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A STUDY OF HOME ENVIRONMENT OF HIGHER SECONDARY SCHOOL STUDENTS IN AIZAWL DISTRICT, MIZORAM

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Abstract

Home environment includes the physical, social, and psychological conditions that shape a child's development, influencing cognition, academics, and emotional well-being. As an informal learning space, it fosters values, support, and interactions that shape attitudes, beliefs, and life skills. The present study aims to find out the level of home environment, compare gender and academic stream of higher secondary school in Aizawl District, Mizoram. A total number of 284 sample were collected in Aizawl district and analyse using Z score, Chi Square and descriptive statistical techniques. The analysis shows that most students have a moderately favourable home environment, while only a few experience highly supportive conditions, indicating that truly favourable home settings are rare. However, a remarkable number of students face some level of an unfavourable home environment, which could affect their well-being and academic performance, highlighting the need for better home conditions and support systems.

Keywords: Home Environment, Chi Square, Z Score, Aizawl, Mizoram

1. Introduction

Home environment refers to the physical, social, and psychological conditions within a household that influence that contribute to the growth and development of a child. It encompasses various factors such as the family relationships, interactions, access to resources, emotional support, and the overall atmosphere of the home. The home environment is believed to have a significant impact on shaping the attitudes and beliefs of the individuals (Jamba, 2023). Thus, home environment means all sorts of moral and ethical values, emotional, social and intellectual climate set by the family members for the child to contribute his/her wholesome development (Anene, 2005).

Home environment typically includes the climate, both physical and emotional, and the state of the family whether it is good, bad, dysfunctional etc. (Knapp, 1993). Home environment is considered a powerful influence on the child. A home environment is viewed as consequential for child developmental outcomes such as cognitive ability, school readiness, academic achievement and emotional adjustment The home environment plays a crucial role in

shaping a child's cognitive development, school readiness, academic performance, and emotional well-being. The overall quality of the home environment directly impacts a child's ability to engage in educational activities and develop essential life skills. (Fantuzzo *el al.,* 2000). Therefore, home-environment is a most powerful informal learning situation in which the family, more specially parents, acts as an educator. Home environment refers to all sorts of moral and ethical values, emotional, social and intellectual climate set by the family members for the child to contribute his/her wholesome development (Anene, 2005).

Home plays a crucial role as the primary social institution shaping a child's development. In view of the impact of family on personality development, many studies have explored different aspects of family dynamics and their connection to a child's growth and academic performance. It is often said that the home serves as a first school, with the mother as their first teacher and educates on essential life skills, including health practices, communication patterns, and social behaviours. In fact, the family provides the foundation on which the children's future education is constructed. The home plays a crucial role as the primary social institution shaping a child's development. One of the important responsibilities of the family is ensuring the physical well-being of the child. Encouraging healthy habits such as maintaining proper hygiene, getting sufficient rest, and engaging in regular physical activity is crucial for overall health and personality development. Furthermore, parents actively contribute to the education of the child by showing interest in their schoolwork and academic progress. The involvement and encouragement of the parents play a key role in fostering the intellectual and personal growth of the children.

Clark and Goyder (2007) agreed that positive domestic environment is the prominent indicator of success of the students in their academics and teaching learning process carried out at school is incomplete without the support of home environment. Parents who take an active role in their children's learning help foster a greater interest in studies. Parveen, 2007; Moula, 2010; Bandhana & Sharma, 2012 proved and accept that the role of the home environment, the present study determines to find the level of home environment. Therefore, this study was aimed to investigate the level of home environment of higher secondary students in Aizawl District, Mizoram.

2. Objectives

The main objectives of this study are:

i. To find out the level of home environment of higher secondary school in Aizawl District, Mizoram.
ii. To compare the level of home environment of higher secondary school students in Aizawl district, Mizoram with reference to stream (Academic discipline).
iii. To compare the level of home environment of higher secondary school students in Aizawl district, Mizoram with reference to gender.

3. Hypotheses

To explore the objectives of this study, the following null hypotheses were framed:

1. There is no significant relationship between the level of home environment of higher secondary school in Aizawl district and stream (academic discipline).

2. There is no significant relationship between the level of home environment of higher secondary school in Aizawl district and gender.

