

A COMPARATIVE ANALYSIS OF THE STUDY HABITS OF SCIENCE AND ARTS STUDENTS IN HIGHER SECONDARY SCHOOLS AT CHAMPHAI DISTRICT

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Abstract

Good habits are prerequisites for achieving anything meaningful in life. Not surprisingly, it is important to have a proper study habits in order to have significant achievements in one's academic pursuits. Good study habits form the foundation upon which students build their academic success. Students' academic success and achievements are largely influenced by their study habits. Multiple studies have revealed that students differ greatly in their study habits. To ensure academic success, it is very important that students not only have good study habits but that their study habits are systematic, efficient and effective. The present study is a systematic deep dive in to the study habits of science and arts students in higher secondary schools at Champhai district and a comparison of the same.

Keywords: *Study habits, Science Students, Arts Students, Government Higher Secondary School Students, Private Higher Secondary School Students*

Introduction

Study habits involve various behaviors, routines, and strategies for effective learning. Developing good habits requires setting realistic goals, creating a conducive environment, and using techniques like summarizing, self-discipline, and seeking support to enhance academic performance and promote lifelong learning skills. Sherafat & Murthy has defined study habit as, "...a skill that facilitates students' learning. It is one of the most important topics in the educational research" (as cited in Ahmed et. al., 2018, p. 18). The purposes for which each student studies or maintains study habits could vary from obtaining good grades in the examinations or for improving their learning in general. In other words, study habit can be defined as-

The definition of study habits as a "well-planned and deliberate pattern of study, which has attained a form of consistency on the part of the students towards understanding academic subjects and passing examinations" encapsulates the essence of effective learning strategies. A well-planned study routine involves breaking down tasks, setting realistic deadlines, and dedicating daily study time. Consistency is key, with successful students viewing studying as an ongoing process. Good study habits focus on understanding material and preparing effectively for exams to demonstrate proficiency and mastery.

Review of Related Literature

Researching study habits of higher secondary school students is crucial for educators and policymakers to understand their learning approaches. Identifying effective habits informs targeted support, while revealing patterns that hinder learning enables intervention development. This research contributes to educational reform, curriculum development, and improving outcomes, ultimately enhancing student well-being and understanding of effective learning processes. Reddy and Nagaraju (2001) investigated the influence of locality and gender on study habits of secondary school students on a sample consisting of

200. The outcomes were established and tabulated from the analyzed data. Results exposed that gender had insignificant effect on study habits.

Alabi (2003) investigated the relationship between study habits and attitudes among students towards examination malpractice. The sample of 400 students selected from secondary schools through random sampling method. The study concluded that examination malpractice no associated with study habits and attitudes. It also found that male and female study habits are exactly same.

Annaraja and Mohanan (2006) conducted a research entitled “Inter-relationship among academic achievement, study habits, and level of aspirations: A study on higher secondary students” on a sample of 211 students through t-test, and Pearson correlation and discovered that men and women had significant difference in study habits. The female students were found to have better study habits than the male students. The students from private schools were found to have better study habits than that from the government schools.

Sud and Sujata (2006) investigated academic performance between self-handicapping, test anxiety and study habits. They chose a group of 200 students from govt. senior secondary schools. The results revealed that female students were better than their male counterparts in study habits.

Prema (2007) conducted a research entitled “A study of study habit and achievement motivation towards academic achievement among XII higher secondary school students in Chengalpattu District” on a sample of 450 students and observed that the female students have better study habits than the male students. The study also revealed the existence of significant difference in the study habits of government, government-aided and private school students.

Rationale of the study

Good study habits play a crucial role in academic success. Research shows that poor study habits are a leading cause of examination failures. Developing effective study habits is essential for students to achieve academic success and overcome failures.

