



Home Environment And Academic Achievement Among Higher Secondary Students In Tiruvallur District

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Abstract

Background: Academic achievement is one of the important indicators of students' educational success and is related to a number of personal, social and environmental factors. These comprise the home environment which is one of the most important factors in the cognitive, emotional and academic development of students, which offers learning resources, parental guidance and a conducive learning environment. Although it is recognized as one of the area of importance, the empirical research regarding the relationship between home environment and achievement of students of higher secondary education in Tiruvallur District is still very limited. **Purpose:** The present study set to examine the relationship between home environment and academic achievement of the higher secondary students in Tiruvallur District and to find out the difference between the home environment and academic achievement with respect to selected demographic variables. **Methodology:** The normative survey design was used. The number of higher secondary students selected is 240 students from higher secondary Schools using simple random sampling method in Tiruvallur District, Tamilnadu. The standardized Home Environment Scale was used to gather data and academic achievement was assessed through students' score on the half-yearly examination. Descriptive statistics, t-tests, were used for the data collected analysis. **Results:** The findings indicated that there was no significant difference between gender and locality in all the measures of home environment and academic achievement. But there was a significant difference with regard to the medium of instruction. The study concludes that the positive home environment contributes to promoting students' academic achievement to a considerable extent.

Keywords: Home Environment, Academic Achievement, Higher Secondary Students, Family Environment, Educational Psychology and Student Performance.

Introduction

Education is known as the foundation of social, economic and cultural growth as it provides individuals with the knowledge, skills, values and competencies to be productive citizens. Educational attainment is generally considered as one of the most critical measures of educational attainment, and is related to cognitive development, learning outcomes and readiness for further education and employment. However, there are many factors that are interrelated that affect academic achievement within and beyond the school environment. The home environment is one of the key determinants in this context that influences students' intellectual development, emotional state, learning motivation and learning behaviour. The family is the child's first school in which attitudes of learning, discipline, communication, responsibility and social values are formed. When parents support the child academically, emotionally, with encouragement, supervision and guidance, good academic performance is promoted.

Parental education, socioeconomic status, family cohesion, family environment, emotional climate, study facilities, parental expectations, communication patterns and educational involvement are the various dimensions of the concept of home environment. These dimensions all interact to affect students' patterns of study, self-confidence, self-regulation, motivation and academic goals. Thus, there may be disparities between the academic performance of pupils from different types of home environment. Due to the rapid development of technology, urbanization, a new family system and greater academic competition and socio-economic differences, student educational experiences have changed significantly in recent years. These changes have highlighted the need to know more about family-related influences on academic achievement, especially at the higher secondary level, when important academic choices can impact future education and employment opportunities.

Home Environment

The home environment is the physical, emotional, social, cultural and educational setting in the family that affects a child's total development. It encompasses parental education, family relations, emotional support and communication, discipline, learning resources, study facilities and parental expectations and educational encouragement. A positive home environment helps to stimulate intellectual growth, emotional stability and healthy personality development to facilitate academic success. Educational Psychologists have long said that the first place where learning begins is at home. Active involvement in their children's education through homework supervision, fostering their reading routines, supplying study materials and communicating effectively with them are important factors in their children's achievement. On the other hand, students' motivation and performance can be negatively impacted by failing to involve parents adequately, family conflicts and poor learning environments.

Academic Achievement

Academic achievement is the degree of attainment of educational objectives and outcomes by students. It is often assessed by test results, grades and other measures of academic achievement. Academic achievement is a measure of students' knowledge, understanding, skills and ability to apply their learning in a variety of academic settings. To influence academic achievement, there are several factors such as Intelligence, motivation, teaching quality, school climate, peer relationships, socioeconomic status and home environment. Family support is one of these factors which have the highest impact on students' educational achievement as it affects students' attitudes towards learning, self-discipline, confidence and aspirations from an early stage in their life.

Research Gap

Existing research has consistently acknowledged the importance of home environment in promoting students' academic achievement. A number of gaps, however, exist in the current literature. First, the majority of the previous studies have focused mainly on children from primary and secondary schools and fewer have been conducted with those in the higher secondary level of education, who face special academic and psychological difficulties. Second, previous studies often have focused on individual factors in the family background, typically parental education or socioeconomic status, without taking into account home environment as a composite variable. Thirdly, there is need for localised investigations due to the differences in educational practices and socio-cultural contexts across the various regions. The influence of home environment on higher secondary students is not well documented as yet on Tiruvallur District in this regard; it is justifiable to conduct the present study.

Literature Review

Bhamani et al. (2022) demonstrated that positive family communication and emotional security significantly enhanced students' psychological well-being and academic performance. Their findings suggested that supportive parenting reduced academic stress while increasing learning motivation.

