

A study of family Climate and Academic Achievement of Secondary School Students of Odisha

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Abstract

The purpose of this study was to determine whether there is a connection between the family climate and student academic achievement in secondary school. With reference to their gender and locality. Further, it was also intended to find out the difference between the boy and girl students in terms of academic achievement. The researcher adopted a correlational research design for the study. 60 secondary school students of class X consisting of 30 boys and 30 girls from rural and urban areas were taken as a sample by random sampling technique. The research tools used for the study were Family Climate Scale and The student's academic achievement scores. data were analyzed by using Mean, standard deviation, Pearson product-moment correlation and t-test. The findings showed that gender and location were positively correlated with the family climate of secondary school students as well as their academic success. Moreover, the family climate of boy and girl students at secondary school did not differ significantly.

Keywords –family climate, academic achievement

Education is the key component for determining the progress of the nation. The main purpose of education is to educate the people within society. The more people become educated in society the more they can contribute to the development of the nation. So, it is the responsibility of society to provide good education to its member as it helps in their self-development and to contribute to their family as well as society in various aspects. Good education is the product of the teaching-learning process with the efforts of the teacher, school, students and also the family environment. Family being the first agency of socialization plays an important role in influencing the child. One can incorporate all the good habits and good manners from his family. In the teaching-learning process also family circumstances are determining the learning abilities of the child and lead the academic performance in different stages.

The true knowledge and skill acquired by the students in the school subject are generally known as academic achievement. The academic achievement of the students is affected by various family variables. Family climate plays a key role in the academic achievement of their children.

Family Climate

The family consists of a group of people who live together through marriage, blood relations within a single household, and interaction with each other. The family is a group of people living together through marriage, blood ties in one household and interaction with each other. The primary function of the family is to socialize the child. It also provides a proper environment for the growth of all the members of society, especially children. Family climate is a concise term, the word 'climate' includes the word 'environment' in itself. Family climate covers all the activities that can be physical, social and emotional, which plays a major role in shaping the lives of

children.

Academic Achievement

Brilliant performance in the academic field is one definition of academic achievement. By this, though, we normally mean that it is something that can be learned in a class at a school, college, or university. Due to the quest for excellent academic accomplishment, teachers and students are under great pressure today. As success is determined by academic achievement, keeping achievement within a specific set of constraints has become increasingly practical at all levels of education. Based on the student's prior academic performance, the class X students' academic achievement was evaluated. Students' performance on curriculum elements is reflected in their academic grades. which was collected through the prior test. That is study the researcher considers the previous grade point of the students.

Secondary school students

Secondary school students are those between the ages of 13 and 15. Currently, all areas of life are experiencing significant expansion. The past will have an impact on both the present and the future during this time of turmoil. Here, secondary school students represent those taking the state board examination for the X standard. Parental marital status and family size were highly correlated with academic performance. in addition, family type, family size and parental marital status significantly influenced students' academic performance. a significant association was found between girls' achievement and their mothers 'jobs. (Razei, Keshvari and Paki,2013., Egunsola,2014., Grewal,2014., Khan, Begum and Imad, 2019., Das, 2020.). A significant correlation was found between family climate and undergraduate students' academic achievement. It was also found that significant differences existed in the academic achievement of students having positive and negative family

