school students of Aizawl district with reference to parental qualification
4. To study and compare the parental support of high school students of Aizawl district with reference to type of school.

Hypotheses

1. There is no significant difference of parental support of high school students of Aizawl district with reference to gender.
2. There is no significant difference of parental support of high school students of Aizawl district with reference to parental qualification.
3. There is no significant difference of parental support of high school students of Aizawl district with reference to type of school.

Methodology

In the present study the researcher employs a descriptive survey method to find out the differences if any, in parental support of parents of private and government school students.

Population

The population consists of parents of Class 10 students within Aizawl District.

Sample

The sample of the study consisted of 140 parents where 70 parents were from government schools and another 70 parents were from private schools.

Procedure of data collection

The investigator adopted a stratified random sampling technique for selecting the samples. For the present study, the sample consisted of 140 parents (70 parents from Government schools and 70 parents from Private schools) within Aizawl district. After getting permission from the researcher's supervisor and the school authorities,

the data were collected among the parents of high school (Class X) students. The parents were asked to respond and choose the given options freely related to their children's education. The responses were kept strictly confidential and only used for research purposes. Data obtained from the various sources were analysed using descriptive statistics.

Tool used for data collection

In this research "Parental Support Scale" developed by ShobhaNandwana and Dr.NimmiAsawa was used.

Analysis and interpretation

The respondents' responses were categorised, collated, and analysed using the established scoring methodology. Utilizing the proper statistical methods, data analysis was accomplished. The results were meaningfully interpreted and presented in accordance with the study's goals and hypotheses as follows:

Objective no. 1: To find out the parental support of high school students in Aizawl district.

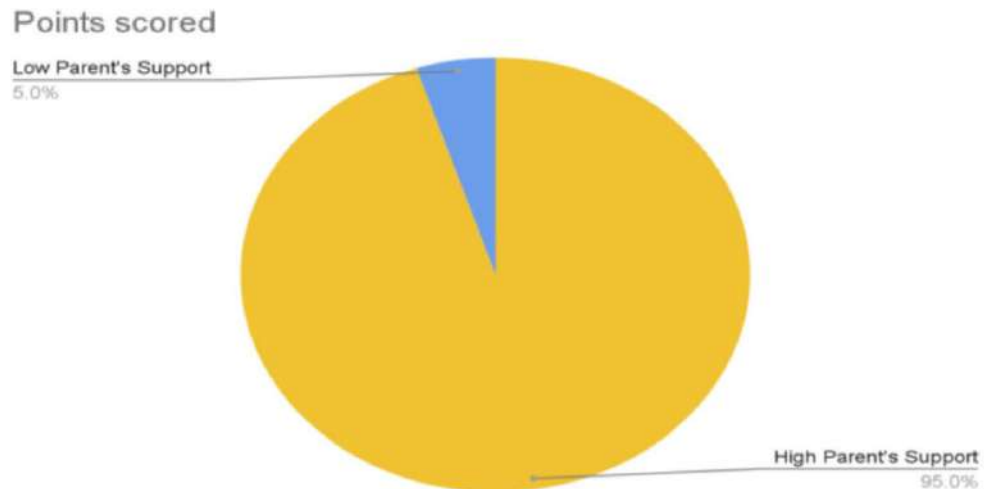
The scores obtained from parents of Government and Private School Class 10 students on the 'Parental Support Scale' were scored and tabulated. Based on their responses, parental support was classified into 2 levels as 'High Parent Support' and 'Low Parent Support' according to the norms of the scale. The scores above the 75 were categorised as high parent support and the scores below 74 were categorised as low parent support. Thus, depending upon their scores, the respondents were considered as having a High Parent Support (scoring 75 and above) and Low Parent Support (scoring 74 and below).

The table - 1 presented reflects the level of parent's support in their children's education in the Aizawl district.

Table No. 1

Level of Parental Support in their Children's Education in Aizawl District

Category	Range of Scores	No. of Parents	Percentage
High Parent's Support	75 and above	133	95
Low Parent's Support	Below 74	7	5
Total		140	100

Fig. 1**Level of Parental Support in their Children's Education in Aizawl District**

The table No. 1 and Fig. 1 shows that, as per the norms in the manual of the scale out of the 140 parents of High school students in the Aizawl district, 133 parents (95%) had high parent support, and 7 parents (5%) has low parent's support.

Objective no. 2: To compare the parental support of high school students of Aizawl district with reference to gender.

Hypothesis No.1 states: "There is no significant difference of parental support of high school students of Aizawl district with reference to gender."

Table No. 2 presents a comparison of parental support of high school students of Aizawl district with reference to gender.

Table No. 2**Gender Wise Parental Support of High School Students in Aizawl District**

Groups	Number	Mean	SD	MD	SE MD	T value	Sig. Diff.	P value
Male	88	87.19	7.912	-1.076	1.285	-0.838	0.108	0.40348
Female	52	88.27	6.259					

Not significant at .05 level

Fig.2

Mean of Parental support of male and female parents of High School students in Aizawl District

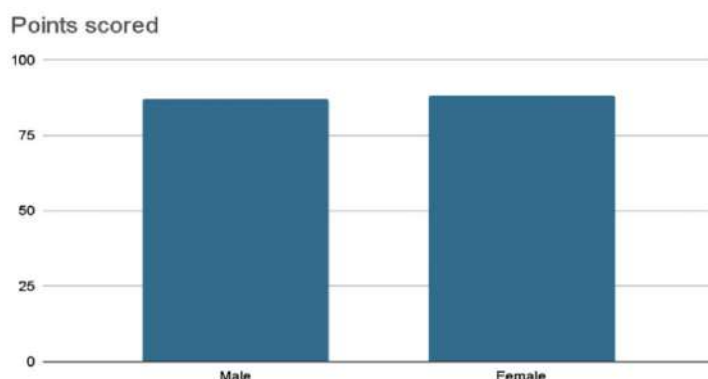


Table No.2 shows, the mean, SD and t-value of parental support of private and government of high school students in Aizawl district.

As shown in table No. 2 the ‘t’ value for the significance of the difference between the mean scores of male and female is -.838. The table shows no significant gender difference (i.e. $t = -.838$; $p = .40348$) at 0.05 level. Further the table No. 2 and Fig.2 shows that based on the mean scores, female parents (88.27) have higher mean scores than male parents (87.19) of High School students in Aizawl district.

Therefore, the null hypothesis (No.1) stating that there is no significant difference of parental support of high school students of Aizawl district with reference to gender is accepted.

Objective No. 3: To study and compare the parental support of high school students of Aizawl district with reference to parental qualification

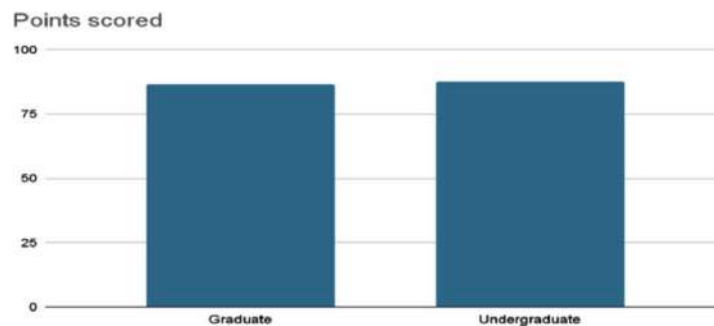
Hypothesis No.2 states: “There is no significant difference of parental support of high school students of Aizawl district with reference to parental qualification.”

Table No.3 presents a comparison of parental support of high school students of Aizawl district with reference to parental qualification.

Table No. 3**Parental Qualification Wise Parental Support of High School Students in Aizawl District.**

Groups	Number	Mean	SD	MD	SE MD	T value	Sig. Diff.	P value
Graduate	31	86.55	9.201	-1.342	1.494	-0.898	0.011	0.37075
Undergraduate	109	87.89	6.735					

Not significant at .05 level

Fig.3**Mean of parental support of graduate and undergraduate parents of High School students in Aizawl District**

From the table No. 3 the mean, SD and t-value of parental support of private and government of high school students in Aizawl district.

As shown in table No. 3 the 't' value for the significance of the difference between the mean scores of male and female is -.898. The table shows no significant gender difference (i.e. $t = -.838$; $P = .37075$) at 0.05 level. Further the table No. 3 and Fig. 3 shows that based on the mean scores, undergraduate parents (87.89) have higher mean score than graduate parents (86.55) of High School students in Aizawl district.

Therefore, the null hypothesis (No.2) which states that there is no significant difference of parental support of high school students of Aizawl district with reference to parental qualification is accepted.

Objective no. 4: To study and compare the parental support of high school students of Aizawl district with reference to their type of School

Hypothesis No.3 states: “There is no significant difference of parental support of high school students of Aizawl district with reference to School.”

Table No. 4 presents a comparison of parental support of high school students of Aizawl district with reference to type of School.

Table No. 4

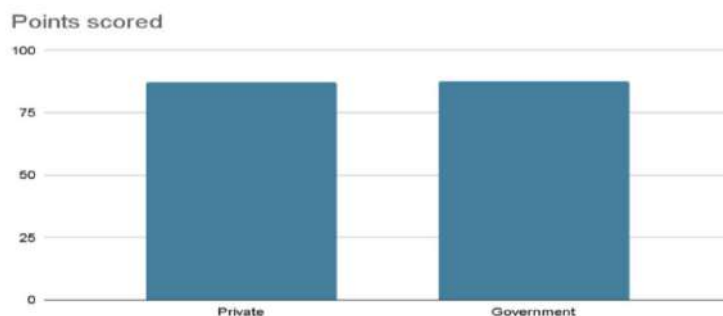
School Wise Parental Support of High School Students in Aizawl District.

Groups	Number	Mean	SD	MD	SE MD	T value	Sig. Diff.	P value
Private	70	87.38	7.315	-0.41	1.244	-0.333	1.244	0.73964
Government	70	87.8	7.405					

Not significant at .05 level

Fig.4

Mean of Private and Government School parents of High school students in Aizawl District



From the table No. 4 the mean, SD and t-value of parental support of private and government of high school students in Aizawl district. \

As shown in table No. 4 the ‘t’ value for the significance of the difference between the mean scores of male and female is -.333. The table shows no significant gender difference (i.e. $t = -.838$; $P = .73964$) at 0.05 level. Further the table shows that based on the mean scores, government school parents (87.80) have higher mean score than private school parents (87.38) of High School students in Aizawl district.

Therefore, the null hypothesis (No.3) stating that there is no significant difference of parental support of high school students of Aizawl district with reference to School is accepted.

Major findings

Parental Support of High School Students in Aizawl District

1. Out of the 140 parents of High school students in the Aizawl district, 133 parents (95%) had high parental support.
2. 7 parents (5%) were categorized as having low parental support.
3. The overall finding shows that the majority of parents had high parental support, and it was also found that very few of them were found to have low parental support.

Parental Support of High School Students in Aizawl District with Reference to Gender

There is no significant difference of parental support of high school students of Aizawl district with reference to gender.

Parental Support of High School Students in Aizawl District with Reference to Educational Qualification

There is no significant difference of parental support of high school students of Aizawl district with reference to educational qualification.

Parental Support of High School Students in Aizawl District with Reference to their Type of School

There is no significant difference of parental support of high school students of Aizawl district with reference to type of school.

Recommendations

As per the findings of this study, the following recommendations have been given:

1. Parental support is one factor that has been consistently related to a child's increased academic performance. So, the parents should try to involved and assist their child in their academic activities for better development of their child.
2. Parents should have a positive attitude and support towards their children's education as it can inspire and empower the child to develop good learning habits.
3. The parents should try to understand the emotional and intellectual needs of their children. 4. The parents should be involved in decision making regarding policy and management of the school.

5. School administrators and policy makers should continue to investigate ways to increase a parental support about their child's education and demonstrate to parents that their action is related to their child's academic performance.
6. School principal/head may set time in the curriculum for team building exercises between students, teachers and parents.

Conclusion

The majority of the parents had high support in their children's education at the High School in Aizawl district. It was discovered that mothers were more active in their children's schooling than fathers. Therefore, schools should prepare parents and inform them of the requirements for their full participation in their children's education. In an effort to show their children love and affection, both parents should try to spend as much time as possible with them. It will assist in establishing a favourable learning environment for their kids at home.

References:

- Edwards, E. & Alldred, P. (2000). A typology of parental involvement in education centring on children and young people: Negotiating familialisation, institutionalisation and individualization. *British Journal of Sociology of Education*, 21(3), 435–455. <https://doi.org/10.1080/713655358>
- Davies, D. (1996). Partnerships for student success. *New Schools, New Communities*, 12(3), 13–21.
- Durisc, M., & Bunijevac, M. (2017). Parental involvement as a important factor for successful education. *Center for Educational Policy Studies Journal*, 7(3), 137-153. <https://files.eric.ed.gov/fulltext/EJ1156936.pdf>
- Emegwali, S. (2009). Fostering parent-teacher collaboration in the classroom. *Techniques (Association for Career and Technical Education)*, 84(5), 8.
- Epstein, J.L. (2009). In School, family, and community partnerships: Your handbook for action (3rd ed.). USA: Corwin Press.
- Greenwood, G. E., & Hickman, C. W. (1991). Research and practice in parent involvement: Implications for teacher education. *The elementary school journal*, 91(3), 279-288. <https://www.journals.uchicago.edu/doi/abs/10.1086/461655>.
- Henderson, A. T., & Berla, N. (1994). *A new generation of evidence: The family is critical to student achievement*. National Committee for Citizens in Education. <https://files.eric.ed.gov/fulltext/ED375968.pdf>.

- Richardson, S. A. (2009). Principal's perceptions of parental involvement in the "big 8" urban districts of Ohio. *Research in the Schools*, 16(1), 1–12. <https://www.proquest.com/openview/0f96f2d4b96d62f22635c40e4c2ad82c/1?pq-origsite=gscholar&cbl=10235>
- Rumberger, R. W., Ghatak, R., Poulos, G., Ritter, P. L., & Dornbusch, S. M. (1990). Family influences on dropout behavior in one California high school. *Sociology of education*, 283-299. <https://doi.org/10.2307/2112876>.
- Sanders, M. G. & Sheldon, S. B. (2009). Principals matter: A guide to school, family, and community partnerships. Corwin: A SAGE Company.
- Sheldon, S. B. (2009). In School, family, and community partnerships: Your handbook for action. (3rd ed.). USA: Corwin Press.
- Swap, S. M. (1993). *Developing home-school partnerships: From concepts to practice*. Teachers' College Press. <https://eric.ed.gov/?id=ED358220>.
- Whitaker, T., & Fiore, D. (2001). Dealing with difficult parents. Larchmont, NY: Eye on Education.

Achievement Motivation of Prospective Elementary School Teachers in Aizawl District

D. Sangzuala*

J. Lalsangzuala**

Lokanath Mishra***

Vanlaltanpuij****

Abstract

Achievement motivation plays a significant role in achieving a particular goal. High level achievement motivation drives an individual to get better performance in examination. This study attempts to find out the achievement motivation of prospective elementary school teachers in Aizawl district. The present study employs a descriptive survey method by aiming to determine the achievement motivation among prospective elementary school teachers from Aizawl district. By studying 180 population, the current investigation had been carried out in terms of gender, locale and academic achievement. The Academic Achievement Motivation Test Scale (AAMT-st) standardized and constructed by TR Sharma was used to collect, measure and analyse data. It was found that majority of the prospective elementary school teachers had low academic achievement motivation. No significant difference was found with regards to gender and locale while, weakly positive correlation had been found with regards to academic achievement.

Keywords: Achievement motivation, prospective elementary school teachers, Aizawl district

Introduction

Achievement motivation can significantly influence the teaching effectiveness of educators. Teachers with high levels of achievement motivation are likely to be

*D. Sangzuala, Research Scholar, Dept. of Education, Mizoram University, Aizawl.
Email:dsangzuala@gmail.com

**Dr. J. Lalsangzuala, Assistant Professor, IASE, Aizawl.Email:jrenthlei0711@gmail.com

***Prof. Lokanath Mishra, Professor, Dept. of Education, Mizoram University, Aizawl
.Email:mishra.lokanath70@gmail.com

****Dr.Vanlaltanpuij, Associate Professor, IASE, Aizawl.Email:vtanpuiihrahse@gmail.com

more committed, enthusiastic, and proactive in their teaching methods, which can positively impact students' learning outcomes.

Denhardt (2008) argued that motivation is not directly observable. Motivation is an inherent condition that drives individuals to act in specific ways to achieve specific goals and objectives. It is not easily manipulated or imposed externally, as it originates within the thoughts and emotions of individuals. It is important to note that motivation differs from satisfaction; while satisfaction is rooted in the past, motivation is forward-looking.

Generally speaking, Achievement motivation is expectancy of finding satisfaction in mastery of different and challenging performance whereas in the field of education, in particular it stands for the pursuit of excellence. (Chauhan, 2004). Prospective elementary school teachers with strong achievement motivation may create a more engaging and stimulating learning environment. This, in turn, can contribute to increased student motivation, participation, and academic achievement.

Rationale of the study

There are a lot of students seeking admission into the pre-service course of study for preparation to elementary school teachers. At the same time, the available seat is very limited as compared to those qualified students attempting to study the said course. Due to this, many students who are inspired to study pre-service elementary teacher education course were not be able to fit in the course. Meanwhile, there may be many students who are qualified and intelligent on the ground of their knowledge and capacity, but those students may not have motivation to become teacher in their future occupation. In fact, due to some limitation in the ground of employment opportunity, many students try to enter into the field of teaching. In such a situation, it may be difficult for the authorities to identify who are well motivated to become a teacher or not. And it seems that, those who have no zeal to become a teacher may not have strong desire to achieve in the pre-service course of study.

Investigating achievement motivation provides insights into the commitment and satisfaction levels of prospective teachers with their chosen career path. Understanding the factors that drive individuals to become teachers can inform strategies to enhance job satisfaction and reduce attrition rates. Therefore, attempt has been made to study achievement motivation of prospective elementary school teachers in Aizawl district.

Objectives of the study

1. To study the levels of achievement motivation of prospective elementary school teachers in Aizawl District.

2. To compare the achievement motivation of prospective elementary school teachers in relation to their gender.
3. To compare the achievement motivation of prospective elementary school teachers in relation to their locale.
4. To examine whether there is significant relationship between achievement motivation of prospective elementary school teachers and their corresponding academic achievement.

Hypotheses of the study

1. There exist different levels of achievement motivation among prospective elementary school teachers.
2. There is no significant difference between the achievement motivation of male and female prospective elementary school teachers.
3. There is no significant difference between achievement motivation of urban and rural prospective elementary school teachers.
4. There is no significant relationship between the Academic Achievement and Achievement Motivation of prospective elementary school teachers.

Method of study

In the present study, the investigator attempts to find out the achievement motivation of prospective elementary school teachers with their corresponding academic achievement. The study adopted descriptive survey study aiming to determine the achievement motivation. The variable to study is achievement motivation, academic achievement, gender and locale.

Population of the study

All the students presently studying the course of pre-service teacher education in Aizawl District constitute the population. So, the total number of students studying pre-service teacher education course comprises of the population of the study. Since, there is only one institution offering the said course, the investigator, without choosing sample, select the whole population for study following census method for collection of data. In this case, the investigator selects all the students present at the time of collecting data.

Table No. 1**Distribution of Respondents as per their gender**

Population		Total
Male	Female	
63	117	180

Tools for the study

In the present study, the Achievement Motivation has been measured with regards to academic achievement, gender and locale of the prospective elementary school teachers. To measure the Achievement Motivation, the Academic Achievement Motivation Test Scale (AAMT-st) (2018) standardized and constructed by TR Sharma was used. The test booklet contains thirty-eight (38) statements. Each of the statement has two options; the subjects choose the one which is correct according to them.

The investigator refers to the records of the institution and the examination result of pre-service teacher education from Mizoram Board of School Education for obtaining the number of students and academic achievement record respectively.

Procedure of data collection

The investigator personally administers the AAMT-st questionnaire and information to the selected sample. The subjects were informed to answer the question honestly. Their answers should not be based on what they think they should feel but based on how they actually feel. And they were told to tick the boxes provided for options in each of the statements.

Analysis and interpretation

Objective wise analysis and interpretation of the result had been carried out as follows:

Objective No 1. To study the levels of achievement motivation of prospective elementary school teachers in Aizawl District.

The levels of achievement motivation as per the responds by prospective elementary school teachers is depicted in the following table.

Table No. 2**Total Scores on Achievement Motivation**

Sl. No	Classification	Score	N	Percentage
1	High Academic Motivated	33 or above	1	0.56%
2	Average Academic Motivated	26 – 32	35	19.44%
3	Low Academic Motivated	25 or below	144	80%
	TOTAL		180	100%

As depicted in the table No. 2 majority of the population falls under the category of Low Academic Motivated containing as much as 144 subjects out of 180 which comprises 80 % of the population. On the other hand, the total number of populations which scores fall under the High Academic Motivated was only less than one per cent containing only 1 number of populations. There were 19.44 per cent of the population whose score comes under the category of Average Academic Motivated. Hence, it can clearly be seen that there exist different levels of achievement motivation among prospective elementary school teachers.

Objective No. 2. To compare the achievement motivation of prospective elementary school teachers in relation to their gender.

The difference between male and female prospective elementary school teachers upon the level of Achievement Motivation was calculated by applying statistical methods of t-test. The result was depicted in the following table.

Table No. 3**Comparative Analysis of Achievement Motivation of Male and Female Prospective Elementary School Teachers**

Gender	N	Mean	SD	Std. Error Mean	t	Sig. (p)	Remarks
						(2-tailed)	
Male	63	23.16	4.64	0.58493	0.304	0.761	Null Hypothesis accepted
Female	117	22.97	3.71	0.34312			
Total	180						

The mean score of female prospective elementary school teachers on achievement motivation is 22.97 with standard deviation 3.71; the mean score of male prospective elementary school teachers on achievement motivation is 23.16 with standard deviation 4.64.

Table No. 3 showed that the t-value for the significant difference between male and female prospective elementary school teachers in Aizawl District towards their achievement motivation. As seen from the table, the achievement motivation between 63 males and 117 females yielded a t-value of 0.304 with 178 degrees of freedom and the corresponding p-value is 0.761. Since, the calculated t-value is less than the criterion t-value and p-value is more than 0.05, it was observed that gender did not have a significant influence on achievement motivation of prospective elementary school teachers. Therefore, the null hypothesis, which indicates there is no significant difference between the achievement motivation of male and female prospective elementary school teachers should be accepted.

Objective No. 3. To compare the achievement motivation of prospective elementary school teachers in relation to their locale.

The difference between urban and rural prospective elementary school teachers upon their scores of achievement motivation was done by using statistical method of t-test.

Table No. 4

Comparative Analysis of Achievement Motivation of Urban and Rural Prospective Elementary School Teachers

Locale	N	Mean	SD	Std. Error Mean	t	Sig. (p) (2-tailed)	Remarks
Urban	77	22.86	3.99	0.45498	0.504	0.615	Null Hypothesis
Rural	103	23.17	4.1	0.40464			
Total	180						

Table No. 4 shows that the mean score of urban prospective elementary school teachers on achievement motivation is 22.86 with standard deviation 3.99; the mean score of rural prospective elementary school teachers on achievement motivation is 23.17 with standard deviation 4.10.

The t-test was conducted to assess the potential difference in achievement motivation between prospective elementary school teachers from urban and rural backgrounds. The calculated t-value from 77 urban and 103 rural prospective elementary school teachers is 0.504, and the corresponding p-value is 0.615. This implies that there is no significant difference in achievement motivation between urban and rural prospective elementary school teachers as the calculated t-value is less than the criterion t-value and the corresponding p-value is more than the 0.05. Hence, the null hypothesis

which indicates there is no significant difference between achievement motivation of urban and rural prospective elementary school teachers should be accepted.

Objective No. 4. To examine whether there is significant relationship between achievement motivation of prospective elementary school teachers and their corresponding academic achievement.

Comparative analysis of Achievement Motivation and Academic Achievement of the prospective elementary school teachers was performed by using statistical method of Pearson's Product Moment of Coefficient of Correlation.

Table No. 5

Correlation Between Achievement Motivation and Academic Achievement of Prospective Elementary School Teachers

Group (N = 180)	Achievement Motivation	Academic Achievement
Achievement Motivation	1	0.142
Academic Achievement	0.142	1

A Pearson product-moment correlation coefficient was used to assess the relationship between achievement motivation and academic achievement among prospective elementary school teachers. Table No. 5 shows correlation of achievement motivation and academic achievement among prospective elementary school teachers, it was found to be positive ($r = 0.142$). Although the correlation coefficient suggests a positive relationship between the two variables, the low magnitude of the correlation indicates that the strength of this relationship is relatively weak. Thus, there existed a low positive correlation between these two variables, which implies that as the achievement motivation of prospective elementary school teachers increased, their academic achievement was also slightly increased and vice versa.

Conclusion

The present study had been carried out from prospective elementary school teachers studying at DIET Aizawl representing Aizawl District. Since, there is one institution in the investigated area, the study needs not to be delimited. Thus, all the prospective elementary school teachers studying at the particular institution constitute the population of the study.

In order to carry out the study, the investigator used the Academic Achievement Motivation Test Scale (AAMT-st) standardized and constructed by TR Sharma. The result of public examination faced by the population which was conducted by Mizoram Board of School Education was also used to obtain information regarding their academic achievement.

The test was administered to 180 subjects who were present and respond the test at the time of collection of data. By analyzing and interpreting the result, statistical techniques like Mean, Median, Standard Deviation, t-test and Product Moment Coefficient of Correlation were used.

After successful carry out of the investigation, the hypotheses were tested by obtaining the scores and the academic performance of the population with the help of appropriate statistical techniques. The statistical tools used to test the hypotheses reveal that all the null hypotheses to find out the differences that may exist among variables need to be accepted. However, the null hypothesis on the relationship between achievement motivation and academic achievement of prospective elementary school teachers needs to be rejected as there is relatively weak correlation.

References

- Chauhan, S. S. (2004). *Advanced Educational Psychology*. Vikash Publication House Pvt. Ltd. (pp. 222-225).
- Chetri, S. (2014). Achievement Motivation of Adolescents and Its Relationship with Academic Achievement. *International Journal of Humanities and Social Science Invention*, 3(6), 08–15.
- Denhardt, R. B., Denhardt, J. V., & Aristigueta, M. P. (2008). Managing Human Behavior in Public and Nonprofit Organizations. Sage Publications, Inc. *Journal of Personality and Social Psychology*, 47, 944-952.
- Dhall, S. (2014). A Study of Academic Achievement among Adolescents in relation to Achievement Motivation and Home Environment. *Journal of All India Association for Educational Research*, 26(1), June 2014.
- Gupta, R. (2014). Study on Self-Concept, Academic Achievement and Achievement Motivation of the Students. *IOSR Journal of Humanities and Social Science (IOSR-JHSS)*, 19(5), Ver. II (May 2014), 88-93. e-ISSN: 2279-0837, p-ISSN: 2279-0845.
- Koul, L. (2009). *Descriptive Research*. Vikas Publishing House Pvt. Ltd., E. 28, Sector – 8, Noida – 201301 (UP) India (pp. 103-130).

- Sarangi, C. (2015). Achievement Motivation of the High School Students: A Case Study among Different Communities of Goalpara District of Assam. *Journal of Education and Practice*, 6(19), 140–144. ISSN 2222-1735.
- Sharma, T. R (2018). *Manual for Academic Achievement Motivation Test (AAMT-st)*, National Psychological Corporation, Agra.

A Study of the Attitude of Undergraduate Students towards Online Learning in Aizawl

Pooja Walia*
Vanlalmangaihzuale**

Abstract

Online learning can serve many students at a significantly lower cost than traditional classroom-based instruction. By utilizing virtual classes and digital resources, educational institutions can reach a wider audience without the constraints of physical infrastructure and logistical limitations. Attitude is a powerful determinant of their predisposition or inclination to respond with positive or adverse reactions. The purpose of the present study was to assess the attitude of undergraduate students towards online learning concerning three variables, viz., Gender, locale, and stream of study—the study sample comprised 150 undergraduate students from Pachhunga University College, Aizawl City. Data were collected through the 'Attitude Towards E-learning Scale (ATLES)' developed and standardized by Dimple Rani. It was analyzed through t-test and two-way ANOVA. The study revealed that most students have average attitudes towards online learning. Further, it is revealed that attitudes towards e-learning among college students were independent of Gender and location, while it is dependent on the stream of the study. Science undergraduate students have a more favorable attitude toward online learning than Arts students.

Keywords: Attitude, Online-learning, Gender, Locality, Stream of the Study.