In today's digital age, students often prioritize convenience over reliability, neglecting valuable resources like books and libraries. This approach reveals a lack of discipline and commitment, leading to poor academic performance. To improve learning outcomes, instilling good study habits in higher secondary school students is crucial. This study aims to provide insights and practical strategies to help students develop better study habits, enhancing their academic performance and laying a strong foundation for lifelong learning.

Firstly, effective study habits guidance benefits both teachers and parents. Teachers can provide targeted support, empowering students to become self-directed learners. Meanwhile, parents are informed of their vital role in fostering academic success outside the classroom. By creating a supportive home environment, parents can instill strong study habits, laying the foundation for their children's academic achievement and future success.

Additionally, the study will underscore the importance of fostering collaboration between teachers, parents, and students to create a cohesive support system for students' academic endeavors. By working together, stakeholders can identify areas for improvement, implement targeted interventions, and monitor students' progress effectively.

Moreover, good study habits have inherent value beyond academic success, benefiting students in personal and professional life. These skills help students stay on track, achieving success in various areas. To address poor study habits, it's essential to understand the prevailing habits of higher secondary school students, enabling tailored recommendations and interventions to address the root causes.

Objectives of the study

1. To find out the prevailing study habits of higher secondary school students in Champhai district.
2. To compare the study habits of science and arts students in higher secondary school at Champhai district.
3. To compare the study habits of government higher secondary school students and private higher secondary school students in Champhai district.
4. To compare the study habits of government higher secondary school male students and private higher secondary school male students.
5. To compare the study habits of government higher secondary school female students and private higher secondary school female students.

Hypotheses

1. There is no significant difference in the study habits of science and arts students in higher secondary schools at Champhai district.
2. There is no significant difference in the study habits between government and private higher secondary school students in Champhai district.
3. There is no significant difference in the study habits between government higher secondary school male students and private higher secondary school male students in Champhai district.
4. There is no significant difference in the study habits between government higher secondary school female students and private higher secondary school female students in Champhai district.

Delimitations

Due to time constraint and availability of resources, the study was delimited to higher secondary school students at Champhai district.

Methodology

The proposed study is an attempt to find out the study habits of science and arts students among higher secondary school students in Champhai district. Considering the nature of the present research, descriptive survey method was used.

Population of the study

The population for the proposed study consisted of all the higher secondary school students in Champhai district.

Sample

For the proposed study, a sample of 100 students were randomly selected from higher secondary schools within Champhai town; in which 50 students were selected from science stream and another 50 from arts stream of higher secondary schools.

Tools and techniques of collecting data

To achieve the objectives, study habits tool developed by Dr. Lajwanti, Prof. N.P.S. Chandel, and Mr. Ashish Paliwal was adapted by the researcher.

Reliability

Split-half method was applied for testing of reliability of inventory. Product moment correlation coefficient value is 0.89. The Spearman-Brown Prophecy Formula was used to find the reliability of the full test that was found to be 0.94. This shows that the test is highly reliable.

Validity

SHI has been developed in consultation with experts of the field. The items of the inventory were judged by 10 experts. Experts were requested to rate the items on a 10 point rating scale on the criteria whether the item is able to assess the dimension of study habits for which it has been framed. The items which were rated 7 or above by all the 10 experts were retained and the rest were dropped. Thus the inventory consists of construct validity.

The inventory was validated by calculating co-efficient of correlation (Product moment) between the score of 100 sample units on Study Habit Inventory developed by M. Mukhopadhyay & D. N. Sansanwal (1992) and on the present inventory. The co-efficient of correlation was found 0.79 which is significant at .01 level of significance and shows that the inventory is valid.

Procedure for collecting data

Data was collected through personal visit by the researcher after obtaining the due permission from the Headmasters of the school visited. Rapport with the students was built and the objectives were thoroughly explained. The researcher also stressed that confidentiality would be maintained.

3.7 Data analysis

For analyses of data, the following statistical techniques were employed:

1. Frequency distribution to find out the mean and standard deviation of different groups of respondents.
2. Percentage to find out the level of study habits.
3. 't'-test to find out the significant difference between the study habits of arts and science students, government and private school students, government school male and private school male students, government school female and private school female students in Champhai district.

