Study of the Impact of Family Environment on the Learning Style of Higher Secondary Level Students (In the Context of Mahasamund City)

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Abstract:

Home environment refers to the emotional, social and intellectual atmosphere established by the family members as well as all kinds of moral and ethical values to contribute to the overall development of the individual. Learning style is a concept that may be important in this. The present study focuses on different learning styles and discusses the obstacles and possibilities of learning styles in educational studies. In view of this, an attempt has been made to examine the effect of family environment. 100 students have been taken at random in the study to examine the effect of family environment on the learning styles of higher secondary level students of government and private schools. In the present study, Learning style Inventory (LSI-$_{MK}$) instrument developed by Dr. Karuna Shankar Mishra has been used to collect data regarding learning styles and similarly Family Climate Scale (FCS-$_{SB}$) instrument developed by Dr. Bina Shah has been used in relation to family climate factors. The results of the data obtained were tested by appropriate statistics such as mean, standard deviation, SED and t-value. This was compared with the t-table value of independent frequency fraction [df] of 98 and significance level of 0.05. The calculated value in conclusion shows significant difference between learning styles and family environment of higher secondary level students of government and private schools.

Keywords: Learning; Learning style; Family environment; Higher secondary level students

1. Introduction

There is a significant relationship between family environment and the way students learn that affects student learning outcomes. Researchers on learning styles have revealed the fact that adapting teaching strategies to individual learning styles not only maximizes the academic performance of learners, enhances their motivation, increases their confidence, helps them develop a positive attitude towards learning, but also makes learning a fun or enjoyable activity. [1] The home environment refers to the emotional, social and intellectual environment established by family members as well as all kinds of

moral and ethical values to contribute to the overall development of the individual. [2] Learning style is a concept that can be important in this field, not only in informing teaching practices but also in bringing forth issues that help faculty and administrators think more deeply about their roles and the organizational culture in which they carry out their responsibilities. Students' learning outcomes are positively influenced by learning styles and interactions with peers. [3] If students are given lessons that suit their learning styles and if their social environment is better, their learning outcomes will also be better. A student who is going through a phase of development. Each individual in the educational group has a variety of abilities ranging from talents, interests, needs and other factors, therefore, students require teaching and learning to develop and grow. [4] In today's world of education, the importance of considering and paying attention to the differences in student characteristics cannot be ignored in the importance of the learning and teaching process. The family environment also affects learning. Based on these problems, solutions are needed to overcome them. [5] That is, by looking at and observing the students' learning styles and the family environment. The way a person absorbs, organizes and processes the information received is by using the most practical learning style. The importance of the right learning style is a determining factor for the student's success in the learning process. [6-7]

Importance and need of the study

If students adopt proper teaching style then it will increase their academic achievement. This study will guide students to adopt proper teaching style for the development of their character. The academic achievement of students will improve only when they have proper teaching style. Therefore, the things considered in the present study are of great need and importance. [8-9]

Problem Statement

The statement of the problem in the present research is - Study of the effect of family environment of higher secondary level students on their learning style. (In the context of Mahasamund city)

2. Objective of the study

In the present research study, the researcher has conducted the study with the aim to achieve the following objectives -

1. Study of the effect of family environment of students studying in government school on their learning style.

2. Study of the effect of family environment of students studying in non-government school on their learning style.

3. Study of the effect of family environment of students studying in government and non-government school. [10]

4. Study of the effect of learning style of students studying in government and non-government school.

Hypothesis of the study

The hypothesis of the related research are the following hypothesis - In the present research study, the researcher has related the study of the problem

H_{01} - The family environment of the students studying in government schools will not be found to have a significant difference in their learning style. [11-12]

H_{02} - The family environment of the students studying in non-government schools will not be found to have a significant difference in their learning style. H_{03} - There will be no significant relationship in the study of the effect of family environment on the students studying in government and non-government schools.

