
Relationship between family climate and educational success: A case study of class XII students in Khowang Development Block of Dibrugarh, Assam.

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Abstract

This study specifically focuses on the relationship between educational achievement, family climate, and gender dynamics. The study aims to explore how family climate influences the academic performance of senior secondary students, with a particular emphasis on gender-related aspects within the specified geographic area of rural Assam. A descriptive survey method was adopted for the study to comprehensively explore and understand the academic preparedness and educational challenges faced by Class XII students in the Khowang Development Block of Dibrugarh district of Assam. The comprehensive survey involved a diverse sample of students from various educational institutions of Khowang Development Block under the administrative jurisdiction of Inspector of Schools, Dibrugarh District Circle. In the study, academic performance metrics were analyzed alongside the assessments of family climate, gauging the similarities and differences between genders. The study reveals the positive impact of family climate on students' educational achievements. The correlation between a conducive family environment and enhanced academic performance was found to be substantial, emphasizing the pivotal role of family dynamics in shaping educational success. The academic achievement of both Boys and Girls is found to be almost equal. There is a high positive impact of family climate on the academic achievement of the students.

Keywords— Family climate, academic success, Class XII Students, Secondary education, cognitive approach to information.

Introduction

Educational endeavours aim to foster the holistic development of individuals. It encompasses the physical, mental, intellectual, socio-cultural, spiritual, and economic aspects. Academic achievements play a pivotal role in realizing an individual's life goals, serving as the primary criterion for awards, scholarships, job opportunities, and future educational pursuits. As a result, high academic performance holds significant importance for students, influenced by various factors categorized as cognitive, personal, and environmental sphere. Among the environmental factors, the family climate stands out as a significant example. From a psychological point of view, the influence of the family environment on a child is immensely profound, ultimately affecting the student's academic accomplishments. A nurturing familial atmosphere cultivates emotional reinforcement and cognitive engagement. It augments the intellectual capacities among the students. Education subsequently hones these capacities by equipping individuals with frameworks for critical analysis and skills for information processing. Understanding the impact of family climate on student academic performance this study has been conducted in the Khowang Development Block of Dibrugarh district, Assam. Dibrugarh district, located in the

eastern part of upper Assam, encompasses the Khowang Development Block as one of its seven constituent development blocks. Secondary schools within the Khowang Development Block are predominantly situated in rural settings, comprising a mix of 15 provincialized, 12 private, 11 ad-hoc, 2 recognized, and 6 permitted secondary schools.

1. REVIEW OF LITERATURE

Shafeeq & Tazeen (2015) tries to explore the relationship between family climate and academic achievement among secondary school students, with a focus on government and private school students in Aligarh, India. The study aims to investigate whether family climate has a significant impact on academic performance and whether there are differences between government and private school students in this regard. The study reveals that family environment and parental support do not significantly influence academic achievement.

Kaur (2019) in her study aims to investigate how different dimensions of family climate impact academic performance among adolescents. The study reveals significant differences in academic achievement across various dimensions of family climate. The results highlight the complex interplay between family dynamics and academic outcomes. The study shows that no significant differences were reported in some dimensions like fairness vs. partiality, acceptance vs. rejection, dominance vs. submission, and open communication vs. controlled communication.

Samita (2021) in her study explores the significant role that the family environment plays in the education and social development of secondary school students. The author argues that the family, as the primary social group, has the potential to positively impact students' self-esteem, social skills, and overall adjustment in the school environment.

Marulasiddappa & Venkatesha (2022) conducted a comprehensive study of the relationships between various intrinsic factors such as family climate, emotional intelligence, personal adjustment, etc. impacting the academic performance of secondary school students in Davanagere District. The revelation of significant differences between emotional intelligence scores and academic achievement scores among Boys and Girls implies practical implications for potential guiding interventions to support students.

Zhao & Zhao (2022) in their study investigated how family environment factors, as perceived by both parents and children, impact adolescents' academic achievement. The findings reveal that the family environment has a positive impact on adolescents' academic achievement, which highlights the importance of a supportive and conducive family atmosphere for a student's educational success.

2. OBJECTIVE OF THE STUDY

- i. To examine the academic achievement and family climate of Class XII students in secondary schools within the Khowang Development Block with a specific focus on gender.
- ii. To explore the influence of family climate on the academic achievement of Class XII students in secondary schools within the Khowang Development Block of Dibrugarh district.

3. HYPOTHESIS OF THE STUDY

- i. There is no significant difference in academic achievement between male and female students of Class XII in secondary schools within the Khowang Development Block of Dibrugarh district.
- ii. There is no significant difference in family climate between male and female students of Class XII in the Khowang Development Block of Dibrugarh district.
- iii. There is no significant relationship between the academic achievement of Class XII students in the Khowang Development Block of Dibrugarh district and their family climate.

4. LIMITATION OF THE STUDY

- i. This study is limited to only private and provincialized secondary schools of the Khowang Development Block of Dibrugarh district.
- ii. This study is limited to only the students studying in class XII.
- iii. This study is confined to only the annual examination result of class XII in 2022.
- iv. This study is delimited to a sample of 515 students of Class XII of the selected 11 secondary schools.

5. METHODOLOGY OF THE STUDY

The descriptive survey method was adopted in the present study. The study encompassed all students currently enrolled in Class XII across 12 private and 15 provincialized secondary schools within the Khowang Development Block of Dibrugarh district. For this study, a purposive sampling technique was employed to select participating schools. Among the 12 private schools, 5 were selected, and among the 15 provincialized schools, 6 were chosen. The study's sample consisted of all 515 Class XII students from these 11 selected schools. The marks obtained by students at the Class XI annual examination in 2022 were procured from the office of the schools.