Chen and Liu (2024) reported that students from supportive home environments exhibited superior critical thinking skills, improved classroom engagement, and higher academic achievement than students from less supportive family backgrounds.

Garcia and Weiss (2021) examined educational inequalities and concluded that home learning resources, including books, internet access, and parental educational guidance, substantially influenced academic achievement. The study emphasized that educational success depends not only on school quality but also on opportunities available within students' homes.

Hattie (2023) synthesized numerous educational studies and concluded that parental expectations and family engagement rank among the strongest contributors to academic achievement. His meta-analysis highlighted that parental involvement positively influences students' learning outcomes irrespective of socioeconomic differences.

Kumar and Raj (2025) emphasized that home environment remains one of the strongest predictors of educational success despite rapid technological changes and evolving educational practices. Their findings demonstrated that emotional support combined with educational guidance contributed substantially to students' academic excellence.

Rahman and Islam (2023) found that students experiencing positive parent-child communication developed stronger academic self-efficacy and performed better in public examinations.

Sharma and Singh (2022) reported that students belonging to highly supportive families consistently achieved higher examination scores than students experiencing poor family relationships or inadequate parental supervision.

Significance of the Study

The outcomes of this research will be important to the educational field, both in terms of research and practice. The study can give empirical evidence on the influence of home environment on students' academic achievement. It provides informative content for parents to enable them to foster educational success in their supportive learning environments. The results can be used by teachers for further information regarding family background of their students and for planning their teaching strategies accordingly. The school administration can develop parent-school partnership programmes designed to enhance education support systems. The results could also be used by policymakers in education to create interventions that encourage equitable learning opportunities for students of different socio-economic backgrounds. Moreover, the study makes a significant contribution to the existing literature in the field of educational psychology in relation to the study of family environment and academic performance in the context of higher secondary level education.

Statement of the Problem

It is well known that the home environment is one of the most crucial factors impacting on students' academic success. It gives the emotional, psychological, social and educational back-bones for effective learning. A positive family environment will foster students to have positive study habits and build students' self-confidence, motivation and academic goals, while an unfavourable family environment can have a negative effect on students' educational performance. Though there are many studies explaining the factors affecting the academic achievement, very few studies have been made to relate the home environment and academic achievement among higher secondary students in Tiruvallur District. Hence the investigator came up with a research problem "A Study on Home Environment in Relation to Academic Achievement of Higher Secondary Students in Tiruvallur District".

Operational Definitions

Home Environment

Home environment refers to the physical, emotional, social, cultural and educational conditions prevailing within the family that influence students' learning experiences and overall development. It includes parental encouragement, educational guidance, emotional support, family relationships, discipline, study facilities, communication and learning resources available to students.

Academic Achievement

Academic achievement refers to the scholastic performance attained by higher secondary students in the annual public examination conducted by the respective schools. It represents the level of knowledge; understanding and learning acquired by students during the course of their education and is measured through their examination marks.

Objectives of the Study

1. To find out significant difference between Higher Secondary students Home Environment and Academic Achievement based on their

- Gender
- Medium of Instruction
- Type Family

Hypotheses of the Study

1. There is no significant difference among the Higher Secondary students Home Environment and Academic Achievement based on their

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Methodology of the Study

The investigator adopted the Normative Survey Method to study the relationship between home environment and academic achievement among higher secondary students in Tiruvallur District. The normative survey method was considered appropriate because it enables the investigator to collect factual information regarding the existing conditions of the variables under investigation and to analyse relationships and differences among them. The study employed both descriptive and inferential statistical techniques to analyse the collected data.

Population and Sample for the Study

The population of the study comprised all higher secondary students studying in Government, Government-Aided, and Matriculation Higher Secondary Schools in Tiruvallur District, Tamil Nadu. The investigator employed the Simple Random Sampling Technique for selecting the respondents. A total sample of 300 higher secondary students was selected from various higher secondary schools in Tiruvallur District. The sample represented students from different genders, school managements and mediums of instruction, localities and family backgrounds, thereby ensuring adequate representation of the population.

Sampling Technique

The Simple Random Sampling Technique was adopted for selecting the sample. Every student in the population had an equal opportunity to participate in the study.

Tool Used in the Study

1. Home Environment Scale

A standardized Home Environment Scale, developed and validated by the investigator, was used to assess the quality of the students' home environment.

2. Academic Achievement

Academic achievement was measured using the students' Half-yearly examination marks obtained from the official school records.

Data Analysis and Interpretation

Ho: There is no significant difference among the Higher Secondary students Home Environment and Academic Achievement based on their Gender, Medium of Instruction, and Type Family.