Introduction

Learning is a multifaceted and dynamic process that involves the acquisition of fresh insights, comprehension, cognitive frameworks, behavioral patterns, competencies, ethical principles, personal inclinations, and preferences. It encompasses a broad spectrum of activities and experiences through which individuals expand their

*Dr. Pooja Walia, Assistant Professor, Department: Education, Mizoram University, Email Id: mzut273@mzu.edu.in Contact No.: 8529201718

**Vanlalmangaihzuale (M.A. Student), Department: Education, Mizoram University, Email Id: hmangaihachau8@gmail.com, Contact No.: 9774222053

intellectual capacity, broaden their horizons, and develop a repertoire of abilities and perspectives that shape their world views and actions.

E-learning encompasses using electronic media and information and communication technologies (ICT) in education. It encompasses various educational technology tools and approaches and is increasingly recognized as an advanced paradigm for higher education. The term E-learning encompasses a wide range of pedagogical methods and strategies that continually evolve to meet the needs of both students and educators. The advent of the internet and its educational applications have significantly impacted how learners approach learning. Newton (2003) states that the e-learning system encompasses three primary domains. Firstly, it aims to enhance access to education and training, making it more widely available and accessible to learners. Secondly, it strives to improve the quality of teaching and learning experiences, employing technological advancements to enhance educational outcomes. Lastly, it recognizes the importance of higher education institutions adapting and maintaining a competitive edge in an evolving market, ensuring they meet students' changing demands and preferences.

Online learning, also known as e-learning, refers to an educational approach that leverages the power of the internet, allowing students to receive instruction and engage in learning activities within an entirely virtual environment. Initially emerging in the 1990s, coinciding with the advent of the internet, online learning gained significant traction in distance education. However, its influence has since expanded, particularly within higher education. Online learning or e-learning primarily utilizes devices such as laptops, smartphones, and tablets, with smartphones being the preferred choice for most students (Muthuprasad et al., 2021).

In its multifaceted nature, attitude encompasses an individual's subjective lens through which they perceive and evaluate a specific concept, entity, individual, or circumstance. It is a powerful determinant of their predisposition or inclination to respond with positive or adverse reactions. As a psychological construct, attitude delves into the intricate processes of perception and evaluation, shaping one's overall outlook and subjective judgment. It goes beyond mere observation and analysis, incorporating deeply ingrained beliefs, values, experiences, and social influences that influence how individuals approach and interpret ideas, objects, individuals, or situations.

Justification of the Study

Recent trends show that online learning has gained massive popularity due to its ease of access (Doley & Das, 2021). It provides the opportunity for students to learn at their comfort and requirements. It accommodates everyone's needs and helps

communicate concepts and ideas. It is cost-effective compared to traditional learning forms because learning through this mode happens quickly and easily (Doley & Das, 2021). Due to the comprehensive set of benefits, online learning has become quite popular and appreciated amongst students world wide. Konwar's (2017) study shows that students who have used e-learning as a learning strategy have gotten higher marks or percentages than the fewer users of the e-learning strategy. Therefore, to improve students' e-learning performance and feel more comfortable using e-resources, it is essential to make them aware of its importance and utility (Konwar, 2017). Hence, the present study helps to know how the students reacted and thought about e-learning and their attitude. A review revealed that most students are showing average level of attitude toward online learning (Dhas2017; Fouzdar & Behera, 2017; Khan, 2017).

Few studies (Dhamija, 2014; Zabadi & Alawi, 2016; Konwar, 2017; Gupta & Sharma, 2018; Sao et al., 2018; Sahu et al., 2022) found that undergraduate male students generally hold less positive attitudes towards e-learning compared to undergraduate female students. Concerning locality, few studies (Konwar, 2017; Ghatak & Das, 2021; Fouzdar & Behera, 2017; Lalsangpuui et al., 2023) reported no significant disparity in attitudes between urban and rural students. However, it is essential to note that Doley and Das (2021) reported a significant difference in attitudes towards e-learning between urban and rural students in their study. According to their findings, urban undergraduate students exhibited a more positive attitude toward e-learning than their rural counterparts. Some variations were reported about the stream as a categorical variable by Periasamy (2019), Nachimuthu (2020) and Lalsangpuui (2023). Periasamy (2019) identified significant differences among Language, Arts, and Science B.Ed. Trainees. The Science trainees hold more favorable attitudes toward online learning. Similarly, Nachimuthu (2020) found a significant difference between the attitude of student teachers belonging to Science and Arts streams towards online learning. Further, Lalsangpuui et al. (2023) reported that science stream prospective teachers have a more favorable attitude towards e-learning than Arts stream.

In contrast, Fouzdar & Behera (2017) reported a significant difference in favor of PG Arts students over PG Science students in their study. On the other hand, Ghatak and Das (2021) discovered no significant difference in attitudes toward online learning among arts and science undergraduate students.

The findings of the studies mentioned above are provided results in both directions with regard to categorical variables. There is a need to conduct more scientific investigation to get clear picture. With regard to geographical location, the investigators found a very limited study (Lalsangpuui et al., 2023) conducted in Aizawl City. Lalsangpuui et al., 2023 conducted study on prospective teachers at primary level. There is much scope to find the attitude of northeast undergraduate students towards

online learning. All of the above-stated reasons encouraged the investigator to conduct the present study.

Objectives of the Study

1. To study the attitude of undergraduate students towards online learning in Aizawl.
2. To compare the attitude of male and female undergraduate students towards online learning.
3. To compare the attitude of urban and rural undergraduate students towards online learning.
4. To compare the attitude of arts, science, and commerce stream undergraduate students towards online learning.

Hypotheses of the Study

1. There exists no significant difference between the attitudes of male and female undergraduate students towards online learning.
2. There exists no significant difference between the attitude of urban and rural undergraduate students towards online learning.
3. There exists no significant difference among the attitude of arts, science and commerce stream undergraduate students towards online learning.

Methodology

Research Design

The investigator adopted a descriptive method for the study. A survey was conducted to study the attitude of undergraduate students towards online learning.

Sampling

In the present study, the population comprises all the students of undergraduate colleges located in Aizawl City. There are 12 undergraduate colleges for traditional courses like Bachelor of Arts, Science, and Commerce in Aizawl city. Out of 12 colleges, Pachhunga University College was selected for drawing samples because this is the only college in Aizawl city where all three streams, i.e., Arts, Science, and Commerce, are available. Stratified random sampling was used to select the undergraduate students from the three streams stated above. A sample of 150 undergraduate students, 50 from each stream, were selected for the present study.

Tool Used

The tool used for the present study was *the Attitude Towards E-learning Scale* (ATLES) developed by Dimpal Rani in 2015. The scale consisted of four major areas, viz., 1. E-Learning interest, 2. Usefulness, 3. Ease of e-learning, and 4. E-learning confidence. The scale is five – a five-point scale with 65 positive and negative items. The reliability of the scale was found by the Test-Retest method. The correlation coefficient was +0.87, which is significant at a .01 significance level.

Procedure of Data Collection

The investigator systematically conducted the tests online, using Google Forms and offline. The students were asked to respond and choose the given options freely related to their attitude towards online learning or e-learning. They have been told that their responses were kept confidential and only used for research.

Analysis and Interpretation

To study the attitude of undergraduate students, the researchers classified the scores of the individual students according to the norms given in the ATLES manual. The Mean score and Standard Deviation were also computed. The objective-wise analysis is presented below;

I. Attitude of undergraduate students towards online learning

Raw scores were converted into z-scores to assess the attitude toward online learning among undergraduate students; the level of attitude ranges from Extremely high, High, Above average, Average, Below average, Low, and Extremely low towards e-learning. Table 1 and Figure 1 present the attitude level of undergraduate students.

Table 1

Level of Attitude of Undergraduate Students Towards Online-learning

Grade	Level of Attitude	No. of Students	Percentage
A	Extremely High	4	2.67
B	High	14	9.33
C	Above Average	25	16.67
D	Average	58	38.67
E	Below Average	40	26.67
F	Low	2	1.33
G	Extremely Low	7	4.67

Table 1 reveals that most undergraduate students (38.67%) have an average attitude toward online learning, followed by those with below-average attitudes (26.67%). It can also be observed that while 1.33 % have a low attitude toward online learning, very few of the undergraduate students have extremely high (2.67%), high (9.33%), above average (16.67%), and extremely low (4.67%) attitude towards online-learning.

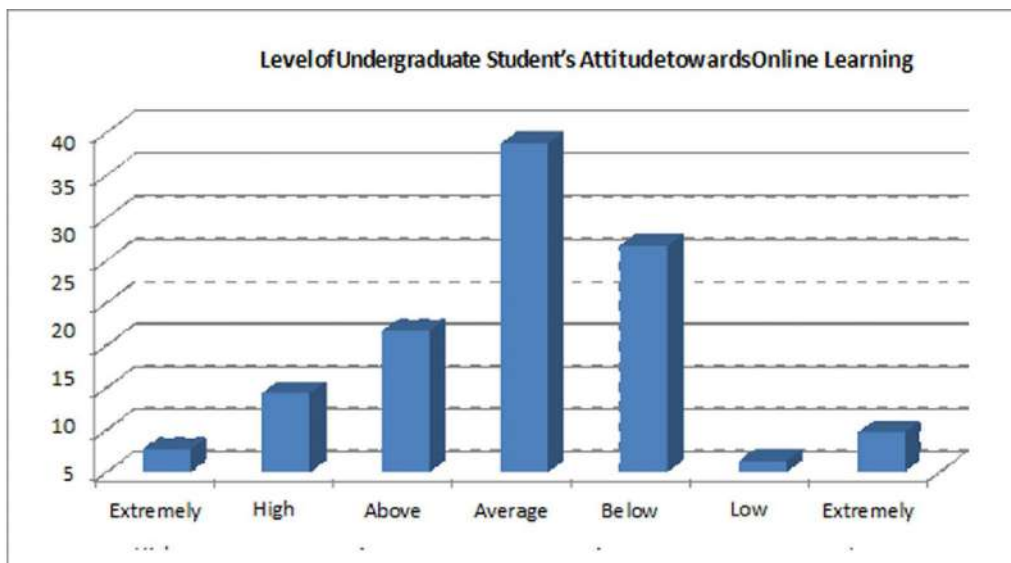


Figure 1 Level of Undergraduate Students' Attitude towards Online Learning

II. Attitude of Undergraduate Students' toward online learning with respect to Gender

The mean scores of male and female students are presented in Figure 2, which shows a difference concerning Gender. The mean score of female undergraduate students (208.3) toward online learning is greater than that of male students (206.71). A t-test was applied to study the significance of the difference. Table 2 compares the level of attitudes towards online learning with respect to Gender.

Figure 2 Attitude of undergraduate students towards online learning with respect to Gender.

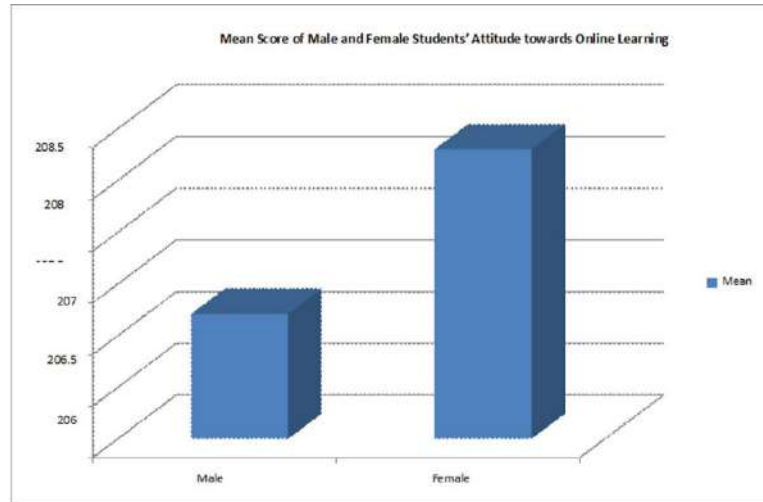


Table2

The Attitude of Undergraduate Students towards Online Learning with respect to Gender

Gender	N	Mean	SD	t-value	df	Significance level
Male	81	206.71	14.1162	0.49	149	Notsignificant
Female	69	208.3	14.33089			

Table 2 shows that the t-value is 0.49, which is less than the critical value, i.e., 1.96 at a 0.05 level of significance. Therefore, the null hypothesis, "There exists no significant difference between the attitude of male and female undergraduate students towards online learning," is accepted. Although the Mean score of both male (206.71) and female students (208.3) indicates that female students have a slightly more favorable attitude towards online learning, the difference is not statistically significant, which means that there is no significant difference between the attitude of male and female undergraduate college students towards online-learning. Hence, male and female undergraduate students have the same attitude toward online learning.

III. Attitude of Undergraduate Students towards online learning with respect to locale

Mean scores of urban and rural students are presented in Figure 3, which shows a difference with respect to locale. The mean score of urban undergraduate students towards online learning is more than that of rural students. A t-test was applied to study the significance of the difference. Table 3 compares the level of attitude towards online learning with respect to locale.

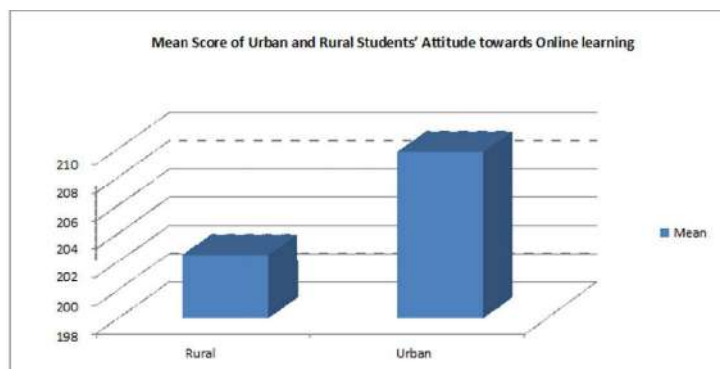


Figure 3 Attitude of undergraduate students towards online learning with respect to locale

Table 3

Comparison of Rural and Urban Undergraduate Students' Attitudes towards Online Learning

Locality	N	Mean	SD	t-value	df	Significance level
Rural	49	202.47	15.66	0.0032	149	Notsignificant
Urban	103	209.78	13.053			

The t-value is 0.0032, which is significantly less than the critical value, i.e., 1.96 at 0.05 level of significance. Therefore, the null hypothesis, which states that "There exists no significant difference between the attitude of urban and rural undergraduate students towards online learning," is accepted. Although the Mean score of both urban (209.78) and rural students (202.47) indicates that urban students have a slightly more favorable attitude towards online learning, the difference is not statistically significant, which means that there is no significant difference between the attitude of urban and rural undergraduate college students towards online learning. Hence, urban and rural undergraduate students have the same attitude towards online learning.

IV. Attitude of Undergraduate Students towards online learning with respect to the academic stream

The mean scores of Arts, Science, and Commerce students are presented in Figure 4, which shows a difference with respect to the academic stream. The mean score of Science students is more than that of Commerce students towards online learning. Further, the mean score of Commerce students is more than that of Arts undergraduate students' attitude toward online learning. Table 4 presents the mean scores of students' attitude levels towards online learning with respect to the stream. One-way ANOVA was applied to study the significance of differences among the three groups. Further, a t-test was applied to see the significant difference between the two groups. Tables 4 to 8 compare the level of attitude towards online learning with respect to the academic stream.

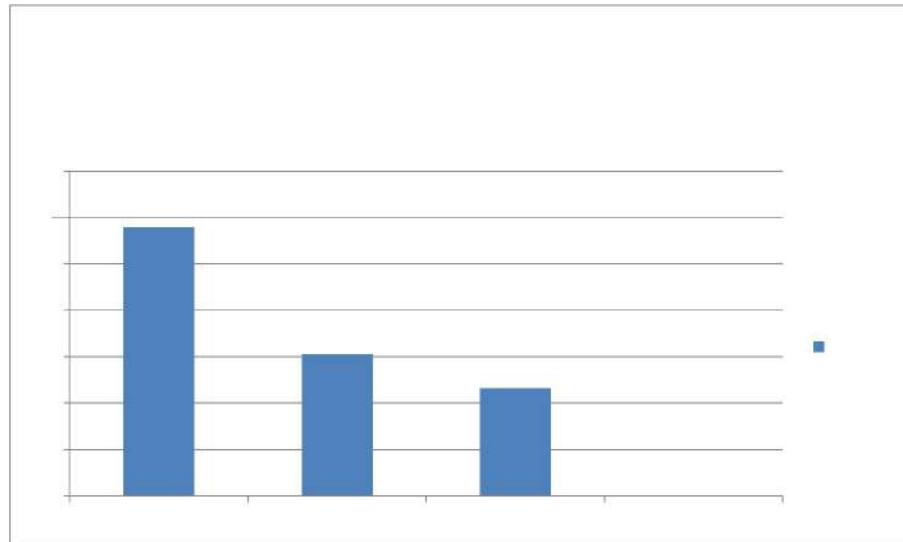


Figure 4 *Attitude of undergraduate students towards online learning with respect to academic stream*

Table 4

Comparison of Mean Scores of Undergraduate Students' Attitude towards Online Learning Concerning Academic Stream

Group	N	Sum	Mean	Variance	SD
Science	50	10580	211.6	193.67347	13.91
Commerce	50	10305	206.1	204.58163	14.3
Arts	50	10232	204.64	196.43918	14.01

Table 4 presents the means cores of undergraduate students' attitudes toward online learning based on their academic streams: Science, Commerce, and Arts. The mean scores for the Science, Commerce, and Arts groups are 211.6, 206.1, and 204.64, respectively. There is a difference among the mean scores of the three student groups; however, one one-way ANOVA and t-test were applied to test the significant difference.

Table5

**Comparison of Undergraduate Students' Attitude towards Online Learning
Concerning Academic Stream**

Source of Variation	SS	df	MS	F	P-value	F critical Value
BetweenGroups	1347.053	2	673.53	3.398	0.0361	3.058
WithinGroups	29140.02	147	198.23			

Table 5 compares under-graduate students' attitudes toward online learning across the different academic streams. The analysis considers the variation both between the groups and within the groups.

i. Between Groups: The F-statistic, calculated as the ratio of between-group MS to within-group MS, is 3.398. The critical value of the F-statistic at 0.05 significance level is 3.058. Further, the p-value as sociated with this F-statistic is 0.0361, indicating a statistically significant difference in the attitude towards online learning a cross the academic streams.

ii. Within Groups: The variation within the groups is measured using the sum of squares (SS), 29140.02. The degree off reedom (df) for within groups is 147. The mean sum of squares (MS) is calculated by dividing the SS by the respective degrees of freedom.

Table 6

**ComparisonofScienceandCommerce Stream Students' Attitudes towardsOnline
Learning**

Academic Stream	N	Mean	SD	df	t-value	Significance level
Science	50	211.6	13.91	98	1.948	Notsignificant
Commerce	50	206.1	14.3			

Table 6 shows the t-value is 1.948, which is much less than the critical value, i.e., 1.96 at a 0.05 level of significance. Therefore, the null hypothesis, which states that "There exists no significant difference between the attitude of science and commerce undergraduate students towards online learning," is accepted. Although the Mean score of both science (211.6) and commerce students (206.1) indicates that science students

have a slightly more favorable attitude towards online learning than commerce students, the difference is not statistically significant, which means that there is no significant difference between the attitude of science and commerce undergraduate college students towards online learning. Hence, science and commerce undergraduate students have the same attitude towards online learning.

Table 7
Comparison of Commerce and Arts Stream Students' Attitudes towards Online Learning

Academic Stream	N	Mean	SD	df	t-value	Significance level
Commerce	50	206.1	14.3	98	0.51	Not significant
Arts	50	204.64	14.01			

Table 7 shows that the value is 0.51, which is much less than the critical value, i.e., 1.96 at a 0.05 level of significance. Therefore, the null hypothesis, which stated that "There exists no significant difference between the attitude of arts and commerce undergraduate students towards online learning," is accepted. Although the mean score of both commerce (206.1) and arts students (204.64) indicates that commerce students have a slightly more favorable attitude towards online learning than arts students, the difference is not statistically significant, which means that there is no significant difference between the attitude of commerce and arts undergraduate college students towards online learning. Hence, commerce and arts undergraduate students have the same attitude toward online learning.

Table 8
Comparison of Science and Arts Stream Students' Attitudes towards Online Learning

Academic Stream	N	Mean	SD	df	t-value	Significance level
Science	50	211.6	13.91	98	2.49	Significant
Arts	50	204.64	14.01			

Table 8 shows the t-value is 2.49, which is greater than the critical value, i.e., 1.96 at a 0.05 level of significance. Therefore, the null hypothesis, which stated that "There exists no significant difference between the attitude of science and commerce undergraduate students towards online learning," is rejected. Therefore, a significant difference exists between the attitude of science and arts undergraduate college students towards online learning. The mean score of science students (211.6) is greater than that of art students (204.64). Hence, science undergraduate students have a more favorable attitude towards online learning than arts students.

Findings of the Study

1. It is found that undergraduate students have different attitudes towards online learning. Data reveals that 38.67% have an average attitude towards online-learning, 26.67% below average, 1.33 % have a low attitude, very few of the undergraduate students have extremely high 2.67 %, 9.33% high, 16.67% above average, and 4.67% extremely low.
2. It was found that there is no significant difference in the attitude of male and female undergraduate students towards online learning. Both male and female undergraduate students have the same level of attitude towards online learning.
3. It was found that urban and rural undergraduate students' attitudes towards online learning are the same. Urban and rural undergraduate students have the same attitude towards online learning.
4. It was found that there is a significant difference in the attitudes of Science, Commerce, and Arts students towards online learning.
5. It was found that science and commerce undergraduate students' attitudes towards online learning are the same. Both science and commerce undergraduate students have the same level of attitude toward online-learning.
6. It was found that commerce and arts undergraduate students' attitudes towards online learning are the same. Both commerce and arts undergraduate students have the same level of attitude towards online learning.
7. It was found that there exists a significant difference in the attitude of science and arts undergraduate students towards online learning. Science students have a more favorable attitude toward online learning than arts students.

Discussion

The findings revealed that most undergraduate students have an average attitude towards online learning. These findings align with previous studies conducted by Dhas (2017), Fouzdar and Behera (2017), and Khan (2017), which reported that the majority of undergraduate students exhibited an average level of attitude towards online learning or e-learning. This consistency between the present study and previous research adds weight to the validity and generalizability of the findings.

Further, the findings revealed no significant difference between the attitudes of male and female undergraduate students towards online learning. These findings align with the results of previous studies conducted by Doley & Das (2021), Ghatak & Das (2021). Further, the findings revealed that urban and rural undergraduate students'

attitudes towards online learning are the same. These results are consistent with previous studies conducted by Konwar (2017), Ghatak & Das (2021), and Fouzdar & Behera (2017), which also found no significant disparity in attitude between urban and rural students. However, it is essential to note that Doley and Das(2021) reported a significant difference in attitudes towards e-learning between urbanand rural students in their study. According to their findings, urban undergraduate students exhibited a more positive attitude towards e-learning than their rural counter parts.

Further, the findings revealed a significant difference among the attitudes of Science, Commerce, and Arts students towards online learning. It is revealed that Science and commerce students' attitudes are the same. Similarly, commerce and art students' attitudes are the same. However, a significant difference in attitudes towards online learning was found when comparing Science and Arts students. This finding is consistent with Periasamy, 2019; Nachimuthu2020; and Lalsangpuui, 2023. Findings of of the present study concerning stream of study are not aligned with the findings of Fouzdar & Behera, (2017). They reported a significant difference in favor of PG Arts students over PG Science students in their study. On the other hand, Ghatak and Das (2021) discovered no significant difference in attitudes toward online learning among arts and science undergraduate students, which is also different from the findings of the present study.

Conclusion

Online learning can serve many students at a significantly lower cost than traditional classroom-based instruction. By utilizing virtual classes and digital resources, educational institutions can reach a wider audience without the constraints of physical infrastructure and logistical limitations. This scalability allows for efficiently disseminating high-quality educational materials to a broad student population.

Further more, online learning fosters digital literacy skills, equipping students with essential competencies required in the digital age. Through interactive multimedia resources, online discussions, and personalized instruction, students develop critical thinking, problem-solving, and collaborative skills, which are highly valued in today's work force.

The positive attitudes towards e-learning observed among college students in the present study highlight the recognition of the potential benefits associated with this educational approach. College students are increasingly familiar with technology and are eager to embrace innovative learning methods that align with their digital-native characteristics. E-learning empowers students to take charge of their learning journey, providing them with the tools and resources to engage actively in the learning process.

It is also revealed that attitudes towards e-learning among college students were independent of Gender and geographic location but dependent of academic stream, therefore, it is essential to acknowledge that individual experiences and academic factors that may influence students' perceptions and acceptance of e-learning. Therefore, educational institutions and policy makers must consider students' diverse needs and preferences when designing and implementing online learning initiatives. In conclusion, the present study's findings emphasize the transformative potential of online learning in the current educational landscape. Online learning provides a flexible, accessible, and cost-effective education, connecting students globally and empowering them to take control of their learning journey. By leveraging the positive attitudes towards online learning among college students, educational institutions can further enhance the quality of education and better prepare students for the challenges and opportunities of the digital era.

References

- Dhamija, N. (2014). Attitude of undergraduate students towards the use of e-learning. *MIER Journal of Educational Studies, Trend and Practices*, 4(1), 123–135.
- Dhas, L. J. S. (2017). Attitude of college students towards e-learning. *International Journal for Research in Emerging Science and Technology*, 4(9), 13-23.
- Doley, P.P., & Das, R. (2021). A study of the attitude of undergraduate students towards e-learning. *IOSR Journal of Humanities and Social Science*, 26(1), 10-14. <https://doi.org/10.9790/0837-2601121014>.
- Fouzdar, K., & Behera, S. K. (2017). Attitude of postgraduate students towards mobile-learning. *EDUCARE: International Journal of Educational Studies*, 9(1), 111-120.
- Ghatak, D., & Das, P. (2021). Attitude of college & university students towards e-learning in Kolkata and North 24 Parganas districts. *International Journal of Research*, 7(1), 81-91.
- Gupta, M., & Sharma, M. (2018). A study on attitude of senior secondary school students towards e-learning in relation to their Gender, residential backward and nature of school. *International Journal of Engineering, Science and Mathematics*, 7(1), 418–432.
- Khan, M., Vivek, M., Nabi, M., Khojah, M., & Tahir, M. (2020). Students' perception towards e-learning during COVID-19 pandemic in India: An empirical study. *Sustainability*, 13(15), 1-14. <https://dx.doi.org/10.3390/su13010057>.
- Konwar, H. I. (2017). A study on the attitude of college students towards e-learning with special reference to north Lakhimpur of Lakhimpur district, Assam. *International Journal of Information Science and Education*, 4(1), 1–9. https://www.ripublication.com/ijise_info/ijisev4n1_01.pdf.

- Lalsangpuui, C., Fanai, L., Sailo, L., Khiangte, L., & Chinzah, D.V. (2023) Attitude towards e-learning among D.El.Ed students in Aizawl city. *International Journal for Research Trends and Innovation*, 8 (4), 99-102. <https://ijrti.org/papers/IJRTI2304017.pdf>.
- Muthuprasad, T., Aditya, K., Aiswarya, S., & Jha, G. (2021). Students' perception and preference for online education in India during the COVID-19 pandemic. *Social Sciences & Humanities Open*, 3(1), 1-11. <https://doi.org/10.1016/j.ssaho.2020.100101>.
- Nachimuthu, K. (2021). Student teachers' attitude towards online learning during covid-19. *International Journal of Advanced Science and Technology*, 29(6), 8745-8749.
- Newton, R. (2003). Staff attitudes to the development and delivery of e learning. *New Library World*, 104(10), 412-425. <https://doi.org/10.1108/03074800310504357>.
- Periasamy, R. (2019). Attitude towards e-learning among the B.Ed. trainees. *International Journal of Information and Computing Science*, 6(12), 54-64.
- Rani, D. (2015). *Manual for attitude towards e-learning scale*. National Psychological Co-operation.
- Sahu, N., Sahu, S., Meher, V., & Dash, N. (2022). Undergraduate students' attitude toward e-learning: Gender and stream of education perspectives. *The Online Journal of Distance education and e-learning*, 10(3), 425-434.
- Sao, S., Sutradhar, G.C., Chanda, P., & Gayen, R. (2018). Attitude of B.Ed student-teachers towards mobile learning. *International Journal of Research and Analytical Reviews*, 5(3), 414-420.
- Zabadi, A.M., & Alawi, A.H. (2016). University students' attitude towards e-learning. *International Journal of Business and Management*, 11(6), 286-295.

Attitude towards E-learning among B.Ed Students of Mizoram University

C.Lalsangpuii*
Vanlalruatfela Hlondo**
Vasty Lalthanpuii***
Ms. Lalremsangi****

Abstract

The present study was conducted to assess and compare the attitude towards e-learning among B.Ed (Bachelor of Education) students of Mizoram University. Census survey method was adopted in which 138 samples were collected. Attitude Towards E-learning Scale developed by Dimpal Rani was used for collecting data. The result revealed that B.Ed students of Mizoram University has average attitude towards e-learning and that there is no significant difference in their attitude with respect to their gender or educational qualification.