The collected data for the present study is depicted in tabular form as per the sequential order and flow of the objectives of the study:

To find out the prevailing study habits of higher secondary school students in Champhai district

The first objective of the study was to find out the prevailing study habits of higher secondary school students in Champhai district. For achieving the objective, study habits tool developed by Dr. Lajwanti, Prof. N.P.S. Chandel, and Mr. Ashish Paliwal was used. The calculated scores are shown in the following table:

| S/No. | Range of z-Scores | Raw Score | No. of Students | Percentage | Level of Study Habits |
|-------|-------------------|---------------|-----------------|------------|-----------------------|
| 1 | +2.01 and above | 162 and above | 9 | 9% | Extremely High |
| 2 | +1.26 to +2.00 | 145 to 161 | 12 | 12% | High |
| 3 | +0.51 to +1.25 | 128 to 144 | 33 | 33% | Above Average |
| 4 | -0.50 to +0.50 | 104 to 127 | 34 | 34% | Average/Moderate |

| | | | | | |
|---|-----------------|--------------|----|-----|---------------|
| 5 | -0.51 to -1.25 | 86 to 103 | 12 | 12% | Below Average |
| 6 | -1.26 to -2.00 | 69 to 85 | - | - | Low |
| 7 | -2.01 and below | 68 and below | - | - | Extremely Low |

Table 4.1: Students' level of study habit

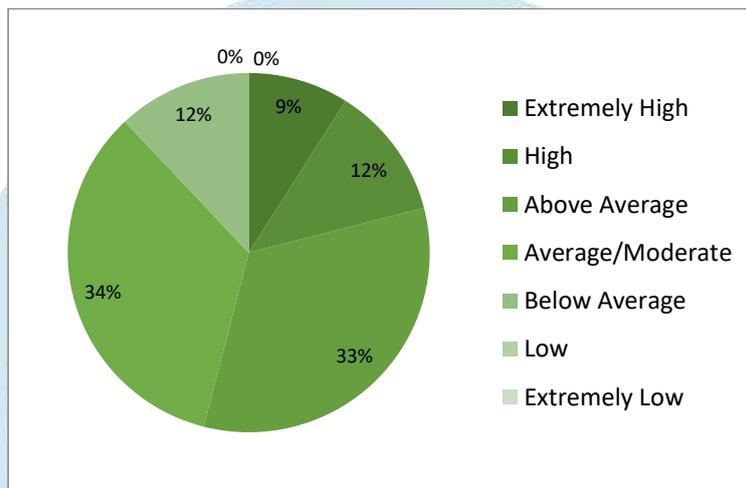


Figure 4.1: Graphical Pie-Chart showing the students' level of study habits

Analysis and Interpretation:

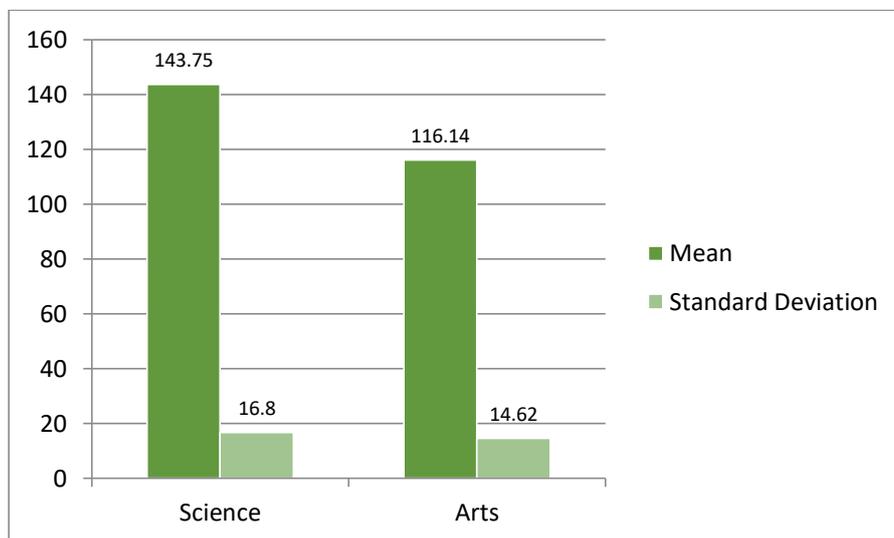
From the above Table and Figure, it was found out that 34% of the students in higher secondary school at Champhai district have average/moderate level of study habits; 33% of the students have above average level of study habits; 12% of the students have high level of study habits; another 12% of the students have below average level of study habits and 9% of the students have extremely high level of study habits as far as their level of study habits was concerned.

