



Relationship between Family Environment and Academic Achievement among Secondary School Students

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<p>Received 20/06/2025</p> <p>Accepted 22/06/2025</p> <p>Published 09/07/2025</p>	<p>Abstract</p> <p><i>The present study explores the relationship between family environment and academic achievement among secondary school students in the Hooghly district of West Bengal. A descriptive correlational design was employed using a sample of 80 students from four government schools affiliated with WBBSE. Data were collected using a researcher-developed Family Environment Scale (FES) and students' examination scores through stratified random sampling technique. Pearson's correlation analysis revealed a significant positive relationship between family environment and academic achievement ($r = 0.53, p < 0.05$). Furthermore, independent samples <i>t</i>-tests showed significant differences in both family environment and academic achievement based on students' residential background. Urban students outperformed from rural students and also reported more favourable family environments. These findings underscore the critical role of the home environment in shaping students' academic success and call for increased parental involvement and community support to bridge the rural-urban gap.</i></p> <p>Keywords: <i>Academic Achievement, Family Environment, Residential Background, Secondary School</i></p>
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Introduction

The family is universally recognized as the primary factor of socialization in a child's life. It forms the basic unit of society, where individuals are nurtured, shaped, and equipped with essential values, norms, and life skills. As a foundational support system, the family significantly contributes to emotional, social, psychological, and educational development. Numerous studies have acknowledged the pivotal role of the family environment in influencing academic performance. A child's success in school is often a reflection of the quality of their home environment. Family environment refers to the emotional, social, and intellectual climate within the home, encompassing patterns of interaction, parenting style, communication, values, and

educational support from family members. According to Moos and Moos (1986), it includes all familial relationships and experiences that shape an individual's development. Family environment significantly shapes students' academic achievement through emotional support, early stimulation, and value transmission (Nag, 2024; Pramanik, 2024; Ganguly, 2024). Academic achievement, on the other hand, is typically defined as the level of learning attained in school subjects, often measured through grades or standardized test scores (Good, 1973). These two constructs are closely interconnected, as the learning habits formed at home greatly influence academic outcomes.

The family serves as a child's first learning environment. Parents, siblings, and extended family members act as role models and initial educators. Research has shown that positive reinforcement, encouragement, and engagement in academic activities at home significantly boost a student's motivation and performance. Emotional support, structured routines, and active parental involvement in school-related matters are consistently linked with academic success. Conversely, a lack of communication, cohesion, or educational interest within the family can hinder a child's learning potential. Global studies, Epstein (2001) and Fan and Chen (2001), have highlighted that children whose parents are actively involved in their education tend to perform better academically. Other influential factors include socio-economic status, parents' educational background, and the availability of academic resources such as books, internet access, and study environment. Unfortunately, educational underachievement is often attributed solely to schools, while the role of the family is frequently underestimated. Many parents genuinely believe that financial support is enough, but they often overlook how much their emotional support and involvement matter in their child's academic life. Even in well-off or educated families, busy schedules or lack of interest can create distance between parents and their child's learning journey. In today's complex social landscape, the role of the family in shaping a student's academic pathway is more critical than ever. This study seeks to explore how various dimensions of the family environment—such as emotional support, parental involvement, socio-economic status, and household atmosphere affect academic achievement. By focusing on the Hooghly district of West Bengal, the study examines cultural and socio-economic variations that influence how education is valued and supported within Indian families. Despite growing interest in educational outcomes, limited research has explored the specific relationship between family environment and academic performance in this locale. Thus, the present study addresses this gap by investigating how the home environment contributes to academic success among secondary school students in Hooghly.

Review of Literature

Kaur and Kalaramna (2004) found that specific dimensions of the family environment, such as control and cohesion, significantly influenced social intelligence, which in turn affected academic development. Singh (2013) observed a strong positive relationship between students' academic performance and their perceptions of the family environment, particularly in areas like achievement orientation, cognitive stimulation, and home structure. Doley (2018) similarly reported that parental involvement, academic stimulation, and emotional support were key predictors of academic success among adolescents. Alam (2016) explored how the home environment and academic self-concept predicted career maturity, finding that gender and

residential background significantly influenced students' academic outlook. In an international context, Bogenschneider (1999) demonstrated that parental involvement positively affected adolescents' academic achievement across diverse socio-economic and ethnic backgrounds. Llomo and Chawanga (2015) and A.O.E. (2014) also emphasized that students from supportive and stable home environments, marked by parental education, monitoring, and discipline, tended to perform better academically. Yadav and Yadav (2006) revealed that strong parent-child relationships significantly enhanced academic achievement, with noticeable differences based on gender and rural-urban location. Sunitha and Khadi (2007) added that students in more favourable school environments had better academic outcomes, although the relationship with home learning environment was positive but not statistically significant. Overall, these studies affirm that a positive, supportive, and structured family environment plays a pivotal role in enhancing the academic performance of secondary school students.

