Research Paper   Education

The Correlates of Academic Achievement in Adolescents

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ABSTRACT

The family is the first school where a child learns his initial lessons of life. The strongest factor in molding a child's personality is his relationship with his parents. The present study is aimed to study the family climate of the family of adolescents in relation to their family gender and academic achievements. A total of 109 adolescents (63-Boys and 46-girls) were randomly selected for the study. The tool used for this study was Family Climate Scale (FCS) developed by Dr. Beena Shah. This tool access the family climate on 10 different dimensions. Academic scores were taken from the school records. The analysis of the data was done using one way ANNOVA and calculation of correlation coefficient. It was found that though there is no significant correlation between academic achievement and the family climate of the adolescents, the gender was found to be significant in determining the family climate in the house. This indicated that there still exists the social discrimination on the basis of gender in families. It was recommended that the parents and teachers should play a deciding role in curbing this social divide in the society.

Keywords :

Introduction & Literature Review

It is a common belief that home environment plays a significant role in overall development of the child. The family is the first school where the child understands himself and discovers the magnificence of the world around him. The families in general and parents in particular, have often been deemed to be the most important support system available to the child. The strongest factor in molding a child's personality is his relationship with his parents. Though the importance of home environment cannot be overruled during any of the developmental stages of the child, there is a special need of support during the adolescent period. Adolescent is a period of storm and stress. Poets have described it as the spring of the human life span. The child experiences a number of changes in this transitional period of his growth and development. Adolescents have a reputation of getting along poorly with their families. The teenage boy or girl may be faced with serious problems of adjustment when there is a difference of opinions, ideals and attitudes with their parents. As soon as the child enters the adolescence, his social roles and responsibility change. Change of role requires adjustment to new situations in a different way by changing the old habits of childhood in home, school and society. The change over to a new pattern of habits creates emotional tensions in adolescents. It is this emotional aspect which is to be cared by the parents. Conflicts may arise between the adolescent and the parents that are difficult to resolve if neither is willing nor able to compromise. It takes all the tact and understanding of parents to handle their teenage son or daughter.

In a study titled, "Home environment, self-concept, and academic achievement: A causal modeling approach", John Hattie investigated the relation between home environment, self-concept, and academic achievement in 2,297 14–15 yr old Koreans and found that though the home environment does not exert direct effects on academic achievement, but social status indicators had indirect effects on self-concept via family psychological characteristics. Also, academic self-concept affected academic achievement more strongly than did social self-concept. School adjustment was found to be related to family climate in a research by Kurdek, Sinclair and others where they studied the adjustment to the school context and factors from both family context and peer context of sixth graders. Rani Mahanraj and Latha studied the relationship between family environment, the home adjustment and academic achievement in adolescents and found that family environment appeared to influence home adjustment as well as academic performance. Jagpreet Kaur, J. S. Rana and Rupinder Kaur studied the academic achievement and home environment as correlates of self concept in 300 adolescents and concluded that there is significant positive relationship of home environment with self-concept which is not significantly correlated with academic achievement.

In studies related to academic achievement or family climate, gender played no significant role. But the researcher wanted to study this aspect also in Indian scenario. In a study titled "Gender, education and child labour: A sociological perspective", Bilal Ahmad Bhat (2010) mentions that in India, boys and girls are assigned different societal roles and experience different perspectives of life as a result of their being male or female. Such differences have a gigantic impact on their lives.

The discrepancies in terms of gender, its effect on family climate and subsequently on the academic achievement are the core aspect of the present study.

Problem of the Study

In the present study, the researcher wanted to study the family climate of adolescents in relation to their gender. The present study also deals with the correlation between the family climate and academic achievement of the adolescent.

The study was designed to test the following hypothesis:
• There is no difference in family climate for male and female students.
• The family climate and academic achievement are not significantly correlated
• The academic achievement and gender are not significantly correlated

Methodology

The study is essentially a survey, and the instrument of data collection was Family Climate Scale (FCS) developed by Dr. Beena Shah. This tool access the family climate on 10 different dimensions. Academic scores were taken from the school records. This test was personally administered to the students of grade 9.

