



STUDY HABITS AND ACADEMIC ACHIEVEMENT: A CORRELATIONAL STUDY AMONG HIGHER SECONDARY STUDENTS

MASUD ALI KAYAL ¹ | KAZI HASIBUR RAHAMAN ²

¹ PG STUDENT, DEPARTMENT OF EDUCATION, ALIAH UNIVERSITY, WEST BENGAL, INDIA.

² PG STUDENT, DEPARTMENT OF EDUCATION, ALIAH UNIVERSITY, WEST BENGAL, INDIA.

ABSTRACT:

Academic achievement is widely recognized as a key indicator of educational success, influenced by a range of personal and institutional factors. This study aims to examine the relationship between study habits and Academic achievement among Higher Secondary students in West Bengal. The study also compares Study habits and academic achievement based on gender and academic streams (Science and Arts). A descriptive correlational research design was employed, and a sample of 300 Class XI students was selected through random sampling from six schools. Data was gathered through using students' Madhyamik examination marks, while study habits were assessed using the Palsane and Sharma's Study Habits Inventory (PSSHI). Data was analyzed through using descriptive and inferential statistics. The results revealed no significant difference in academic achievement between boy's and girl's students. However, Arts stream students showed significantly higher academic achievement than Science stream students. In contrast, Science students demonstrated better study habits than their Arts counterparts. No significant gender difference was observed in study habits. Furthermore, the study found no significant correlation between study habits and academic achievement. These findings suggest that while structured study habits are important, they may not solely determine academic achievement. Other factors such as motivation, teaching methods, and learning environment should also be considered.

KEYWORDS:

ACADEMIC ACHIEVEMENT, STUDY HABITS, GENDER, STREAMS, HIGHER SECONDARY STUDENTS, DESCRIPTIVE-CORRELATIONAL STUDY.

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1. INTRODUCTION

Academic achievement stands as one of the most important goals of education, influenced by numerous factors that students learning. Among these, study habits play a particularly vital role in determining how effectively students perform in their academic success. Study habits refer to the regular practices and strategies that students use to acquire, organize, and retain knowledge effectively (Good,1973). Study habits include multifactor such as time management, physical status, note-taking, testing strategies, learning motivation, reading ability, memory and health (Palsane & Sharma, 1971) These habits not only affect the way students learn but also their overall academic success.

Therefore, student need to increase more heavily structured and effective study practice. Previous study indicated that students who adopt consistent and well-planned study routine tend to perform better academically compared to those who didn't (Kumar & Joshi,2020). Hence, today's highly competitive academic

climate, it is essential to examine how study habits contribute to students' academic success. In this regard, the current study aims to investigate the association between study habits and academic achievement among higher secondary students.

2. LITERATURE REVIEW

Tus et.al (2020) conducted a study on the association between study habits and academic achievement among senior high school students. This study was employed descriptive-correlational research design. The study showed no significant association between study habits and academic achievement. however, the study emphasized the need to enhance specific habits such as note taking, reading ability, and health maintenance to improved academic outcome.Sharma (2023) examined how B.Ed. students' social competency related to their study habits and academic performance. This study employed descriptive-correlational research method. The

study result demonstrated that there is positive relationship between social competence and study habit. Patra (2024) conducted assessment of the study habits among B.Ed. college students. This study employed descriptive survey method involved 136 teacher trainees. The study findings demonstrated that majority of student had poor study habit. Furthermore, there were significant difference in study habits based on socio-demographic variables. Patel & Kumari (2023) investigated on effectiveness of module on pedagogy of teaching biological science in the context of study habit and achievement. In this study investigator was utilized quasi-experimental design research pre-test and post-test non-equivalent control group. The study finding revealed that module-based instructs significantly improved academic achievement compared to traditional method. However, this study also reported that achievement was found to be independent of student's study habits highlighting the instructional method pivotal role.