H_{04} - There will be no significant relationship in the study of the effect of learning style on the students studying in government and non-government schools. [13]

Limitations of the study

The present research will be limited to the following parameters -

1. Mahasamund town of Mahasamund district of Chhattisgarh state has been taken for the study in this research. [14]

2. Students of class 11th and class 12th of higher secondary level have been taken in this study. [15]

3. Two government and two non-government schools have been taken for collecting data in this research.

4. Both male and female students have been selected randomly for the study. [16]

5. For the data in the study, 50 students of government school and 50 students of non-government school have been selected randomly. [17]

Research Instruments

In the present study, the following two instruments/test forms have been selected by the researcher as per the requirement for data collection. So that their real problem can be clearly presented to the researcher. The selected instruments are as follows:-

(1) The instrument of Family Climate Scale (FCS-$_{SB}$) created by Dr. Bina Shah has been used. (Related to family environment)

(2) The instrument of Learning Style Inventory (LSI-$_{MK}$) created by Dr. Karuna Shankar Mishra has been used. (Related to learning style)

Population of the study

In the present research, the researcher has studied the effect of family environment of higher secondary level students on their learning style (in the context of Mahasamund city). For the present study, four schools located in Mahasamund city area of Mahasamund district have been selected for the population. Out of which two government schools- (1) Govt. D.M.S. Higher Secondary School Mahasamund and (2) Swami Atmanand Utkrisht Government Hindi Medium Higher Secondary School Mahasamund have been taken. Similarly, two non-government schools- (1) Ma Gayatri Higher Secondary School Mahasamund and (2) Shyam Balaji Higher Secondary School Mahasamund have been taken. The total population of higher secondary level students studying in the above schools is 375, out of which 100 students have been selected by the researcher as per time and convenience. [18-20]

Sample of the study

Sample selection in the presented research study, the researcher has studied the effect of family environment of higher secondary level students on their learning style (in the context of Mahasamund city). For which four schools of Mahasamund city area have been selected for the sample. In which two government schools and two non-government schools have been selected. As per convenience, time and requirement of study, 100 students have been selected in the sample from the total number of 375 students studying in higher secondary level in these schools. [21-22] The details of which are shown in the table.

Table 1. Distribution of sample on the basis of school.

S.no.	Type of school (schools located in Mahasamund city)	Number of students of higher secondary level		Total
		11th	**12th**	
1	Government D.M.S. Higher School Mahasamund.	03	22	25
2	Swami Atmand Utkrisht Government Hindi Medium Higher School Mahasamund.	25	00	25
3	Maa Gayatri Higher School Mahasamund.	18	07	25
4	Shyam Balaji Higher School Mahasamund.	10	15	25
	Total	**56**	**44**	**100**

3. Sampling technique

In this research, the researcher has chosen random sampling method.

Analysis of data

In this research study, descriptive statistics like mean, standard deviation, standard deviation error have been used. Similarly, for logical analysis, t-test has been used.

Table, interpretation, conclusion-

Hypothesis number - 01

H_{01} - There will be no significant difference in the impact of family environment of students studying in government schools on their learning style.

Table 2. Statistical analysis of family environment and learning style of students of government schools.

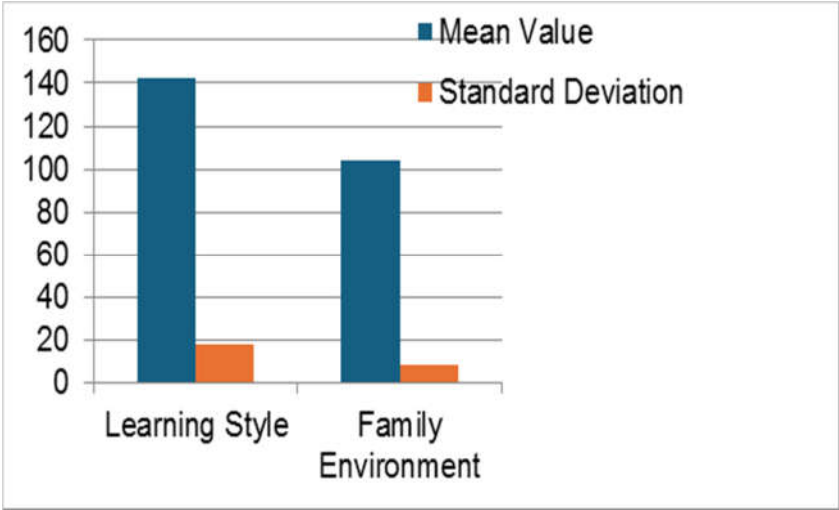| S. No.	Study Variables	Number of Students	Mean Value	Standard Deviation	Standard Deviation Error	Independent Frequency Fraction	t-value	Significance Level
1	Learning Style	50	142.1	18.31	2.85	98	3.43	0.05
2	Family Environment	50	103.98	8.52				

Fig.1. Diagram based on the mean and standard deviation obtained regarding the family environment and learning style of students of government schools.