Keywords: Attitude, E-learning, B.Ed Students, Gender, Educational qualification

Introduction

Education may be defined as a systematic planned instruction that occurs in school. The term 'education' holds a very wide definition. Education is not confined within the four walls but goes beyond. In today's technological world, knowledge about technology and electronic devices are as important as textbook knowledge considering the contribution it has in teaching learning processes.

The core definition of education is provided as rising up, guiding out, or making evident a pupil's innate potentialities. Education is defined as any act or event that has a formative influence on an individual's personality. In general term, education is

*C. Lalsangpuii, Assistant Professor, Institute of Advanced Studies in Education.
Email: 25sangpuii@gmail.com

**Dr. Vanlalruatfela Hlondo, Assistant Professor, Department of Education, Mizoram University.
Email: ruatfela87@gmail.com

*** Vasty Lalthanpuii, Research Scholar, Department of Education, Mizoram University.
Email: vastylalthanpuii@gmail.com

****Lalremsangi, Assistant Professor, Department of Education, Mizoram University.
Email: remisangi4381@gmail.com

defined as the lifelong process of acquiring new knowledge and skills through both formal and informal exposure to information, ideas, and experiences.

One of the most important challenges of education in a modern culture is to keep up with technological advancements in getting relevant knowledge from trusted e-resources. The term e-learning refers to the use of electronic tools or devices that help and support instructional and learning practice in the education system (Thakkar & Joshi, 2017).

Rationale of the study

The current study will help in determining the attitudes of B.Ed (Bachelor of Education) students at Mizoram University to investigate the viewpoint on e-learning and to obtain reflective information regarding the value and contribution of e-learning in their studies. This study will help students' educational demands for e-learning, and students will also be able to apply the subject-based on their needs in other sectors. In addition to conventional education at educational institutions, the importance of e-learning-based education will steadily grow, and the pace of social progress will be assured by digital method teaching-learning. It will be a learning paradigm that uses digital technology to improve students' knowledge and abilities. E-learning will help students in their education processes in a very productive way. It will enable the usage of technology and electronic devices and provides access to useful resources. In order to understand and seek for further requirements to take relevant proceedings, it is important to assess the attitude towards e-learning and make comparisons based on gender and educational qualification.

Review of Related Literature

Gopal and Anandan (2013) conducted a study on "Attitude towards e-learning in Classroom Instruction among the B.Ed. Students at Colleges of Education". The study reveals that the Total Mean value is 53.03 out of maximum value of 100 which is found to be average. This result indicates that the B.Ed. Students are having lesser attitude towards e-learning for the Classroom Instruction. Also it was found that there was no significant difference between the mean scores of the attitude of B.Ed students towards e-learning for classroom instruction with respect to gender.

Behera, Sao and Mohamed (2016) conducted a study on "Attitude of B.Ed Student-Teachers towards E-Learning". From the study it was revealed that the calculated t-value was 0.38 which is less than the table value at both 0.01 and 0.05 level of significance. Hence, there is no significant difference between male and female B.Ed College Student-Teachers in respect of their attitude towards E-learning. It may be due to the fact that both male and female student-teachers gave equal importance to e-learning.

Doley (2020) conducted a study on “A study on B.Ed Trainee’s attitude towards e-learning”. The study reveals that B.Ed trainees have different levels of attitudes towards e-learning. The data reveals that 58% students have positive attitude, 7% negative and 35% have neutral attitude towards e-learning. The study also concluded that there is no significant difference in the attitude of B.Ed students towards e-learning between male and female members, which shows that the attitude of B.Ed students of male and female students have positive attitude towards e-learning.

Rajesh and Stanley (2022) in their study “Attitude towards E-Learning among the B. Ed, Teacher-Trainee in Pondicherry Region”, resulted that the attitude towards e-learning of B.Ed teacher-trainee in Pondicherry region is favorable.

Kataria and Mishra (2019) conducted a study on “Analysis Of Teacher-Trainees Attitude Towards E-Learning”. The study found that the mean attitude scores of male and female teacher-trainees in Punjab towards e-learning are 297.88 and 305.17, respectively. It shows that both male and female teacher-trainees in Punjab have a positive attitude towards e-learning, with male teacher-trainees having a more positive attitude than female teacher-trainees.

Objectives of the study

1. To assess the attitude towards e-learning among B.Ed students of Mizoram University.
2. To compare the attitude towards e-learning among B.Ed students of Mizoram University with respect to their gender.
3. To compare the attitude towards e-learning among B.Ed students of Mizoram University with respect to their educational qualification.

Hypotheses

1. There is a significant difference in the attitude towards e-learning among B.Ed students of Mizoram University with respect to their gender.
2. There is a significant difference in the attitude towards e-learning among B.Ed students of Mizoram University with respect to their educational qualification.

METHODOLOGY

In the present study, Descriptive Survey Method was adopted and Census Survey was employed for collecting data.

Population and sample

The population of the present study comprised of all B.Ed students of Mizoram University (MZU). The respondents were divided into two groups- one, based on gender i.e., male and female; and the other, based on educational qualification, i.e., between graduates and post graduates. The following table shows the profile of B.Ed students in MZU based on the two mentioned groups.

Table 1 : Profile of B.Ed students in Mizoram University

Groups		Number of prospective		Percentage
Gender	Male	57	138	41.3
	Female	81		58.7
Educational qualification	Graduate	40	138	28.99
	Post graduate	98		71.01

Tools used for data collection

Attitude Towards e-learning Scale, which was developed by Dimpal Rani was used for collecting data. It is a standardized tool to measure the Attitude Towards e-learning. The mentioned scale is categorized into four major areas: e-Learning interest, usefulness, ease of e-learning and e-learning confidence. The positive and negative type which total to 65 items have been distributed in these mentioned four areas. The scale is a five point scale. *Strongly Agree, agree, undecided, disagree and strongly disagree* are the five point of scaling, which comes with separate scoring for the positive and negative items.

Data was collected using Attitude Towards E-Learning Scale developed by Dimpal Rani, which is a standardized tool to assess e-learning attitudes. This scale has four categories: e-Learning interest, usefulness, ease of e-learning and e-learning confidence. A total of 65 items, consisting of positive and negative have been distributed in these mentioned four areas. It is a five point scale consisting of Strongly Agree, Agree, Undecided, Disagree, and Strongly Disagree, that comes with separate scoring for the positive and negative items.

Statistical technique used

The data collected has been analyzed using statistical techniques namely Mean, Standard deviation and t-test.

Data analysis and interpretation

The collected data were analyzed and interpreted according to the objectives of the study.

Objective No.1:To assess the attitude towards e-learning among B.Ed students of Mizoram University.

To assess the attitude towards e-learning among B.Ed students of Mizoram University, the whole sample of B.Ed students were grouped into different levels of e-learning according to the norms given in the manual of 'Attitude towards e-learning', prepared by Dimple Rani. Extremely high, High, Above average, Average, Below average, Low and Extremely low are the different levels of e-learning. Table No.2 reveals the distribution of B.Ed students on the basis of analysis of data.

Table 2: B.Ed students' level of attitude towards e-learning

Sl. No	Z-Scores	Frequency	Percentage	Level of attitude towards e-learning
1	+2.01 and above	2	1.45	Extremely High
2	+1.26 to +2.00	1	0.72	High
3	+0.51 to +1.25	9	6.52	Above Average
4	-0.50 to +0.50	58	42.03	Average
5	-1.25 to -0.51	45	32.61	Below Average
6	-2.00 to -1.26	20	14.49	Low
7	-2.00 and below	3	2.17	Extremely Low
Total		138	100	

Table 2 reveals that majority of the B.Ed students of Mizoram University (42.03%) have average attitude towards e-learning, followed by those having below average attitude towards e-learning (32.61%). It can also be observed that very few of the B.Ed students have extremely high (1.45%), high (0.72%), above average (6.52%) and extremely low attitude (2.17%) while 14.49% have low attitude towards e-learning.

Objective No.2:To compare the attitude towards e-learning among B.Ed students of Mizoram University with respect to their gender.

To compare the attitude towards e-learning among B.Ed students with respect to their gender, the respondents have been categorized as male and female. The hypothesis which stated that 'There is a significant difference in the attitude towards e-learning among B.Ed students of Mizoram University with respect to their gender' was converted into a null hypothesis which states that, 'There is no significant difference in the attitude towards e-learning among B.Ed students of Mizoram University with respect to their gender'. To test this null hypothesis, a t-test was conducted and comparison was made

between male and female B.Ed students in Mizoram University. The Mean and the Standard Deviation were also calculated and t-test was used to test the Mean difference, the detail of which has been shown in the following table.

Table 3: Comparison of e-learning attitude between male and female B.Ed students of Mizoram University

Gender	No. of Students	Mean	Standard Deviation	SED	t-value	df	Significance level
Male	57	225.22	60.65	8.35	1.007	136	Not Significant
Female	81	216.81	20.56				

Table 3 shows the comparison of the level of e-learning attitude between male and female B.Ed students in Mizoram University.

The calculated t-value was found to be 1.007 with degrees of freedom 136, which is smaller than the critical value at the required level of significance.

Hence, the null hypothesis, 'There is no significant difference in the attitude towards e-learning among B.Ed students of Mizoram University with respect to their gender' is accepted.

Objective No.3: To compare the attitude towards e-learning among B.Ed students of Mizoram University with respect to their educational qualification.

In order to compare the attitude towards e-learning among B.Ed students with respect to their educational qualification, the respondents have been grouped into graduates and post-graduates. The hypothesis which stated that 'There is a significant difference in the attitude towards e-learning among B.Ed students of Mizoram University with respect to their educational qualification' was converted into a null hypothesis which states that, 'There is no significant difference in the attitude towards e-learning among B.Ed students of Mizoram University with respect to their educational qualification'. For testing this null hypothesis, a t-test was conducted and comparison was made between graduate and post graduate B.Ed students in Mizoram University. The Mean and the Standard Deviation were calculated and t-test was used to test the Mean difference. This detail has been given in the following table.

Table 4: Comparison of e-learning attitude between graduate and post graduate B.Ed students of Mizoram University

Gender	No. of Students	Mean	Standard Deviation	SED	t-value	df	Significance level
Graduate	40	225.89	71.45	11.5	0.68	136	Not significant
Post graduate	98	218.01	21.34				

Table 4 shows the comparison of the level of e-learning attitude between graduate and post graduate B.Ed students of Mizoram University.

The calculated t-value has been found to be 0.68 with degrees of freedom 136, which is smaller than the critical value at the required level of significance.

Hence, the null hypothesis, 'There is no significant difference in the attitude towards e-learning among B.Ed students of Mizoram University with respect to their educational qualification' is accepted.

Findings:

1. Majority of the B.Ed students of Mizoram University have average attitude towards e-learning.
2. There is no significant difference in the attitude towards e-learning among B.Ed students of Mizoram University with respect to their gender.
3. There is no significant difference in the attitude towards e-learning among B.Ed students of Mizoram University with respect to their educational qualification.

Educational Implication of the present study

Attitude plays a crucial role in achieving educational objectives. With a favorable attitude, it is much easier to achieve educational objectives and this could in fact be done in the most effective way. In contrast to this, unfavorable attitude towards any topic or subject implies to ineffective or even failure in achieving goals. A favourable attitude towards e-learning will encourage B.Ed students towards finding the appropriate e-learning tool for not only effective teaching, but including the preparatory courses of becoming a resourceful teacher. A teacher must grow with the growing technology and not lack behind as it greatly affects the potential and quality of student's lives as well as education itself.

The contents of B.Ed course has been designed in a way that it suffice all possible needs of preparing an individual to become an effective teacher to keep up with the progress, it is important that prospective teachers are acquainted with not just the knowledge, but with the expertise of e-learning. The findings in the present study have

shown that more sensitization towards the need for knowledge on e-learning is required, so as to acquire more favorable attitude towards it. This, in turn will eventually lead to B.Ed students be better equipped for their future profession to meet the needs for being effective teachers.

Conclusion

In a world like today where technology plays a vital role, knowledge on Information and Communication Technology (ICT) is something education cannot go without, and thus is included in most courses of teacher education including B.Ed course. A teacher must be familiar with the different technologies and knowledge available for providing education to pupils and must try to always make progress. Thus, it is important that teachers have favourable attitude towards e-learning for providing the best for their students and education as a whole.

References:

- Behera, S. K., Sao, S., & Mohamed, S. (2016). Attitude of B. Ed students-teachers towards e-learning. *International Journal of Computer Science Engineering*, 5(6), 305-311. <http://www.ijcse.net/docs/IJCSE16-05-06-008.pdf>
- Doley, P. (2020). A study on B. ed Trainee's attitude towards e-learning. *J Res HumanitSocSci*, 12(8), 25-9.
- Gopal, B. V., & Anandan, K. (2013). Attitude towards e-Learning in Classroom Instruction among the B. Ed. Students at Colleges of Education. *Current Perspectives on Education*, 10(12), 55-237. http://languageinindia.com/feb2013/udayakumarvolume_1final.pdf#page=44
- Kataria, M. K., & Mishra, M. (2019). Analysis of teacher-trainees attitude towards e-learning. *Aayushi International Interdisciplinary Research Journal (AIIRJ)*, VI(V), 42-45. https://aiirjournal.com/uploads/Articles/2019/05/3801_10.Ms.%20Khushboo%20Kataria%20&%20%20Dr.Minakshi%20Mishra.pdf
- Rajesh, R., & Stanley, S. L. (2022). Attitude towards E-Learning among the B. Ed., Teacher-Trainee in Pondicherry Region. *Specialusis Ugdyms*, 1(43), 7238-7242. <https://www.sumc.lt/index.php/se/article/view/995>
- Takkar, S., & Joshi, H. (2017). Students attitude towards e-learning. *International Journal of Advance Engineering & Research Development*, 4(11). <https://doi.org/10.21090/ijaerd.15380>

Assessment and Accreditation in Higher Education: Perception by College Teachers

H.Malsawmi*

Ramhlupuii**

Zonunmawii***

Estherine Lalrinmawii****

Lalchhuanmawii*****

Abstract

The main purpose of this study is to find out how college teachers perceive the assessment and accreditation of higher education in Mizoram. The sample was collected randomly from five colleges in Aizawl. The sample consisted of 117 teachers with 62 male and 55 female teachers. A 20 item Perception Questionnaire on assessment and accreditation in higher education constructed by the investigators was used to collect data from college teachers. It was found that most of the college teachers had a positive view of the assessment and accreditation in higher education in Mizoram. A few recommendations to improve assessment and accreditation in higher education in Mizoram were suggested.

Key words: Observation, Assessment, Accreditation, Higher Education, College teachers

Introduction:

The National Assessment and Accreditation Council (NAAC) is an organization in India that assesses and accredits Higher Education Institutions (HEIs), including colleges and universities. NAAC accreditation is a process by which colleges and universities are evaluated based on various parameters to assess the quality of education they offer. It involves a comprehensive assessment of the institution's infrastructure, faculty, teaching methodologies, research, student support, and overall governance.

NAAC accreditation plays a pivotal role in enhancing the quality of higher education institutions in India. This accreditation process assesses academic programs,

*Prof. H.Malsawmi, Professor, Department of Education, Mizoram University

**Ramhlupuii, Research Scholar, Department of Education, Mizoram University

***Zonunmawii, Research Scholar, Department of Education, Mizoram University

****Estherine Lalrinmawii, Asst Professor, Institute of Advanced Studies in Education, Aizawl.

*****Dr. Lalchhuanmawii, Asst. Professor, Department of Education, Pachhunga University College.

faculty quality, research, infrastructure, and governance within these institutions, ensuring that they meet established standards. The importance of NAAC accreditation lies in several key aspects. First, it serves as a quality benchmark, enabling prospective students and parents to make informed choices when selecting an institution. Accredited colleges and universities are perceived as having higher standards, thereby attracting more admissions. This, in turn, fosters healthy competition among educational institutions, pushing them to continuously improve and innovate.

Moreover, NAAC accreditation is closely linked to funding opportunities. Many government and private funding agencies consider an institution's accreditation status when disbursing grants and scholarships, which can significantly benefit both the institution and its students. Also, accreditation is vital for global recognition. Accredited institutions are more readily acknowledged on the international stage, facilitating student mobility and collaborations with foreign universities. Essentially, the accreditation process is a catalyst for quality improvement. Institutions work diligently to meet and exceed NAAC's criteria, leading to enhancements in infrastructure, curriculum development, and faculty development. Overall, NAAC accreditation is an essential mechanism for maintaining and enhancing the quality of higher education in India, benefiting both educational institutions and the students they serve.

Rationale of the study:

Studying college teachers' observation with respect to assessment and accreditation in higher education is essential because it provides valuable insights into the quality of higher education in the state, as these teachers are at the forefront of the educational system and have a deep understanding of the challenges and opportunities within their institutions. Their perceptions can shed light on the effectiveness of accreditation processes in improving the quality of education, which, in turn, can inform policy decisions and reforms. Besides, understanding how teachers perceive these mechanisms can impact their motivation and commitment to maintaining high standards, ultimately benefiting students. Moreover, the study can help identify areas where further support and resources may be required, fostering continuous improvement in higher education institutions. To put it simply, examining the perceptions of college teachers on assessment and accreditation is a critical step towards enhancing the overall quality of higher education in the state and ensuring it aligns with the needs and aspirations of both educators and students.

Objective of the study:

1. To find out the perception of college teachers on the assessment and accreditation in higher education in Mizoram

Method of study:

Descriptive survey method is a research approach that collects data to describe characteristics, behaviors, or opinions within a population, often using structured questionnaires to gather information. It focuses on providing a comprehensive overview of the subject under study. The present study employs the descriptive survey method.

Population and sample:

The population consists of all college teachers in Aizawl teaching the arts, science and commerce stream. The sample was collected randomly from five colleges. The sample consisted of 117 teachers with 62 male and 55 female teachers.

Tools used for collecting data:

A 20 item Perception Questionnaire on assessment and accreditation in higher education constructed by the investigators was used to collect data from college teachers. Respondents has to tick their response out of the options provided in each item

Analysis and interpretation:

Data was analyzed by finding out the percentage of the responses of the teachers for each item and are presented in the following tables.

Table - 1
Importance of accreditation for colleges in Mizoram

Item - 1	Very Important	Moderately important	Not important at all
What is your overall perception of the importance of accreditation for colleges in Mizoram?	85 (72.65%)	29 (24.79%)	3 (2.56%)

As can be seen in Table – 1, with respect to the question on the importance of accreditation for colleges in Mizoram, majority (72.65%) of college teachers perceived it to be very important, 24.79% perceived it to be moderately important and only 2.56% perceived it is not important at all. In essence, this emphasizes the critical importance of college accreditation in Mizoram.

Table – 2**Familiarity with accreditation process**

Item - 2	Very familiar	Somewhat familiar	Not familiar at all
How familiar are you with the accreditation process in Mizoram's higher education institutions?	46 (39.32%)	70 (59.83%)	1 (0.85%)

With respect to teachers' familiarity with accreditation process in Mizoram's higher education institutions, Table – 2 shows that significant percentage 59.83% of teachers are somewhat familiar, 39.32% are very familiar and only .85% are not familiar at all. This suggests that majority of college teachers have a reasonable level of understanding regarding the accreditation procedures in the state's higher education institutions.

Table – 3

Item - 3	Yes	Not sure	No
Do you believe that accreditation positively impacts the quality of education in colleges?	79 (67.52%)	21 (17.95%)	17 (14.53%)

In Table 3, it is evident that a majority of college teachers, specifically 67.52%, express a belief that accreditation has a positive influence on the quality of education within colleges. Moreover, 17.95% of teachers appear to have a degree of uncertainty regarding this impact, while 14.53% of teachers hold the view that accreditation does not contribute to the enhancement of education quality in colleges. This shows that majority of college teachers believe in the positive impact of accreditation for quality education in colleges of Mizoram.

Table – 4**Satisfaction with administrative support provided to facilitate accreditation**

Item - 4	Satisfied	Neutral	Dissatisfied
Are you satisfied with the level of administrative support provided to facilitate the accreditation process in your college?	72 (61.54%)	41 (35.04%)	4 (3.42%)

The data from Table 4 indicates that a substantial majority of college teachers, specifically 61.54%, expressed satisfaction with the administrative support offered to facilitate the accreditation process in their college. Additionally, 35.04% of teachers adopted a neutral stance on the matter, while a mere 3.42% expressed dissatisfaction. This suggests that the predominant sentiment among college teachers is one of contentment with the administrative support provided for accreditation processes in their institutions.

Table – 5**Participation in workshops or training related to accreditation**

Item - 5	Yes, multiple workshop	Yes, one workshop	No, but interested
Have you participated in any workshops or training related to accreditation in the past?	69 (58.97%)	21 (17.95%)	25 (21.37%)

The data from Table 5 indicates that a significant majority of college teachers, specifically 58.97%, have actively engaged in multiple workshops or training sessions related to accreditation in the past. Furthermore, 17.95% of teachers attended a single workshop, 21.37% expressed an interest in participating but have not done so yet, and a small 1.71% of teachers showed neither interest nor participation in these activities. This data highlights the fact that the predominant pattern among college teachers is active participation in multiple workshops and training sessions associated with accreditation in the past.

Table – 6**Adequacy of reflecting the unique challenges and needs of colleges**

Item - 6	Yes, completely	Yes, to some extent	No, not at all
Do you think that the accreditation process adequately reflects the unique challenges and needs of colleges in Mizoram?	31 (26.5%)	83 (70.94%)	3 (2.56%)

According to the data in Table 6, the findings indicate that 70.94% of college teachers believe that the accreditation process adequately reflects the unique challenges and needs of colleges in Mizoram to some extent, 26.50% of college teachers believe it reflect it completely. Only a small percentage, 2.56% of teachers think it does not reflect at all. This suggests that the majority of teachers share the view that the accreditation process, to some extent, adequately addresses the distinctive challenges and requirements of colleges in Mizoram.

Table – 7**Regularity of self-assessment and reflection on teaching methods & practices**

Item - 7	Regularly	Occasionally	Never
How often do you engage in self-assessment and reflection on your teaching methods and practices?	59 (50.43%)	57 (48.72%)	1 (0.85%)

The data in Table 7 indicates that a significant proportion of college teachers, specifically 50.43%, regularly engage in self-assessment and reflective practices relating

to their teaching methods and approaches. Furthermore, 48.72% of teachers engage in such activities occasionally, while only a minimal percentage of 0.85% never participate in them. This implies that the majority of college teachers actively involve themselves in self-assessment and reflective processes related to their teaching methods and practices.

Table – 8
Adequacy in recognizing and rewarding effective teaching practices

Item - 8	Yes, completely	Yes, to some extent	No, not at all
Do you believe that the accreditation process adequately recognizes and rewards effective teaching practices?	31 (26.49%)	78 (66.67%)	8 (6.84%)

The data presented in Table 8 indicates that a substantial proportion of college teachers, specifically 66.67%, believe that the accreditation process partially acknowledges and rewards effective teaching practices. Moreover, 26.49% of teachers feel that it fully recognizes and rewards these practices, while a small 6.84% express the view that it doesn't acknowledge or reward them at all. This suggests that the majority of college teachers perceive the accreditation process as recognizing and rewarding effective teaching practices to some extent.

Table – 9
Level of transparency and communication existing between college faculty and accreditation bodies in Mizoram

Item - 9	High level	Moderate level	Low level
What level of transparency and communication exists between college faculty and accreditation bodies in Mizoram?	30 (25.64%)	83 (70.94%)	4 (3.42%)

Table 9 data reveals that a substantial 70.94% of teachers perceive that the level of transparency and communication between college faculty and accreditation bodies in Mizoram is at a moderate level. Moreover, 25.64% of teachers feel that this transparency and communication are at a high level, while a minimal 3.42% consider it to be at a low level. This suggests that the majority of college teachers in Mizoram believe there is a moderate degree of transparency and communication between the college faculty and accreditation bodies.

Table – 10

Adequately in addressing issues of inclusivity and diversity in higher education

Item - 10	Yes, completely	Yes, to some extent	No, not at all
Do you think that the accreditation process in Mizoram adequately addresses issues of inclusivity and diversity in higher education?	21 (17.95%)	92 (78.63%)	4 (3.42%)

Table 10 shows that 78.63% of college teachers think that the accreditation process in Mizoram adequately deals with issues of inclusivity and diversity in higher education to some extent. Moreover, 17.95% of teachers perceive that it fully addresses these issues, while a mere 3.42% believe it falls short in addressing them. In essence, majority of college teachers in Mizoram believe that accreditation process adequately addresses issues of inclusivity and diversity in higher education

Table – 11

flexibility to accommodate the unique needs of colleges in Mizoram

Item - 11	Yes	Undecided	No
Do you believe that the accreditation process should be more flexible to accommodate the unique needs of colleges in Mizoram?	95 (81.2%)	12 (10.26%)	10 (8.54%)

As indicated in Table 11, a significant 81.20% of college teachers advocate for greater flexibility in the accreditation process to cater to the distinct requirements of colleges in Mizoram. Meanwhile, 10.26% of teachers remain undecided on the matter, and only 8.54% hold the view that the accreditation process need not be more flexible. In essence, the prevailing sentiment among college teachers is in favor of enhancing the flexibility of the accreditation process to better align with the unique needs of colleges in Mizoram.

Table – 12

Information about the assessment methods used in the accreditation process

Item - 12	Very well informed	Moderately well-informed	Not well -informed
How well-informed do you feel about the assessment methods used in the accreditation process?	51 (43.59%)	64 (54.7%)	2 (1.71%)

Table 12 reveals that the majority of college teachers, with 54.70% in total, felt moderately well-informed about the assessment methods utilized in the accreditation process. Specifically, 43.59% of teachers considered themselves very well-informed. Only a small 1.71% of teachers expressed that they were not well-informed. In essence, this data indicates that most college teachers possessed a good level of understanding regarding the assessment methods employed in the accreditation process.

Table – 13

Recognizes and values teaching excellence alongside research and publication achievements

Item - 13	Yes, completely	Yes, to some extent	No, not at all
Is teaching excellence given due recognition in the accreditation process alongside research and publication achievements?	43 (36.75%)	69 (58.98%)	5 (4.27%)

Table 13 indicates that a substantial proportion of college teachers, with 58.98 % in total, believe that teaching excellence is given due recognition in the accreditation process alongside research and publication achievements. More specifically, 36.75% of teachers completely agree with this, and only a small 4.27% do not agree with this. In essence, the data reveals that the majority of college teachers are of the view that the accreditation process gives due recognition to teaching excellence to some extent alongside research and publication achievements.

Table – 14

Role of college teachers in the accreditation process

Item - 14	Very influential	Moderately influential	Not influential
How do you perceive the role of college teachers in the accreditation process?	76 (64.96%)	37 (31.62%)	4 (3.42%)

Table 14 shows that 64.96% of college teachers perceive the role of college teachers in the accreditation process as very influential, 31.62% of teachers consider it as moderately influential, and 3.42% of teachers believe it is not influential at all. This indicates that the majority of college teachers perceive the role of college teachers in the accreditation process as very influential

Table – 15

Item - 15	Extremely valuable	Somewhat valuable	Not valuable at all
How do you perceive the role of student feedback in the accreditation process?	70 (59.83%)	47 (40.17%)	0

The data in Table 15 indicates that a significant majority of college teachers highly value the role of student feedback in the accreditation process, with nearly 60% perceiving it as extremely valuable, and the rest considering it somewhat valuable. None of the teachers regard student feedback as not valuable at all. This stresses the strong importance that college teachers place on student feedback within the accreditation process.

Table – 16

Role of research and publications in the accreditation process

Item - 16	Very important	Moderately important	Not important at all
What role does research and publications play in the accreditation process for colleges in Mizoram?	74 (63.25%)	41 (35.04%)	2 (1.71%)

The data in Table 16 reveals that an overwhelming majority of college teachers consider the role of research and publications in the accreditation process to be highly significant, with more than 63% regarding it as very important. Additionally, around 35% of teachers find it moderately important, and only a small fraction, approximately 1.71%, do not see it as important at all. This clearly indicates that most college teachers advocate for a prominent and crucial role for research and publications in the accreditation process for colleges in Mizoram.

Table – 17

Most significant barrier to successful accreditation for colleges

Item - 17	Lack of resources	Insufficient infrastructure	Faculty shortages	Administrative challenges	others
What, in your opinion, is the most significant barrier to successful accreditation for colleges in Mizoram?	45 (38.46%)	28 (23.93%)	24 (20.51%)	16 (13.67%)	5 (4.27%)

In Table 17, it is evident that a substantial portion of college teachers in Mizoram regards the lack of resources as the foremost and most significant hindrance to the successful accreditation of colleges in the region, with nearly 38.46% highlighting this issue. Moreover,

around 23.93% of teachers identify insufficient infrastructure as the primary barrier, while 20.51% point to faculty shortages as a key challenge. Moreover, 13.67% express concerns about administrative challenges, and 4.27% acknowledge other barriers. Consequently, the most prevalent perception among teachers is that the scarcity of resources represents the most substantial impediment to the successful accreditation of colleges in Mizoram.