Mutya et.al (2023) conducted a study on the impact of self-learning modules on students' attitudes, study habit and academic performance in science stream. The study was utilized descriptive-correlational research method involved study sample was 174 secondary level students. The study found that there was no significant association between study habits and academic performance. Melon et.al (2025) examined the students study habits and its impact on their academic performance among high school students. This study utilized descriptive-correlational research method and study sampled was 112 students. The Study findings highlighted that no significant association had found between study habits and academic performance. The study highlighted the importance of aligned study habit with individual learning styles to optimize the learning outcomes. Erna and Pavlyuchenkova (2015) explored on influence of study habit on academic performance of international college students in shanghai. This study was qualitative in nature; and utilized observational interview method. The study findings reported that culturally influenced study habits, particularly in multicultural classrooms, significantly affect academic performance. Aristeidou and Cross (2021) explored on impact of covid-19 on study habits of distance learning university students. This study was used descriptive survey method involved 555 UG students at the open university in UK. The study findings reported that negative effect to study habit, due to workload issue less peer interaction significantly hinder student academic performance.

Hence, the literature on the impact of the study habits on students' academic achievement is extensive, but there is gap in research in the context of West Bengal.

2.1 OBJECTIVES

1. To compare the level of academic achievement between boys and girls among Higher secondary students.
2. To compare the level of academic achievement

among Higher secondary students in regard to streams (Science and Arts).

3. To compare the level of study habits between boys and girls among Higher secondary students.
4. To compare the level of study habits among Higher secondary students in regard to streams (Science and Arts).
5. To investigate the correlation between study habits and academic achievement among Higher secondary students.

2.2 HYPOTHESES

1. **H₀₁**: There is no significant difference in the mean scores of academic achievement between boys and girls among Higher secondary students.
2. **H₀₂**: There is no significant difference in the mean scores of academic achievement among Higher secondary students in regard to streams (Science and Arts).
3. **H₀₃**: There is no significant difference in the level of study habits between boys and girls among Higher secondary students.
4. **H₀₄**: There is no significant difference in the level of study habits among Higher secondary students in regard to streams (Science and Arts).
5. **H₀₅**: There is no significant correlation between study habits and academic achievement among Higher secondary students.

3. METHODS

3.1 RESEARCH DESIGN

The present study employed descriptive correlational research design.

3.2 POPULATION

The population of the study all higher secondary school students in West Bengal state.

3.3 SAMPLING TECHNIQUES AND SAMPLE

Random sampling technique was employed to select the schools and then all the students of class XI were taken as sample from 6 selected schools A total sample size of 300 students were taken for the study.

3.4 TOOL USED FOR DATA COLLECTION

The present study used following tools for data collection.

1. Academic achievement was measured using the marks obtained by students in the Madhyamik examination (under WBBSE board).
2. To assess study habits, the Palsane and Sharma's Study Habits Inventory (PSSHI) was administered to the participants.

3.5 STATISTICAL TECHNIQUES USED FOR DATA ANALYSIS

The statistical techniques employed for data analysis included mean, standard deviation, independent t-tests,

and Pearson product moment correlation. Data analysis was done with the help of SPSS.

4. RESULTS

4.1 NORMALITY OF DATA

Normality of the test score has checked by calculating skewness, kurtosis and by Kolmogorov-Smirnov test of normality with the help of SPSS and result are shown where skewness value found 0.116 and SE 0.141 whereas, (Z value of Skewness 0.823) kurtosis value found -.458 and SE .281 where as, (Z value kurtosis -1.63) so both within acceptable value ± 3 limit. In Kolmogorov-Smirnov result stated that Statistic value found .049 and DF- 300, significant value .085 it is also acceptable value. Normality of the plot shown with the help of Histogram as result found that bell-shaped or symmetry. Hence, the data has found to be normal. Figure1 is given below-

