



A COMPARATIVE STUDY OF STUDY HABITS AND INTEREST IN SCIENCE OF SECONDARY LEVEL GIRLS OF GOVERNMENT AND PRIVATE SCHOOLS

Pooja Verma^a and Dr. Pratima Ojha^b

^aM.Ed. student, Eram Girls' Degree College, Lucknow

^bAssistant Professor, Department of Education, Eram Girls' Degree College, Lucknow

Abstract: Education is a systematic and applied discipline that broadens mental horizons and improves academic performance. Study habits, science literacy, and interest in science are crucial for developing knowledge, skills, and positive attitudes towards science and technology. The main aim of this study is to determine the study habits and science interest of secondary level girls of government and private schools. The research was carried out on a sample of 100 secondary level girl students in class X of government and private schools of Lucknow district. Standardized scales of M N Palasane and Anuradha Sharma for study habits and Dr. L N Dubey and Dr. Archana Dubey for science interest were used to collect the data, which in turn was analyzed by applying Mean (M), Standard Deviation (SD) and *t*-test. Findings revealed that significant difference exists in study habits, areas of study habits and interest in science of secondary level girls of government and private schools. In the study it is also found that study habits and interest in science is better in secondary level girls private school than secondary level girls of government school. Necessary steps and important measures may be taken by teachers to motivate their students in developing positive study habits and attitude towards science. Finally the study proffers some suggestions to enhance the study habits and interest in science of secondary school students.

Index Terms: Study habits, Interest in science, Secondary girl students, Government school, Private school

1. INTRODUCTION

Education is a methodical, applied discipline that incorporates ideas from different fields and necessitates experience in order to be properly recognized. It extends people's perspectives both individually and collectively. The capacity to efficiently manage time and resources in order to finish academic work is referred to as study habits. Students must choose the ideal time and location for their studies in order to form a methodical study habit. It takes passion and commitment to become knowledgeable, and study habits come from training the mind and body to search for information with great fervor. Crede and Kuncel (2008) defines study habit as study routines, including, but not restricted to, frequency of studying sessions, review of material, self-testing, rehearsal of learned material, and studying in a conducive environment.

Interest is a motivating force that drives cognitive, conative, or affective behavior. It refers to an individual's feelings, thoughts, and predispositions towards their environment. A student with a science interest is curious and eager to undertake projects, read scientific literature, and interact with reputed scientists. Interest in science is a combination of hereditary and environmental determinants that produce predispositions and abilities.

SIGNIFICANCE OF THE STUDY

The increasing number of students necessitates excellence in education, with teachers playing a crucial role in shaping the educational process. Establishing a passion for learning and studying habits is essential, and their behaviors should be closely observed. Knowledge of science is crucial for understanding technological advancements and our surroundings. Adolescent students need the right direction and attention to develop process skills, a good attitude towards learning science, and a scientific mentality. This helps them understand the value of science and its importance. As children grow up to be influential members of society, it is essential to examine how they acquire science.

STATEMENT OF THE PROBLEM

The topic identified for the current study is on “A Comparative Study of Study Habits and Interest in Science of Secondary Level Girls of Government and Private Schools”

OBJECTIVES

The study will be designed with the following objectives:

1. To study and compare the ‘study habits’ of secondary level girls of government and private school.
2. To study and compare the ‘areas of study habits’ of secondary level girls of government and private school.
3. To study and compare the ‘interest in science’ of secondary level girls of government and private school.

HYPOTHESIS

The following hypothesis are formulated for the present study:

1. There is no significant difference between study habits of secondary level girls of government and private school.
2. There is no significant difference between areas of study habits of secondary level girls of government and private school.
3. There is no significant difference between interest in science of secondary level girls of government and private school.

REVIEW OF RELATED LITERATURE

Studies Related To Study Habits

- **Unwalla, N. (2020)** conducted comparative analysis of study habits between males and females of college. The Study Habits Inventory, a tool developed by M.N.Palsane and Anuradha Sharma was used for the purpose of the research. The results showed that there exists a significant difference between the study habits of males and females and further also revealed that females tend to have better study habits as compared to males.