Generally speaking, students in higher secondary schools are expected to have good levels of study habits, but studies have often revealed something contrary. According to the findings, out of 100 as much as 34% of the students were found to be having average/moderate level of study habits. Similarly, as much as 33% of the students were found to be having above average level of study habits. There could be several reasons contributing to the unsatisfactory level of study habits in the students. Surprisingly, it was found that as much as 12% of the students were found to be having below average level of study habit which is quite disappointing. Accordingly, it was found that 12% of the students had high level of study habits; and 9% were found to be having extremely high level of study habits. The findings indicate that these students had a satisfactory level of study habits and this should be facilitated by the teachers and other concerned persons.

To compare the study habits of science and arts students in higher secondary school at Champhai district

The second objective of the study was to compare the study habits of science and arts students in higher secondary school at Champhai district. In order to find out the difference in study habits between science and arts students in higher secondary school, calculation of mean value and standard deviation was done followed by t-test. The following table shows the comparison of study habits of science and arts students in higher secondary school:

| Stream | N | Mean | SD | DF | t-value | Level of significance |
|---------|----|--------|-------|----|---------|-----------------------|
| Science | 49 | 143.75 | 16.80 | 98 | 8.78 | Significant at 0.01 |
| Arts | 51 | 116.14 | 14.62 | | | |

Table 4.2: Students' level of study habit based on streams, i.e., Science and Arts**Figure 4.2: Graphical Column showing students' level of study habit based on streams, i.e., Science and Arts****Analysis and Interpretation:**

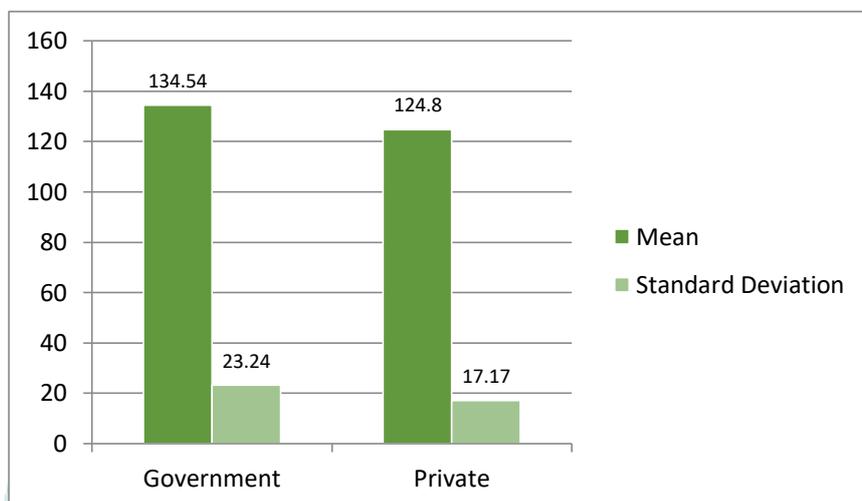
The cursory glance at Table 4.2 and figure 4.2 shows the comparison made on the levels of study habits of higher secondary school students based on streams i.e., science and arts. It can be seen from Table 4.2 and Figure 4.2 that out of the total 100 students, there are 49 science students and 51 arts students. The mean score of science students is 143.75 with standard deviation of 16.80. On the other hand, the mean score of arts students is 116.14 with standard deviation of 14.62.