4. Methodology

The present study aimed to identify the level of home environment among higher secondary school students in Aizawl District, Mizoram, and to compare them based on gender and academic stream. The sample was selected using a stratified random sampling method, where the population was divided by gender and academic stream (Arts or Science). The final sample consisted of 284 students. The participants were drawn from various higher secondary schools across Aizawl District, with students categorized by gender and whether they were enrolled in rural or urban areas.

The Home Environment Scale, developed by Akhtar and Saxena (2013), was used for data collection. This scale is designed to measure the psychological atmosphere of the home as perceived by children. It consists of 50 items, capturing various aspects of the home environment, including warmth, support, and emotional climate. Each item is rated on a five-point Likert scale.

For data analysis, statistical techniques such as the Z-score, percentage, mean, and standard deviation were employed using Microsoft Excel and SPSS 20.

5. Result and discussion

The total number of students surveyed is nearly balanced, with males making up 51.4% of the sample and females 48.6% (Table 1). The slight difference in numbers ensures that gender-based comparisons remain valid and representative

The analysis of the home environment based on gender and academic stream reveals notable differences. Male students have a slightly higher mean home environment score (139.2) compared to females (137.9), though the difference is minimal. However, the higher standard deviation for males (19.2) compared to females (15.1) suggests greater variability in home conditions among male students (Table 1). Some may experience highly favourable environments, while others face significant challenges. In contrast, female students have a more consistent home environment, with less variation in scores.

When comparing academic streams, Arts students have a higher mean score (142.4) than Science students (134.7), suggesting a relatively more favourable home environment for those in the Arts stream. The slightly higher standard deviation for Arts students (17.9) than Science students (16.7) indicate greater variability in home conditions among Arts students (Table 1).

Table 1 sampling size and descriptive statistics

		Number	Percentage	Mean	Standard deviation
Gender	Male	146	51.4	139.2	19.2
	Female	138	48.6	137.9	15.1
Stream	Arts	172	60.6	142.4	17.9
	Science	112	39.4	134.7	16.7
Over all				**138.7**	**17.7**

Source: Authors' Survey, 2022

Table 2 categorizes individuals based on their home environment levels using Z-scores and raw scores, ranging from Extremely Favourable to Extremely Unfavourable. A largest percentage of students (44%) fall into the Average/Moderately Favourable category, indicating that most people have a balanced home environment. On the other hand, the least represented category is Extremely Favourable with only 1.4% of individuals, showing that very few people experience highly supportive home conditions (Table 2). The relatively low representation in these higher categories suggests that only a small portion of the population experiences truly favourable home conditions.

On the other hand, 16.9% of students fall into the Above Average Favourable category, and 7% are in the Highly Favourable category, reflecting that some students benefit from supportive home environments. A significant proportion of students (20.4%) fall into the Below Average Unfavourable category, followed by only 7% in the Highly Unfavourable category and 3.2% in the Extremely Unfavourable category. This means that nearly one-third (30.6%) of the students experiences some form of an unfavourable home environment (Table 2). This finding is crucial as it highlights the challenges faced by a notable portion of students, possibly affecting their well-being and overall quality of life. However, the presence of a considerable number of students in the lower categories suggests the need to improve home conditions.

Table 2 level of home environment of higher secondary school in Aizawl district, Mizoram.

Range of Z-Scores	Range of Raw Scores	Level of Home Environment	Total (%)
2.01 & above	176 and above	Extremely Favourable	4 (1.4)
1.26 to 2.00	163 to 175	Highly Favourable	20 (7)
0.51 to 1.25	148 to 162	Above Average Favourable	48 16.9)
0.50 to -0.50	130 to 147	Average/Moderately Favourable	125 (44)
-0.51 to -1.25	116 to 129	Below Average Unfavourable	58 (20.4)
-1.26 to -2.00	103 to 115	Highly Unfavourable	20 (7)
-2.01 & below	102 and below	Extremely Unfavourable	9 (3.2)

Computed by: SPSS 20

i. Level of home environment of higher secondary school students in Aizawl district, Mizoram with reference to gender.