- **Pandey, S. K. (2021)** conducted study on study habits of senior secondary school students in relation to gender and type of school in Una district of Himachal Pradesh. The study was conducted by Study Habits Inventory (SHI) by Chandel and Paliwal (2012) on 200 senior secondary school students. The results showed that students studying in government senior secondary schools had better study habits as compared to students studying in private senior secondary schools especially on the comprehension and Task-orientation whereas students studying in private senior secondary schools had better study habits as compared to government senior secondary schools in drilling dimension.

- **Singh, R. and Gohain, J. (2022)** conducted study on study habits among higher secondary students in relation to their school environment. Results showed that there was no significant difference in the mean scores of study habits of boys and girls. It was concluded that there exists no significant relationship between study habits and school environment of higher secondary school students. Hence it could be interpreted that study habits has no dependence on school environment.

- **Kumar, S. (2023)** conducted study on study habits and attitudes among secondary school students. The study was conducted on students of SBSE and ICSE secondary school students. Studies found that there was no significant difference in study habits of SBSE and ICSE secondary school students as well as any difference in the two genders study patterns. It was also found that the majority of the students in both education systems had a poor study habit.

Studies Related To Science Interest

• **Soundararajan, M. (2013)** conducted study on science interest of higher secondary students. The major purpose of the research was to study the level of science interest of higher secondary school students. The findings indicated that there was a significant difference in the level of science interest between the urban and rural students and the type of management.

• **Yashu, V. & Rai, R. (2016)** conducted a study of attitude towards scientific interest among the tribal Students at secondary level in Kohima. The result revealed that tribal students of private secondary schools have more in relation to their scientific interest and its curiosity in comparison to tribal students of government secondary schools.

• **Singh, Y. C. and Bai, C. A. (2017)** conducted a study of scientific attitude and science interest of secondary school students in Prakasam district, Andhra Pradesh. The study found positive and significant relationship between scientific attitude and science interest of secondary school students.

• **Khan, A. F. (2021)** has taken up study of interest in science of IX Standard English medium students of Aurangabad city. He found out that interest of science was high among male and female IX Standard English medium students and there was significant difference in science interest of male and female students.

• **Muthaiyan, R. (2022)** conducted study on study on science interest of the higher secondary students studying in Ariyalur district. The results showed that there was no significant difference in mean scores of Science interest with respect to gender and there was no significant difference in mean scores of Science interest with respect to school management.

METHODOLOGY

a) Research method

The present study comes under 'descriptive survey research'.

b) Population

The population for the present study is the girl students of class X of Lucknow district studying in government and private schools.

c) Sampling

For the selection of the sample, stratified random sampling method was adopted. A representative sample of 100 girl students of government and private schools studying in class X were selected.

d) Variables Studied

In the present study there are two independent variable and two dependent variables, which are to be studied.

Independent Variables:

Gender: Girl

Type of Institutions: Government and Private

Dependent Variables:

- Study Habit
- Interest in Science

e) Research Tool Used

For the collection of data for the present study, the following tools were used:

- Study Habit Inventory (SHI) by M. N. Palsane and Anuradha Sharma
- Science Interest Test (SIT) by Dr. L. N. Dubey and Dr. Archana Dubey

5. ANALYSIS AND INTERPRETATION OF DATA

Objective 1

Comparison Of Study Habits Of Secondary Level Girls Of Government And Private School

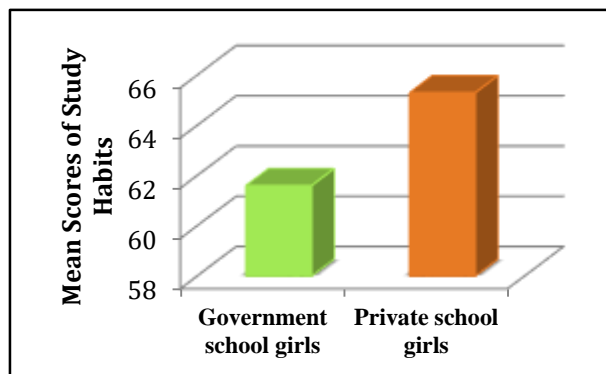
Table 1.1 Comparison of study habits of secondary level girls of government and private school