Statistical Techniques Used in Analysis and Interpretation of Data:

- (a) Descriptive statistics were employed to examine the levels of academic achievement and family climate.
- (b) The Product Moment coefficient of correlation method was utilized to determine the relationship between academic achievement and family climate.
- (c) Critical Ratio was computed to compare the academic achievement and family climate of students based on gender.

7.RESULTS AND DISCUSSION

Table No.1: Descriptive statistics for academic achievement of the students of class XII of Secondary Schools

Variable	N	Mean	Median	SD	Skewness	Kurtosis
Academic Achievement	515	37.40	34	9.62	2.23	5.67

The computed skewness value of the distribution is 2.23, indicating that the distribution of academic achievement scores is positively skewed, or skewed to the right. This suggests that scores tend to concentrate towards the lower end of the scale. The computed kurtosis value of the distribution is 5.67, exceeding the threshold of 0.263. This indicates that the distribution of academic achievement scores is platykurtic, meaning that the scores are more broadly dispersed compared to a normal distribution, with a flatter peak.

Table No.2: Descriptive statistics for academic achievement of Boys and Girls of Class XII of Secondary Schools

Variable	Sample	N	Mean	Median	SD	Skewness	Kurtosis
Academic Achievement	Boys	303	36.96	33.5	9.25	2.34	6.78
	Girls	212	38.03	34.33	10.11	2.10	4.56

The computed skewness values for the distribution are 2.34 for Boys and 2.10 for Girls. This indicates that the distribution of academic achievement scores is positively skewed or skewed to the right in both categories, both for boys and girls. In other words, the scores are concentrated towards the lower end of the scale. The kurtosis values for the distribution of academic achievement scores are 6.78 for boys and 4.56 for girls. This suggests that the distribution is platykurtic in both categories, i.e., for both boys and girls. Consequently, the scores are more evenly scattered compared to a normal distribution, with a flatter peak.

Table No. 3: Descriptive statistics for the family environment of the students of Class XII of Secondary Schools

Variable	N	Mean	Median	SD	Skewness	Kurtosis
Family climate	515	109.06	107	12.09	0.50	0.26

The computed skewness value of the distribution is 0.50, indicating that the distribution of family climate scores is positively skewed or skewed to the right. This implies that the scores are concentrated towards the lower end of the scale. The computed kurtosis value of the distribution is 0.26, indicating that the distribution of family climate scores is mesokurtic or normal. Therefore, the scores are normally scattered, with a typical distribution pattern.

Table No .4: Descriptive statistics of family Climate of Boys and Girls students of Class XII of Secondary Schools

Variable	Sample	N	Mean	Median	SD	Skewness	Kurtosis
Family climate	Boys	303	108.35	106	12.13	0.50	0.10
Family climate	Girls	212	110.07	108	11.99	0.53	0.53

The computed value of skewness of the distribution is 0.50 for boys and 0.53 for girls. That means the distribution of family climate scores is skewed positively or to the right in both categories, i.e., Boys and Girls. That means the scores are massed at the lower end of the scale. The Kurtosis value of Boys' and Girls' distribution of family climate scores is

0.10 and 0.53 respectively. That means the distribution of Boys is leptokurtic. Therefore, the scores are mostly concentrated in the same place or some limited points than the Normal Distribution. On the other hand, the distribution of Girls is platykurtic. Therefore, the scores are scattered more evenly than the normal distribution.

Table No.5: Significance of difference between means of the Academic Achievement scores of Boys and Girls students of Class XII

Gender	N	Mean	SD	σD	C.R	Significance
Boys	303	36.96	9.25	0.87	1.22	Not Significance at .01 level
Girls	212	38.03	10.11			

The value of the critical ratio indicates that the difference between the female and male students of Class XII in the Khowang Development Block is not significant concerning their academic achievement. Hence, the null hypothesis may be accepted. Therefore, it can be concluded that the male and female students of Class XII do not significantly differ in their academic achievement.

Table No.6: Significance of Difference between means of the Family Climate scores of Boys and Girls students of Class XII of Khowang Development Block of Dibrugarh district

Gender	N	Mean	SD	σD	C.R	Significance
Boys	303	108.35	12.13	1.08	1.59	Not Significance at .01 level
Girls	212	110.07	11.99			

The critical ratio value indicates that the difference between the female and male students of Class XII is not significant concerning their family climate. Hence, the null hypothesis may be accepted. Therefore, it can be concluded that the male and female students of Class XII do not significantly differ in their family climate.

Table No.7: Product Moment coefficient of correlation (r) between Academic Achievement and Family Climate of the students of Class XII of Khowang Development Block

Variable	Product Moment co-efficient of Correlation	Significance
Academic Achievement	0.768	Significant
Family Environment		

The product-moment coefficient of correlation (r) between academic achievement and family climate is 0.768. Therefore, the null hypothesis is rejected because there is a positive relationship between academic achievement and family climate. So, it can be concluded that there is a positive correlation between academic achievement and family climate among the students of Class XII in the Khowang Development Block of Dibrugarh district. Therefore, it can be said that the family environment has played a significant role in the academic achievement of the students in Class XII in the Khowang Development Block of Dibrugarh district.

7. CONCLUSION

Based on the findings of the present study, it can be concluded that when it comes to the academic achievement of Class XII students in the secondary schools of Khowang Development Block, there is no significant difference between genders. The family environment of the students, when considered by gender, is found to be nearly identical. Regarding the influence of family climate on academic achievement, it is evident that there is a strong positive impact of family climate on the academic achievement of Class XII students in the secondary schools of Khowang Development Block in Dibrugarh District, Assam.

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