From table 3, the majority of are in the Average/Moderately Favourable category, with 61 males (41.8%) and 64 females (46.4%). This shows that a significant portion of the students experiences a home environment that is neither highly supportive nor highly unfavourable. Conversely, the least populated category is Extremely Favourable, with only 3 males (2.1%) and 1 female (0.7%), indicating that very few students have supportive home environment. A few students are under the Below Average Unfavourable and Highly Unfavourable categories, showing that a lesser number of the students experience unfavourable home conditions.

A distinguished gender disparity is observed in the Below Average Unfavourable and Highly Unfavourable categories, where a higher percentage of females (25.4% and 8%, respectively) experience unfavourable home environments compared to males (15.8% and 6.2%, respectively). However, in the Highly Favourable and Above Average Favourable categories, males outnumber females, suggesting a slightly better home environment for males overall (Table 3).

Overall, the data suggests that while a large portion of individuals experience a moderately favourable home environment, a significant number also face unfavourable conditions, particularly females. The limited presence in the Extremely Favourable category indicates that highly supportive home environments are rare. The findings highlight potential areas for intervention to improve home conditions, particularly for those in the lower categories.

A Chi Square test was conducted to test the relationship between gender and the level of home environment. The calculated value is 15.825 with 6 degrees of freedom (df), and the Asymptotic Significance (p-value) is 0.015 (Table 4).

Then, the p-value (0.015) is less than the conventional significance level of 0.05 (Table 4), indicating that the relationship between gender and home environment levels is statistically significant. This means that gender differences impact the distribution of home environment categories.

The significant result suggests that males and females experience home environments differently. There may be variations in family dynamics, parental involvement, or socio-cultural factors that influence the home environment differently based on gender.

Table 3 level of home environment of higher secondary school with reference to gender in Aizawl District, Mizoram

Range of Z-Scores	Range of Raw Scores	Level of Home Environment	Male (%)	Female (%)
2.01 & above	176 and above	Extremely Favourable	3 (2.1)	1 (0.7)
1.26 to 2.00	163 to 175	Highly Favourable	16 (11)	4 (2.9)
0.51 to 1.25	148 to 162	Above Average Favourable	31 (21.2)	17 (12.3)
0.50 to -0.50	130 to 147	Average/Moderately Favourable	61 (41.8)	64 (46.4)
-0.51 to -1.25	116 to 129	Below Average Unfavourable	23 (15.8)	35 (25.4)
-1.26 to -2.00	103 to 115	Highly Unfavourable	9 (6.2)	11 (8)
-2.01 & below	102 and below	Extremely Unfavourable	3 (2.1)	6 (4.3)

Computed by: SPSS 20

Table 4 gender and level of home environment Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	15.825	6	.015

Computed by: SPSS 20

A Chi-Square test conducted to analyse the relationship between streams (academic disciplines) and levels of home environment. The calculated value is 8.748 with 6 degrees of freedom (df). The Asymptotic Significance (p-value) is 0.188 (Table 5).

Table 5 streams and level of home environment Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	8.748	6	.188

Computed by: SPSS 20

Since the p-value (0.188) is greater than the significance level of 0.05, the result is not statistically significant (Table 5). This means there is no strong evidence of an association between academic streams and their level of home environment of the students. The lack of significance suggests that the distribution of students across different streams does not vary significantly based on their home environment. In other words, home environment does not appear to have a major impact on their choice of academic stream to the students.

Conclusion

The present study highlights the significant role of the home environment in shaping the academic and personal development of higher secondary students in Aizawl District, Mizoram. The findings indicate that while most students experience a moderately favourable level home environment, only a small percentage benefit from highly supportive conditions. A substantial proportion of students face some level of an unfavourable level home environment, which could negatively impact their well-being and academic performance.

Gender-based analysis reveals that male students tend to experience a slightly better home environment than female students, as indicated by higher variability in home conditions among males. Although the difference was not statistically significant. Arts students were found to have a relatively more favourable home environment than Science students,

The study highlights the importance of a supportive home atmosphere in fostering academic success and overall well-being. Parents and guardians play a crucial role in shaping the home environment, and greater efforts are needed to ensure that children receive the necessary emotional, psychological, and academic support. Interventions such as parental awareness programs, counseling, and school-community collaboration could help improve home conditions, especially for students facing challenges.

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