Table – 18

Greatest challenges in implementing effective assessment practices

Item - 18	Lack of assessment expertise	Resistance to change	Limited resources for assessment	Inadequate training	Others
What, in your opinion, is the greatest challenge in implementing effective assessment practices in your college?	24 (20.51%)	26 (22.22%)	43 (36.75%)	24 (20.51%)	1 (0.86%)

In Table 18, the data indicates that a significant portion of college teachers, comprising 36.75%, perceive limited resources for assessment as the most prominent hurdle when it comes to implementing effective assessment practices in their college. Besides, 22.22% of teachers believe resistance to change is the greatest challenge. Moreover, 20.51% of teachers express that the primary challenge lies in the lack of assessment expertise, while an equal percentage, another 20.51%, consider inadequate training to be a substantial barrier. It is worth noting that only a very small fraction, 0.86% of teachers, identify other challenges. Therefore, the prevailing sentiment among teachers is that limited resources for assessment represent the foremost challenge in the successful implementation of effective assessment practices in their college.

Table – 19

Primary benefit of the accreditation process for colleges in Mizoram

Item - 19	Enhanced academic quality	Increased funding opportunities	Improved reputation	Accountability and transparency	Others
In your opinion, what is the primary benefit of the accreditation process for colleges in Mizoram?	45 (38.46%)	37 (31.62%)	25 (21.37%)	9 (7.67%)	1 (0.86%)

Table 19 reveals that the majority of college teachers in Mizoram, with 38.46% of respondents, regard the foremost advantage of the accreditation process for colleges is an

enhancement in academic quality. Furthermore, a substantial 31.62% of teachers see it primarily as an avenue for increased funding opportunities, while 21.37% attribute it to an improved reputation. A smaller proportion, 7.67%, emphasizes its role in fostering accountability and transparency. Only a negligible 0.86% foresee other benefits. Therefore, it is evident that most teachers believe that the central advantage of the accreditation process for colleges in Mizoram lies in the improvement of academic quality.

Table – 20

Improvements to enhance the accreditation process for colleges in Mizoram

Item - 20	More training and workshops for faculty	Increased collaboration between colleges and accreditation bodies	Tailored accreditation criteria for Mizoram's context	Better communication channels	Others
What additional measures or improvements would you suggest to enhance the accreditation process for colleges in Mizoram?	45 (38.46%)	37 (31.62%)	25 (21.37%)	9 (7.69%)	2 (1.71%)

Table 20 indicates that a significant 38.46% of college teachers advocate the implementation of additional training and workshops for faculty as a key measure to enhance the accreditation process for colleges in Mizoram. Another notable 31.62% of teachers suggest fostering increased collaboration between colleges and accreditation bodies. Moreover, 21.37% of teachers emphasize the importance of tailoring accreditation criteria to suit the specific context of Mizoram. A smaller but significant 7.69% advocate for the improvement of communication channels. A minority, only 1.71% of teachers, raise various other points. In summary, the primary recommendation made by most teachers to enhance the accreditation process in Mizoram's colleges is the provision of more training and workshops for faculty.

Recommendations to improve assessment and accreditation in higher education in Mizoram:

To enhance assessment and accreditation in higher education, several key recommendations have been identified. These recommendations aim to improve the quality of education and ensure that institutions meet accreditation standards:

Implement Formative Assessment: Formative assessment strategies can enhance student learning by providing ongoing feedback. It is crucial to incorporate these methods into the

teaching and learning process, helping students better understand their progress and areas for improvement

Focus on Learning Outcomes: Accreditation processes should prioritize assessing and grading systems that focus on learning outcomes. This shift can help institutions align their educational objectives with accreditation standards and ensure that students are achieving the intended learning goals

New Perspectives on Accreditation: Consider new perspectives on accreditation. Exploring different ways to use accreditation to improve higher education is essential. Institutions should be open to addressing the issues that need attention and determine how to address them effectively

Incorporate Collaborative Approaches: Collaborative approaches to accreditation can bring significant benefits to higher education. Institutions can benefit from collaborative efforts to ensure quality education and follow higher standards

Professional Development and Training: Provide faculty with ongoing professional development and training opportunities. Enhancing the skills and expertise of faculty members is crucial for effective assessment and accreditation processes

Tailored Accreditation Criteria: Customize accreditation criteria to align with the specific context and needs of the region or institution. Tailoring the criteria can ensure that accreditation is relevant and achievable within the given context

Improved Communication Channels: Establish better communication channels within institutions and between accreditation bodies and colleges. Clear and effective communication is key to successful assessment and accreditation processes

These recommendations collectively contribute to improving the assessment and accreditation processes in higher education, ensuring that institutions meet quality standards and provide a better learning experience for students.

References:

- Sharma, D. (2023). *What is NAAC accreditation and why is it important?* <https://www.linkedin.com/pulse/what-naac-accreditation-why-important-dheeraj-sharma>
- What is NAAC accreditation? Importance & benefits of NAAC accreditation.* <https://www.iitms.co.in/blog/importance-of-naac-accreditation-for-colleges.html> Oct 2023

Constructivism as an Approach in Teaching-Learning Process

Lalhruaitluangi*
Nitu Kaur**

Abstract

Constructivism is one of the important ideas in education. The impact on how teachers teach and to learn to teach is enormous. For education reform efforts to succeed for all students, they must focus on students. To date, the emphasis on student-centred learning may be constructivism's most important contributions. Constructivism is a psychology-based learning theory that explains how people acquire and learn knowledge. Therefore, it can be directly applied to education. This theory states that people construct knowledge and meaning from their experiences. It also has a philosophical underpinning that emphasizes highly on epistemology of problem solving and self-directed learning methods. The paper tries to highlight its approach and implication on teaching-learning process.

Keywords : Constructivism, Teaching-Learning Process, Teaching Theory

Roots and Stems of Constructivism

Constructivism has multiple roots in the psychology and philosophy of twentieth century. It is rooted in the development perspective of Jean Piaget, the emergence of cognitive psychology under the guidance of figures such as Jerome Bruner and Erickson, the interactional and cultural emphasis of Bruner and Vygotsky, the constructivist perspective of philosophers such as Nelson Goodman. Central to the vision of constructivism is the notion of the organism as "active", not just responding to stimuli, as in the behaviorist rubric, but engaging, grappling and seeking to make sense of things (Perkins, 1991). Even, there are researchers in fields from science education to educational psychology and instructional technology, who are articulating

*Ms. Lalhruaitluangi, Research Scholar & Assistant Professor, Department of Education
Pachhunga University College

**Dr. Nitu Kaur, Assistant Professor, Department of Education, Mizoram University

various aspects of the constructivist theory. Moreover, constructivism is only one of the labels used to describe these efforts. Rather than a single theory, constructivism represents a collection of similar approaches which are gaining currency in education and training. They stem from a view of learning more compatible with the ideas of Piaget, Bruner than with information processing.

Definition and Description of Constructivism

Honobein (1996) describes the philosophical paradigm as an approach that asserts that people construct their own understanding and knowledge of the world through experiencing things and reflecting on those experiences. It is based on the analogy or basis that people form or construct much of what they learn through experience (Hein, 1991). Thus, to the constructivist, constructing meaning is learning; there is no other kind. This nullifies the traditional concept of learning in a 'chew, pour, and forget' thus, learning because of examination with less or no motivation on the application of the learned experience in real life setting.

To the constructivist, learning occurs only when the learner discovers the knowledge through the spirit of experimentation and doing (Dogru & Kalender, 2007). The brain behind this kind of philosophical approach is best described in Confucius, the renowned Chinese philosopher's quote, "I hear and I forget. I see and I remember. I do and I understand". What is the meaning of his statement? If teachers' spoon feed students with knowledge as mother does the weaning child, the students forever will be immature, not having the keen ability to make constructive arguments about issues and drawing tentative conclusions of situations. This soon makes them forget why they were taught. If they witness the carrying out of the phenomenon, they may remember through the sensory activity of seeing. The best option which the constructivist philosophers believe and propose is fully engage the student in the teaching and learning processes so that his engagement would enable him personally discover the knowledge or 'truth'.

Piaget's theory of Cognitive Constructivism

Piaget's theory of constructivism impacts learning curriculum because teachers have to make a curriculum plan which enhances their students' logical and conceptual growth. Teacher must put emphasis on the significant role that experiences – or connections with the adjoining atmosphere play in student education. For example, teachers must bear in mind the role of those fundamental concepts, such as the permanence of objects, plays when it comes to establishing cognitive structures.

Piaget's theory of constructivism argues that people produce knowledge and form meaning based upon their experiences. Piaget's theory covered learning theories, teaching methods and education reform. Two of the key components which create the construction of an individual's new knowledge are accommodation and assimilation. Assimilating causes an individual to incorporate new interferences into the old experiences. This causes the individual to develop new outlooks, rethink what were once misunderstandings, and evaluate what is important, ultimately altering their perceptions. Accommodation on the other hand, is reframing the world and new experiences into the mental capacity already present. Individuals conceive a particular fashion in which the world operates. When things do not operate within that context. They must accommodate and reframing the expectations with the outcomes. Students and their learning.

Apart from learning theories, Piaget's theory of constructivism addresses how learning actually occurs, not focusing on what influences learning. The teacher in this theory functions as facilitators whose role is to aid the student when it comes to their own understanding. This takes away focus from the teacher and lecture puts it upon the student and their learning. The resources and lesson plans that must be initiated for this learning theory take a very different approach toward traditional learning as well. Instead of telling, the teacher must begin asking. Instead of answering questions that only align with curriculum, the facilitator in this case must make it so that students come to the conclusions on their own instead of being told. Also, teachers are continually in conversation with the students, creating the learning experiences that is open to new directions depending upon the needs of the student as the learning progresses. Teachers following Piaget's theory of constructivism must challenge the student by making them effective critical thinkers and not being merely a 'teacher' but also a mentor, a consultant, and a coach.

Vygotsky's theory of Social Constructivism

Lev Vygotsky introduced the social constructivism learning theory in 1968. According to social constructivism, children's understanding is shaped not only by their adaptive interactions with the physical world but also by their interactions with other people in relation to a world that is cultural, meaningful, and significant, made so in large part by language. This world is not just physical and perceivable through the senses. The level of potential growth (academic performance), according to Hein (1991), is the degree of development that the learner is capable of achieving with the help of teachers or in cooperation with peers. He views education as a social activity that involves other individuals, such as peers, family members, and even passing acquaintances like those who have gone before. The use of discussion, interpersonal

contact, and the application of information are all recognized as important components of social constructivism's understanding of learning and as ways to accomplish learning goals.

According to Vygotsky, social interaction is essential to human development throughout life and social learning really promotes cognitive growth. In other words, learners may complete any learning task—no matter how challenging—while being guided by an adult or working together with peers. The development of possibilities for students to work together with the instructor and peers in creating knowledge and understanding is supported by this notion. According to Kapur (2018), social production of knowledge occurs in a variety of settings and on numerous platforms.

It might be accomplished through group discussions, teamwork, or any type of pedagogical contact in a place of learning or training, on social media, in a place of worship, or in a marketplace. Students develop knowledge and experience necessary for leading fulfilling lives when they engage with others, the physical and immaterial world, and themselves. Because social constructivism is built on student involvement, discussion, and sharing, it is also known as collaborative learning. A variety of groups and interactive techniques are possible with this teaching style. These could include class-wide talks, discussions in smaller groups, or pairs of students working together on projects or tasks. The fundamental tenet of the theory is that students collaborate in groups to share ideas, brainstorm solutions to problems, find causes and effects, or simply produce something new to supplement prior knowledge.

Commonality in the Two Contrasts: Cognitive and Social Constructivism

According to Cognitive constructivism definition by Irene Chen (2005) who is a renowned machine-learning specialist, "Piaget's theory of cognitive development proposes that human cannot be "given" information which they immediately understand and use. Instead, humans must "construct" their own knowledge. They build their knowledge through experience. Experiences enable them to create schemas – mental models in their heads. The schemas are changed, enlarged and made more sophisticated through complementary processes, assimilation and accommodation". She further defines and contrasts social constructivism by saying, "There is a great deal of overlap between cognitive constructivism and Vygotsky's social constructivist theory. However, Vygotsky's constructivist theory, which is often called social constructivism, has much more room for an active, involved teacher. For Vygotsky the culture gives the child the cognitive tools need for development. The type and quality of those tools determines, to a great extent than they do in Piaget's theory, the pattern and rate of development. Adults such as parents and teachers are conduits for the tools of culture, including language. Today they include electronic forms of information access".

Principles of Constructivism

Following are core Principles of Constructivism:

1. *Knowledge is constructed:* Knowledge is built upon prior knowledge. Students take pieces and put them together in their own self unique way. Building something unique than what another student will build. This is the basic principle of constructivism. The student's previous knowledge, experiences, beliefs and insights are all important basis for their continued learning.
2. *People learn to learn:* Learning involves constructing meaning and systems of meaning. For example, if a student is learning the chronology of dates for a series of historical events, at the same time, they are learning the meaning of chronology. If they are writing a paper about history, they are also learning principles of grammar and writing as well. A simple small thing we learn gives us a better understanding of other things in the future.
3. *Learning is an active process:* Learning encompass sensory input to construct meaning. The learner needs to do something in order to learn, it's not a passive activity. They need to engage in the world so that they are vigorously involved in their own learning and development. Learners cannot just sit and expect to be told things and learn, they need to engage in discussions, readings, activities and the like.
4. *Learning is directly linked to our connection with other people:* Our teachers, our family, our peers, and our acquaintances impact our learning. Educators are more likely to be successful as they understand that peer involvement is important in learning. Progressive education recognize that social interaction is key to learning and they use conversation, interaction, group applications to encourage students retain their knowledge.
5. *Learning is contextual:* Students don't learn isolated facts and theories separate from the rest of our lives – We learn in a way connected to things we already know, what we believe and more. The points we tend to remember and the things we learn are connected to the things going on around us.
6. *Knowledge is personal:* Knowledge is a personal matter as constructivism is based on one's own experiences and beliefs. Each person will have their own prior knowledge and experiences to bring to the table. Thus, the way and things people learn and gain from education is very difficult.
7. *Learning exists in the mind:* Hands on experience and physical activity are important for learning, but those elements are not enough. Engaging the mind is key to successful learning. Learning needs to involve activities for the mind, not just the hands. For retaining the knowledge, the mental experiences are needed.

8. *Motivation is key to learning:* Motivation is very important for students to learn. Students are unable to learn if they are not motivated. Educators need to have ways to engage and motivate learners to activate their minds and help them get excited about education. Without motivation, it is difficult for learners to reach into their past experience and make connections for new learning.

Constructivist Assumption about Learning and Knowledge

Theorists who write in the emerging constructivist tradition often contrast their ideas with epistemological assumptions of the objectivist tradition. Objectivism is the view that knowledge of the world comes about through the individual experience of it. As the experience grows broader and deeper, knowledge is represented in the individual's mind as an even closer approximation of how the world really is. In a sense, then, knowledge is thought to exist independently of learners and learning consists of transferring that knowledge from outside to within the learner. Both behavioural and cognitive information processing theories of learning emerged from the objectivist tradition. That is, information processing as well as behaviourism separates the individual from his/her environment. The constructivist approach contrasts with theories of education which see knowledge and rules which have been institutionalized by past generations as mind-independent entities in an external environment. Constructivist view knowledge as someone's knowledge. Learning is accomplished by constructing and elaborating schemas based on experiences. It is very much a personal matter (Wheatley, 1991). Constructivist view learning as the adaptations children make in their functioning schemes to neutralize perturbations that arise through interactions with the world (Steffe 1995). Learners, therefore, are not empty vessels waiting to be filled but rather active organisms seeking meaning. Regardless of what is being learned, constructive processes operate and learners form, elaborate and test complex mental structures until a satisfactory one emerges (Perkins, 1991). Moreover, new particularly conflicting experience will cause perturbations in these structures, so that they must be constructed anew in order to make sense of the new information. Piaget referred to a similar process as schema accommodation and other developmental theorists called it knowledge restructuring. Both Bruner and Vygotsky as well, devised similar concepts to account for the changes in children's knowledge as they develop.

Because constructivists state that each person constructs knowledge for him/herself and in fact construct their own reality, they have been accused of ignoring the role of social interaction in learning. But this is not true, construction is greatly influenced by others, it might be more representative of radical constructivism to say that individuals construct knowledge. Thus, meanings stem from the consensual domains of individuals, learning is characterized by the subjective reconstruction of societal means

and models through the negotiation of meaning is social interaction (Bauersfeld,1988).Moreover,many constructivist theorists adhere to Vygotsky's notion about the social negotiation of meaning.That is,learners test their own understanding against those of others,notably those of teachers or more advanced peers.Thinking in terms of activities rather than content may be more useful in establishing effective learning environment.Since knowledge involves a learner,it is necessary to consider intentions.Everything that a person does is shaped by intentions and learning events must be seen as intentional."Thought and action must be interpreted in terms of thinker's purpose"(Cobb, Wood, Yackle, Nicholls, Weatley, Trigatti, &Perlwitz,1991).

Constructivist approach to identifying learning goals emphasizes learning in context.Brown et al. (1989),for example argued that learners can usefully deploy should be developed.Moreover,this can only be done in the context of meaningful activity.It is not enough, in other words for students to acquire concepts or routines that lie inert,never to be called upon even in the face of relevant problems to be solved.Instead,knowledge must develop and continue to change with the activity of the learner." Learning is continuous, life -long process resulting from acting in situations"(Brown et al. 1989).In view of this thinking activities the ability to write persuasive essays,engaging in formal reasoning,explaining how data relate to theory in scientific investigation formulate and solve moderately complex problems could be the primary goals of concerns to the constructivist.Spiro et al. (1991)described the need for learners to acquire cognitive flexibility whereas Jonathan Culler, a specialist in semiotics spoke of the need to foster post structuralist thinking.a kind of relative criticism.Critical thinking and mindful considerations are also among those goals thought to be fostered by constructivist pedagogy.

Features of Constructivist Model of Learning

The important features of constructivist model of learning could be summarized as follows in terms of some major works:

1. Knowledge acquisition is a constructive or generative process and each student's knowledge is personal or idiosyncratic (Fisher & Lipson,1986)
2. Misconceptions may originate as a result of student's interaction or experiences with the real world and/or because of his/her misinterpretation of the world of ideas presented to him/her (Driver and Easley,1978).
3. Development of alternative frameworks or misconception is from the same mechanism that leads to the development of conception (Eylon and Linn,1988).
4. Due to their conceptual ecologies,different students can incorporate the same new experiences or ideas differently in their conceptual structure's framework (Jordan,1987)

5. The process of concept formation is a continuous process of successive approximation and students hold intuitive ideas that are both identifiable and stable, and have enough commonality to make it worth for planning instructional strategies (Clough and Driver, 1986).

Analysis of the above features as given by different cognitive psychologists and educators suggests that constructivism emphasizes the importance of each pupil's active role in the construction of knowledge through the interplay of prior learning and new learning. These connections are constructed by the learner themselves.

Researchers and theorists maintain that the key element of constructivist theory is that people learn by constructing their own knowledge, comparing new information with their previous understanding and using this to work through discrepancies to come to new understanding. Tam (2000) lists the following characteristics of constructivist learning environments, which must be considered when implementing constructivist instructional strategies i.e., i) Knowledge will be shared between teachers and students; ii) Teachers and students will share authority; iii) The teacher's role is one of a facilitator or guide and iv) Learning groups will consist of small numbers of heterogeneous students.

Honobein (1996) summarizes what he describes as the seven pedagogical goals of constructivist learning environment as:

- i) To provide experience with the knowledge construction process (students determine how they will determine)
- ii) To provide experience in and appreciation for multiple perspectives (evaluation of alternative solutions)
- iii) To embed learning in realistic contexts (authentic tasks)
- iv) To encourage ownership and a voice in the learning process (student centered learning).
- v) To embed learning in social experience. (collaboration)
- vi) To encourage the use of multiple roots of representation (video, audio text, etc.)
- vii) To encourage the awareness of the knowledge construction process (reflection, metacognition).

Emphasis on the Learner and Redefining Teaching Methods

In the constructivist theory the emphasis is placed on the learner or the student rather than the teacher or the instructor. It is the learner who interacts with objects and

events and thereby gains an understanding of the features held by such objects or events. The learner therefore constructs his/ her own conceptualizations and solutions of problems. Learner's autonomy and initiative is accepted and encouraged.

Constructivists view learning as the result of mental construction. Students learn by fitting new information together with what they already know. People learn best when they actively construct their own understanding. In constructivists thinking, learning is also affected by the context and the beliefs and attitudes of learners. Learners are encouraged to invent their own solutions and to try out ideas and hypotheses. They are given the opportunity to build on prior knowledge.

A major theme in the theoretical framework of Bruner is that learning is an active process in which learners construct new ideas or concepts based upon their current/past knowledge. The learner selects and transforms information, constructs hypotheses, and makes decisions, relying on a cognitive structure to do so. Cognitive structure (i.e., schema, mental models) provides meaning and organization to experiences and allows the individual to go beyond the information given.

As far as instruction is concerned, the instructor should try to encourage students to discover principles by themselves, the instructor and student should engage in an active dialogue (i.e., Socratic learning). The role of the instructor is to translate information to be learned into a format appropriate to the learner's current stage of understanding. Curriculum should be organized in a spiral manner so that the student continuously builds what they already have learned.

Bruner (1996) states that a theory of instruction should address four major aspects.

- i) Predispositions towards learning
- ii) The ways in which a body of knowledge can be structured so that it can be most readily grasped by the learner.
- iii) The most effective sequences in which to present material, and
- iv) The nature and pacing of records and punishments.

According to social constructivism, knowledge is not an individual property but rather a shared experience that arises from social interaction. In the classroom, social constructivism, according to Kelly (2012), might be implemented through the use of case studies, research projects, problem-based learning, brainstorming, collaborative learning/group work, guided discovery learning, simulations, and more. In order to help the groups or pairs understand ideas or accumulate learning experiences in accordance with the planned objectives, the instructor may at times split the class into groups or pair the pupils.

Teaching strategies for social constructivism may be divided into two main categories: discussion and activity/group work.

Discussion-based instruction: According to Omwirhiren (2015), a discussion approach is one that use facilitated interaction to draw attention to a certain topic matter with the intention of assisting the students. Although the approach takes time, according to Jegede (2010), it improves learning by offering students the opportunity to develop their communication skills and mental abilities such as critical thinking, reflective thinking, and assessing differing viewpoints. In this technique, the teacher plays the role of a facilitator. Through thoughtful conversation, the teacher helps the pupils learn by doing. In this teaching strategy, teachers and students discuss a predetermined subject in-depth. Small-group discussions or class-wide discussions can be used for this. The conversation is facilitated by the teacher, and all students are free to express their opinions on a particular issue or subject. To prevent chaos, rules are set up from the outset.

This teaching strategy increases student attention, promotes learning retention, encourages discussion, and engages students as active participants in the course. Students are encouraged to confront one another and freely exchange ideas, which fosters democratic thinking among them. They acquire reflective thinking abilities as a result, which aid in their ability to fully comprehend and evaluate problems. As a result, their ability to communicate with others is enhanced, and they also learn to appreciate and tolerate the opinions of others, even when those opinions are unfavorable to them. Debate, think-pair-share, role playing, brainstorming, field trips, and other socially engaged teaching/learning techniques are all examples of discussion methods. They promote inquiry, critical thinking, the growth of speaking and listening abilities, and the capacity to assess other people's opinions.

Activity/group work-based instruction: Small groups of students collaborate to complete an activity or group project using this type of education. Within the group, each student assumes a position that may be official or informal, and the roles frequently change. It focuses on the contemplation and reasoning of the students as they build their own learning. In other words, it involves figuring out what they already know, what they need to know, and how and where to get fresh knowledge that might help them solve their problem. The teacher's job is to support, direct, and oversee the learning process in order to encourage learning. The instructor wants to increase students' learning while also helping them become more confident in their ability to solve difficulties. Compared to the old, frequently lecture-based methods of teaching and learning, this approach to teaching and learning constitutes a paradigm change. A good illustration of group work is the problem-based teaching and learning approach.

Bell (2010) describes project-based teaching and learning as a cutting-edge method of instruction that imparts a wide range of skills necessary for success in the twenty-first century. With this type of instruction, students learn how to inquire and collaborate to conduct research and produce projects that demonstrate their understanding. Project-based learning is a complete approach to classroom teaching and learning that is created to involve students in exploration of real-world issues, according to Blumenfeld, Soloway, Ronald, Krajcik, Guzdial, and Palincsar (2011).

The Jigsaw is an additional group/activity teaching technique. Jigsaw is a type of guided discovery teaching strategy that makes use of cooperative and collaborative learning methods. Igwe (2018) asserts that the jigsaw teaching technique incorporates the cooperative learning method and its tenets. In this teaching approach, groups of students are formed, and the teacher sets up scenarios that promote student collaboration during the teaching and learning process. Jigsaw are an excellent teaching approach because, according to Ike (2016), each student's success is necessary for the success of the group. This forces the group to function as a cohesive one in order to succeed.

Constructivism as Favourable Conditioning for Impactful Classroom Processes

Social constructivism clarifies the teacher's position in the teaching/learning process, which supports instructional pedagogy. This suggests that educators should use instruction strategies that are: learner-centered, collaborative in nature and instructor-guided. In learner-centered approach the pupils are prioritized over the instructor. This implies that the students are asked to actively participate in their own learning process. They are free to develop their own concepts, inquiries, explanations, and make-ups. In the sense of collaboration learning through social/ peer contact is prioritized. Students are required to collaborate in groups to solve issues, research, and examine subjects and situations in order to draw conclusions. By doing this, people independently find information or create it. Instructor guide the whole process in social constructivist classrooms. Peer contact takes the form of collaborative learning, which is managed and organized by the instructor. The presentation of certain ideas, issues, or situations can start a discussion. The discussion is then steered by well-placed questions, the introduction and explanation of ideas and information, and allusions to previously studied material.

This new role of teacher is highly effective on how pupils' learning experiences as they no longer sit down to be lectured to or given information by the instructor as in traditional classrooms. Rather they learn by doing as they respond to the teacher's prompts, such as questions, assignments, project work, and the like. Further, in order to collaborate effectively or engage in cooperative learning, students are now taught to

work in groups that the instructor has established. As they share and expand upon their prior experiences to produce new information, they become co-custodians of knowledge. They take ownership of their learning by contributing actively to the process and working together. By valuing and examining fresh perspectives and lessons learned from their peers, students should learn to take into account the opinions of others. They should respect each event, take lessons from it, and be willing to share with their groups in order to continually develop their cognitive capacity.

References

- Bada, S. O., & Olusegun, S. (2015). Constructivism learning theory: A paradigm for teaching and learning. *Journal of Research & Method in Education*, 5(6), 66-70.
- Bauersfeld, H. (1983). Subjektive Erfahrungsbereiche als Grundlage einer Interaktionstheorie des Mathematiklernens und -lehrens. In H. Bauersfeld, H. Busmann, G. Krummheuer, J. H. Lorenz, & J. Voigt (Eds.), *Lernen und Lehren von Mathematik. Untersuchungen zum Mathematikunterricht, Band 6* (pp. 1-56). Köln: Aulis Verlag Deubner.
- Bell, S. (2010) *Project-Based Learning for the 21st Century: Skills for the Future*. The Clearing House, 83, 39-43. <http://dx.doi.org/10.1080/00098650903505415>
- Britannica, T. Editors of Encyclopaedia (2023, October 16). Frederic Bartlett. Encyclopedia Britannica. <https://www.britannica.com/biography/Frederic-Bartlett-psychologist>
- Brown, J. S., Collins, A., & Duguid, P. (1989). Situated cognition and the culture of learning. *1989, 18*(1), 32-42.
- Bruner, J. (1996). *Frames for thinking: Ways of making meaning*.
- Chen, I. (2005). Cognitive constructivist theories. *Dimuatturunpada Mei*, 13, 2005.
- Cifarelli, V. V. (1998). The development of mental representations as a problem solving activity. *The Journal of Mathematical Behavior*, 17(2), 239-264.
- Clough, E., & Driver, R. (1986). A study of consistency in the use of students' conceptual frameworks across different task contexts. *Science Education*, 70(4), 473-496.
- Cobb, P., Wood, T., Yackel, E., Nicholls, J., Wheatley, G., Trigatti, B., & Perlwitz, M. (1991). Assessment of a problem-centered second-grade mathematics project. *Journal for research in mathematics education*, 22(1), 3-29.
- Dogru, M., & Kalender, S. (2007). Applying the Subject" Cell" through Constructivist Approach during Science Lessons and the Teacher's View. *Online Submission*, 2(1), 3-13.