Group	Number of students	Mean	Standard deviation	df	t-value	Level of significance
Government school girls	50	61.6	6.96	98	2.64	0.01
Private school girls	50	65.3	7.07			

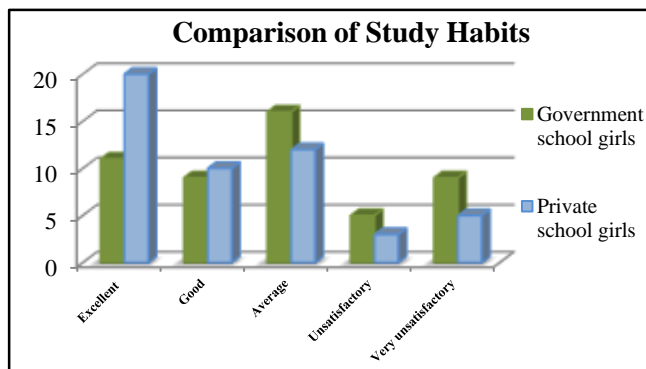
Significance level $0.01=2.63$

Therefore, it may be interpreted that there is significant difference in the mean scores of study habits of secondary level girls of government and private school. From the findings it was found that secondary level girls of private school have better study habits than the secondary level girls of government school. The secondary level girls of government school had average study habits while secondary level girls of private school had good study habits. Thus the hypothesis there will be no significant difference between study habits of secondary level girls of government and private school cannot be accepted.

Graph1.1 Graphical representation of study habits mean scores between government and private school girls



Graph1.2 Graphical representation of comparison of study habits of government and private school girls



The graph 1.2 shows the comparison of study habits of government and private secondary school girls and categorizes them. It shows more private school girls are in excellent category of study habits than government schoolgirls. In good category of study habits more girls of private school are more than government school. But in case of average, unsatisfactory and very unsatisfactory study habits number of government schoolgirls is more than private school girls. This specifies that private school girls have better study habits than government schoolgirls.

Objective 2

Comparison Of Areas Of Study Habits Of Secondary Level Girls Of Government And Private School

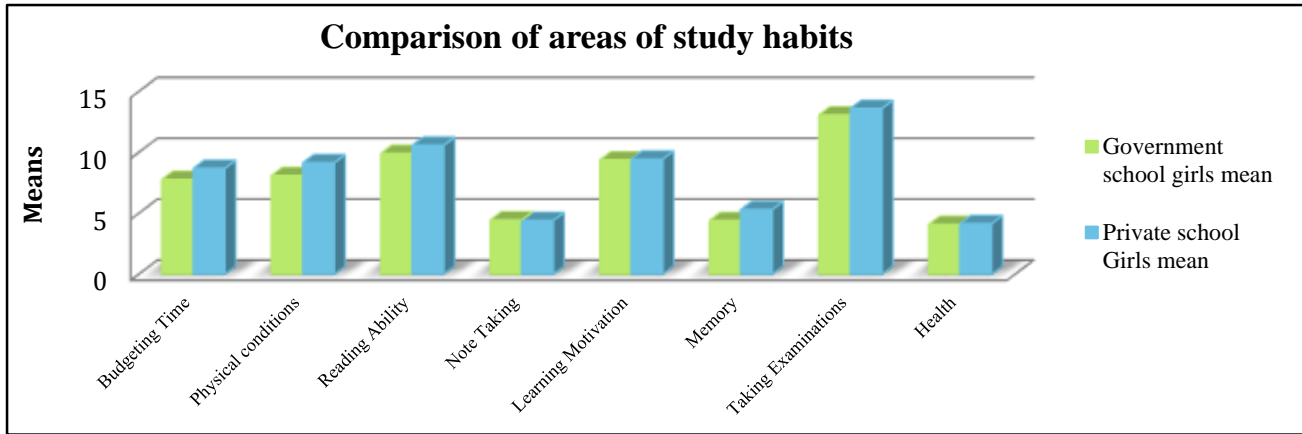
Table 1.2 Mean, Standard deviation, *t*-value and level of significance of areas of study habits of government and private school girls