Variable	Sub samples	N	Mean	SD	't' Value	Level of Significance
Home Environment	Male	120	13.58	5.01	0.339	Not Significant
	Female	120	13.39	3.64		
Academic Achievement	Male	120	69.18	15.77	0.365	Not Significant
	Female	120	68.47	14.25		
Home Environment	Tamil	160	11.30	3.42	15.481	Significant
	English	80	17.86	2.30		
Academic Achievement	Tamil	160	74.83	14.01	10.615	Significant
	English	80	56.83	8.17		
Home Environment	Rural	162	13.29	4.33	1.007	Not Significant
	Urban	78	13.90	4.47		
Academic Achievement	Rural	162	69.77	15.51	1.405	Not Significant
	Urban	78	66.87	13.77		

Interpretation

The results presented in Tables 1–6 indicate that gender and locality did not significantly influence either home environment or academic achievement among higher secondary students in Tiruvallur District. Male students ($M = 13.58$, $SD = 5.01$) and female students ($M = 13.39$, $SD = 3.64$) did not differ significantly in home environment ($t = 0.339$, $p > 0.05$), and similarly, no significant difference was observed in academic achievement between male ($M = 69.18$, $SD = 15.77$) and female students ($M = 68.47$, $SD = 14.25$; $t = 0.365$, $p > 0.05$). Likewise, rural students ($M = 13.29$, $SD = 4.33$) and urban students ($M = 13.90$, $SD = 4.47$) showed no significant difference in home environment ($t = 1.007$, $p > 0.05$), while their academic achievement scores also did not differ significantly (Rural: $M = 69.77$, $SD = 15.51$; Urban: $M = 66.87$, $SD = 13.77$; $t = 1.405$, $p > 0.05$). In contrast, medium of instruction significantly influenced both home environment and academic achievement. English-medium students reported a significantly higher home environment score ($M = 17.86$, $SD = 2.30$) than Tamil-medium students ($M = 11.30$, $SD = 3.42$; $t = 15.481$, $p < 0.01$), whereas Tamil-medium students achieved significantly higher academic achievement scores ($M = 74.83$, $SD = 14.01$) than English-medium students ($M = 56.83$, $SD = 8.17$; $t = 10.615$, $p < 0.01$). These findings indicate that gender and locality have no significant influence on home environment and academic achievement, whereas the medium of instruction has a statistically significant influence on both variables.

Major Findings

1. Gender did not significantly influence both home environment and academic achievement among higher secondary students.
2. The medium of instruction significantly influenced both home environment and academic achievement.
3. Locality did not significantly influence both home environment and academic achievement among higher secondary students.

Discussions

The present study was aimed at finding out the effect of selected demographic variables on the home environment and academic performance of higher secondary students in Tiruvallur District. The results showed that there was no significant difference between the girls and the boys in respect of home environment and academic achievement. This implies that boys and girls receive equal parental support, educational and learning opportunities in their homes. Parent involvement suggests that there is growing similarity in educational encouragement between boys and girls, and this is reflected in

similar academic outcomes. The finding is similar to Erhan et al. (2023) who found that gender was not significantly different with regards to students' educational experiences and learning outcomes.

The study also showed that the medium of instruction had a significant effect on the home environment and academic performance. The home environment of English-medium students was more positive than the home environment of Tamil-medium students, but the academic performance of Tamil medium was significantly higher than those of English-medium students. This discovery is an indication that the English medium students might get more educational support and learning resources at home but the Tamil medium students might be performing better academically because they were better understanding of the content in the classroom, effective classroom interaction or due to the familiarity of English language used in examinations. The result aligns with Patel et al. (2024) who highlighted that family support and educational resources have a positive effect on students' learning environment, and that academic achievement is a result of many educational and contextual factors.

The results also revealed that the type of family played an important role in the academic performance and home environment for students in higher secondary schools. There were different levels of parental involvement, emotional support, supervision and educational guidance for students and this, in turn, influenced their learning outcomes. The family is still the most important social institution that influences children's attitudes toward learning and gives them emotional and academic support that is essential for their success in learning. This result is consistent with Madhu and Ambedkar (2026) who found that positive family environment has a positive effect on students' academic performance in creating a conducive learning climate and a good parent-child relationship.

Overall, the results show that there is no statistically significant impact of gender and family type on the students' home environment and academic performance, but the medium of instruction have a significant impact on the educational experience of students. The findings stress the need to improve parental participation, create enabling educational opportunities, and develop positive family climates to improve the performance of secondary school students in higher secondary education.