To test the above hypothesis, 50 students of the higher secondary level studying in a government school have been taken as a purposive sample. Their study was done with the help of the research and psychological test form prepared instrument and the mean, standard deviation, standard deviation error of the original results were found and the t-value was found whose distribution is given in Table-01. In the above Table- 01, on the basis of the hypothesis and analysis of the data, the mean of the family environment of the students studying was 103.98 and the standard deviation was 8.52. Similarly, the mean of the learning style of the students was 142.1 and the standard deviation was 18.31. Also, the t-value obtained by calculation is 3.43. And the significance value at 0.05 level of significance of 98 df is 1.98. The t-value obtained by calculation is 3.43. Which is clearly more than the significance value at 0.05 level. Hence our hypothesis H_{01} is rejected.

Conclusion

There will be a significant difference in the effect of family environment of students studying in government schools on their learning style. That is, there is a significant relationship between family environment and the way students learn. Which affects the learning outcomes. On this basis, there is a need to know the need for proper guidance and solution to overcome the problems.

Hypothesis No. - 02

H$_{02}$- There will be no significant difference in the effect of family environment of students studying in non-government schools on their learning style.

Table 3. Independent frequency share statistical analysis of family environment and learning style of students of non-government schools.

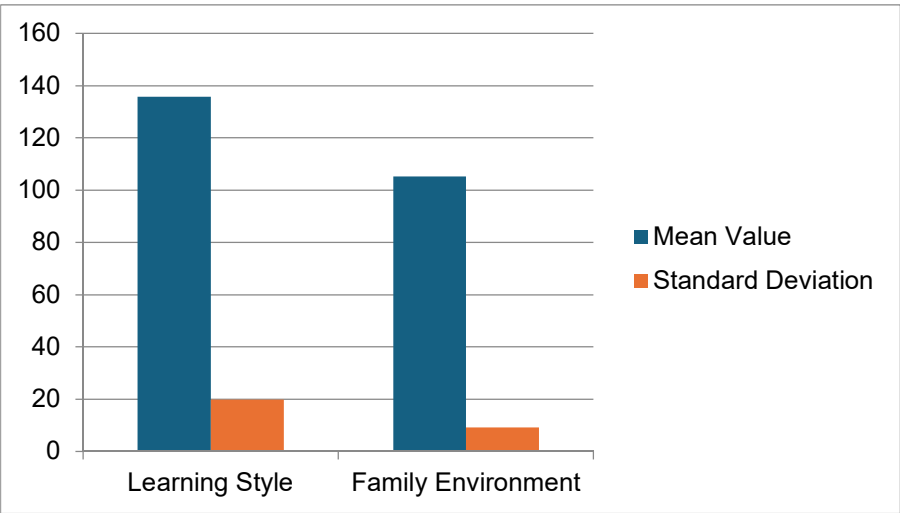| No	Study Variables	Number of Studens	Mean Value	Standard Deviation	Standard Deviation Error	Independent Frequency Fraction	t-Value	Significance Level
1	Learning Style	50	135.78	19.94	3.10	98	3.46	0.05
2	Family Environment	50	105.24	9.21				

Fig.2. Diagram based on the mean and standard deviation obtained regarding the family environment and learning style of students of private schools.

To test the above hypothesis, 50 students of higher secondary level studying in private schools have been taken as a purposive sample. Their study was done with the help of the instrument prepared by research and psychological test form. By finding the mean, standard deviation, standard deviation error of the original marks obtained. The value (t-value) was found whose distribution is given in Table-02. In the above table-02, on the basis of hypothesis and analysis of data, the mean of family environment of students studying in private schools was found to be 105.24 and standard deviation 9.21. Thus, the mean of learning style of students was found to be 135.78 and standard deviation 19.94. Also, the t-value obtained by calculation is 3.46. And the value of significance at 0.05 level of significance of 98 of df is 1.98. The t-value of obtained by calculation is 3.46. Which is clearly more than the significance value at 0.05 level. Hence our hypothesis H$_{o2}$ is rejected.