- Dorgu, T. E. (2015). Different teaching methods: A panacea for effective curriculum implementation in the classroom. *International Journal of Secondary Education*, 3(6), 77-87.
- Driscoll, M. P. (2000). *The Psychology of Learning for Instruction*, 2nd Allyn and Bacon: Boston.
- Driver , R. and Easley , J. 1978 . Pupils and paradigms: a review of literature related to concept development in adolescent science students . *Studies in Science Education* , 5 : 61 – 84 .
- Eylon, B. & Linn, M. (1988). Learning and instruction: An examination of four research perspectives in science education. *Review of Educational Research*, X(3), 251-301.
- Fisher, K., & Lipson, J. (1986). Twenty questions about student errors. *Journal of Research in Science Teaching*, **23**, 783–803.
- Fox, R. (Ed.). (1996). *Perspectives on constructivism* (Vol. 56). University of Exeter, Media and Resources Centre.
- Hein, G. E. (1991). Constructivist learning theory. *Institute for Inquiry*. Available at:<http://www.exploratorium.edu/ifi/resources/constructivistlearning.html>S.
- Honebein, P. C. (1996). Seven goals for the design of constructivist learning environments. *Constructivist learning environments: Case studies in instructional design*, 11(12), 11.
- Jean Piaget's Constructivist Theory of Learning and Its Application in Teaching*. Retrieved from**[Doran International ECE Center | Jean Piaget's Constructivist Theory of Learning and Its Application in Teaching \(doran-ece.ca\)](http://DoranInternationalECECenter.com)
- Jonassen, D. H. (1991). Evaluating constructivistic learning. *Educational Technology*, 28-33.
- Kanno, T. N. (2018). Guided discovery teaching method. *Issues in Curriculum Development and Implementation in Nigeria*. Lagos: Foremost Educational Services Ltd.
- Kapur, R. (2018). The significance of social constructivism in education. *Obtenido de https://www.researchgate.net/publication/323825342_The_Significance_of_Social_Constructivism_in_Education*.
- Kelly, A. V. (2009). *The curriculum: Theory and practice*. Sage.
- Omwirhiren, E. M. (2015). Enhancing academic achievement and retention in senior secondary school chemistry through discussion and lecture methods: a case study of selected secondary schools in Gboko, Benue State, Nigeria. *Journal of Education and Practice*, 6(21), 155-161.
- Perkins, D. N. (1991). What constructivism demands of the learner. *Educational technology*, 31(9), 19-21.

- Roth, W. M. (1999). Authentic school science: Intellectual traditions. *Learning and knowledge*, 6-20.
- Spiro, R. J., Feltovich, P. J., Jacobson, M. J., & Coulson, R. L. (1991). Cognitive flexibility, constructivism, and hypertext: Random access instruction for advanced knowledge acquisition in ill-structured domains. *Educational Technology*, 31 (5), 25-33.
- Steffe, L. P. (1995). Alternative epistemologies: An educator's perspective. In L. P. Steffe and J. Gale (Eds.), *Constructivism in education* (pp. 489–524). Hillsdale, NJ: Lawrence Erlbaum Associates
- Tam, M. (2000). Constructivism, instructional design, and technology: Implications for transforming distance learning. *Journal of Educational Technology & Society*, 3(2), 50-60.
- Westwood, P. S., & Westwood, P. (2008). *What teachers need to know about teaching methods*. Aust Council for Ed Research.
- Wheatley, G. H. (1991). Constructivist perspectives on science and mathematics learning. *Science education*, 75(1), 9-21.
- <https://www.wgu.edu/blog/what-constructivism2005.html>

Job Satisfaction and Value System of Male and Female Secondary School Teachers in Mizoram

Lalzarmawii*

Abstract

The purpose of the present study was to find out the relationship between the job satisfaction and valuesystem of male and female secondary school teachers in Mizoram. It was found that the male teachers' job satisfaction is notsignificantly related with their theoretical, aesthetic, political and religious values but is related with their economic and social values. It was also found that the job satisfaction of femaleteachers teaching in secondary schools of Mizoram is not having a significant relationship with their theoretical, aesthetic and political values while it is found that there is significant relationship between their job satisfaction and their economic, social and religious values.

Keywords: *Job satisfaction, Value system, Secondary school teachers.*

Introduction

Job satisfaction is a widely accepted psychological aspect of functioning in any profession which describes how content an individual is with his or her job. It is the result of various attitudes possessed by an employee towards his job. These attitudes may be related to job factors such as wage, job security, job environment, nature of work, opportunities for promotion, prompt removal of grievances, opportunities of participation in decision making and other fringe benefits. Job satisfaction has been defined as “an attitude which results from a balancing summation of many likes and dislikes experienced in connection with the job” (Bullock 1952).

The term job satisfaction has been defined by Guion (1958) as “the extent to which the individual’s needs are satisfied and the extent to which the individual perceives that satisfaction as stemming from his total job situation.” In the present study Job Satisfaction refers to the satisfaction of teachers on job - intrinsic factors

*Dr.Lalzarmawii, Associate professor, Department of Education, Aizawl North College

(factors lying in the job itself) and extrinsic factors (factors lying outside the job). Job intrinsic factor area was further conceptualised as job concrete e.g. excursions, working conditions etc., and job abstract e.g. cooperating, democratic functioning etc., and job extrinsic area as consisting of three components, viz. psycho-social aspects, financial aspects and community/nation growth aspect.

A value system means how an individual or a group of individuals organize their ethical or ideological values. Value System in the present study refers to the classification based on the six (6) values viz., theoretical, economic, aesthetic, social, political and religious.

Rationale of the study

Teachers are arguably the most important group of professionals for the nation's future and hence it is disturbing to find that many of today's teachers are dissatisfied with their jobs. The teacher's job satisfaction influences his job performance, attrition and ultimately students' performance. A teacher's job life is not absolutely separate from his personal life, but rather these two aspects of life are interrelated to each other. The value system of teachers may be one of the many factors for job satisfaction among the secondary school teachers of Mizoram. In this study an attempt was made to find out the relationship between job satisfaction and the value system of both the male and female secondary school teachers in Mizoram.

Objectives of the study

1. To find out the relationship between job satisfaction and value system of male secondary school teachers in Mizoram.
2. To find out the relationship between job satisfaction and value system of female secondary school teachers in Mizoram.

Hypotheses

1. There is no significant relationship between job satisfaction and value system of male secondary school teachers in Mizoram.
2. There is no significant relationship between job satisfaction and value system of female secondary school teachers in Mizoram.

Method of Study

The present study belongs to the category of descriptive research with composite characteristics of inter-group comparison as it involves survey and fact finding enquiry

relating to the job satisfaction of secondary school teachers in Mizoram in relation to their value system.

Population

The population of the present study comprises of all the teachers teaching in all the government and non-government secondary schools of both urban and rural areas of Mizoram. There are 502 secondary schools in the state out of which 2 are Central Schools, 194 are Government schools, 9 are Deficit Schools, 10 are Adhoc Aided Schools, 107 Private Aided and 182 are Private Unaided Schools. Among these 502 secondary schools 273 are in the urban areas while the rest 229 are in the rural areas. The total number of teachers teaching in such schools is 3768 out of which 2691 are males and 1077 are females.

Sample

The sample for the study was selected in a scientific and objective manner following Random Sampling Design from the eight (8) districts of the state. The sample selected consists of 418 teachers from 91 secondary schools of Mizoram out of which 211 are male teachers and 207 are female, 210 are government school teachers and 208 are non- government teachers, 211 are from urban areas and 207 are teaching in rural areas.

The sample distribution of District wise Schools and sample distribution of teachers are given in Table -I and table –II respectively.

Table No – 1
District-wise schools and sampled schools

Districts	No. of schools available				No. of schools selected for the			
	Govt.	Non- govt.	Urban	Rural	Govt.	Non-Govt.	Urban	Rural
Aizawl	64	123	133	54	18	17	22	13
Lunglei	33	55	51	37	7	5	8	4
Saiha	13	17	16	14	2	2	4	1
Champhai	29	41	27	43	10	11	12	9
Kolasib	12	15	14	13	4	2	3	3
Serchhip	15	16	15	16	2	3	3	5
Mamit	13	17	5	25	2	2	1	3
Lawngtlai	15	24	12	27	2	2	3	1
Total	194	308	273	229	47	44	56	36

Table – 2
Sample of the study

Districts	Urban				Rural			
	Government		Non-government		Government		Non-government	
	Male	Female	Male	Female	Male	Female	Male	Female
Aizawl	18	20	20	20	11	13	12	6
Lunglei	6	10	11	8	7	4	5	4
Saiha	4	2	2	1	5	4	4	5
Champhai	15	14	13	10	3	5	3	7
Kolasib	5	5	4	5	2	9	2	5
Serchhip	2	2	8	7	4	5	9	2
Mamit	2	2	2	2	3	9	3	2
Lawngtlai	1	2	5	3	10	10	10	7
Total	53	54	65	56	45	59	48	38

Tools for Data collection

The tools used for the present study were :-

1. The Job Satisfaction Scale (JSS) constructed by Dr. Amar Singh and Dr. T.R. Sharma (2006).

The research instrument used in this study measures the job satisfaction of any category of employees all at one time. The level of job satisfaction is measured in two areas – job intrinsic and job extrinsic. The scale contains 30 statements each of which has five alternatives from which a respondent has to choose one which candidly expresses his response. The scale in its totality or in parts depending upon the requirements can be administered to any category of professionals. It is comprehensive and omnibus in nature.

2. Teacher Values Inventory (TVI) (English Version)

The Teacher Values Inventory developed by Dr. (Mrs.) Harbhajan L Singh and Dr. S.P. Ahluwalia (1980) has been originally constructed for teachers specially and standardised on teachers working in schools. It has been based on the six(6) values – *theoretical, economic, aesthetic, social, political and religious*.

Data collection

The data for the study were collected from 91 secondary schools of Mizoram by the investigator visiting the schools and meeting the teachers personally in all the districts of Mizoram.

Mode of analysis

The data collected from the 418 secondary school teachers of Mizoram were scrutinised and tabulated after scoring the responses on job satisfaction and value system using the standard scoring procedures given in the respective manuals. Each teacher was assigned a serial number and details based on gender, locale and type of management. The scores of the teachers on the different variables were entered in the tabulation sheet and were subjected to statistical treatment by employing the following statistical techniques.

1. Descriptive Statistics Measure

Measures of Central Tendency and Percentages were employed to know the nature of score distribution

2. Test of significance for mean difference

The difference between the mean scores of the groups based upon the variables such as job satisfaction, value system, gender, locale and type of management were tested for significance by applying the t-test.

3. Pearson Product Moment Correlation

The Pearson product moment method was applied to compute the correlation between the scores on various variables. The coefficient of correlation was tested for significance by comparing the value with the table for corresponding degree of freedom and was interpreted following the critical values suggested by Garrett (1981).

Analysis and Interpretation

The data for the present study were collected by administering the Job Satisfaction Scale and the Teacher Value Inventory (TVI). The responses obtained from the subjects were scored following the standard scoring procedures described in the respective manuals. The scores were classified, tabulated analysed and the details are given below. The analysis of data was carried out with the help of appropriate statistical techniques keeping in view the objective of the study and the findings were meaningfully interpreted.

1.2. Objective - 1: To find out the relationship between job satisfaction and value system of male secondary school teachers in Mizoram.

In order to find out the relationship between job satisfaction and the value system of male secondary school teachers in Mizoram, coefficient of correlation was calculated by applying the Pearson Product Moment method of computing coefficient of correlation. The result is shown in the following way:-

1.3. Relationship between Job Satisfaction and six dimensions of Value System with regard to Male Secondary School Teachers in Mizoram.

The following table shows the relationship between job satisfaction and the six dimensions of value system in case of male secondary school teachers in Mizoram.

Table No –3

	Job satisfaction & Theoretical	Job satisfaction & economic	Job satisfaction & Aesthetic	Job satisfaction & Social	Job satisfaction & Political	Job satisfaction & Religious
Male Teachers (N - 211)	-0.02	-0.28**	0.07	0.22**	-0.05	0.06

**significant at .01 level

Table No –3 reveals that the correlation between job satisfaction and the variables like theoretical, aesthetic, political and religious are all not significant at any level, However, the obtained r of -0.28 between job satisfaction and economic value has negative correlation and that r of 0.22 between job satisfaction and social value has positive correlation in case of male secondary school teachers and they are both significant at .01 level. Thus the null hypothesis that presumes there is no significant relationship between job satisfaction and six dimensions of value system of male secondary school teachers of Mizoram is rejected in case of job satisfaction and theoretical, aesthetic, political and religious values but not rejected in case of job satisfaction and economic and social values.

1.4. Objective -2 : To find out the relationship between job satisfaction and value system of female secondary school teachers in Mizoram.

In order to find out the relationship between job satisfaction and the value system of female secondary school teachers in Mizoram, coefficient of correlation was calculated by applying the Pearson Product Moment method of computing coefficient of correlation. The result is shown in the following way:-

1.5. Relationship between Job satisfaction and six dimensions of Value System with regard to Female Secondary School Teachers in Mizoram.

The following table shows the relationship between job satisfaction and the six dimensions of value system in case of female secondary school teachers in Mizoram.

Table No – 4

	Job satisfaction & Theoretical	Job satisfaction & Economic	Job satisfaction & Aesthetic	Job satisfaction & Social	Job satisfaction & Political	Job satisfaction & Religious
Female Teachers (N – 207)	0.06	0.16*	0	0.58**	0.04	0.13*

*significant at .05 level

**significant at .01level

Table No – 4 reveals that the obtained *rs* of 0.06, 0.00 and 0.04 between job satisfaction and theoretical, aesthetic and political values respectively in case of female secondary school teachers in Mizoram are all positive and are not significant at any level. However, the obtained *rs* of 0.16, 0.58 and 0.13 between job satisfaction and economic value, social value and religious value respectively in case of female secondary school teachers in Mizoram are found to be positive and their economic and religious values are found to be significant at .05 level, while their social value is significant at .01 level. Therefore, the null hypothesis that presumes there is no significant relationship between job satisfaction and six dimensions of value system of female secondary school teachers is rejected with regard to job satisfaction and theoretical, aesthetic and political values while it is accepted with regard to job satisfaction and economic, social and religious values.

Findings and Discussion

On the basis of the extent of association between the variables as reflected through coefficients of correlation in the study, it can be said that the job satisfaction of male secondary school teachers in Mizoram is related with the two dimensions of value system namely economic value and social value. However, the relationship found between job satisfaction and economic value of male secondary school teachers although significant is low and negative. This shows that the male secondary school teachers who are satisfied with their teaching job are not having a high economic value and do not give much consideration to money matters. The finding indicates that the male secondary school teachers are found to be interested and satisfied enough with their job and they do not find it necessary to indulge themselves in material pursuit illustrating that those teachers who possess high job satisfaction do not hanker after money, power prestige and material possessions. This can be a challenge for those teachers who find their job unsatisfying and spend their time and energy for the possession of material things. The result of the study also reveals that the male teachers who are satisfied with their teaching job are also having high social value system. This indicates that the male secondary schoolteachers in Mizoram consider their job as a social service and activity where

they render help for the general benefit of the students and the school. This makes them enjoy their work and thus they find satisfaction in their teaching job.

With regard to female secondary school teachers in Mizoram their emphasis on useful and practical values which are characterised by a dominant interest in money matters, their love of others and service to people with a spirit of altruism and philanthropy are associated with their job satisfaction, and that those female teachers who are satisfied with their teaching job are characterised by the ethical principles founded in religious traditions and beliefs or norms. They are having interest in their religious rituals and activities. However, the analysis of female secondary school teachers in respect of their job satisfaction and theoretical value indicates that their satisfaction with the teaching job is not significantly related with their interest in the discovery of truth and their rational outlook towards life. It can also be said that the satisfaction of these female secondary school teachers with their teaching job is not significantly related with their values on the form and harmony of life and their attitude towards enjoying the beauty of fine arts, music etc. It can also be seen that these female secondary school teachers who are having job satisfaction although they are of the intellectual circle, are not interested in the political activities, political institutions, organisations, views and ideas resulting from the transforming creative socio-political practices of the social forces that meet the requirements of social progress and the development of human personality on a social scale.

References

- Guion, R.M. (1958). Industrial morale: The problem of terminology, *Personnel Psychology*, 11, p. 59 – 61.
- Gupta, N.L. (2000). Human values for the 21st century, *Anmol Publications Pvt. LTD. New Delhi*
- Hoppock.R. (1935). Job satisfaction, *Harper Row Publishers, New York*.
- Joshi Dhananjay. (2006). Value education in global perspective. *Lotus Press, New Delhi*.
- Mittal J.P. (1995). Teachers' motivation to work, *Mittal Publications*, p.12

Feeding Practice and Malnutrition among Under-Five Children of Mizoram

Laltanpuii*

Vk Roy**

Lukima S.***

H.T. Lalthanthuami****

Abstract

Nutrition plays a crucial role in the maintenance of health as well as the growth and development of the body. The main objective of this study is to identify the feeding practice and find out association of feeding practice with malnutrition among the children. A descriptive cross sectional study was conducted in Mizoram among under 5 children during February 2023 to June 2023. Data was collected by structured interview and anthropometric measurement and analysed their weight for age, height for age and weight for height. The study results shows that among 288 breastfed children, 183(80.3%) initiated breastfeeding within 1 hour after birth, 184 (80.7%) do not give pre lacteal feed, exclusive breastfeeding for 6 months was practiced by 173(75.9) and weaning was started at 6 months by 174(76.3%) 22 (9.4%) of the children were under weight, 29 (12.4%) were stunted, 10 (4.3%) were wasted. There was significant association between a child's weight for height (wasting) status and initiation of breastfeeding after birth and duration of breastfeeding after the introduction of complementary feeding ($P<0.05$). The results shoed the need to improve the nutritional status of the vulnerable age group of children. It needs more support and awareness on the importance of infant young children feeding practice to follow recommended guidelines.

Keywords: Children, Feeding, Malnutrition

Introduction

Malnutrition is major public health problem particularly in those children under five of age. According to the World Health Organization, malnutrition refers to

*Laltanpuii, Ph.D in Nursing Scholar, Mizoram University

**Vk Roy, Associate Professor, Department of Zoology, Mizoram University

***Lukima S., Lecturer, Regional Nursing College, Guwahati, Assam

****H.T. Lalthanthuami, Ph.D. Scholar (CSIR Senior Research Fellowship) College of Nursing, JIPMER, Puducherry

deficiencies, excesses, or imbalances in a person's intake of energy and/or nutrients. Under nutrition is estimated to be associated with 2.7 million deaths annually or 45% of all child deaths (World Health Organization, 2021). Globally 49.5 million children under 5 years of age are wasted, and 149 million are stunted. According to National Family Health Survey-5 India, 36 percent of children under age five years are stunted (too short for their age). Nineteen percent of children under age five years are wasted (too thin for their height), which is a sign of acute under nutrition; while 32 percent of children under age five years are underweight.

Nutrition, growth and development in children are intricately inter-linked aberrations of one aspect tend to significantly influence the others (Elizabeth, 2010). Infant and young child feeding is a key area to improve child survival and promote healthy growth and development.

World Health Organization recommend early initiation of breastfeeding within 1 hour of birth, exclusive breastfeeding for the first six months of life and introduction of complementary foods at 6 months together with continued breastfeeding up to 2 years of age or beyond. Child needs the right foods at the right time to grow and develop to their full potential. The most important time for good nutrition is during the 1000 day period from pregnancy until a child's second birthday (UNICEF report). Approximately two-thirds of child's deaths occur in the first year of life are linked to improper feeding practices (Singh, 2004). When children are undernourished over an extended period of time, there are various outcomes such as delayed mental development; reduced intellectual capacity, it may also result in heightened severity and susceptibility to infections, and increased mortality risk. (WHO Newsletter). The Government of India has strongly committed to the achievement of one of the important developmental goal 'Erase Hunger' which aims to eliminate hunger and all forms of malnutrition by 2030 (United Nations India, 2023).

Review of Related Literature

Khobragade & Yadav (2019) studied in one of the Integrated Development Scheme (ICDS) project area of rural India regarding nutritional status of under five children including 354 study subjects. The study found that the prevalence of underweight, stunting, and wasting were 15.8 %, 35% and 6.4% respectively.

Divya, Murthy, Nimithamohan & Amoghashree (2022) in Mysuru investigated on infant and young child feeding practices among 261 samples between the ages of 6 months to 5 years of age. It was found that the prevalence of underweight, stunting and wasting were 13.8%, 16.5% and 5.7% respectively. 70.1% received breastfeeding within an hour of birth and exclusive breastfeeding for 6 months was given for 67.4% of the children.

Study conducted by Haradhanalli R et al (2016) on infant feeding practice and its association to nutritional status of under 5 children including 200 children in urban poor locality of Bangalore showed that 49.7% of the children were given pre lacteal feed, 49.5% of the children were exclusively breastfed for 6 months and 49.1% weaned at 6 months of age. They found that there was significant association between undernutrition status and feeding practice of the children.

Ahmad S & Mishra S (2018) in Lucknow District found that total 70.7% of the children were breastfed in an hour, colostrum was given to only 61.9% children while only 52.4% were given breastfeeding exclusively for 6 months and the study identified that children who have started feeding after one hour of birth were found to be more stunted than children who were breastfed earlier ($p < 0.001$) and children with non-exclusive breastfeeding were significantly underweight than who were exclusively breastfeed.

Varma P (2015) in Hyderabad conducted a study on infant and young feeding practices and prevalence of under nutrition. The study concluded that children who initiated breast feeding within an hour were found not to be stunted in comparison to others.

Study conducted by Palupi (2016) in Indonesia regarding feeding practice and nutritional status among children. The study shows that most of the children had good feeding practices in terms of breastfeeding practices and found that there was no significant association between feeding practice behaviors and nutritional status among the study participants.

Understanding the significance of feeding practice for the maintenance of nutritional status of the children, various research studies related to feeding practice and nutritional status of children were undertaken, but this area is not adequately explored in Mizoram. This study is undertaken to fill this research gap so that the research will contribute in this unexplored area.

Rationale of the study

Malnutrition is universal problem and it can severely affect the vulnerable children especially under five years of age. Children of today are our future citizens. In North east India, Meghalaya Mizoram, Nagaland and Tripura saw an increase in stunting among children (Saigal, 2021). As per National Family Health Survey-5 report, the prevalence of under nutrition in Mizoram is also increasing. Massive increase in child malnutrition and rising levels of anemia in women and pregnant women in Mizoram indicate that the children born during 2015-2019 might be suffering from nutritional deficiencies (NHFS-5, Mizoram). It was also found that there is deterioration of infant

and young child feeding indicators in north east states. Tripura, Nagaland, Mizoram and Assam saw a decrease in the proportion of children receiving adequate diets (Chakraborty, 2021).

Hence the assessment of the ground reality on the feeding practice and its association with prevalence of malnutrition of children becomes very significant so that appropriate intervention can be implemented which will improve the nutritional status of the target population.

Statement of the problem

The problem of the study is stated as '*Feeding Practice and Malnutrition of under Five Children of Mizoram.*'

Objectives

The objectives of this study are:

1. To identify the feeding practice among children
2. To find out association of feeding practice with malnutrition among the children.

Material and methods

Study design

This study was designed as a community based cross-sectional study

Study setting

This study was carried out in the selected areas of Aizawl district, Mizoram.

Study population

Two hundred thirty three children between age group of 6- 59 months and their mothers were included in the study.

Inclusion criteria

1. Children between age group of 6- 59 months
2. Mothers giving consent and willing to participate in this study.

Exclusion criteria

1. Children who were suffering from chronic illness or congenital anomalies
2. Children who are uncooperative and their mother not willing to participate

Study duration

This study was conducted from February 2023 - June 2023.

Sample size calculation

The sample size of 233 was calculated based on the prevalence of under nutrition 13% at 5% level of significance and an absolute precision of 4%, sample size was estimated to be 233 using Cochran's formula:

$$n \geq \frac{z_{1-\alpha/2}^2 p(1-p)}{d^2}$$

Sampling Technique

A multi stage random sampling technique has been used to select the required sample size. Study was done in Aizawl East District. Aizawl East district covers 47 local council areas. 10 local council areas were selected by random sampling and samples are selected randomly based on population proportionate to size sampling technique.

Ethical Consideration

The Institutional Human Ethics Committee of Mizoram University reviewed and approved this study (approval number: MZU/HEC/2022/008). Permission was taken from Chief Medical Officer, Aizawl East District to conduct research study in the area. Participants (mothers) have given written consent before participating in the study.

Data Collection Details

A structured interview schedule was used to collect data on demographic characteristics, feeding practice and anthropometric measurements was done by using standard method. The weight and height measurement were converted to identify the three nutritional indices such as weight for age, height for age and weight for height. These are interpreted by the WHO z score classification system. Children whose weight for age z-score of less than -2SD were graded as underweight and severe underweight are having z - score of less than -3SD. Children's height for age less than z score -2SD were graded as stunted and severely stunted are children's height for age less than z-score -3SD. Similarly, children were graded as wasted (weight for height z score of -2SD) and severely wasted (weight for height z score of -3SD). Socioeconomic status has been calculated using Modified Kuppaswamy Socioeconomic scale.

Data analysis

The data entry was done in Microsoft offices excel and IBM SPSS Statistics Version 20 was used to analyze the data. Frequencies and percentages were used for analysis of categorical data. The z scores for the different nutritional indices such as weight for age, height for age and weight for height were calculated based on the WHO growth standards. Chi square test and Fisher exact test were used to test the significance wherever indicated, p value less than 0.05 was considered statistically significant.

Results

Table No.1

Distribution of participants' socio-demographic characteristics (N=233)

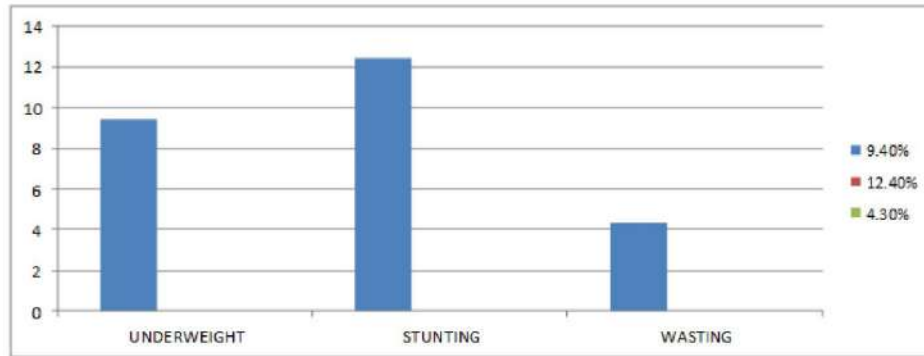
Variables		Frequency	Percentage
Age	6-11 months	31	13.3
	12-23 months	58	24.9
	24-35 months	47	20.2
	36-47 months	62	26.6
	48-59 months	35	15
Gender	Male	117	50.2
	Female	116	49.8
Type of family	Nuclear	152	65.2
	Joint family	72	30.9
	Single parent family	9	3.9
Socioeconomic status	Upper (I)	3	1.3
	Upper middle (II)	15	6.4
	Lower middle (III)	48	20.6
	Upper lower (IV)	163	70
	Lower (V)	4	1.7

As depicted in Table 1, a total of 233 children aged 6 months to 59 months were included in the study. The mean age of the participant was 31 months. Among the participants, 50.2% are male and 49.8% were females. About 71.7% of children belonged to lower socioeconomic class while 1.3% belonged to upper class. Mothers of majority of the children (83.7%) were in the age group of 19-34 years.

Table No.2**Distribution of feeding practices for breastfed children (N=228)**

Variables		Frequency	Percentage
Initiation of breastfeeding after birth	Within 1 hour	183	80.3
	1-24 hours	35	15
	After 24 hours	10	4.3
Pre-lacteal feed given	Yes	44	19.3
	No	184	80.7
Type of pre-lacteal feeding (n=44)	Formula	43	97.7
	Boiled cool water	1	3.3
Exclusive breastfeeding done for 6 months	Yes	173	75.9
	No	55	24.1
Age at the start of weaning	<6 months	43	18.9
	6 months	174	76.3
	7-12 months	11	4.8
Continued breastfeeding after the introduction of complementary foods	1 year	11	4.8
	1 to $\leq$ 2 years	44	19.3
	2 years	45	19.7
	>2years	23	10.1
	Still breastfed	105	46.1

Feeding practice of children is presented in Table 2. Among the participants, 228(97.85%) were able to breastfeed their children, 5 (2.15%) were unable to feed with breast milk since birth. Early initiation of breastfeeding within an hour of birth was done by 80.3%. Pre lacteal feed was given by 19.3% and formula feeding was most common pre lacteal feed given to the children. Only 75.9% had exclusively breastfeed their child for the first complete 6 months while 24.1% were not able give exclusive breastfeeding for 6 months. 10.1 % of the sample continued breastfeeding for more than 2 years and 24.1% had discontinue breastfeeding before reaching 2 years of age. On examining the complementary feeding practice, 18.9% children were given complementary feeding before 6 months of age and 4.8% of mothers started giving complementary feeding between the age of 7-12 months. The mean age of food complementation was 5.8 months of age which was less than recommended age for starting complementary feeding.