Areas of study habits	Government school girls		Private school girls		<i>t</i> -value	Level of significance
	Mean	<i>SD</i>	Mean	<i>SD</i>		
Budgeting Time	7.78	1.76	8.68	1.36	2.85	0.01
Physical conditions for study	8.1	1.42	9.14	1.51	3.55	0.01
Reading Ability	9.92	2	10.58	2.1	1.61	NS
Note Taking	4.46	1.11	4.4	1.26	1.94	NS
Learning Motivation	9.38	1.37	9.44	1.61	0.20	NS
Memory	4.4	1.59	5.3	1.36	3.04	0.01
Taking Examinations	13.08	2.02	13.6	2.08	1.27	NS
Health	4.08	0.88	4.14	1.23	0.28	NS

Significance level $0.01=2.63$

Therefore, it may be interpreted that there is significant difference in the mean scores of budgeting time, physical conditions for study and memory of secondary level girls of government and private school. So the findings of the study indicate that budgeting time, physical conditions for study and memory of secondary level girls of private school are better than secondary level girls of government school.

Graph 2.1 Graphical representations of comparison of areas of study habits of secondary level girls of government and private school



The graph indicates the comparison of the means of the areas of study habits of girls of secondary level of government and private school, which shows there is difference in means of budgeting time, physical conditions for study and memory.

Objective 3

Comparison Of Interest In Science Of Secondary Level Girls Of Government And Private School

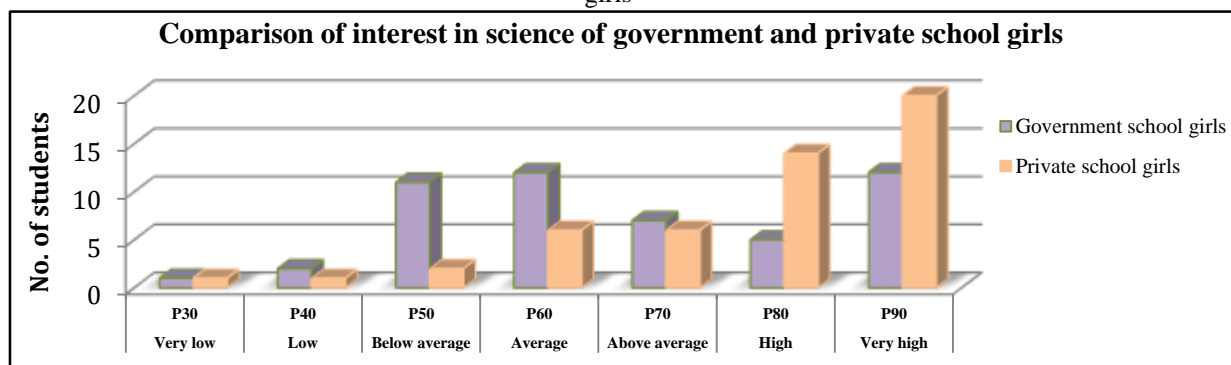
Table 1.3 Number, Mean, Standard Deviation, Degree of Freedom, *t*-value and Level of Significance of interest in science of secondary girl students of government and private schools.

Group	Number of students	Mean	Standard deviation	<i>df</i>	<i>t</i> -value	Level of significance
Government school girls	50	41.14	9.94	98	3.14	0.01
Private school girls	50	47.46	10.17			

Significance level $0.01=2.63$

The table reveals that there is significant difference in science interest of secondary level girls of government and private school. It specifies that means scores of science interest of secondary level girls of private school are better than secondary level girls of government school. The secondary level girls of government school had above average science interest while secondary level girls of private school had high science interest. Thus the hypothesis there will be no significant difference between interest in science of secondary level girls of government and private school cannot be accepted.

Graph 3.1 Graphical representation of comparison of Interest in Science of secondary level girls of government and private school girls



The graph represent that number of students of ‘low’, ‘below average’, ‘average’ and ‘above average’ science interest category are more in secondary level girls of government school than in secondary level girls of private school. While number of students of ‘high’ and ‘very high’ science interest category are more in secondary level girls of private school than in secondary level girls of government school.