There will be a significant difference in the effect of family environment of students studying in private schools on their learning style. That is, learning style is a personal trait. Which affects the ability of students to acquire information, interact with peers and teacher and participate in other learning experiences.

Hypothesis No. - 03

H_{03}- There will be no significant relationship in the study of the effect of family environment of students studying in government and non-government schools.

Table 4. Statistical analysis related to family environment of students of non-government and government schools.

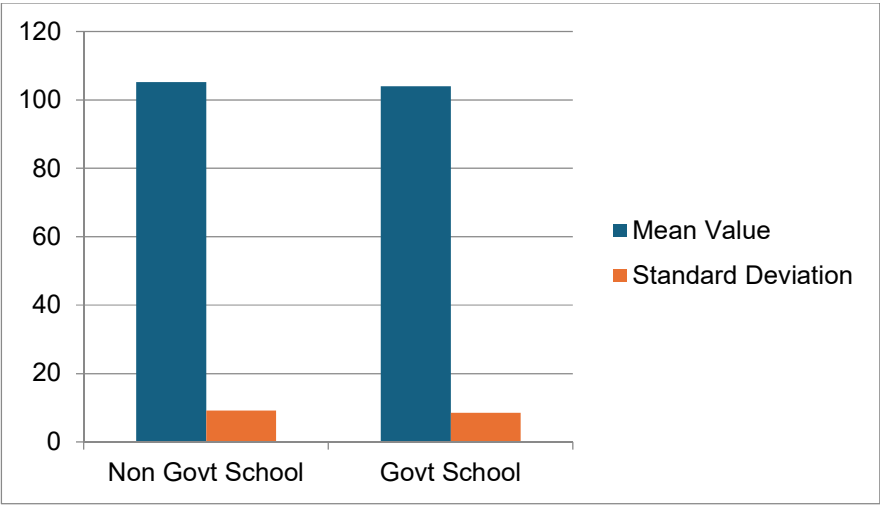| No	Study Variables	Number of Students	Mean Value	Standard Deviation	Standard Deviation Error	Independent Frequency Fraction	t-Value	Significance Level
1	Non Govt School	50	105.24	9.21	1.77	98	0.38	0.05
2	Govt School	50	103.98	8.52				

Fig.3. Diagram based on the mean and standard deviation obtained regarding the family environment of students of private and government schools.

To test the appropriate hypothesis, 50 and 50 students of higher secondary level studying in government and non-government schools respectively, thus 100 students have been taken as a purposive sample. With the help of the research and psychological test form prepared instrument, the mean, standard deviation, standard deviation error of the original scores obtained were found and the t-value (t-value) was found whose distribution is given in Table no.- 03. In the above Table-03, on the basis of the hypothesis and analysis of the data, the mean of the family environment of the students studying in government schools was 103.98 and the standard deviation was 8.52. Similarly, the mean of the family environment of the

students studying in non-government schools was 105.24 and the standard deviation was 9.21. Also, the t-value obtained by calculation of both the groups, government school and non-government school, is 0.38. And the significance value of df is 1.98 at 0.05 level of significance of 98. Thus, the value of α obtained by calculation is 0.38. Which is clearly less than the significance value at 0.05 level. Hence, our hypothesis is accepted.

No significant relationship will be found in the study of the effect of family environment on students studying in government schools and non-government schools. That is, in the present study, it was found that there is no significant difference between the learning styles and family environment related factors among the students of government and non-government schools.

Table 5. Statistical analysis of learning styles of students of non-government and government schools.