For this study, the researcher had selected the 109 students of grade 9 from eleven secondary schools of Aurangabad city using stratified random sampling technique.

The statistical analysis technique used in testing the hypotheses was one-way analysis of variance (ANNOVA). All the hypotheses were tested at 0.05 level of significance.

Data Analysis and Results:
The data was tabulated and was analyzed using one-way AN-NOVA. The result of the family climate in a nutshell for the students is shown in the table below.

	Favorable	Unfavorable	Total
Boys	42	21	63
Girls	16	30	46
Total	58	51	109

Table 1: Family Climate and Gender

The above table clearly indicates that more number of boys enjoy a favorable family climate as compared to the girls. The data was tested statistically for generalizations.

The testing of the hypothesis is presented one by one.

Hypothesis one: There is no difference in family climate for male and female students.

The data regarding the gender was collected though the preliminary information column of the answer sheet provided during administering the scale for assessing the family climate of students. The Family climate score was calculated by the response received from the students.

To test the hypothesis, one-way analysis of variance (ANNOVA) method is used, as one variable (gender of adolescent) is dichotomous. The result of one-way ANNOVA is shown in table below:

Source	DF	SS	MS	F	P
Gender	1	3.087	3.087	13.77	0.000
Error	105	23.548	0.224		
Total	106	26.636			

Table 2: One way ANOVA: FCS versus Gender

Notations: DF is for degree of freedom, SS is for Sum of square, and MS is for Mean of Square

The P- Value obtained in the above table is 0.000. This P-value is less than 0.05 which indicates that there is a significant relationship between independent and dependent variable. This implies that there is a significant relationship between gender and the Family Climate of the student.

Hence Hypothesis one is rejected.
Hypothesis two: The family climate and academic achievement are not significantly correlated

The academic achievement of the adolescents was collected using a self made table and was tabulated with the family climate.

To test this hypothesis, one-way analysis of variance (ANNOVA) is used. The result of one-way ANNOVA of Family Climate score and academic score is shown in table below:

Source	DF	SS	MS	F	P
Academic Score	34	8.563	0.252	1.00	0.481
Error	72	18.072	0.251		
Total	106	26.636			

Table 3: One way ANOVA: FCS versus Academic score

Notations: DF is for degree of freedom, SS is for Sum of square, and MS is for Mean of Square

From the table no. 2, the P value associated with academic score is 0.211 which is more than 0.05. It implies that Academic Score of adolescents is not affected by family climate.

Hence Hypothesis two is rejected.
Hypothesis three: The academic achievement and gender are not significantly correlated

To test this hypothesis, one-way analysis of variance (ANNOVA) is used. The result of one-way ANNOVA of Academic score and gender is shown in table below:

Source	DF	SS	MS	F	P
FCS	1	0	0	0.00	0.985
Error	105	11358	108		
Total	106	11358			

Table 4: One way ANOVA: Academic score versus Gender

Notations: DF is for degree of freedom, SS is for Sum of square, and MS is for Mean of Square

From the table no. 2, the P value associated with academic Score is 0.985 which is more than 0.05. It implies that Academic Score of adolescents is not affected by gender.

Hence Hypothesis three is rejected.
Findings & Recommendations
The present study concludes that Academic Achievement is not significantly related to the gender of the adolescents. Also the academic achievement is not significantly related to the family climate of the adolescents so, it can be concluded that, the family climate plays no significant role in determining the academic achievement. But this study highlights that family climate is significantly related to the gender. The boys are favored and given a more conducive and positive family atmosphere as compared to the girls. The age old gender bias is still very much prevalent in India. There is a need for creating awareness to curb this bias and help the girls in the family be treated at par with their male counterpart.

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