Figure No 1: Nutritional status of participants (N=233)

Data presented in Figure 1 shows the prevalence of underweight, stunting and wasting were 9.4%, 12.4% and 4.3% respectively; stunting is the most common form of malnutrition.

Table No. 3

Association between underweight status and feeding practices for breastfed children (N=228)

Variables		Underweight (n=22)	Normal (n=206)	P-value
Initiation of breastfeeding after birth	Within 1 hour	20 (10.9)	163 (89.1)	0.07
	1-24 hours	0	35 (100.0)	
	After 24 hours	2 (20.0)	8 (80.0)	
Pre-lacteal feed given	Yes	4 (10)	36 (90.0)	0.934
	No	18 (9.6)	170 (90.4)	
Exclusive breastfeeding done for 6 months	Yes	15 (8.7)	158 (91.3)	0.375
	No	7 (12.7)	48 (87.3)	
Age at the start of weaning	<6 months	3 (7.0)	40 (93.0)	0.116
	6 months	16 (9.2)	158 (90.8)	
	7-12 months	3 (27.3)	8 (72.7)	
Continued breastfeeding after the introduction of complementary foods	1 year	2 (18.2)	9 (81.8)	0.041
	1 to ≤2 years	4 (9.1)	40 (90.9)	
	2 years	4 (8.9)	41 (91.1)	
	>2years	6 (26.1)	17 (73.9)	
	Still breastfed	6 (5.7)	99 (94.3)	

Chi-square test; Pd^o0.05

Data in Table 3 shows that there was significant association between underweight status and duration of breastfeeding after introduction of complementary food with a P-value of 0.041.

Table No 4**Association between stunting status and feeding practices for breastfed children (N=228)**

Variables		Stunting (n=29)	Normal (n=199)	P-value
Initiation of breastfeeding after birth	Within 1 hour	25 (13.7)	158 (86.3)	0.33
	1-24 hours	2 (5.7)	33 (94.3)	
	After 24 hours	2 (20.0)	8 (80.0)	
Pre-lacteal feed given	Yes	4 (10.0)	36 (90.0)	0.57
	No	25 (13.3)	163 (86.7)	
Exclusive breastfeeding done for 6 months	Yes	22 (12.7)	151 (87.3)	0.998
	No	7 (12.7)	48 (87.3)	
Age at the start of weaning	<6 months	5 (11.6)	38 (88.4)	0.898
	6 months	23 (13.2)	151 (86.8)	
	7-12 months	1 (9.1)	10 (90.9)	
Continued breastfeeding after the introduction of complementary foods	1 year	3 (27.3)	8 (72.7)	0.518
	1 to ≤2 years	4 (9.1)	40 (90.9)	
	2 years	6 (13.3)	39 (86.7)	
	>2years	4 (17.4)	19 (82.6)	
	Still breastfed	12 (11.4)	93 (88.6)	

Chi-square test; Pd⁰.005

Data in Table 4 illustrates that there was no significant association between stunting status and feeding practice of children.

Table No. 5**Association between wasting status and feeding practices for breastfed children (N=228)**

Variables		Wasting (n=10)	Normal (n=203)	Overweight (n=15)	P-value
Initiation of breastfeeding after birth ¹	Within 1 hour	8 (4.4)	166 (90.7)	9 (4.9)	0.02
	1-24 hours	0	30 (85.7)	5 (14.3)	
	After 24 hours	2 (20.0)	7 (70.0)	1 (10.0)	
Pre-lacteal feed given ¹	Yes	3 (7.5)	32 (80.0)	5 (12.5)	0.129
	No	7 (3.7)	171 (91.0)	10 (5.3)	
Exclusive breastfeeding done for 6 months ¹	Yes	8 (4.6)	155 (89.6)	10 (5.8)	0.666
	No	2 (3.6)	48 (87.3)	5 (9.1)	
Age at the start of weaning ¹	<6 months	1 (2.3)	39 (90.7)	3 (7.0)	0.777
	6 months	8 (4.6)	154 (88.5)	12 (6.9)	
	7-12 months	1 (9.1)	10 (90.9)	0	
Continued breastfeeding after the introduction of complementary foods ²	1 year	2 (18.2)	9 (81.8)	0	0.02
	1 to ≤2 years	2 (4.5)	42 (95.5)	0	
	2 years	2 (4.4)	40 (88.9)	3 (6.7)	
	>2years	3 (13.0)	19 (82.6)	1 (94.3)	
	Still breastfed	1 (1.0)	93 (88.6)	11 (10.5)	

¹Chi-square test; ²Fisher's exact test; Pd⁰.05

Data in Table 5 shows that there was significant association between a child's weight for height (wasting) status and initiation of breastfeeding after birth and their decision to keep breastfeeding after the introduction of complementary feeding with a P-value of 0.020.

Discussion and Conclusions

In this study, 86.3% of children were normal for weight for age, 9.4 % were moderately underweight. 87.6% children had normal height for age while only 12.4 % are moderately stunted. 88.8% children had normal weight for height and 6.9 % had weight for height between -2SD to -3SD. As per NFHS-5 in India, 32% children below 5 years are underweight which is higher than the present study showing Mizoram children nutritional status is better than the other cities.

The present study revealed the common form of malnutrition was stunting, followed by underweight and wasting which indicate undernourished children in the study are chronic malnutrition which may occur as a result of inappropriate feeding practice in early life.

80.3% of the children were given breastfeeding within one hour after birth which was one of the important indicators of correct breastfeeding practice. 19.3% of the mothers offer pre lacteal feed where most of them given formula feeding. One hour after birth is regarded as the golden hour for initiation of breastfeeding. Encouragement and support from professional and family during this period is very important. The Government of India is promoting institutional delivery where there is more opportunity to give support for the promotion of early initiation of breastfeeding and avoidance of practicing pre lacteal feed.

The present study revealed that breastfeeding was given exclusively for 6 months by 75.9% of the children and complementary feeding was started on time by 76.3%. The mean age of starting complementary feeding is 5.8 months. Complementary feeding was started earlier than the recommended months which can influence the nutritional status of the children. Therefore, mothers need more encouragement to practice the recommended duration of exclusive breastfeeding for 6 months and timely introduction of complementary food.

There was significant association observed between feeding practices and nutritional status of children. Among the breastfed children, initiated early breastfeeding and continue breastfeeding for more than 2 years have better nutritional status than other groups. Children who have started breastfeeding after one hour of birth were found to be more wasted than children who were breastfed earlier and children who continued breastfeeding more than 2 years were found to be less wasted and underweight

than children who completed breastfeeding less than 2 years of age. From the study finding, more attention to be given on the promotion of early initiation of breastfeeding within 1 hour after birth and increase duration of breastfeeding along with complementary feeding for the improvement of the nutritional status of under five children.

Recommendations

Effective promotion of the recommended practice of young child feeding practice is very essential. It is very urgent to explore the underlying detail of the situation and the true reason for the inability to follow the recommended feeding practice. Infant feeding practices need to be monitored and provide the required information on a regular basis for the caregiver. Mothers need to be informed and educate about exclusive breastfeeding, avoiding pre-lacteal feedings, and right time to introduce complementary feedings from the beginning of pregnancy for the promotion of better infant feeding practices. Reinforcement of correct feeding practice to be given during postnatal and immunization visits which might improve feeding practices. Raising public awareness of the recommendation of feeding and strengthening the intention of mother to breastfeed could lead to adopt correct feeding practice of the children.

References

- Ahmad, S., & Mishra, S. (2018). Impact of feeding practices on nutritional status of preschool children of Lucknow district: A community based cross-sectional study. *Clinical Epidemiology & Global Health*, 15, 1-4. <https://doi.org/10.1016/j.cegh.2022.101011>
- Chakraborty,R., Devikrishna ,M.B., & Chauhan, A. Acute malnutrition worsened among children:NFHS-5. *Down to Earth*. . <https://www.downtoearth.org.in/blog/health/acute-malnutrition-worsened-among-children-nfhs-5-74987>
- Divya K. L.,Murthy,M.R.N., Nimithamohan,K., &Amoghashree. A cross sectional study on infant and young child feeding practices: a keep for successful nutrition in under-five children attending rural Anganwadi centres, Mysuru. *International Journal of Community Medicine and Public Health*, 9(11):4166-4172. <https://dx.doi.org/10.18203/2394-6040.ijcmph20222919>
- Elizabeth,K.E. (2010). *Nutrition and Child Development*. 4th ed. Hyderabad: Medical Publisher.
- Haradanhalli,R.,et al .(2019). Infant-Feeding Practice and Its Association to Nutritional Status of Under-5 Children . *International Journal of Preventive Curative & Community Medicine*, 3(3). <https://doi.org/10.24321/2454.325X.201710>

- Khobragade,A.W., & Yadav,R.G. (2020). Nutritional status of under five children attending Anganwadi in rural area of central India. *International Journal of Community Medicine and Public Health*, 7(12), 5165-5168. <https://dx.doi.org/10.18203/2394-6040.ijcmph20205201>
- National Family Health Survey (NFHS-5), 2019-2020: Mizoram. Available at: http://rchiips.org/nfhs/NFHS-5_FCTS/FactSheet_MZ.pdf.
- National Family Health Survey (NFHS-5), 2019-21: India. Available at: gov. in/sites/default/files/NFHS-5_Phase-II_0.pdf.
- Palupi,I.R., Susetyowati, Meltica,R, &Faza,F. (2016). Feeding Practices and Nutritional Status among Children Under Five Years of Age in Sleman District, Yogyakarta, Indonesia. *Pakistan Journal of Nutrition*,18 (9): 888-894.10.3923/pjn.2019.888.894
- Saigal, N., & Shrivastava, S.(2021). What child stunting numbers tell us about Northeast Indian states? *North East News*. Available at: <https://www.eastmojo.com/sikkim/2021/02/26/what-child-stunting-numbers-tell-us-about-northeast-indian-states/>.
- Singh,A.(2004). *National guidelines on infant and young child feeding*. Ministry of Women and Child Development. New Delhi.
- United Nations India. (2023). *Sustainable Developmental Goals*. <https://india.un.org/en/sdgs>.
- UNICEF Report . *Early Childhood Nutrition*. Available at :<https://www.unicef.org/nutrition/early-childhood-nutrition>
- Varma,P et al.(2015). Infant and Young Feeding Practices Regarding Under-Nutrition Prevalence in Shamirpet Mandal, Hyderabad, India. *International Journal of Nutrition Sciences*, 7(4):195-202. 10.30476/ijns.2022.96514.119
- World Health Organisation.(2021). *Malnutrition*. Available at: <https://www.who.int/news-room/fact-sheets/detail/malnutrition>
- World Health organization Newsletter. *Malnutrition in children*. Available at : <https://www.who.int/data/nutrition/nlis/info/malnutrition-in-children>.

Quality of Life and Depression among Caregivers of Children with Attention Deficit Hyperactivity Disorder (ADHD)

Lalawmpuia*
Lalnunpuii**
Zokaitluangi***

Abstract

The present study aims to investigate the quality of life and Depression among Caregivers of Children with ADHD. 80 Parents of ADHD children and 80 parents of children without mental illness with ages ranging from 30 to 45 years, residing in Aizawl, were sampled using a purposive random sampling method. Quality of Life (WHO Quality of Life-BREF, 1996) and Beck Depression Inventory (BDI) (Beck, Steer & Brown, 1996) were used for collecting data. Results revealed that parents of ADHD scored lower than parents of children with no mental illness on psychological quality of life whereas scores on depression were higher among parents of ADHD than parents of children with no mental illness; quality of life and depression had a negative correlation; and depression predicted quality of life among the samples. The results revealed the high need for psychological intervention among parents of ADHD which invites the urgent need to pay attention to the caregivers of mental patients as well as mental patients.

Keywords: *Quality of Life, Depression, ADHD, Parent, Caregivers, Children*

Introduction

Almost all people have a mental problem from time to time when encountering life problems becomes a mental illness when ongoing signs and symptoms cause frequent stress and affect on ability to function. Mental illness and mental health disorders are used interchangeably used refer to a wide range of mental health conditions, any mental disorders that affect your mood, thinking and behaviour. The Diagnostic and Statistical Manual of Mental Disorders (DSM), Fifth Edition include

*Lalawmpuia, Ph. D Scholar, Department of Clinical Psychology, Mizoram University.

**Lalnunpuii, Guest Faculty, Department of Clinical Psychology, Mizoram University

***Prof. Zokaitluangi, Professor, Department of Psychology, Mizoram University.

300 mental illnesses (Peterson, 2019), and groups the different mental disorders into five distinct categories such as neurodevelopmental disorders, internalizing disorders, externalizing disorders, neurocognitive disorders, and other disorders. Among many mental illnesses, Attention-deficit/hyperactivity disorder (ADHD) is under the neurodevelopmental disorders as per DSM V classification which was selected for the present study.

Attention-deficit/hyperactivity disorder (ADHD) is a neurobehavioral disorder characterized by inattention, impulsivity, and hyperactivity. ADHD have heterogeneous and variable impacts on functioning and daily activities for these children and their caregivers. Attention-deficit hyperactivity disorder (ADHD) is one of the mental disorders in the paediatric population with prevalence rates ranging from 5 to 7.1% (Polanczyk et al., 2007; Willcutt, 2012). ADHD symptoms included inattention, hyperactivity, and impulsivity symptoms, causing significant impairment to the patient (APA, 2013).

The concept of QoL in general terms an individual's subjective perception of physical, emotional, and social well-being (Göz et al., 2007) which covers a cognitive (satisfaction) and an emotional component (happiness). QoL can be influenced by many proximal (family and friendship) factors, distal (e.g., socioeconomic and cultural) factors, and the presence of a chronic illness has been considered the most potent risk factors for worse QoL scores (Harpin et al., 2005; Göz et al., 2007; Xiang et al., 2009; Kim et al., 2014).

Having a child with developmental disabilities creates a crisis event, how parents respond to the stresses of raising their child with special needs depends on a wide variety of factors influencing their ability to cope, such as their interpretation of the crisis event, the family's sources of support, community resources, and family structure. The personality characteristics of the family members, their financial status, educational level, problem-solving skills, and spirituality all influence a family's ability to cope. Strong marital relationships and social support also help determine parent adjustment (Thwala et al., 2015; Fazil et al., 2004). Parents of children with autism and ADHD are presented with a unique set of challenges associated with providing care for their children. Depending upon the nature and severity of the disability, the child may require significant personal care and monitoring to ensure his or her wellness and safety. Parents are usually the primary providers of this care. Given other responsibilities that parents typically have about maintaining stability for their family, the additional responsibility of providing significant levels of care for their child indefinitely may task parents' ability to maintain balance in their own lives. This may lead to stress for parents which could compromise their ability to effectively care for their child.

Review of Literature

The research evaluated the QoL and depression among 202 primary caregivers of ADHD children by comparing them with a control group and found that parents of ADHD children reported poorer family QoL and higher parental depression and anxiety disorders (Cussen et al., 2012). Akvardar and colleagues compared the QoL scores between patients with psychiatric disorders and the control group, and patients with mental illness reported less satisfaction compared with patients with normal controls (Akvardar et al., 2006). Craig and colleagues (2020) did a study on a systematic review of coping strategies in parents of children with attention deficit hyperactivity disorder (ADHD).

The presence of ADHD has a deep and enormous impact not only on the patients but also on their family members in giving care to them (Harpin, 2005). Caring for a child with ADHD invites family, marital, and parental problems, reduces parenting efficacy, and increases the level of parental stress (Danckaerts et al., 2010); and also accompanied by feelings of guilt which increases vulnerability to depression (Johnston & Mash, 2001) and worse quality of life (Faraone et al., 2005; Desidério et al., 2010).

Statement of the Problem

Behavioural problems of the child have a negative impact or effect on family adaptation including quality of life and psychological well-being. Parents may feel helpless, overwhelmed and frightened by this kind of behaviour and often begin to question their parental ability and will have guilt feelings associated with their inability. Parents of children with ADHD are presented with a unique set of challenges associated with providing care for their children.

In the Indian context, mothers take the sole responsibility for raising and caring for a child with a disability. Given other responsibilities that mothers typically have about maintaining stability for their family, the additional responsibility of providing significant levels of care for their child indefinitely may task parents' ability to maintain balance in their own lives. This may lead to stress for parents which could compromise their ability to effectively care for their child. Parents develop different positive and negative coping strategies to combat this psychological stress. Significant differences in coping behaviour have been reported among parents with different marital and socioeconomic status.

Many studies have evinced that QoL may be impaired due to the presence of ADHD (Harpin et al., 2005; Sawyer et al., 2002; Akvardar et al., 2006; Cussen et al., 2012). However, there are very few studies published in the literature investigating QoL in ADHD caregivers (Andrade et al., 2016). To address the research gap, the

present study was designed with the hope of exploring coping mechanisms of parents of children with ADHD to promote positive coping strategies for parents of children with ADHD, and to help such parents identify people who can support them.

Objectives

The study set forth objectives based on the literature available as under:

- 1) To examine the applicability of the *Quality of Life (the subscale of the WHO Quality of Life-BREF (1996) and the Beck Depression Inventory (BDI) (Beck, Steer & Brown, 1996)* to the parents of children with ADHD, and parents of children with normal mental health.
- 2) To determine any variations between parents of children with ADHD and Normal mental health on Psychological Quality of life and Depression.
- 3) To investigate the connection between depression and Psychological Quality of Life among parents of children with ADHD.
- 4) To investigate the prediction of Psychological Quality of Life from Depression among parents with ADHD and parents of normal.

Hypotheses

In consistency with the objectives of the study the following hypotheses were framed for the present study:

- 1) *WHO Quality of Life-BREF (1996) and Beck Depression Inventory (BDI) (Beck, Steer & Brown, 1996)* scales are applicable for parents of children with ADHD, and parents of children with normal mental health.
- 2) Parents of children with ADHD would show higher scores than parents of children with normal mental health on Psychological Quality of life and Depression.
- 3) There will be a positive significant correlation between Psychological Quality of life and Depression variables.
- 4) There will be a significant prediction of Depression on Psychological Quality of life among parents of children with ADHD and parents of children with normal mental health.

Methodology

Sample:

The sample size was 160 in total, 80 parents of ADHD, and 80 parents of children with normal children without any mental illness selected from the mental patients admitted to Dept of Psychiatry – Kulikawn Hospital, Special schools, Child Guidance Centre, District Early Intervention Centre and Private Clinic of Aizawl-Mizoram whereas parents of children with normal mental health were identified to well matched on socio-demographic variables, age range between 25 to 50 years but well matched socio-demographic variables such age ecology (urban and rural), educational level and others for comparison on Psychological Quality of life and depression.

Tool Used

1. **Socio-Demographic Profile (Lalawmpuia, 2021):** It was specifically constructed by Lalawmpuia (2021) for screening purposes for controlling confounding demographic variables and to get true representation as per the design of the study. It consists of information about socio-demographic variables such as age, sex, religion, education, marital status, residence and occupation of the subjects.
2. **Informed Consent Form (Lalawmpuia, 2021).** It was constructed by Lalawmpuia (2021) to get consent from the samples after giving information about the present study.
3. **WHO Quality of Life-BREF (1996):** The WHO quality of life assessment was developed by the WHOQOL group and is applicable cross-culturally. It contains a total of 26 questions. The internal consistency coefficient ranged from 0.70 to 0.75 for the domains. The test-retest reliability coefficient ranged from 0.41 to 0.79 at item level.
4. **Beck Depression Inventory (BDI) (Beck, Steer & Brown, 1996):** It was developed to measure the severity of depression which contains 21 items with a 4-point rating scale, having Cronbach's alpha of 0.92 and validity of .98 (Beck et al., 1996). The test-retest reliabilities were calculated, yielding an average correlation of .93.

Design

2 X 2 factorial designs explaining the two levels of gender (male and female) and level of mental illness (parent of children with ADHD and parent of children without ADHD); parents of children with ADHD were selected from the list of the parent of ADHD children from different hospital, homes, centres run by Government

of Mizoram and registered Private/ NGOS as per objectives of the study for comparison on Psychological Quality of life and Depression.

Procedures

The required psychological tests were collected and made necessary preparation, and ready for use. The parents of ADHD parents' samples were randomly selected from Dept of Psychiatry – Kulikawn Hospital, different special schools, the Child Guidance Centre, a private clinic, the district early intervention centre and the education department of Aizawl-Mizoram. In contrast, parents of children without ADHD/ mental illness were selected from different parts of Aizawl to well match with the parents of children with ADHD, and also an equal representation of male and female samples. All necessary permissions were taken from the concerned authorities. Confidentialities were maintained and Informal consents were obtained from parents and participants as per the manual and APA code of ethics for research.

Results: The raw data does not contain missing data and outlier data, and it meets the objectives of the study and put together in the Table as under:

Table -1: Showing the Psychometric Properties of the Scale, t-test, Pearson's correlation and regression between independent and dependent variables among the samples.

Independent Variables	Statistics	Dependent Variables	
		Psychological Quality of life	Depression
Parents of ADHD children	Mean	13.25	16.78
	SD	2.31	2.29
	Kurtosis	-0.97	-0.96
	Skewness	-0.46	0.69
Parents of Normal Mental health children	Mean	19.63	10.25
	SD	2.35	2.3
	Kurtosis	-0.99	-0.97
	Skewness	0.4	-0.68
Reliability (Alpha)		0.81	0.83
Homogeneity of Variances		0.74	0.69
t-test between two groups		3.25*	2.87*
Pearsons' Correlations between Psychological Quality of life and Depression			R=.68*
Regression Analysis (prediction of depression on Psychological Quality of life)			

Quality of Life and Depression among Caregivers of Children with Attention Deficit
Hyperactivity Disorder (ADHD)

Predictor	Criterion	R Square	F Change	df	Sig. F Change	Durbin-Watson
Depression	Psychological Quality of life	0.46	102.89	1/118	0	1.15
* = significant at .01 levels: ** = * = significant at .05 levels						

Objective-1: To examine the applicability of the psychological *quality of life the subscale of the WHO Quality of Life-BREF (1996) and the Beck Depression Inventory (BDI) (Beck, Steer& Brown, 1996)* to the parents of children with ADHD and normal mental health, the normality of the data was checked, and skewness values and kurtosis values were less than 1.0 (+/-) which conveyed that the data approximates normality. Cronbach's alpha showed high reliability for both tools;.81 for WHO Quality of Life-BREF and .83 for BDI. Tests of homogeneity of variance showed that psychological Quality of life and Depression were not significant indicating that variances of the three sample groups are approximately equal on both scales. The overall results showed the applicability of the tests in the target population and also highlighted the appropriateness of applying parametric tests to data. The result suggests acceptance of hypothesis no 1.

Objective 2: To determine any variations among parents of children with ADHD and Normal mental health on Psychological Quality of life and Depression an independent t-test was calculated. Results evinced those parents of ADHD children scored lower than (M=13.25; 16.48) and parents of children with normal mental health on Psychological Quality of life at significant .01 level (M=13.25; 19.63; t=3.35; p<.01). The reverse trend was found in Depression where parents of ADHD scored higher than parents of children with normal mental health (M=16.78; 10.25; t=3.87; p<.01) with significance at. 01 level on Depression as shown in the Table. The result has accepted hypothesis no -2.

Objective-3: To investigate the connection between Depression and Psychological Quality of Life among parents of children with ADHD and parents of children with normal children the Pearson Correlation was used. The results showed that the Psychological Quality of Life and Depression had a significant negative correlation (r=.68; p<.01) as shown in Table 2. The magnitude of the relationship was moderate and favoured accepting hypothesis no 3.

Objective -4: To investigate the prediction of Psychological Quality of Life from Depression among parents with ADHD and Autism, Regression Analysis was calculated. The simple regression analysis results showed significant predictability of Psychological Quality of life from Depression (p<.01) accounting for 46 %of the variation within the criterion variable. Durbin Watson was lower than 2.0 indicating

that there was no autocorrelation detected in the sample. The results suggest accepting hypothesis no-4.

Discussion and Conclusion:

Results revealed that the parents of ADHD have a lower Psychological Quality of Life and higher depression when compared to parents of normal children/ with no mental illness which confirmed the earlier researchers' finding that parents of ADHD children reported poorer family QoL and higher parental depression and anxiety disorders (Cussen et al., 2006) as the presence of ADHD has a deep and enormous impact not only on the patients but also on their family members in giving care to them (Harpin, 2005). The burden of caretaking children with ADHD with little to no intervention may be the reason behind such poor quality of life and higher depression levels. The significant negative relationship between the Psychological Quality of Life and Depression variables throws light on the burden of being a parent of ADHD endorses depression and decreases their quality of life. The findings support earlier findings that the QoL may be impaired due to the presence of ADHD (Harpin et al., 2005; Sawyer et al., 2002; Akvardar et al., 2006; Cussen et al., 2012). The results evinced the prediction of depression on Psychological Quality of Life suggesting the importance of paying attention to the mental health of the carer of the mental patients. Several studies also evinced the same that the burdensome of caring for a child with ADHD increases stress (Danckaerts et al., 2010) and vulnerability to depression (Johnston & Mash, 2001) resulting in a worse quality of life (Faraone et al., 2005; Desidério et al., 2010). The moderate magnitude of the relationship must be put into consideration if intervention is formulated. and the result of regression analysis also strongly supports the need for formulating care and support policies for parents and caregivers. The findings show caregivers/parents of children with ADHD and Autism had a greater frequency of depression and worse quality of life which required psychological intervention and the need for developing better intervention programmes to address the mental health of the carer of mental patients.

Limitation

The present study could not compare single parents, small sample used in the present study limited the generalization of present findings and limited psychological variables.

Significance of the study

The study has contributed to the level of burden and anxiety for caregivers which has never been done, and highlighted the need for psychological intervention for them.

Suggestion

Though the present study contributed significant findings but not free from limitations which invites some suggestions for the improvement of future research (i) inclusion of a bigger sample size for more information with reliability which could be used for generalizing the target group, (ii) inclusion of more types of mental patients for comparison to contribute more information about the carer's burden of the mental health patients, (iii) inclusion of more mental health symptom to understand more about the psychological problems for making prevention and intervention strategies for target group. There is a need for more research on the psychosocial well-being of the parents/caregivers of children with disability.

References

- Akvardar ,Y., Akdede ,BB., & Ozerdem , A. (2006) Assessment of quality of life with the WHOQOL-BREF in a group of Turkish psychiatric patients compared with diabetic and healthy subjects. *Psychiatry Clin Neurosci* (2006) 60:693–9.
- Ali, A., Hassiotis, A., Strydom, A., & King, M. (2012). Self stigma in people with intellectual disabilities and courtesy stigma in family carers: a systematic review. *Research in Developmental Disabilities*. 33, 2122–40.
- Balushi.N., & Shukaili.A. (2017): Burden for caregivers of children with attention deficit/hyperactivity disorder in Oman. *European Psychiatry Volume 41, Supplement, April 2017, Pages S120-S12*.
- Balushi.N., & Shukaili.A. (2017): Burden for caregivers of children with attention deficit/hyperactivity disorder in Oman. *European Psychiatry Volume 41, Supplement, April 2017, Pages S120-S12*.
- Baker,B.L., McIntyre,L.L., Blacher,J., Crnic,K.,Edelbrock,C., & Low,C. (2003) . Preschool children with and without developmental delay : Behaviour problems and parenting stress over time. *Journal of Intellectual disability Research*, 47(4/5), 217-230.
- Browne, D.T., Rokeach, A., Wiener, J., Hoch, J.S., Meunier, J.C. and Thurston, S. (2013) Examining the family-level and economic impact of complex child disabilities as a function of child hyperactivity and service integration. *Journal of Developmental and Physical Disabilities*, 25 (2), 181–201 .
- Danckaerts ,M ., Sonuga-Barke.,E & Banaschewski ,T. (2010) The quality of life of children with attention-deficit/hyperactivity disorder: a systematic review. *Eur Child Adolesc Psychiatry* (2010) 19:83–105.
- Faraone ,SV., Biederman ., J & Chen ,WJ .(1995)Genetic heterogeneity in attention-deficit hyperactivity disorder (ADHD): gender, psychiatric comorbidity, and maternal ADHD. *J Abnorm Psychol* (1995) 104:334–45.