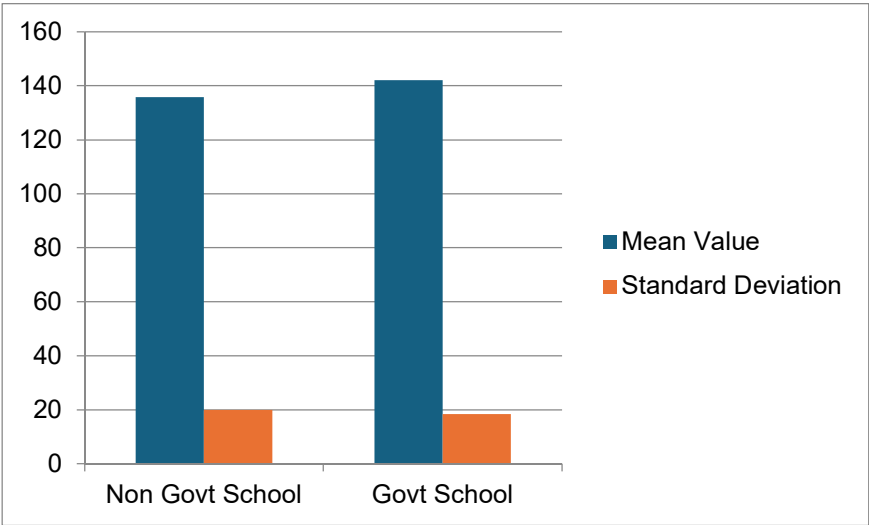| No	Study Variables	Number of Students	Mean Value	Standard Deviation	Standard Deviation Error	Independent Frequency Fraction	Value	Significance Level
1	Non Govt School	50	135.78	19.94	3.82	98	0.42	0.05
2	Govt School	50	142.1	18.31				

Fig.4. Diagram based on the mean and standard deviation obtained regarding the learning style of students of private and government schools.

To test the above hypothesis, 50 students, 50 students of higher secondary level studying in government and non-government schools respectively, and thus 100 students have been taken as a purposive sample. With the help of the research and psychological test form prepared instrument, the mean, standard deviation, standard deviation error of the original marks obtained were found and the t-value (t-value) was found whose distribution is given in Table- 04. In the above table-04, on the basis of the hypothesis and analysis of the data, the mean of the learning style of students studying in government schools was

142.1 and the standard deviation was 18.31. Similarly, the mean of the learning style of students studying in non-government schools was 135.78 and the standard deviation was 19.94. Also, the value obtained by calculation of both the groups, government school and non-government school, is 0.42. And the significance value of df 98 at 0.05 level of significance is 1.98. Thus the value of α obtained by calculation is 0.42. Which is clearly less than the significance value at 0.05 level. Hence our hypothesis Hoa is accepted.

4. Conclusion

No significant relationship will be found in the study of the impact of learning style of students studying in government schools and non-government schools.

That is, in the present study it was found that the learning style of students and the study related to family environment are affected by the variables.

Suggestions

In the present research, the findings of the study of the hypotheses formulated according to the problem have brought forth some new ideas, keeping this in mind, some suggestions are being given here. Which are as follows:-

Teacher-centered teaching approaches based on traditional methods and direct transfer of information to students should be replaced with student-centered approaches that are responsive to learning styles, individual differences, interests and abilities. This study is limited to the study of higher secondary level students and family environment. Future studies can adopt learning style based differentiated instructional activities in other class levels and courses. Education is a deliberate and planned effort to create a learning environment and learning process so that students can learn by actively being active in their potential. Its purpose is that they should have inner strength, good self-control, a strong personality, intelligence, good morality and skills that are important for them, communities, countries and nations. Students are given lessons suited to their learning style and if their social environment is better then their learning outcomes will also be better. Hence teachers and parents need to pay more attention to how students learn and what kind of education is given to them at home. There is a significant relationship between the family environment and the learning style of students which affects the learning outcomes. On this basis, there is a need to know the need for a proper guidance and solution to overcome the problems. The present study found that there is no significant difference between learning styles and family environment related factors among students of government and private schools. The learning styles of students of these schools are influenced by family environment related variables. Similarly, the family environment of higher secondary level students of government school and private school shows a significant difference in their learning styles. Thus, these dimensions of the study, home environment factors and learning styles factors such as tolerance towards the child's wishes, parental affection and

encouragement for independence etc. had positive and significant relationship with each form of family and learning styles.

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