The calculated value of 't' is 8.78, which is greater than the critical value of 't' at 0.01 level of confidence. Therefore, the null hypothesis stating there is no significant difference in the study habits of science and arts students in higher secondary schools at Champhai district is rejected. Thus, the conclusion made based on the comparison is that there is a significant difference in the study habits among science and arts students in higher secondary schools at Champhai district. The students of science stream have higher mean score between the two groups, indicating that the students of science stream have higher level of study habits than that of arts stream.

To compare the study habits of government higher secondary school students and private higher secondary school students in Champhai district

The third objective of the study was to compare the study habits of government higher secondary school students and private higher secondary school students in Champhai district. In order to find out the difference in study habits between government higher secondary school students and private higher secondary school students, calculation of mean value and standard deviation was done followed by t-test. The following table shows the comparison of study habits of government higher secondary school students and private higher secondary school students:

| School | N | Mean | SD | DF | t-value | Level of significance |
|------------|----|--------|-------|----|---------|-----------------------|
| Government | 50 | 134.54 | 23.24 | 98 | 2.38 | Significant at 0.05 |
| Private | 50 | 124.8 | 17.17 | | | |

Table 4.3: Students' level of study habit based on organization of the school, i.e., Government and Private**Figure 4.3: Graphical Column showing students' level of study habit based on organization of the school, i.e., Government and Private****Analysis and Interpretation:**

The cursory glance at Table 4.3 and figure 4.3 shows the comparison made on the levels of study habits of higher secondary school students based on organization of the school i.e., Government and Private. It can be seen from Table 4.3 and Figure 4.3 that out of the total 100 students, there are 50 students each in government school and private school. The mean score of government school students is 134.54 with standard deviation of 23.24. On the other hand, the mean score of private school students is 124.8 with standard deviation of 17.17.

The calculated value of 't' is 2.38, which is greater than the critical value of 't' at 0.05 level of confidence. Therefore, the null hypothesis stating there is no significant difference in the study habits between government and private higher secondary school students in Champhai district is rejected. Thus, the conclusion made based on the comparison is that there is a significant difference in their study habits among the students of government and private schools in higher secondary schools at Champhai district. The students of government higher secondary school have higher mean score between the two groups, indicating that the students of government higher secondary school have higher level of study habits than that of students of private higher secondary school.

To compare the study habits of government higher secondary school male students and private higher secondary school male students

The fourth objective of the study was to compare the study habits of government higher secondary school male students and private higher secondary school male students. In order to find out the difference in study habits between government higher secondary school male students and private higher secondary school male students, calculation of mean value and standard deviation was done followed by t-test. The following table shows the comparison of study habits of government higher secondary school male students and private higher secondary school male students:

| Gender | N | Mean | SD | DF | t-value | Level of significance |
|-----------------|----|--------|-------|----|---------|-----------------------|
| Government Male | 24 | 138.46 | 28.19 | 46 | 2.75 | Significant at 0.01 |
| Private Male | 24 | 119.96 | 16.99 | | | |

Table 4.4: Male students' level of study habit from Government and Private schools



Figure 4.4: Graphical Column showing male students' level of study habit from Government and Private schools

Analysis and Interpretation:

The cursory glance at Table 4.4 and Figure 4.4 shows the comparison made on the male students' levels of study habits from government and private schools. It can be seen from Table 4.4 and Figure 4.4 that out of the total 48 students, there are 24 male students each in government school and private school. The mean score of government school male students is 138.46 with standard deviation of 28.18. On the other hand, the mean score of private school male students is 119.96 with standard deviation of 16.99.