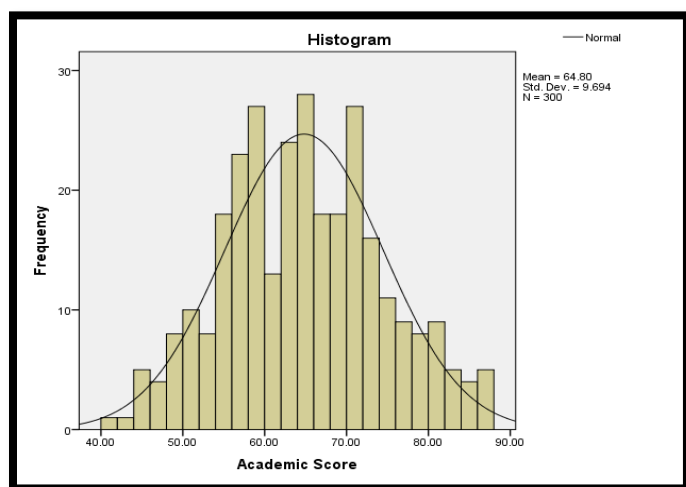


FIGURE.1 HISTOGRAM

4.2 TESTING OF HYPOTHESIS

H₀₁: There is no significant difference in the mean scores of academic achievement between boys and girls among Higher secondary students.

TABLE 1: COMPARE THE LEVEL OF ACADEMIC ACHIEVEMENT BETWEEN BOYS AND GIRLS AMONG HIGHER SECONDARY STUDENTS.

Academic score of Gender	N	Mean	SD	t-value	Significant level
Boys	151	65.37	10.11	1.01	Not significant at 0.05
Girls	149	64.23	9.25		

RESULT:-

Table 1. showed that the mean academic scores of Boys students (M-65.37, SD-10.17, N-151) and Girls students (M-64.23, SD-9.25, N-149) are found to differ little. A further independent samples t- test was performed to determine whether or not this difference is statistically significant. The independent sample t test showed that the computed 't' value = 1.01 and p value 0.31 ($p < .05$).

therefore, at the 0.05 level 't' is not significant. Thus, H₀₁ is not rejected and it is reasonable to conclude that Boys and Girls academic performance nearly equal.

H₀₂: There is no significant difference in the mean scores of academic achievement among Higher secondary students in regard to Science and Arts streams.

TABLE 2: COMPARE THE LEVEL OF ACADEMIC ACHIEVEMENT AMONG HIGHER SECONDARY STUDENTS IN REGARD TO SCIENCE AND ARTS STREAMS.

Academic score of Streams	N	Mean	SD	t-value	Significant level
Arts	137	66.23	10.09	2.356	Significant at 0.05
Science	163	63.60	9.21		

RESULT:-

Table 2. showed that the mean academic scores of arts stream students (M-66.23, SD-10.09, N-137) and science stream students (M-63.60, SD-9.21, N-163) are found to differ little. A further independent samples t- test was performed to determine whether or not this difference is statistically significant. The independent sample t test showed that the computed 't' value = 2.36 and p value 0.02 ($p < .05$). therefore, at the 0.05 level 't' is significant. Thus, H₀₂ is rejected and it is reasonable to conclude arts stream student perform better than science streams student.

H₀₃: There is no significant difference in the level of study habits between boys and girls among Higher secondary students.

TABLE 3: COMPARE THE LEVEL OF STUDY HABITS BETWEEN BOYS AND GIRLS AMONG HIGHER SECONDARY STUDENTS.

Study habit score of Gender	N	Mean	SD	t-value	Significant level
Boys	151	54.46	17.85	.663	Not Significant at 0.05
Girls	149	53.05	18.79		

RESULT: -

Table 3. showed that the mean Study habit score of Boys students (M-54.46, SD-17.85, N-151) and Girls students (M-53.05, SD-18.79, N-149) are found to differ little. A further independent samples t- test was performed to determine whether or not this difference is statistically significant. The independent sample 't' test showed that the computed t value = .663 and p value 0.47 ($p < .05$). therefore, at the 0.05 level 't' is not significant. Thus, H₀₃ is not rejected, indicating no significant difference in the level of study habits between boys and girls among Higher secondary students.

H₀₄: There is no significant difference in the level of study habits among Higher secondary students in regard to

Science and Arts streams.