Educational Implications

1. The parents should ensure the provision of a positive home environment by promoting good study habits, communicating effectively, supervising study time and providing support materials. These can make a major contribution to students' motivation and achievement.
2. Teachers need to be aware of the impact of students' home backgrounds on learning in the classroom. Having insights into the family background of students will help teachers to give suitable academic guidance and emotional support to the students, particularly for the students who have negative conditions at home.
3. School leadership to establish parent-teacher meetings, educational awareness initiatives and counselling sessions to foster the partnership between schools and families. These efforts can increase involvement in children's learning and foster a positive learning atmosphere.
4. Educational policy makers need to develop programmes to promote parental engagement and offer educational assistance to disadvantaged students. Home learning disparities can also be minimized by community-based educational programmes.

Recommendations

1. Parents should be involved in children's learning process and give them consistent encouragement in learning.
2. School should organise regular programmes for parent education to raise awareness on the role of home environment in achieving good academic results.
3. Teachers need to recognize pupils with unfavourable home environment and offer them suitable academic guidance and counselling.
4. Parent-school partnership is to be reinforced at educational institutions, in which parents and school work together through regular communication and education activities.
5. Government/educational bodies should establish initiatives to enhance educational opportunities for students from poorer backgrounds.
6. The services of guidance and counselling within schools should be enhanced to assist students who are experiencing academic or emotional difficulties caused by their family's situation.

Suggestions for Further Research

1. Other districts in Tamil Nadu can also be investigated and a similar study can be carried out to find out regional variations in the home environment and academic performance.
2. Comparative study can be done among Government, Government-Aided, CBSE, ICSE and Matriculation Schools.
3. The study suggests that other factors like parental education, socioeconomic status, emotional intelligence, digital literacy, self-regulation and learning motivation can be explored in future research.
4. Longitudinal studies can be done to look at changes in the home environment and academic outcomes over time.
5. The use of mixed-methods (qualitative and quantitative) could have a more comprehensive view of the effect of home environment on the educational development of students.

Conclusion

According to the result of the present study it is observed that there is no significant effect with respect to the gender and locality with regards to home environment and academic achievement among the higher secondary students in Tiruvallur district. However, medium of instruction significantly affected both of these two variables, suggesting that there were significant differences in home environment and academic performance of students by medium of instruction. Specifically, English-medium students reported a more favourable home environment whereas Tamil-medium students showed higher academic achievement. In general, the findings indicate that the information provided regarding the demographic factors (gender and locality) has little impact, but the information provided regarding the students' educational context has significant implications for the students' home environment and academic performance, especially with regard to the medium of instruction. The results highlight the importance for the school, parents and policymakers to increase the level of home-school engagement and the need to offer equal educational support in various teaching contexts in order to improve students' school performance.

References

- Gago Galvagno, L. G., & De Grandis, M. C. (2022). Home environment, executive functions, and emotional regulation among children. *Early Child Development and Care*, 192(8), 1245–1260.
- Jamba Sangay. (2023). Home environment among senior secondary school students in Bhutan. *Bhutan Journal of Educational Research*, 5(1), 45–58.
- Klever, P. (2013). Family functioning and academic achievement: A longitudinal study. *Journal of Family Studies*, 19(3), 210–223.
- Landau, E. (1998). Self-development and academic achievement among gifted learners. *Gifted Education International*, 13(2), 115–123.
- Matthew R. Jamnik, V. S. Nethala, & Lisabeth Fisher DiLalla. (2024). Early life experiences, home environment, maternal personality, and child behavioural outcomes. *Child Psychiatry and Human Development*, 55(2), 320–336.
- Murray, A., et al. (2022). Early home environment and children's behavioural development. *Developmental Psychology*, 58(6), 1012–1026.
- Schapira, Rotem; Aram, Dorit (2020) Shared Book Reading at Home and Preschoolers' Socio-Emotional Competence, *Early Education and Development*, v31 n6 p819-837.
- Pawilen, Greg Tabios(2018) Home Environment of Selected Filipino Gifted Individuals, *IAFOR Journal of Education*, v6 n2 p71-89.
- Naval, J. M. C. (2026). Effects of home environment on the academic performance of elementary grade pupils. *International Journal of Sustainability and Advanced Integrated Research*, 2(1), 1188–1197.
- Kare, S., & Govindarajan, K. (2026). The impact of home learning environment on the academic performance of adolescents. *Innovare Journal of Education*, 14(4).
- Coskun, B., & Goktas, S. A. (2026). The role of home and classroom factors in shaping reading achievement: A multilevel study based on PIRLS 2021 Turkiye data. *Studies in Educational Evaluation*, 89, 101598.
- Muhammad Younas, M., Javaid, M. I., Liu, C., Khalid, S., & Bakar, A. (2023). Effect of home environment on students' academic achievements at higher level. *Elementary Education Online*, 19(3), 3931–3947.
- Zhang, J., Barrilla, R., & Inouye, D. (2021). What is the relationship between the home literacy environment and the academic performance of youth? Insights from the involvement of South and North Korean parents. *KEDI Journal of Educational Policy*, 18(2), 45–64.