The calculated value of 't' is 2.75, which is greater than the critical value of 't' at 0.01 level of confidence. Therefore, the null hypothesis stating there is no significant difference in the study habits between government higher secondary school male students and private higher secondary school male students in Champhai district is rejected. Thus, the conclusion made based on the comparison is that there is a significant difference in their study habits among government school male students and private school male students in higher secondary schools at Champhai district. The students of government school male students have higher mean score between the two groups, indicating that the students of government school male students have higher level of study habits than that of private school male students.

To compare the study habits of government higher secondary school female students and private higher secondary school female students

The fifth objective of the study was to compare the study habits of government higher secondary school female students and private higher secondary school female students. In order to find out the difference in study habits between government higher secondary school female students and private higher secondary school female students, calculation of mean value and standard deviation was done followed by t-test. The following table shows the comparison of study habits of government higher secondary school female students and private higher secondary school female students:

| Gender | N | Mean | SD | DF | t-value | Level of significance |
|-------------------|----|--------|-------|----|---------|-----------------------|
| Government Female | 26 | 130.92 | 17.31 | 50 | 0.35 | Non-Significant |
| Private Female | 26 | 129.27 | 16.39 | | | |

Table 4.5: Female students' level of study habit from government and private schools

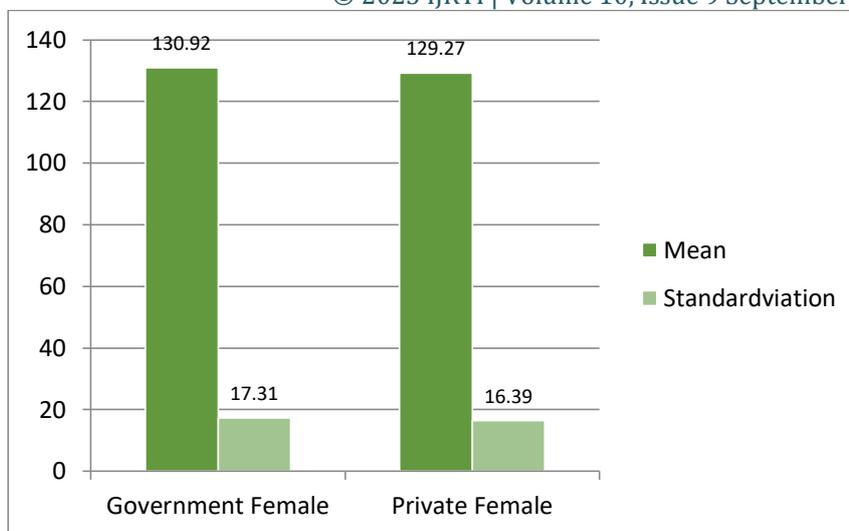


Figure 4.5: Graphical Column showing female students' level of study habit from Government and Private schools

Analysis and Interpretation:

The cursory glance at Table 4.5 and Figure 4.5 shows the comparison made on the female students' levels of study habits from government and private schools. It can be seen from Table 4.5 and Figure 4.5 that out of the total 52 students, there are 26 female students each in government school and private school. The mean score of government school male students is 130.92 with standard deviation of 17.31. On the other hand, the mean score of private school female students is 129.27 with standard deviation of 16.39.

The calculated value of 't' is 0.35, which is lower than the critical value of 't' at the required level of confidence (0.01=2.63, 0.05=1.99), indicating the insignificance of difference. Therefore, the null hypothesis stating there is no significant difference in the study habits between government higher secondary school female students and private higher secondary school female students in Champhai district is accepted. Thus, it can be concluded that the female students of government higher secondary school and the female students of private higher secondary school do not differ significantly in their study habits.