- Gupta, V. B. (2007) Comparison of parenting stress in different developmental disabilities. *Journal of Developmental and Physical Disabilities*, 19, 417–425.
- Gupta, A.& Singhal,N. (2004). Positive perception in parents of children with disabilities. *Asia Pac Disability Rehabilitation Journal*;15:22-35.
- Harpin ,VA .(2005). The effect of ADHD on the life of an individual, their family, and community from preschool to adult life. *Arch Dis Child* (2005) 90(Suppl 1) 2–7.
- Hastings, R.P. & Taunt, H.M. (2002) Positive perceptions of families of children with developmental disabilities. *American Journal on Mental Retardation*, 107, 116–127.
- Hatton, C., Emerson, E., Graham, H., Blacher, J. and Llewellyn, G. (2010). Changes in family composition and marital status in families with a young child with cognitive delay. *Journal of Applied Research in Intellectual Disabilities*, 23, 14–26.
- Ibukan.A.,& Luyemi, O. (2017): The Burden on Caregivers of Children with Attention-deficit Hyperactivity Disorder in Lagos Nigeria: Prevalence and Correlates. 22(1): 1-7, 2017; Article no.JESBS.35582 Previously known as British Journal of Education, Society & Behavioural Science ISSN: 2278-099
- Lalawmpuia (2021). Inform Consent Form constructed for the parents of children with ADHD and parents of children with normal mental health. Unpublished pilot study PhD research work. Department of Clinical Psychology, Mizoram University.
- Lalawmpuia (2021). Socio-Demographic Profiles (Structure Questionnaire). Unpublished pilot study Ph.D. Research work. Department of Clinical Psychology, Mizoram University.
- Lee, J. (2013) Maternal stress, well-being, and impaired sleep in mothers of children with developmental disabilities: A literature review. *Research in Developmental Disabilities*, 34 (11), 4255–4273.
- Malhotra S, Khan W, Bhatia M. Quality of life of parents having children with developmental disabilities. *Delhi Psychiatry Journal*. 2012;15(1):173-4.
- Polanczyk,G., & Horta ,BL (2017) . The worldwide prevalence of ADHD: a systematic review and meta-regression analysis. *Am J Psychiatry* (2007) 164:942–8.
- Syeda,F.,Shagufta,P&Sona,K. (2014): Depression and quality of life of parents of disable children. *Department of Psychiatry, Pakistan Institute of Medical Sciences, Islamabad*.
- Sumit, D.(2015): Mental retardation affects quality of life in families of disabled children and role of nursing practices. *International Journal of Nursing Research*.
- Shahzadi,,&Waheeda,K. (2012): Quality of life of parents having children with developmental disabilities. *Delhi Psychiatry Journal*, Vol.15-No.1.

-
- Uguz., S, Toros ,F., & Yazgan, Ý. (2004). Determination of anxiety, depression and stress levels of mothers with mentally and/or physically disabled children. *Clinical Psychiatry*, 7, 42-47.
- Witt, W., Riley, A., & Coiro, M. (2003). Childhood functional status, family stressors, and psychosocial adjustment among school-aged children with disabilities in the United States. *Arch Pediatric Adolesc Med*. 157:687-695.
- Yamaki, K., Hsieh, K., & Heller, T. (2009). Health profile of aging family caregivers supporting adults with intellectual and developmental disabilities at home. *Journal Information*, 47(6), 425–435.

Emotional Intelligence of Higher Secondary School Students in Aizawl District: A Critical Study

J. Lalhriatpuii*
Francis L.R PuiaTlau**
Venus Lalchhuanthangi***

Abstract

Emotional intelligence is the ability to identify and regulate one's emotions and understand the emotions of others. A high Emotional Quotient helps you to build relationships, reduce stress, and defuse conflict, having a high emotional intelligence allows you to empathize with others, communicate effectively, and be both self and socially aware. This study aimed to find out the emotional intelligence of higher secondary school students in Aizawl district. Comparison was made regarding their gender, stream of study and type of school. It was found that the majority of students had a normal average level of emotional intelligence. There was a significant difference between male and female among the school students. Significance was also found in the type of stream of study in school.

Keywords: Emotional intelligence, students, Higher Secondary School

Introduction

The most common definition of emotional intelligence (EI) is the capability to recognize, utilize, comprehend, regulate, and deal with emotions. Emotionally intelligent people can identify and categorize a wide range of emotions, use emotional information to inform decisions and actions and modify their emotions in response to changing circumstances.

Despite the fact that the term originated in 1964, it became well-known from science journalist Daniel Goleman's 1995 best-selling book 'Emotional Intelligence'.

*Dr. J. Lalhriatpuii, Assistant Professor, Government Aizawl College, Aizawl, Mizoram - 796001
Email: jlalhriatpui@gmail.com

** Dr. Francis L. R. PuiaTlau, Guest Faculty, Government Aizawl College, Aizawl, Mizoram - 796001
Email: francistlau1991@gmail.com

***Venus Lalchhuanthangi, IV Semester MA Student, Government Aizawl College, Aizawl, Mizoram - 796001
Email: pvenusp26@gmail.com

Emotional Intelligence (EI) is the collection of abilities and traits that motivate effective leadership, according to Goleman. The term emotional intelligence describes the capability to recognize, regulate, and assess emotions. While some researchers maintain that emotional intelligence is an innate trait, others contend that it can be developed and strengthened. (D Goleman, 1998)

To quantify EI, several models have been developed. The term “emotional quotient” (EQ) was coined by British scientist Keith Beasley in 1987 as a replacement for the intelligence quotient (IQ). Konstantinos V. Petrides created the trait model in 2001, and it is centred on self-reported behavioural dispositions and perceived abilities. The ability model, which was created in 2004 by Peter Salovey and John Mayer, is centred on a person’s capacity to process emotional data and apply it to their social interactions. Now, ability EI and trait EI, which have since been modelled independently, can be combined in Goleman’s original model, which is now regarded as a mixed model. Emotion recognition, or the attribution of emotional states based on observations of visual and auditory nonverbal cues, has been the subject of more recent research. Furthermore, the goal of neurological research has been to define the neural underpinnings of emotional intelligence.

Emotional intelligence, like general intelligence, is the product of one’s heredity and its interaction with the forces of his or her environment. Until recently, we have been led to believe that a person’s general intelligence, measured as I.Q., or intelligence quotient, is the greatest predictor of success in any walk of life— academic, social, vocational, or professional. Consequently, I.Q. scores are often used for the selection, classification, and promotion of individuals in various programmed courses, job placement, etc. However, research and experiments conducted in the 1990s onwards have tried to challenge such over-dominance of intelligence and its measure, the emotional quotient (E.Q.). These have revealed that a person’s emotional intelligence, measured through his or her E.Q., maybe a greater prediction of success than his or her I.Q.

Emotional intelligence (otherwise known as emotional quotient or EQ) is the ability to understand, use, and manage your own emotions in positive ways to relieve stress, communicate effectively, empathize with others, overcome challenges, and defuse conflict. Emotional intelligence helps us build stronger relationships, succeed at school and work, and achieve our career and personal goals. It can also help us connect with our feelings, turn intention into action, and make informed decisions about what matters most to us.

Nowadays, the general public, professionals, and researchers in educational institutions are all interested in emotional intelligence. Emotional and social

competencies are seen to be just as important as the more conventional aspects of personality and intellect. The many components or elements of emotional intelligence, particularly the data on an individual's emotions and relationship management, greatly assist a person in all areas of life. Another aspect of the human mind that can be usefully examined when examining intelligence through the application of science is emotional intelligence. Such a methodical comprehension of human emotion and intelligence can be very beneficial in raising the overall success rate of modern education and its systems. Therefore, our capability to manage both our own emotions and those of others is essentially reflected in our emotional intelligence. To understand the significant resonances in people's hearts, intelligent academics must investigate emotional intelligence. Many studies have been conducted on emotional intelligence, and it has emerged as a fascinating psychological topic. Emotional intelligence was first defined by Mayer and Salovey in 1990. According to them, emotional intelligence is the ability of individuals to use their emotions to reason in order to improve their thinking and foster both intellectual and emotional development. Numerous investigators have discovered variations in emotional intelligence among individuals. These studies concentrate on the analysis of emotional capacities as predictors of social functioning, psychological well-being, and physical health.

Rationale of the Study:

The capability to recognize, control, and comprehend one's own emotions as well as those of others is known as emotional intelligence. Having a high EQ facilitates relationship development, lowers team stress, and diffuses conflict. Being socially and self-aware, able to communicate effectively, and having empathy for others are all made possible by having a high emotional intelligence. Our home and work environments are impacted by the way we react to one another and ourselves. Living in this world involves interacting with a wide variety of people and embracing change and unexpected experiences on a daily basis. The secret to handling life's challenges well is emotional intelligence. It's also essential to have compassion and comprehend the underlying motivations of other people's behavior.

Being emotionally intelligent is particularly crucial when handling high-stress circumstances like conflict, change, and obstacles. It's important to remember to be kind during these times, and being aware of our feelings can support us in doing so.

Having emotional intelligence makes life easier to handle and more productive. Students compete fiercely to achieve academic excellence in today's world. Students struggle to manage their emotions as they deal with a variety of issues in the classroom. The ability to manage one's emotional intelligence is the most important factor in a student's academic success. The essential component of this understanding is emotional

intelligence, which includes traits like self-assurance, cooperation, relatedness, intentionality, curiosity, self-control, and communication skills. All of these characteristics are parts of emotional intelligence. Research has demonstrated that emotional intelligence outperforms conventional measures such as IQ, GPA, and test scores in predicting future success. As a result, businesses, academic institutions, and educational institutions across the country have a keen interest in emotional intelligence.

There are advantages for secondary schools that implement structured emotional intelligence programs. Pupils who take part in emotional intelligence education programs behave less violently against peers and adults. Gaining emotional intelligence also enhances the learning environment in the classroom, which facilitates instruction for both teachers and students. This facilitates effective communication between the teachers and the students during their academic journey. It is possible to clearly identify a student's strengths and abilities, which can create a favorable environment for their learning system. In order to improve relationships among students, raise emotional self-awareness, develop better interpersonal skills, comprehend a variety of emotions, and be able to express one's own, it is necessary and crucial to conduct research on secondary school students' emotional intelligence.

Objectives of the Study

1. To find out the emotional intelligence of higher secondary school students in Aizawl City.
2. To find out the emotional intelligence of arts higher secondary school students in Aizawl District.
3. To find out the emotional intelligence of science higher secondary school students in Aizawl District.
4. To compare the emotional intelligence of higher secondary school students in Aizawl District with reference to their gender.
5. To compare the emotional intelligence of higher secondary school students in Aizawl District with reference to their stream of study.

Hypotheses of the Study

1. There is no significant difference in the emotional intelligence of higher secondary school students in Aizawl District with reference to their gender.
2. There is no significant difference in the emotional intelligence of higher secondary school students in Aizawl District with reference to their stream of study.

Methodology

Research Approach: Descriptive survey approach was followed for the present study.

Population and Sample: The population of the present study includes all the students from higher secondary schools in Aizawl District.

The sample of the study comprised of 200 higher secondary school in Aizawl District, out of which 92 were male and 108 were female. In the present study, a random sampling technique was applied, so data was collected among 200 students of higher secondary school in Aizawl District. The sample consisted of 91 males and 108 females.

Tool Used: For the present study, the investigator used the emotional intelligence scale (EIS) developed by Anukool Hyde, Sanjyot, and UpinderDhar.

Data Analysis: Data were analyzed both quantitatively and qualitatively. Statistical techniques like percentage, mean, standard deviation etc. were used for data analysis. Further, t test was used for the purpose of comparison.

Results and Findings:

Objective-wise analysis of data and findings are presented below

1. Emotional Intelligence of Higher Secondary School Students in Aizawl District

Table No. 1 shows analysis of emotional intelligence of higher secondary school students in Aizawl District followed by interpretation.

Table No. 1

Emotional Intelligence of Higher Secondary School Students in Aizawl District

Level of Emotional Intelligence	Number (200)	Percentage
High	15	7.50%
Normal	109	54.50%
Low	76	38%

The above table shows that majority i.e., 109 (54.5%) of higher secondary school students in Aizawl District have normal level of emotional intelligence while 76 (38%) of them have low level of emotional intelligence and there are 15 (7.5%) students with high level of emotional intelligence. Thus, it can be concluded that majority of higher secondary school students in Aizawl District have normal level of emotional intelligence.

1. Emotional Intelligence of Arts Higher Secondary School Students in Aizawl District

Table No. 2 shows analysis of emotional intelligence of arts higher secondary school students in Aizawl District followed by interpretation.

Table No. 2

Emotional Intelligence of Arts Higher Secondary School Students in Aizawl District

Level of Emotional Intelligence	Number (100)	Percentage
High	5	5%
Normal	48	48%
low	47	47%

The above table shows that among arts higher secondary school students in Aizawl District majority i.e., 48 (48%) have normal level of emotional intelligence while a considerable number i.e., 47 (47%) have low level of emotional intelligence and there are 5 (5%) students with high level of emotional intelligence. It can be interpreted that majority of arts higher secondary school students in Aizawl District have normal level of emotional intelligence while a considerable number of them have low level of emotional intelligence.

2. Emotional Intelligence of Science Higher Secondary School Students in Aizawl District

Table No. 3 shows analysis of emotional intelligence of science higher secondary school students in Aizawl District followed by interpretation.

Table No. 3

Emotional Intelligence of Science Higher Secondary School Students in Aizawl District

Level of emotional intelligence	Number (100)	Percentage
High	10	10%
Normal	61	61%
low	29	29%

Looking at the above table, it can be seen that among science higher secondary school students in Aizawl District majority i.e., 61 (61%) have normal level of emotional intelligence while 29 (29%) have low level of emotional intelligence and there are 10

(10%) students with high level of emotional intelligence. Thus, it can be interpreted that majority of science higher secondary school students in Aizawl District have normal level of emotional intelligence.

3. Comparison of Emotional Intelligence of Higher Secondary School Students in Aizawl District with Reference to their Gender

Table No. 4 shows the comparative analysis of emotional intelligence of higher secondary school students in Aizawl District with reference to their gender.

Table No. 4

Comparison of Emotional Intelligence of Higher Secondary School Students in Aizawl District with Reference to their Gender

Group	N	M	SD	t value	Sig. Level
Male	91	118.61	12.97	4.63	0.01
Female	108	127.7	14.8		

(NS=Not Significant)

Table No. 4 shows that the t value relating to the emotional intelligence of higher secondary school students in Aizawl District with reference to their gender is significant at .01 level. Therefore, the hypothesis - “*There is no significant difference in the emotional intelligence of higher secondary school students in Aizawl District with reference to their gender*” is rejected. It implies that there is significant difference in the emotional intelligence of higher secondary school students in Aizawl District with reference to their gender and female students have higher emotional intelligence than male students as the mean score of female higher secondary school students is higher than that of male students.

4. Comparison of Emotional Intelligence of Higher Secondary School Students in Aizawl District with Reference to their Stream of Study

Table No. 4 shows the comparative analysis of emotional intelligence of higher secondary school students in Aizawl District with reference to their stream of study.

Table No. 5

Comparison of Emotional Intelligence of Higher Secondary School Students in Aizawl District with Reference to their Stream of Study

Group	N	M	SD	t value	Sig. Level
Arts	100	120.14	10.57	8.01	0.01
Science	100	124.39	11.78		

(NS=Not Significant)

Table No. 4 shows that the t value relating to the emotional intelligence of higher secondary school students in Aizawl District with reference to their stream of study is significant at .01 level. Therefore, the hypothesis - “*There is no significant difference in the emotional intelligence of higher secondary school students in Aizawl District with reference to their stream of study*” is rejected. It implies that there is significant difference in the emotional intelligence of higher secondary school students in Aizawl District with reference to their stream of study and science students have higher emotional intelligence than arts students as the mean score of science higher secondary school students is higher than that of arts students.

Conclusions:

The present study is an attempt to find out the emotional intelligence of students in higher secondary schools in Aizawl District. The findings show that the majority of all the respondents have normal attitudes towards emotional intelligence. The result also shows that there is a significant difference in the emotional intelligence of higher secondary school students in Aizawl District regarding their stream of study and science students have higher emotional intelligence than arts students.

The teacher needs to have more awareness of how to deal with low emotional intelligence as the findings reveal that 38% of the respondents have low emotional intelligence. Both the teachers and parents need to focus on improving the emotional intelligence of the students by listening to them, engaging in activity, modelling appropriate behaviour etc. Developing a healthy relationship between teachers and students, between parents and children and teaching children resilience can be important factor in improving their emotional intelligence.

More science students have a higher percentage of high emotional intelligence so it can be discussed that higher achievement can be related to high emotional

intelligence. Many schools offering science streams have high cutoffs, which require a high percentage to get admission in the science stream.

References

- Afzal, M. T., & Afzal, M. T. (2016). Relationship of family structure and emotional intelligence of secondary school students in Islamabad. *American Journal of Educational Research*, 4(9), 685–688. <https://doi.org/10.12691/education-4-9-7>
- Sánchez Álvarez, N., Martos, M. P. B., & Extremera, N. (2020). A Meta-Analysis of the Relationship between emotional intelligence and academic performance in Secondary Education: A Multi-Stream comparison. *Frontiers in Psychology*, 11. <https://doi.org/10.3389/fpsyg.2020.01517>
- Bahat, B., & Ovsenik, M. (2020). Emotional intelligence in secondary school students. *Revija Za Univerzalno Odličnost*. <https://doi.org/10.37886/ruo.2020.018>
- Bunyaan, S. A., Tan, S. I., & Loo, Y. M. (2015). Emotional intelligence and academic achievement: a study among students of a private university in Malaysia. In *Springer eBooks* (pp. 55–66). https://doi.org/10.1007/978-981-287-399-6_5
- Bunyaan, S. A., Tan, S. I., & Loo, Y. M. (2015e). Emotional intelligence and academic achievement: a study among students of a private university in Malaysia. In *Springer eBooks* (pp. 55–66). https://doi.org/10.1007/978-981-287-399-6_5
- Desser, D. (2022). *A companion to Japanese cinema*. John Wiley & Sons.
- BSc, E. H. (2023, April 7). *The importance of emotional intelligence (Incl. quotes)*. PositivePsychology.com. <http://positivepsychology.com/importance-of-emotional-intelligence>.
- Salovey, P., & Mayer, J. D. (1990). Emotional intelligence. *Imagination, Cognition and Personality*, 9(3), 185–211. <https://doi.org/10.2190/dugg-p24e-52wk-6cdg>
- Román-Mata, S. S., Puertas-Molero, P., Ubago-Jiménez, J. L., & González-Valero, G. (2020b). Benefits of Physical Activity and Its Associations with Resilience, Emotional Intelligence, and Psychological Distress in University Students from Southern Spain. *International Journal of Environmental Research and Public Health*, 17(12), 4474. <https://doi.org/10.3390/ijerph17124474>
- Durlak, J. A., Weissberg, R. P., Dymnicki, A. B., Taylor, R. D., & Schellinger, K. B. (2011). The Impact of Enhancing Students' social and Emotional Learning: A Meta Analysis of School Based Universal Interventions. *Child Development*, 82(1), 405–432. <https://doi.org/10.1111/j.1467-8624.2010.01564.x>

- The relationship between academic success and emotional intelligence, Psychological Empowerment, resilience, Spiritual Well-Being in Nursing students. (2019). *Journal of Health, Medicine and Nursing*. <https://doi.org/10.7176/jhmn/62-10>
- Kant, R. (2019). Emotional intelligence: A study on university students. *Journal of Education and Learning*, 13(4), 441–446. <https://doi.org/10.11591/edulearn.v13i4.13592>
- Kumar, M. (2020). A study on the emotional intelligence of higher secondary school students. *Shanlax International Journal of Education*, 8(3), 114–119. <https://doi.org/10.34293/education.v8i3.2395>
- Meshkat, M., & Nejati, R. (2017). Does emotional intelligence depend on gender? A study on undergraduate English majors of three Iranian universities. *SAGE Open*, 7(3), 215824401772579. <https://doi.org/10.1177/2158244017725796>
- Navas, J. M. M., Bozal, R. G., Lopes, P. N., Salovey, P., & Gil Olarte, P. (2006). Emotional intelligence and social and academic adaptation to school. *PubMed*, 18 Suppl, 112–117. <https://pubmed.ncbi.nlm.nih.gov/17295967>
- Eccles, J. S., & Roeser, R. W. (2011). Schools as developmental contexts during adolescence. *Journal of Research on Adolescence*, 21(1), 225–241. <https://doi.org/10.1111/j.1532-7795.2010.00725.x>
- Goleman, D. (2023, August 10). *What makes a leader?* Harvard Business Review. <https://hbr.org/2004/01/what-makes-a-leader>
- Sünbül, A. M., & Aslan, Y. (2007). The Relationship between Emotional Intelligence and Achievement among 1st and 4th Grade Faculty Students [Dataset]. In *PsycEXTRA Dataset*. <https://doi.org/10.1037/e739422011-050>
- Tehlan, I. B., & Dalal, M. (2018). A study of relationship between emotional intelligence and academic achievement of secondary school students. *International Journal of Advanced Research in Management and Social Sciences*, 7(3), 14–28. <https://www.indianjournals.com/ijor.aspx?target=ijor:ijarmss&volume=7&issue=3&article=002>
- Tiwari, P., Naik, P. R., Nirgude, A. S., & Datta, A. (2020). Effectiveness of life skills health education program: A quasi-experimental study among school students of South India. *Journal of Education and Health Promotion*, 9(1), 336. https://doi.org/10.4103/jehp.jehp_564_20
- Rana, S., Singh, A. K., Singhania, S., Verma, S., & Haque, M. M. (2021). Revisiting the Factors Influencing Teaching Choice Framework: Exploring What Fits with Virtual Teaching. *Global Business Review*, 097215092110153. <https://doi.org/10.1177/09721509211015369>

Mother's Religiosity Prediction on the Resilience of their Children

Lalhmingliani Hlondo*
Zokaitluangi**

Abstract

Resilience allows a person to withstand adversity and adapt to stressful conditions by reducing the impact of negative consequences. Parental religiosity has been associated with improved psychological adjustment and with social competence in their child. Mothers play a vital role in modeling and encouraging children to use specific emotional regulatory strategies. The present study was aimed to examine whether mothers' religiosity predicts the resilience of their children. Two hundred and forty children were selected through a multi-stage random sampling procedure from different schools to serve as a sample in the study. The DUREL (Koenig et al., 1997) and Resilience Scale (Wagnild & Young, 1993) were employed for psychological evaluation among the samples. The results indicated that the mothers' religiosity and the resilience in children have a significant positive correlation. Moreover, mothers' religiosity has a role in predicting the resilience of their children. These findings portrayed the importance of maternal religiosity on the resilience of their children; and also suggested that promotion of family mental health programs can enhance adolescent resilience for their psychological wellbeing.

Keywords: religiosity, resilience, children, mother.

Introduction

Mothers play a crucial role in socializing children's emotional regulation by modeling and encouraging children to utilize particular regulatory tactics. Mothers' reactions to their children's suffering as well as their modeling and application of emotion management behaviors all contribute to the socialization of emotion control (Eisenberg et al., 1998). Parental religiosity, specifically the frequency with which

*Lalhmingliani Hlondo, Ph.D. Student, Department of Psychology, Mizoram University

**Prof. Zokaitluangi, Professor, Department of Psychology, Mizoram University

couples attend worship services, has been associated with better psychological adjustment and social competence in primary school-aged children, according to Bartkowski et al. (2008).

The foundational elements of a child's development may include religion. Along with their warm and supportive gestures and competent supervision, parents' religiosity appears to play a positive role in children's and teenagers' behavioral and emotional outcomes (Bartkowski & Wilcox, 2000). Studies indicate that when there is a positive association between a parent's religiosity and such characteristics, children can benefit from their warmth and emotional support.

Resilience is the ability to adjust to change and grow in harmony with one's surroundings (Pratiwi et al., 2014). Resilience, according to Yunes and Szymanski (2001) and Minello and Scherer (2014), enables a person to face and overcome novel circumstances while also promoting growth or transformation. It consists of a collection of psychological and social processes that enable someone to live a happy and healthy life even in dangerous circumstances (Pesce et al., 2004). In children and adolescents, cognitive ability is a reliable and significant predictor of resilience. Every child is believed to be better equipped to handle pressure and stress, deal with problems that arise frequently, recover from trauma, adversity, and disappointments, set clear, attainable goals, solve problems, and get along with others if they can cultivate a resilient mindset. Another aspect is environmental buffering provided by significant individuals in the child's life (Losel et al., 1989). Other factors include toughness, adaptation, adjustment, mastery, environmental adjustment and toughness.

Werner and Smith (1982, 1992) found that although boys typically feel more vulnerable before reaching puberty, girls are generally more vulnerable after this stage of their lives. Both the ages at which boys and girls are most vulnerable to stress and strain and the ways in which they respond to it are likely to differ between the sexes. Boys choose physical activities like sports, but girls prefer social support, demonstrating that boys and girls have different coping mechanisms (Frydenburg & Lewis, 1993). In stressful situations, Grotberg suggested that girls use resilience-building strategies more frequently than boys (Hampel & Petermann, 2005). Often females have a higher resilience compared to males (Sundar & Archana, 2020).

The influence of social and religious elements on resiliency and quality of life has been studied by Wang & Distelberg (2019). They found that the quality of life was influenced by gender, time, relationships, abuse history, and religious beliefs. Therefore, the current study emphasizes the importance of considering religion to address the stress that kids in schools endure, as well as the factors that contribute to their ability to become resilient. Bryant and Astin's research from 2008 stated that having a religious

affiliation increases people's resilience—their ability to recover from setbacks. Religiosity, in the opinion of (Ghufron&Risnawita, 2010), is thought to be able to contribute to boosting one's capacity for resilience and lowering anxiety in the prison environment in order to lessen the stress suffered by WBP. According to Thistle's research, emotional regulation and resilience are positively connected, which means that those who are more adept at managing their emotions are also more likely to be resilient. Therefore, the aim of this study was to investigate the relation of religiosity and resilience.

Objectives:

The present study aims to elucidate the following:

1. To compare the level of resilience and mothers' religiosity between boy and girls.
2. To study the relationship between Mother's religiosity and children's resilience.
3. To determine the prediction of mother's religiosity on resilience among the samples.

Hypothesis:

The present study set forth the following hypotheses to meet the objective of the study:

1. Boys and girls will differ in their resilience levels, as well as in their mothers' religiosity levels.
2. There will be a significant relationship between the students' resilience and their mothers' religiosity.
3. It was expected that mothers' religiosity will predict the resilience of the students.

The present study is the first endeavor for the targeted population and was exploratory in nature.

Methodology:***Sample:***

240 High school students (120 boys and 120 girls) and their mothers from different High Schools of Aizawl District were randomly selected to serve as samples with equal representation of age and types of school (private and government) for the construction of socio-demographic profiles for the present study.

Tools used:

1. *The Resilience Scale (RS: Wagnild & Young, 1993)*, is a widely used self-report measure designed to assess an individual's level of psychological resilience. The RS consists of 25 items that cover various aspects of resilience, such as adaptability, self-reliance, and the ability to bounce back from adversity. Respondents rate their agreement with each statement, and the scale provides insight into an individual's capacity to cope with life's challenges. The RS has been utilized in research and clinical settings to evaluate resilience and its impact on mental health and well-being and has been shown to be psychometrically adequate in terms of internal consistency, construct validity and concurrent validity (Cajada et al., 2023).

2. *Duke University Religion Index (DUREL: Koenig et al., 1997; Koenig & Busing, 2010)*: five items that cover various dimensions of religiosity, including organizational religious activity, non-organizational religious activity, and intrinsic religiosity. Respondents answer these questions to provide insights into their religious practices, beliefs, and experiences. The DUREL has been demonstrated to be psychometrically sound (Koenig & Busing, 2010), and has been used in numerous studies to investigate the relationship between religiosity and various aspects of physical and mental health, making it a valuable tool for researchers interested in the intersection of religion and well-being.

Design:

The design of the study included two separate yet interconnected methodologies: a between-subjects design and a correlational design. This facilitated a thorough investigation of the research objectives and established a strong foundation for the examination of both variances between groups and relationships between variables in the study.

Procedures:

Samples were selected from different schools of Mizoram. Necessary permissions were taken from the concerned authority and consent was obtained from the participants. Resilience scale was administered on the selected samples and the religiosity scale was also administered to their mothers by following the instructions in the manuals and APA code of ethics. The collected data were checked for any missing responses on the test scales and the results were statistically analyzed.