TABLE 4: COMPARE THE LEVEL OF STUDY HABITS AMONG HIGHER SECONDARY STUDENTS IN REGARD TO SCIENCE AND ARTS STREAMS.

Study habit score of Streams	N	Mean	SD	t-value	Significant level
Arts	137	50.64	18.38	2.740	Significant at 0.01
Science	163	56.39	17.88		

RESULT: -

Table 4. showed that the mean Study habit score of arts students (M-50.64, SD-18.38, N-137) and science stream students (M-56.39, SD-17.88, N-163) are found to differ. A further independent samples t- test was performed to determine whether or not this difference is statistically significant. The independent sample t test showed that the computed 't' value = 2.740 and p value 0.006 (p< .05). therefore, at the 0.01 level 't' is significant. Thus, H₀₄ is rejected, indicating a significant difference in the study habits among Higher secondary students in regard to Science and Arts streams.

H₀₅: There is no significant correlation between study habits and academic achievement among Higher secondary students.

TABLE 5: PEARSON CORRELATION COEFFICIENT BETWEEN STUDY HABITS AND ACADEMIC ACHIEVEMENT AMONG HIGHER SECONDARY STUDENTS

Variables	Correlation coefficient (r)	p-value	Significant level
Study habit	-0.003	0.955	Not Significant at 0.05
Academic Achievement			

RESULT: -

Table 5. showed that the correlation coefficient (r) between study habit and Academic Achievement was found be (-0.003) with a p-value of 0.955 which indicates very minimal effect size. As p-value is greater than 0.05 so 'r' is not significant at 0.05 level, Thus H₀₅ is not rejected indicating that no significant correlation between study habits and academic achievement among Higher secondary students.

5. DISCUSSION

The objectives of the study were compared the level of academic achievement between boys and girls among Higher secondary students. The result of the study found that boys and girls academic achievement nearly equal. These findings are consistent with earlier studies, Nandini M. (2017). Furthermore, objectives of the study were compared the level of academic achievement among Higher secondary students in regard to Science and Arts

streams. The result of the study found that arts stream student performs better than science streams student among Higher secondary level. These findings are aligned with earlier studies Haolader (2017). In addition, compared the level of study habits between boys and girls among Higher secondary students. The result of the study found that boys and girls study habits nearly equal. These findings are aligned with earlier studies Williams(2017). Furthermore, compared the level of study habits among Higher secondary students in regard to Science and Arts streams. The result of the study found that science stream was better at study habit in comparison to arts student. These findings are consistent with earlier studies Zhang et.al (2025). In addition, find out the correlation between study habits and academic achievement among Higher secondary students. The study findings reveal that no significant relationship was found between study habits and academic achievement. These findings are consistent with earlier studies Tus et.al (2020), Mutya et.al (2023), Melon et.al (2025). Moreover, it was hypothesized that study habit would significantly influence student outcomes, result reveal that that study habit alone may not be determining factor of academic achievement. This result implies that academic achievement is multifaced construct, influenced by a wide range of factors beyond just study habit.

6. CONCLUSION

The present study explored impact of the study habit on academic achievement among higher secondary school students. The study aimed to find out Pearson Correlation coefficient between study habit and academic achievement among higher secondary level students. The study findings highlighted that no significant relationship was found between study habits and academic achievement among Higher secondary students. Findings the of the study also reveal that in no gender-difference found in comparison the academic achievement. Further compared the academic achievement in relation to streams difference; study findings reveal that arts stream showed significantly higher academic achievement compare to science stream students. Further compare the study habit in relation to gender difference; findings reveal that no gender-difference found in relation to study habit. Furthermore, compared the study habits in relation to streams difference; findings reveal that science stream students exhibited stronger study habit than arts streams students. Moreover, the study suggesting that good study habit alone may not directly enhance outcomes without considering other influencing factor like, cognitive abilities', motivation teaching method, school climate etc. so effort so should be made to these broader factors rather solely on study habit. Further research may be conducted on broader geographical area, larger sample size and different level of education.

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