Findings of the study

The major findings along with the objectives of the study are given side by side for understanding the level of study habit among Science and Arts students of higher secondary school students in Champhai district. These are:

- To find out the prevailing study habits of higher secondary school students in Champhai district.
 - It has been found that majority of the students consisting of 79% were found to be falling in above average, average and below as far as their level of study habit was concerned. This is quite unsatisfactory. Also, as little as 21% of the students were found to be falling in high and extremely high levels, which does not make up even half of the selected sample. This disparity highlights a significant gap in the study habits among students, which has profound implications for their academic performance and overall success.
- To compare the study habits of the science and arts students in higher secondary school at Champhai district.
 - As far as the study habits of science and arts students are concerned, the findings indicate that the science students had a slightly higher level of study habit in comparison to the arts students.
- To compare the study habits of government higher secondary school students and private higher secondary school students in Champhai district.

- Concerning the level of study habits of government school students and private school students, it has been found that the government school students had a slightly higher level of study habits in comparison to private school students.

4. To compare the study habits of government higher secondary school male students and private higher secondary school male students.

- The findings of the study indicate that government male students had a higher level of study habit than private male students.

5. To compare the study habits of government higher secondary school female students and private higher secondary school female students.

- The findings of the study indicate that there is no significant difference in the study habits of government female students and private female students.

Conclusion

The level of study habits among students can be influenced by various factors, including interest, motivation, and environment. Interestingly, the study found that government school students exhibited higher levels of study habits compared to private school students. This raises questions about the perceived quality of education in private versus government schools. Despite private schools being regarded as superior, the findings suggest that government school students performed better. The study's results also indicate that the overall level of study habits among students is subpar, with most students falling below average. To address this, it is essential for teachers, parents, and responsible individuals to take this matter seriously and work towards developing better study habits in students. Encouraging good study habits is crucial for long-term academic success, optimal learning outcomes, and achieving academic goals.

The finding that government school students have better study habits than private school students challenges the perceived superiority of private education. Factors such as teaching methods, resources, and support systems vary significantly between schools, regardless of type. A critical examination of these factors is necessary to understand their impact on study habits and inform education policy and practice.

In addition to examining the differences between government and private schools, it is crucial to address the overall unsatisfactory level of study habits among students. The fact that the majority of students were found to be only average or below average in their study habits underscores the need for intervention at multiple levels. Teachers, parents, students, and other stakeholders must work together to create a supportive learning environment that fosters the development of effective study habits.

To improve study habits, students need explicit instruction on study skills and motivation. Educators and parents can foster a positive attitude towards learning by emphasizing education's value and encouraging goal-setting. Recognizing and rewarding efforts can boost confidence and motivation.

Moreover, creating a supportive learning environment is essential for promoting good study habits. This includes providing students with access to resources such as textbooks, technology, and academic support services.

Developing good study habits isn't subject-specific. Fundamental principles of effective studying apply across all areas of learning. Educators should integrate study skills instruction into the curriculum to help all students develop these essential skills.

Ultimately, the goal of promoting good study habits is to enable students to achieve academic success in the long run and to prepare them for lifelong learning. By investing in the development of

effective study skills, educators, parents, and students can empower individuals to reach their full potential and contribute meaningfully to society.

In conclusion, the findings indicating higher levels of study habits among government school students challenge common assumptions about the quality of education provided by public and private schools. Instead of focusing solely on the type of institution, we should consider the specific factors that contribute to students' study habits and academic success. By addressing the underlying challenges and implementing targeted interventions, we can create a supportive learning environment that fosters the development of effective study habits among all students, regardless of their background or school type.

References

- Annaraja, P., & Mohanan, A. 2006. Inter-relationship among academic achievement, study habits, and level of aspirations: A study on higher secondary students. *Research and Reflection on Education*, 4(2), 2-4.
- Reddy, B.R. & Nagaraju, M.T.V. (2001) Influence of sex and locality on study habits of X class pupils. *Journal of Education Research and Extension*, 38(1), 44-49.
- Sud, A. & Sujata (2006). Academic performance in relation to self- handicapping, test anxiety and study habits of high school children. *National Academy of Psychology*, 51(4), 304-309.