Results:

The evaluation of the data for the study measures confirmed their normality based on skewness and kurtosis values. Furthermore, the assessment of homogeneity of variances

using Levene's test revealed non-significant results (resilience = .35; religiosity = .34;). Additionally, the reliability tests provided evidence of the scales' trustworthiness (resilience α = .68). [See Table 1]

Table1: Descriptive statistics showing Mean, SD, Normality, Reliability, Homogeneity of the study variables

Stats	Girls		Boys	
	Resilience	Religiosity	Resilience	Religiosity
<i>Mean</i>	97.88	12.52	89.19	8.67
<i>SD</i>	4.61	1.62	3.93	1.67
<i>Skewness</i>	-0.82	-0.68	-0.83	-0.94
<i>Kurtosis</i>	0.88	0.52	0.19	0.67
<i>Reliability</i>	α = .68 (Resilience)		α = .77 (Religiosity)	
<i>Homogeneity (Levene's test)</i>	p = .35 (Resilience)		p = .34 (Religiosity)	

Results of the Independent t-test performed for the study revealed significant gender differences in the study variables. Girls (Mean = 97.88, SD = 4.61) scored higher than boys (Mean = 89.19, SD = 3.93) on resilience, $t(238) = 8.44$, $p < .05$. Additionally, the mothers of girls (Mean = 12.52, SD = 1.62) exhibited higher levels of religiosity compared to the mothers of boys (Mean = 8.67, SD = 1.67), $t(238) = 9.68$, $p < .05$.

Table 2: Results of independent t-test examining the effect of Gender on the study variables

Stats	Religiosity	Resilience
<i>t-statistic</i>	8.44	9.68
<i>p-value</i>	< .05	< .05

Table 3 presents the correlation between religiosity and resilience, revealing a significant positive correlation ($r = 0.54$, $p < .01$). This result suggests that as mother's religiosity increases, the level of resilience in children also tends to increase. Furthermore, the prediction of mother's religiosity on children's resilience showed an R-squared value of 0.29 ($p < .01$), indicating that mother's religiosity accounts for 29% of the variance in children's resilience levels. This suggests that mother's religiosity has a substantial influence on children's resilience.

Table 3: Results of correlation analysis showing the correlation coefficient (r) between the study variables

Variables	Religiosity
Resilience	0.54

Note:

1. $p < .01$
2. *Prediction of Mother's Religiosity on Resilience is $R^2 = .29$ ($p < .01$)*

Discussion

The results indicate that there was a significant difference in the levels of resilience between boys and girls and it was observed that girls had higher resilience than the boys, and that the mothers of girls were more religious than the mothers of boys, which supports the first hypothesis. The correlation between resilience among students and their mother's religiosity was found to have a positively significant relationship which supports the second hypothesis. Results found that 29% of the resilience of the children was predicted by their mothers' religiosity, thus confirming the third hypothesis.

The overall findings may be explained by the common familial factors (genetic and environmental), which may underlie for the factors of mother's religiosity on their children's resilience as the same on depression vulnerability Önder & Gülay (2008). Religious parents frequently display their religious beliefs and ideals in their interactions with others, especially their children. According to Martin (1967) parents may believe that the church is beneficial for their children. In addition, he claims that mothers who are the major caregivers of their children go to church to encourage their kids' participation (Nelsen & Nelsen 1975). Religion assigns parents particular responsibilities and urges them to nurture their kids in particular ways (Pearce & Axinn 1998). As a result, religious beliefs may influence parent-child interactions through both personal and social behaviors. According to Pearce (2007: 1228), women may be able to "socialize their children to believe and practice in ways similar to their own" through these behaviors.

According to retrospective reports, moms were believed to have had the largest positive impact on African American adults' religious commitment and beliefs, according to Gutierrez, Goodwin, Kirkinis, and Mattis (2014). These results indicate that women may play a more significant role in establishing religious values and practices than fathers. Therefore, it may be expected that maternal religiosity will have a stronger correlation with teenage religiosity compared to paternal religiosity (Bao et al., 1999; Boyatzis et al., 2006; Gutierrez et al., 2014; Acock & Bengtson, 1978;

Although many studies have examined the effect of gender on resilience, however there was little agreement among the investigations. While female students were observed to have higher resilience in the study of Önder and Gülay (2008), male students tends to have higher resilience in the studies of Bahadýr (2006), Sürücü and Bacanlý (2010). On the other hand, in some others, the relationship between gender and resilience was not observed (Özcan, 2005; Sezgin, 2005Aktay, 2010;).

Limitations

The sample size could have been expanded to more accurately represent the intended population. Moreover, the study could have employed a more rigorous and comprehensive systematic investigation. The results indicate the necessity for additional research to delve into the factors shaping children's behavior, with a particular focus on the significant role played by their parents in their lives.

Significance of the study

The study provided evidence for the importance of mothers' religiosity on their children's religiosity through interactions with their parents (Kopp, 1989) as evinced by earlier researchers (Brody & Flor, 1998; Gunnoe *et al.*, 1999). Results highlighted a gender difference in resilience which is supported by earlier findings that girls have more resilience than boys (Sundar and Archana, 2020). It also highlighted that religiosity can be an important resilience strategy in the upbringing of children.

References:

- Aktay, TuđbaEsen (2010). *Risk altýndakiortaöđretim 9. ve 10. Sýnyföđrencilerininkendinitoparlamagüçlerinininncelenmesi*, YüksekLisansTezi, GaziÜniversitesi.
- Acoc, A.C., &Bengtson, V.L. (1978). On the relative influence of mothers and fathers: A covariance analysis of political and religious socialization. *Journal of Marriage and the Family*, 40(3), 519–530. doi: 10.2307/350932.
- Bahadýr, E. (2009). Sađlýklailgilifakültelerdeeditimebađlayanöđrencilerinpsikolojiksađlamlikdüzeyleri, YüksekLisansTezi, H.Ü. SađlýkBilimleriEnstitüsü.
- Bartkowski, J.P., & Wilcox, W.B. (2000). Conservative Protestant child discipline: The case of parental yelling. *Social Forces*, 79(1), 263–290.
- Brody, G.H., & Flor, D.L. (1998). Maternal resources, parenting practices, and child competence in rural, single-parent African American families. *Child Dev*, 69(3), 803–816.
- Bryant, A., & Astin, H.S. (2008). The correlates of spiritual struggle during the college years. *The Journal of Higher Education*, 79(1), 1-27. doi: 10.1080/00221546.2008.11772084.
- Cajada, L., Stephenson, Z., & Bishopp, D. (2023). Exploring the Psychometric Properties of the Resilience Scale. *Adversity & Resilience Science*, 4, 245–257. <https://doi.org/10.1007/s42844-023-00102-3>.
- D’Onofrio, B.M., Eaves, L.J., Murrelle, L., Maes, H.H., & Spilka, B. (1999). Understanding biological and social influences on religious affiliation, attitudes, and behaviors: a behavior genetic perspective. *J Pers*, 67(6), 953-984.
- Eisenberg, N., Cumberland, A., & Spinrad, T.L. (1998). Parental socialization of emotion. *Psychological Inquiry*, 9, 241–273.
- Frydenberg, E., & Lewis, R. (1993). Boys play sport and girls turn to others: age, gender and ethnicity as determinants of coping. *Journal of Adolescence*, 16(3), 253-266.
- Ghufron, M.N., &Risnawita, R. (2010). Teori-teoripsikologi. Yogyakarta: Ar-Ruzz Media.
- Gutierrez, E., et al. (2014). Religious socialization in African American families: The relative influence of parents, grandparents, and siblings. *Journal of Family Psychology*. doi: 10.1037/a0035732.
- Grotberg, E. (1993). Promoting resilience in children: A new approach. University of Alabama at Birmingham: Civitan International Research Center.
- Grotberg, E. (1994). Coping with adversity. *Civitan Magazine*, 10-11.
- Gunnoe, M.L., Hetherington, E.M., & Reiss, D. (2006). Differential impact of fathers’ authoritarian parenting on early adolescent adjustment in conservative Protestant versus other families. *Journal of Family Psychology*, 20, 589–596.

- Hampel, P., & Petermann, F. (2005). Age and Gender Effects on Coping in Children and Adolescents. *Journal of Youth and Adolescence*, 34(2), 73–83.
- Koenig, H.G., & Büssing, A. (2010). The Duke University Religion Index (DUREL): A Five-Item Measure for Use in Epidemiological Studies. *Religions*, 1(1), 78-85. <https://doi.org/10.3390/rel1010078>.
- Kopp, C.B. (1989). Regulation of distress and negative emotions: A developmental view. *Developmental Psychology*, 25, 343–354.
- Losel, F., Bliesener, T., & Koferl, P. (1989). On the concept of invulnerability: Evaluation and first results of the Bielefeld project. In M. Brambring, F. L., & H. Skowronek (Eds.), *Children at risk: Assessment, longitudinal research, and intervention* (pp. 186-219). New York: Walter de Gruyter.
- Martin, D. (1967). *A sociology of English religion*. London: SCM Press.
- Minello, I.F., & Scherer, I.B. (2014). Características resilientes do empreendedor associadas ao sucesso empresarial. *Revista de Ciências da Administração*.
- Önder, A., & Gülay, H. (2008). İlköğretim 8. sınıfta öğrencilerin psikolojik sağlamlık düzeylerinin değerlendirilmesi. *Dokuz Eylül Üniversitesi Buca Eğitim Fakültesi Dergisi*, 23, 192-197.
- Özcan, B. (2005). Anne babalarla çocukların psikolojik sağlamlık düzeylerinin değerlendirilmesi. *Yüksek Lisans Tezi, Ankara Üniversitesi*.
- Nelson-Becker, H., & Thomas, M. (2020). Religious/Spiritual Struggles and Spiritual Resilience in Marginalized Older Adults. *Religions*, 11(9), 431. <https://doi.org/10.3390/rel11090431>.
- Pearce, L.D. (1998). *Religious Identity and Family Ideologies in the Transition to Adulthood*. *Journal of Marriage and Family*, 69, 1227-1243.
- Pesce, R.P., Assis, S.G., Santos, N., & Oliveira, R.D. (2004). Risco e proteção: em busca de um equilíbrio promotor de resiliência. *Psicologia: teoria e pesquisa*, 20(2), 135-143.
- Sezgin, F. (2012). İlköğretim okulu öğretmenlerinin psikolojik dayanıklılık düzeylerinin incelenmesi. *Kastamonu Eğitim Dergisi*, 20(2), 489-502.
- Sundar, M., & R, A. (2020). Gender difference in resilience among the undergraduate medical students – A cross-sectional study. *International Journal of Research in Pharmaceutical Sciences*, 11(SPL2), 21-24.
- Sürücü, M., & Bacanlı, F. (2010). Üniversite öğrencilerinin psikolojik dayanıklılık ve demografik değişkenlere göre incelenmesi. *Gazi University Journal of Gazi Educational Faculty (GUJGEF)*, 30(2).

- Tusaie, K., & Dyer, J. (2004). Resilience: A historical review of the construct. *Holistic Nursing Practice*, 18(1), 3-8.
- Wang, S., & Distelberg, B. (2019). Impressions of personal health among collegians: What relationships and faith factors predict health-related quality of life among college students? *College Student Journal*, 53(2), 252-262.
- Werner, E., & Smith, R.S. (1982). *Vulnerable but invincible*. New York: McGraw-Hill.
- Yunes, M.A.M., & Szymanski, H. (2001). Resiliência: noção, conceitosafins e consideraçõescríticas. *Resiliência e educação*, 2, 13-43.

Education as a Medium for Indulging in Social Change

Gautam Makwana*

Abstract

Education provides knowledge, skills, training, and new ideas for society's youth, while addressing outdated policies and values for enlightened progress. The purpose of this research study is to consider the ways in which education might change society. On the review of academic sources, a technique with a qualitative approach is suggested. According to the findings, education is the cornerstone for bringing about social change. In conclusion, sociology is the intellectual foundation that directs the course in the art and science of education, and teachers become protagonists of the change in thought. Education shapes societies and people, shaping thoughts, problem-solving, and life patterns, leading to individual and social change

Keywords: Pedagogy, Education, Social Change, Reproduction, Sociology, Theory, Critical

Introduction

Educational context involves social, historical, economic, and cultural realities intertwining with society's ends (Bondi and Matthews, 2017). Education transforms people and nations from ignorance to knowledge, transforming generations (Fägerlind and Saha, 2016). Human actions often represent ends related to state purposes through social institutions and government. Sociology of education is relevant in studying educational action, as it provides social bases for understanding why educational systems reproduce class interests (Chávez, 2017). Education, from a sociological perspective, is a formative process that develops individual and collective consciousness for life and the world (Swift, 2017). Critical thought and reasoning alone are insufficient for developing competent knowledge (Fogs, Hernández & Cardona 2016). Participation

*Gautam Makwana, Research Scholar (Ph.D), Department of Social Work, School of Social Sciences, Mizoram University, Aizawl 796004, Mizoram, India E mail: mzu1234567@mzu.edu.in

is crucial for community involvement, interaction, and convergence of interests, as it involves human actions (Hernández et Al 2018). This document analyzes sociology studies in education to understand transformative functions and ideological bases for a more inclusive education system, involving the most vulnerable (Rojas, 2014).

The analysis examines sociology's contributions to education and its potential to transform society. It examines discourses that maintain the educational system and critique reality, advocating for a change in the status quo. The constructivist paradigm of knowledge is developed through progressive processes (Martínez, Steffens, Ojeda, & Hernández, 2018). It has emphasized humanistic educational processes, emphasizing learning and student development (Moreno et al 2017). The university's role in social cohesion, integration democracy, and cultural diversity (Parra et al 2018). The text aims to contrast educational theories, focusing on reproduction and liberating perspectives, aiming to transform social, cultural, and educational landscapes. The focus is on analyzing reproduction theories, their characteristics, objectives, and understanding of education. The educational act, critical theory, pedagogy, and sociological theories to understand the discourses that perpetuate a subordinated educational system. It aims to identify discourses that promote renewal from below and oppressed classes, highlighting the importance of critical theory and pedagogy in understanding the subject. Participation in various contexts aims to satisfy contact, relate to the environment, and promote social cohesion, democratic integration, and cultural diversity in students, ultimately fostering values and respect (Parra, García, Durán& Moreno 2018).

Researchers' experiences in education project realities beyond information transmission, aiming to transform situations and analyze social systems, providing examples for other social systems (Ríos-Sánchez, Álvarez-Mejía& Torres-Hernández, 2018).

Methodology

Interpretive paradigm involves qualitative investigation using documentary review to explore topic information. Post positivism challenges current science's focus on quantifiable, replicable methods (Ramos 2015), while interpretative models emphasize natural analysis, considering complexity in phenomena (Aliyu et al 2014). Qualitative approach uses naturalistic mechanisms, including documentary review, to address problems. This design analyzes scientific publications to generate new theoretical perspectives on education and society, using databases like Scielo, Scopus, and Redalyc to collect information from the last five years (Lee 2019).

Results

Education: The General Education Law of Colombia, Law 115 of 1994, defines education as a permanent, personal, cultural, and social formation based on a person's dignity, rights, and duties. This holistic approach ensures the educational system achieves its goals and functions by focusing on educating the subject matter (Beltrán, et al., 2015). Education is crucial in shaping a society's customs and social order, shaping its future and shaping its values. It is a conservative and transformative function that reflects past traditions while fostering human growth (García, 2015). Education should preserve and transform past knowledge, fulfilling moral functions from an empirical and sociological perspective, rather than normative norms (Brighouse and McPherson, 2015). It encourages a realistic understanding of individuals as social entities and examines processes, promoting individual values cultivation and collective adherence to values through dialogue and reasoning. It aims to train students in correct behavior and cultural norms (Chávez and Navigation 2017).

Sociology in Education: Sociology of education studies the educational act, examining how the system undermines its social function (Evetts 2017). Sociology of education studies social relations and institutions shaping educational fact as a cultural phenomenon (Castillo, 2012). Sociology views education as a scientific object, serving as a means of study, research, and theoretical foundations. It recognizes education as a human process expressing intentions, interests, and objectives through organizations and institutions within society, aiming to achieve specific purposes influenced by cultural context (Rojas 2014).

Understanding the relationship between education and sociology through a diagram and conceptual positions illustrated in Figure 1

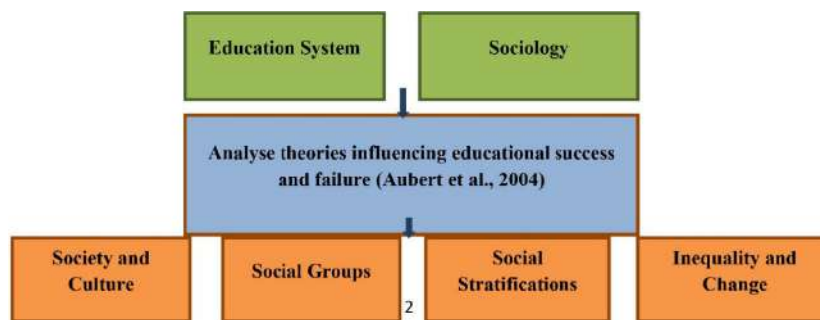


Figure 1 Relationship between education and sociology

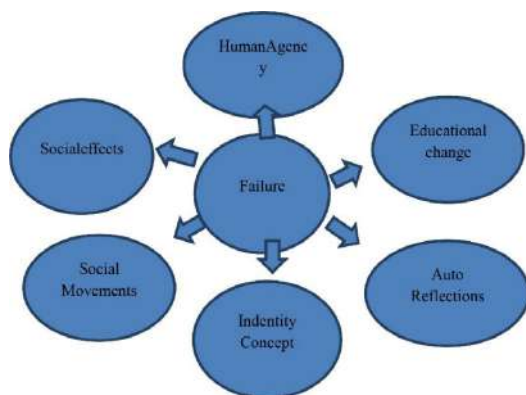
Identifying education functions and their relationship, examine educational systems' organization, characteristics, methodologies, aims, and objectives, and

sociology's interpretation to identify shortcomings and contradictions in academic discourses and reality.

Educational Theory: Reproduction Theory vs Critical Theory: Education theory explains and grounds knowledge about education and its behaviour (Saéz, 2016). Educational theory is shaped by context, knowledge, and individual needs, requiring three axes to achieve its goals (Moore, 1974). Education aims to achieve desired ends for subjects, with appropriate equipment and resources. Educational theory measures progress in practice throughout humanity, defining categories of analysis to highlight and prioritize elements. Education is closely related to the social body, fulfilling a social function (Wexler, 2017). Society's institutions, subject to ruling classes' interests, view education as useful for maintaining a specific system (Apple, 2017). The educational system's impact on society's maintenance and reproduction is analyzed through reproduction and critic models. These theories provide insights into its origins, persistence, and benefits/cons, allowing for a deeper understanding of education's implications.

Reproduction Educational Theory

The theory of reproduction in educational context is controversial, with opponents arguing adaptation to social conditions and historical times, while supporters defend the discourse. The reproduction theory, introduced in Sociology of Education from Critical Pedagogy, significantly contributes to the educational context but neglects essential elements in the approach (Camdepadrós and Pulido 2009). Authors argue that reproduction educational theory lacks equality of opportunities and focuses on social inequalities, lacking new elements to mitigate these issues (Giroux and Flecha 1992) in six limitations theoretical, which are detailed in Figure 2



Source: Giroux and Arrow (1992)

Figure 2 flaws in the theory reproductive educational

Based on figure 2, some clarifications of these concepts are made:

- 1) Human Agency concept is not analyzed due to subject's lack of relevance.
- 2) Lack of human agency cannot explain educational and social change.
- 3) Lacks Self-reflection concept, overlooks social interactions as crucial for inequality reproduction and communication rationality impact (Habermas, 1998)
- 4) Lacks sociological concept of identity or individual, as subjects' role is absent
- 5) Lack of concept of social movement and analysis of social change capacity in structures hinders analysis
- 6) This theoretical perspective lacks self-reflection on social and educational effects from one's reproduction model, but some authors defend its validity and relevance as an educational theory (Bourdieu and Passeron 1973) and (Bernstein et al., 1998)

Bourdieu and Passeron examine reproduction structure and achievements. Bernstein et al. analyze transmission process, translating power relations into communication relations (Ávila-Francés, 2005). Education reproduces culture, social, and economic structure through class strategies, serving class interests by adapting or conserving curricular patterns against those promoting change and maintaining the ethos (Bourdieu and Passeron 1973). Social classes significantly impact schooling relationships, with familiar classes staying in time and alien classes reducing continuity, especially during big turns (Bourdieu and Passeron 1973). School's contributions are limited to reproducing social change, imposing authority guidelines and legitimating social hierarchies through degrees. Education promotes symbolic violence for the ruling class, perpetuating class hierarchies (Bourdieu and Passeron 1973). Educational system instills curriculum through symbolic violence, influenced by dominant forces (Guerrero Serón, 2002). Language studies cultural transmission and codes, cementing distinctions between social classes through linguistic use (Bernstein, et al 1998). Language plays a crucial role in social order, internalizing and contributing to individual experiences (Bonai, 1998). Social classes develop varying levels of complexity, with working classes having a limited language, and middle classes developing a universal language. This requires increased education and training for integration into society (Bernstein et al 1998),

In pedagogical relationships, transmitting agents maintain principles of conduct, character, and manners, promoting social order and identity (Bernstein et al 1998). The system imposes rules on individuals, obscuring their freedom. In educational context, students are expected to follow rules, granting authority and control, and

punishing non-compliance. Excessive structuralism in approaches neglects social change between classes, leading to theories of resistance, focusing on schools as sites of struggle and power-generating endurance (Bourdieu and Passeron 1973). Gender and sexism classification is reprehensible, as it perpetuates domination and superiority between men and women through language and codes (Bernstein, Santomé and Manzano 1998).

Critical Pedagogy: Critical pedagogy contributes to the Copernican turn, fostering social groups and democratic spaces in response to change and transformation.

Below, Table 1 presents the most prominent authors in the proposal made by the critical pedagogy, in the vision of an inclusive, democratic, egalitarian education, and transformative.

Educationist	Theoretical Principle	Approach
Paulo Freire	The pedagogy of the oppressed (1970)	Encourages dialogue among schoolchildren to transform reality and achieve common goals.
Michael Apple	Resistance model (1970)	Sociology of education should focus on resistance processes in schools, overcoming inequality for student success.
Henry Giroux	Radical Pedagogy (1992) teachers like intellectuals. To a critical pedagogy of learning. (1990).	School is a democratic source of cultural production, emphasizing educators as transformers, based on successful theories, and reflecting on their pedagogical function.
Donaldo Macedo	Literacy. reading of the word and reality (1989)	Theorizes poisonous pedagogy, guiding standardization and reproducing social dominant values.
Joe L. Kincheloe y Shirley Steinberg	Rethink the multiculturalism (1998)	Emphasize students' awareness of environment and learning within educational context.

Table 1 Reflections on pedagogy criticism and educational vision

Education is not autonomous, but rather influenced by external parameters, affecting society's maintenance and reproduction. The educational system's contribution is significant, as it represents how society is envisioned and shapes the desired citizens.

Conclusion

Education promotes equality and social justice by instilling knowledge and values in students, enabling participation in political, social, and cultural affairs, and promoting change in thought. Sociology enhances educational processes. Education should integrate authors' theories, foster interaction, and promote equal access to knowledge

and information. It should be attentive to sociology, fostering intellectual growth, and analyzing proposals against education rights.

Education plays a crucial role in society, contributing to development, progress, and advancement. It promotes values, principles, and knowledge, guiding coexistence, identifying cultures, and facilitating access to truth, science, and technology. Education is essential for social change, as it precedes it. Education is essential for social change, shaping perspectives, beliefs, values, promoting equal opportunities, empowering communities, and fostering economic development.

References:

- Aliyu, A. A., Bello, M. U., Kasim, R., & Martin, D. (2014). Positivist and non-positivist paradigm in social science research: Conflicting paradigms or perfect partners. *J. Mgmt. & Sustainability*, 4, 79.
- Apple, M. W. (1970). *Relevance and Curriculum: a study in phenomenological Sociology of knowledge* (Doctoral dissertation, Teachers College, Columbia University).
- Aubert, A., Duque, E., Fisas, M., y Valls, R. (2004). *Dialogue and transform: critical pedagogy of the 21st century*. Barcelona: Grao.
- Ávila-francés, M. M. A. (2005). Socialization, education and cultural reproduction: Bourdieu and Bernstein. *Interuniversity Journal of Teacher Training*, (52), 159-174.
- Beltrán-Villamizar, Y. I., Martínez-Fuentes, Y. L., y Vargas-Beltrán, Á. S. (2015). The system Colombian education on the road to inclusion: Advances and challenges. *Education and Educators*, 18(1), 62-75.
- Bernstein, B., Santomé, T., y Manzano, P. (1998). Pedagogy, symbolic control and identity: theory, research and criticism (No. 316.74: 37). morata
- Bonal, X. (1998). *Sociology of education A critical approach to currents contemporary*. Barcelona: Paidós.
- Bondi, L., y Matthews, M. H. (2017). *Education and society: studies in the politics, sociology and geography of education*. Routledge.
- Bourdieu, P., y Passeron, J. C. (1973). *The students and the culture*. Buenos Aires: Labor.
- Brighouse, H., y McPherson, M. (Eds.). (2015). *The aims of higher education: Problems of morality and justice*. University of Chicago Press.
- Camdepadrós, R., y Pulido, C. (2009). The sociology of education from critical pedagogy. *Educational Theory. Education and Culture in the Information Society*, 10(3).
- Castillo J. (2012). *Sociology of Education*. Third Millennium Network.

- Chávez, C. F., y Navegación, S. (2017). The formation of values: challenge of the XXI century. University Press.
- Chávez, M. N. (2017). In the labyrinths of modernity: Globalization and educational systems. National Pedagogical University. Congress of the Republic (1994). Law 115 of 1994. General Education Law
- Cox, C. (2001). The school curriculum of the future. Perspectives Magazine, 4(2), 213-232.
- Evetts, J. (2017). The sociology of educational ideas. Routledge.
- Fägerlind, I., y Saha, L. J. (2016). Education and national development: A comparative perspective. Elsevier.
- Freire, P. (2005). Pedagogy of the oppressed. XXI century.
- García, Á. D. M. (2015). From criticism. Compendium of sociology of emancipation. Journal of the Association for the Sociology of Education (RASE), 8(2), 303-306.
- Giroux, H. (1990). Teachers as intellectuals (pp. 171-178). Barcelona: Paidós.
- Giroux, H. A., y Flecha, R. (1992). Educational equality and cultural difference. Barcelona: El Roure.
- Guerrero Serón, A. (2002). Manual of sociology of education. Madrid: Synthesis.
- Habermas, J. (1998). Communicative action theory, Vol. 1. Madrid, Taurus. (p.o 1981).
- Hernández, Parra, García, Beleño, Romero & Duran (2018). Organizational behavior Citizen. As an example of participation generating a dialogue of knowledge. Vol. 39 (No. 07). Spaces Magazine. Year 2018.
- Kincheloe, J. L., y Steinberg, S. R. (2000). Rethinking multiculturalism. Octahedron.
- Lee, J. T. (2019). Book Review: Designing and conducting mixed methods research. HERD: Health Environments Research & Design Journal, 1937586719832223. Martínez, Olga; Steffens, Ernesto J.; Ojeda, Decired C. Y Hernandez, Hugo G. Estrategias Pedagógicas Aplicadas a la Educación con Mediación Virtual para la Generación del Conocimiento Global. *Form. Univ.* 2018, vol.11, n.5 ,
- Moore, T. W. (1974) Introduction to educational theory. Madrid, Alliance.
- Moreno, Tezón, Rivera, Duran & Parra (2018). Self-esteem: Development of personal autonomy in students of the technical area. Spaces Magazine Vol. 39
- Moreno, Rivera, & Rivera (2017). Competences and learning of the teacher: A challenge of the globalization. Pedagogical Hexagon Virtual Scientific Journal of Pedagogy. CURN
- Niebles-Núñez, W., Hernández-Palma, H., & Cardona-Arbeláez, D. (2016). Technological management of knowledge: modern tool for the management of educational institutions. Research, Development and Innovation Journal, 7(1), 25-36

- Parra, García, Duran & Moreno (2018) Training in values from the perspective of cultural diversity in the Colombian educational project1.Dialogue of knowledge from the Economic, Administrative and Accounting Sciences II.volume 2
- Ramos, C. A. (2015). Paradigms of scientific research. *Advances in Psychology*, 23(1), 9-17.
- Ríos-Sánchez, A., Álvarez-Mejía, M. L., & Torres-Hernández, F. A. (2018). Digital competences: a look from their evaluative criteria around learning styles. *Latin American Journal of Educational Studies (Colombia)*, 14(2), 56-78.
- Rojas-León, A. (2014). Contributions of sociology to the study of education (classic authors). *Education*, 38(1).
- Swift, D. F. (2017). *The sociology of education: introductory analytical perspectives*. Routledge.
- Wexler, P. (2017). *Social analysis of education: After the new sociology*. Routledge.