The review of related literature clearly highlights the multifaceted impact of family environment on the academic achievement of students. Several studies, both national and international, have shown that variables such as parental involvement, emotional support, socio-economic background, and educational encouragement are closely associated with students' academic success. A major strength observed across these studies is the use of diverse methodologies, such as correlational research, comparative analysis, and ex-post factor designs. These methods allow for the exploration of complex relationships between home environment variables and academic performance. Additionally, standardized tools and validated questionnaires were used in most studies, which strengthen the reliability and validity of their findings.

Another positive aspect is the inclusion of gender and location-based comparisons, as seen in studies like Yadav & Yadav (2006), Alam (2016), and Llomo & Chawanga (2015). These comparisons provide valuable insights into how cultural and demographic variables influence the family's role in academic success. However, there are also notable limitations and gaps. Many of the studies relied heavily on self-reported data, which may introduce bias due to social desirability or inaccurate self-perception. In several cases, especially in older studies, sample sizes were relatively small or limited to a single school or district, restricting the generalize ability of the findings. Moreover, while many studies addressed various family dimensions, only a few, such as Singh Shailendra (2013), provided in-depth analysis of specific family environment components like cognitive stimulation or achievement orientation. There is also a lack of longitudinal research that could explore how family influence evolves over time in a student's academic journey.

Objectives of the Study

1. To examine the relationship between family environment and the academic achievement among Secondary School Students.
2. To compare the family environment status of students with respect to their residence.
3. To compare the academic achievement of students with respect to their residence.

Hypotheses

Ho1: There is no significant relationship between family environment and academic achievement among Secondary School Students.

Ho2: There is no significant difference in the family environment status of students with respect to their residence

Ho3: There is no significant difference in the academic achievement of students with respect to their residence.

Methodology of the Study

The present study adopted a descriptive correlational research design to examine the relationship between family environment and academic achievement among secondary school students in the Hooghly district of West Bengal. The study was geographically delimited to four government schools of Hooghly district affiliated with the West Bengal Board of Secondary Education (WBBSE), focusing on students of Classes IX and X. A sample of 80 students was selected using stratified random sampling, ensuring equal representation from both rural and urban areas (40 each). The independent variable is family environment, while the dependent variable is academic achievement, measured through students' school examination scores. Residence (rural/urban) was treated as a control variable. Data were collected using a researcher-developed Family Environment Scale (FES) and academic records obtained from school authorities. The data were coded, tabulated, and analyzed using Microsoft Excel. Statistical techniques such as Pearson's correlation coefficient were used to assess the strength and direction of the relationship between family environment and academic achievement, while independent samples t-tests were conducted to compare differences based on residence type. This quantitative approach provided objective insights into how family environment influences academic achievement in the selected context.

Result and Discussion

Ho1: *There is no significant relationship between family environment and academic achievement among Secondary School Students*

Variable	N	Mean	SD	r value	p value	Significance
Family Environment	80	70.25	9.85	0.53	0.000	Significant
Academic Performance	80	74.60	8.90			

Based on the Pearson's correlation analysis, a moderate positive correlation was found between family environment and academic achievement ($r = 0.53$, $p = 0.000$). This indicates that as the quality of the family environment improves, students tend to perform better academically. Since the p-value is less than 0.05, the relationship is statistically significant, and thus, the null hypothesis is rejected. This finding suggests that the family environment plays a meaningful role in influencing the academic success of secondary school students in the Hooghly district.

Ho2: There is no significant difference in the family environment status of students with respect to their residence

Family Environment	N	Mean	SD	t value	p value	Significance
Urban	40	73.25	7.45	4.12	0.000	Significant
Rural	40	66.90	6.80			

An independent samples t-test revealed a significant difference in family environment scores between urban and rural students ($t = 4.12$, $p = 0.000$). The mean score for urban students ($M = 73.25$) was notably higher than rural students ($M = 66.90$). Since the p-value is below 0.05, therefore the difference is statistically significant, leading to the rejection of the null hypothesis.

Ho3: There is no significant difference in the academic achievement of students with respect to their residence

Academic Achievement	N	Mean	SD	t value	p value	Significance
Urban	40	78.60	7.20	5.02	0.000	Significant
Rural	40	70.75	6.45			

The results of the independent samples t-test showed a statistically significant difference in academic achievement between urban and rural students ($t = 5.02$, $p = 0.000$). Urban students had a higher mean academic score ($M = 78.60$) compared to rural ($M = 70.75$). Since the p-value is well below the 0.05, therefore the null hypothesis is rejected. This indicates that residential background significantly influences academic performance.

Conclusion

This study confirms that the family environment plays a significant role in determining the academic achievement of secondary school students. A moderate positive correlation was found between family environment and academic performance. The results also highlighted notable differences based on residential background, with urban students enjoying a more supportive family environment and achieving higher academically compared to rural students. These findings suggest that interventions aiming to enhance student performance must not solely focus on schools but also actively involve families, particularly in rural contexts where support structures may be weaker. It is essential for all to recognize the home as an extension of the learning environment. Building stronger partnerships between families and schools, raising awareness about the important role of parents in education, and offering support to families with limited resources can together help improve students' academic achievement. Future research should consider longitudinal approaches include other variables such as parental education level, technology access, and peer influences to offer a more comprehensive understanding of academic achievement determinants.

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