FINDINGS

The main purpose of current study was to find the study habits and science interest of secondary level girls of government and private school. For the support to this purpose following were the findings of the study conducted:

- From the study it was found that secondary level girls of private school have secondary level girls of private school were better than secondary level girls of government school. There was **significant difference** in the study habits of secondary level girls of government and private school. The study habits of secondary level girls of government school fall under **'average'** category whereas study habits of secondary level girls of private school fall under **'good'** category of study habits.
- The study also revealed that there was significant difference in the budgeting time, physical conditions for study and memory of secondary level girls of government and private school. These areas of study habits were better in secondary level girls of private school were better than secondary level girls of government school.
- The study also specified that there was significant difference in science interest of secondary level girls of government and private school. Science interest of private school girls was better than the government schoolgirls. The interest in science in secondary level girls of government school fall under **'above average interest'** category and interest in science in secondary level girls of private school fall under **'high interest'** category.

LIMITATIONS OF THE STUDY

- 1) This study is limited to secondary school girl learners.
- 2) The study is limited to Lucknow district.
- 3) The study is conducted only on 100 secondary level girl students of government and private school.

CONCLUSION

Study habits are crucial for students to manage time and resources effectively. They involve routines like frequency of sessions, material review, self-testing, and a conducive environment. Teachers can influence students' study plans by stimulating problem-solving, critical evaluation, and knowledge relation. A study found that secondary level girls in private schools have better study habits than those in government schools. Science education should promote important changes in young pupils, such as changing thinking, habits, and values. Private school girls have better interest in science, possibly due to teaching techniques, experimentation, and school environment. Schools should recognize students' needs and interests to develop scientific aptitude and promote science learning. Teachers should motivate students and raise awareness about the importance of science education for their children's future.

SUGGESTIONS FOR FURTHER RESEARCH

- A comparative study of study habits and interest in science on basis of gender.
- Influence of school location on students' study habits and interest in science in secondary schools.
- This study can be conducted by taking other variables like socio-economic status, IQ, academic achievement, creativity, parent motivation and so on. .
- A study can be conducted to compare the study habit and science interest of girls of educated and uneducated mothers.

REFERENCES

- 1) Crede, M. & Kuncel, N. R. (2008). Study habits, skills, and attitudes: The third pillar supporting collegiate academic performance. *Perspectives on Psychological Science*, 3, 425-453.
- 2) Khan, A. F. (2021). A study of interest in science of ix standard english medium students of Aurangabad city. *International Journal of Reflective Research in Social Sciences*, 4 (1), 27-28
- 3) Kumar, S. (2023). A study-on-study habits and attitudes among secondary school students. *International Journal for Research in Applied Science & Engineering Technology*, 11 (5), 3563-3572.
- 4) Muthaiyan, R. (2022). A study on science interest of the higher secondary students studying in Ariyalur district. *International Journal of Research Publication and Reviews*, 3 (11), 2224-2229 .
- 5) Pandey, S. K. (2021). Study habits of senior secondary school students in relation to gender and type of school. *Scholarly Research Journal for Interdisciplinary Studies*, 9 (68), 16064-16069 .

- 6) Singh, R., & Gohain, J. (2022). Study habits among higher secondary students in relation to their school environment. *Journal of Positive School Psychology* , 6 (2), 5289 – 5295.
- 7) Singh, Y. C., & Bai, C. A. (2017). A study of scientific attitude and science interest of secondary school students in Prakasam district, Andhra Pradesh. *Indian journal of research* , 6 (10), 362-364 .
- 8) Soundararajan, M. (2013). Science interest of higher secondary school students. *Indian Journal Of Applied Research* , 3 (7), 172-173.
- 9) Unwalla, N. (2020). Comparative analysis of study habits between males and females. *International Journal of Innovative Science and Research Technology* , 5 (7), 182- 187 .
- 10) Yashu, V., & Rai, R. (2016). A study of attitude towards scientific interest among the tribal students at secondary level In Kohima . *International Journal of Multidisciplinary Research and Modern Education (IJMRME)* , 2 (1), 101-107.