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environments the cohesion. Increased improvement in academic success. (Rasmi, 2016). The familial environment, emotional development, and academic success of secondary school pupils are all significantly correlated. (Govindarajan,2018). the beneficial effects of a familial environment on students' academic performance. The study also showed that one of the elements influencing students' academic results was their familial environment. Makalu Senge and Umar (2020). When it comes to teenagers from economically disadvantaged backgrounds, there is little association between academic success and family dynamics. Additionally, it was discovered that academic success had a favorable relationship with the school environment. (kour,2019). Few articles found no significant relationship between academic achievement and the family climate of adolescents. In addition, gender was found to be significant in determining the family climate of the house (Mishra,2012., Appatu et al.,2017). The family climate had a significant impact on the academic achievement of adolescents and also family climate had a positive correlation with parental encouragement (Marulasiddappa,2022., Naushad, 2022.Sanoji and Wani (2018, Rais,2011., Akomolaf,2011, and Verma,2017).) School achievement was independent of family climate and support from parents. (Shafeeqetal,2015). It has a significant impact on the adjustment of children with special needs. (Punia, 2017) The gender difference in the educational outcomes of standard IX students is not substantial and there are no significant differences between those who achieve at a higher level with regard to location. (maître and Singh,2020., Yunus and Baba,2014). Further male and female students concerning their family climate, study habit and academic achievement are found Tobe different. (Algawe,2020). Regarding their familial environment and academic success, there was a substantial difference in the mean scores between male and female adolescents (Aslam.2018). Healthy families, family relationships, and family functioning all had a significant impact on the pupils' emotional intelligence (Bhatia.2012). Government and government-aided schools significantly improved family climate, according to Singh and Devi. (2018). Additionally, due to extremely satisfied and extremely dissatisfied families, there is a substantial disparity in the home and health adjustment of pupil climate (Sharma, 2013).

Objectives

The following were the major objectives of the study:

1. To examine the link between male secondary school academic achievement and their family climate.
2. To establish the relationship between secondary school female students' family environment and their academic performance.
3. To explore the relationship between family climate and secondary school students' academic achievement in rural areas.

4. . To investigate The relationship between the family environment and the educational performance of secondary school students in urban areas.
5. To find out the differences between the mean score of the family climate of boy students and girl students.
6. To explore the differences between mean scores of academic achievement of boy students and girl students.

Hypotheses

The following was the hypothesis of the present study:

- There is no correlation between the family climate and the academic performance of boys' secondary school students.
- There's no correlation between academic performance and a girl's family climate in secondary school.
- In respect of rural areas, there is no correlation between the family climate and the level of education acquired by secondary school students.
- There is no correlation between students' academic results at secondary school in urban areas.
- There exists no difference between the mean scores of the family climate of boy students and girl students.
- There is no difference in the performance of boys and girls when it comes to academic achievement.

Method

Design of the Study

In the present study, The Correlational Method has been implemented in order to determine the relationship between family climate and student achievement at high school.

Population

All X standard secondary school pupils in the paikmal block made up the population for this study.

In the current study, a sample of 60 pupils from paikmal block's X standard, including 30 males and 30 girls, was selected using a simple random selection procedure.

Instrument

The research tool used in the present study was the 'Family Climate Scale' prepared and standardized by Shah (1990) and academic achievement scores i.e, marks of previous examinations of secondary school's students. Family Climate Scale consisted of 90 items of which 42 items were positive and 48 were negative. This is a three-point scale which used always, sometimes and never as response options.

Validity and Reliability This scale's reliability was examined in comparison to the opinions of 20 judges. The items were chosen based on the opinions of

specialists, and the highly significant discriminative indices of every item retained in the FCS final formulation verified the validity of the scale. The dependability coefficient's values were all highly significant (P.001) at all times. As a result, the FCS was a trustworthy tool.

The Procedure of Data Collection

For collecting their required data, there searcher personally visited the field with the prior permission of the authority concerned. The investigator met the respondents explained to them the purpose of the study and collected the data. After collecting the data, she conveyed her thanks to the respondent

Method of Data Analysis

For data analysis, descriptive as well as inferential statistics were employed in this study. The descriptive statistics of mean, standard deviation and Pearson product-moment correlation while the inferential statistics of t-test were used for analyzing the data.

Table-1 Correlation between family climate and academic achievement of secondary school boy students.

Variable	No. of Students	Correlation 'r'	Level of significance
Family Climate	30	0.488	Significant at 0.05 level of significance
Academic Achievement			

Table:2 Correlation between Family Climate and Academic Achievement of Secondary School Girl Students.

Variable	No. of Students	Correlation 'r'	Level of significance
Family Climate	30	0.25	Not significant at 0.05 level of significance
Academic Achievement			

According to Table 1, there is a substantial correlation between boys' academic performance and family atmosphere. Therefore, the Null Hypothesis is disproved. This suggests that there is a link between boys' academic performance and their family climate at the secondary school level

Table-2 shows that the "r" value of the above table is 0.438 which is significant at a 0.05 level of significance. Therefore, it concludes that a positive correlation exists between Family climate and academic achievement. The null hypothesis is rejected because there is no significant relationship between family climate and academic achievement

Table: 3 The correlation between the two variables can be seen For students in rural communities, academic quality and the family climate continues to be a major

Table-3 To explore the relationship between family climate and secondary school students' academic achievement in rural areas.

Variable	No. of Students	Correlation 'r'	Level of significance
Family Climate	30	0.438	Significant at 0.05 level of Significance
Academic Achievement			

factor. This could lead to the null hypothesis being disproved. This shows a positive relationship between the academic success of rural secondary school students and their family environment.

Table-4 shows the relative value of family climate and academic achievement at the secondary level was 0.623. which is not more than the table value There are no significant school students in urban areas. This is

Table-4 Relationship between the family climate and the academic performance of secondary school students in urban areas.

Variable	No. of Students	Correlation 'r'	Level of significance
Family Climate	30	0.623	Significant at 0.05
Academic Achievement			

the significance level of 0.05. We, therefore, accept the null hypothesis.

Table-5 Comparison of Mean Score between Boys and Girls students concerning their Family Climate.

Group	N	Mean	S.D	t-value	Level of Significance
Boys	30	95.16	13.8	0.66	Not significant at 0.05 level of significance
Girls	30	97.83	18.4		

Table-5- depicts the comparison of average scores between male and female students on their family climate. The data show that the "t" value is 0.66 at a 0.05 level of significance, the calculated "t" Value is not significant. Therefore, there is no significant difference in the family climate between male and female students. Here, the null hypothesis is accepted.

Table-6 Comparison of Mean Score between Boys and Girls Students concerning their Academic Achievement.

Group	N	Mean	S.D	t-value	Level of Significance
Boys	30	64.83	13.5	0.25	Not significant at 0.05
Girls	30	63.85	13.6		

Table-6 Comparison of the academic performance of male and female students. The data shows that the “t” value is 0.25 at a 0.05 level of significance, the calculated “t” value is not more than the table value thus the “t” value is not significant. Based on the above data, it can be concluded that boys and girls are similar in their academic achievements. The null hypothesis is therefore found to be valid.

Discussion

According to the study's findings, there is a considerable link between secondary school students' academic success and their family environment, regardless of their gender or location. In terms of the students' familial environments, there is no discernible mean difference between the genders of the pupils. Boys and girls in high school so have similar household environments. Boys and girls in the secondary school achieve academically similarly, with no discernible differences. The majority of the relevant literature (Akomolaf, Rais, 2011, Bhatia, Gartia, 2012, Kaur, Sharma, 2013, Grewal, 2014, Verma, Punia, 2017, Govindrajan, Sanoji and Wani, Singh and Devi, 2019, Khan, Begum and Imad, 2020, Das, and Makalusenge, 2020, Kaur, Naushad, 2022) has reached similar conclusions. The related literature which had found no significant relationship between family climate and academic achievement (Yunus and Baba, 2014, Shafeeqetal.,2015, Pappattuetal.,2017, Marulasiddappa,2022).

Recommendations

Similar studies can be carried out with a combination of related factors, such as study habits, parental encouragement, family type, and emotional maturity, taking them as independent variables, because academic achievement is influenced by various factors. Participants from every age group can be included in such a study. These studies should also be broadened to include vocational or personal objectives, and not limited only to academic purposes.

Conclusion

According to the current study, secondary school kids' academic performance and home atmosphere are significantly correlated. Therefore, to boost their educational achievement, the home environment's quality should be improved, which calls for parents to provide their kids with more of their undivided attention. For pupils to participate fully in modern society, there are several obstacles they must currently overcome. Children's motivation to deal with those challenging conditions is greatly influenced by their

parents, families, and teachers.

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