

Study of Academic Achievement in Relation to Family Environment among Adolescents

Rajesh Kumar¹, Roshan Lal²

ABSTRACT:

The adolescent is the real capital of any society and we should protect and preserve it for the betterment of the society and nation. The present study is an attempt towards examine the pattern of relationship between the academic achievement and family environment. The research was carried out of 200 adolescents in the age group of 15 to 18 years. The researchers used academic achievement scores which were the aggregate percentage of marks from the previous two classes, serve as indicators of academic achievement. Moos (1974) Family Environment Scale (FES) was used to study the impact of family on adolescent's academic success. The academic scores of girls were found better than the boys while boys lead the girls on family environment scores where the t-value was significant at 0.01 levels. There was a clear cut difference between the scores of high and low groups and the t-value was again significant at 0.01 levels. The obtained results indicate that the adolescent experiencing healthy family environments are found to have higher academic achievement in comparison to children belonging to low family environment.

Keywords: *Academic Achievement, Family Environment, Adolescent.*

INTRODUCTION

Adolescence is viewed as a period of increased diversity of social roles, with expectation from diverse role relationships, some of which may be in conflict. Many of these theories reflect the magic of adolescence. In the works of Hall, Erickson, Piaget and others, there is a clear message about the emergence of a potential for changing the course of social evolution in adolescence. At many levels, such as sexual activity, logical thinking, moral philosophy, and definition of personal identity, adolescents have the possibility of making new choices and new solutions that will change the course for themselves and for others.

Adolescence is a period when rapid changes occur in the physical and psychological development of an individual. It is considered as a period of 'storm and stress'. The adolescents are in the process of deciding their goals, priorities and values. These decisions go a long way in influencing their cognitive styles, which include personal opinions, experiences, ideologies, beliefs etc to make the judgment about the situation.

¹Assistant Professor, Department of Psychology, Post Graduate Government College-46, Chandigarh.

²Assistant Professor, Department of Psychology, Panjab University, Chandigarh.

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According to Mc Candles (1970) “Adolescence is both a time of drastic change and a part of the continuous stream of human development. Adolescence is a bridge period, a time of shifting from one stage to another.”

The home and the school are the two important institutions that prepare children to become functional members of society. Society places great importance on educating its youth, recognizing that the acquisition of specialized skills and knowledge facilitates upward social mobility. Human child cannot grow up without some adult care and love. We would say that love includes delight in being with, desire to be with, desire for contact and response and tendency to give to the other person.

Academic achievement is the major concern of educational policy makers of every country. It has been accepted that environment both inside and outside the school in which the child grows has a great influence on the academic achievement of the students. Among them, socio economic status, social phobia, anxiety, learning disabilities, parent styles, learning styles, classroom climate etc. are some such variables. So care should be taken to increase the rate of achievement and find out the hindrances that decrease the achievement rate.

Academic achievement is defined by Crow and Crow (1969) as the extent to which a learner is profiting from instruction in a given area of learning or in other words, achievement is reflected by the extent to which skill and knowledge has been imparted to him. Academic achievement also denotes the knowledge attained and skill developed in the school subject, usually designed by test scores. The level of achieving is how far a student succeeds in a particular exam or standardized test (Reber, 1985).

Sharma et al. (2011) defined academic achievement as the outcome of the training imparted to students by the teacher in school situation. Halawah (2006) opined that academic achievement is accomplished by actual execution of class work in the school setting. It is typically assessed by using teacher’s ratings, class tests and examinations hold by the academic institutions or by the educational boards. Academic achievement is positively related with motivation and family environment.

Academic achievement is the maximum performance in all activities at school after a period of training. Achievement encompasses student’s ability and performance; it is multidimensional; it is intricately related to human growth and cognitive, emotional, social, and physical development; it reflects the whole child; it is not related to a single instance, but occurs across time and levels, through a student’s life in public school and on into post secondary years and working life.

Bogensneider (1999) viewed that parental involvement was a force on achievement. Parents who are more involved in their adolescent’s schooling regardless of parent’s gender or educational level have offspring who do better in school irrespective of the child’s gender, ethnicity or family structure. Parental involvement works for everyone.

During the past few decades family environment had been identified as being a contributing factor in a child’s educational, cognitive and affective development. Families vary greatly in structure and functioning. Variations exist also in school and in children themselves. Given this diversity in families, there is a need to understand how children's experience within the family contributes to their educational outcomes.

One of the major socializing agents which contribute a potent source of impact on him is his immediate family. Family is the child's world in which the personality is shaped and his character is formed and within the family the interactional factors play upon him and influence his personality to a great extent. The training provided in the home is practical rather than

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theoretical. It provides most conducive environment for the development of the virtues which humanize the children's life.

Because of its pre-eminence the family probably has the greatest influence on a child's future life than any other agent. All schools of thought, involved in the study of personality are in agreement that child imitates his parents; his acquisition of pictures of social roles and his tendency to act out in later relationship are all associated with his interaction with his parents. This interaction lets us comprehend the resultant personality characteristics, if dealt with, in a particular parents-behaviour toward child rather than in a general theoretical way. Since few researches in India have attempted to focus on the influence of changing family environment, there is need to study how different family process variables like cognitive stimulation, achievement orientations recreational orientation and home structure, relate to academic achievement of students.

Family is the environment where the children learned to use their faculties and understand and cope with the physical world. It is time when they don't bother with trivial things, such as the family relationship, because they know they are the kingpin of their family. It is the place, where they learn how family relationship work, by observing their parents, grandparents, siblings and rest of the family members deal with each other. They enjoy meeting them on family vacations and family reunions and exchanging family reunions gifts with them. Healthy family relationships, Home cosines, and love of the dearest people, understanding and care.... everybody needs in this life.

In family we get education, learn lifetime values and obtain strength needed to become personalities. When we grow, we learn to respect people who live close to us. We observe our parents and then we either follow their example or choose our own path in life. Hence family relationships start showering their colours of the family members.

In favorable circumstances, adolescents acquire critical adaptive skills in the family among friends, and in the neighborhood but most will needed added skills gained through systematic instruction and practice in the classroom. Teaching skills in the areas of time and finance management, health and nutrition, parenting and family relations, job preparedness, decision making and coping strategies would help children acquire the knowledge, ability and attitudes necessary for success in life. The relationship between perceived parental involvement and adolescent psychological well being is based on two realities. The first reality, the home environment, is the initial social arena in which adolescents have remained more consistently under the influence and supervision of their parents. Later, these individuals begin to seek on alternate reality, separating from parents and seeking inclusion with peers during adolescence (Santrock & Yussen, 1984). Adolescents begin building their own self-concept through observing the reactions directed toward them by vital individuals in their lives (Gibson and Jefferson, 2006). Parental involvement remains critical to the adolescent- parent relationship, because the level of involvement signals to youth their importance to the parents (Gecas & Schwalble, 1986). Furthermore, when parents give efforts to increase their knowledge of adolescents behaviours, interests and activities, it emphasis parental caring and supports the adolescent-parent relationship (Stattin & Kerr, 2000).

Moula et al (2010) explored the relationship between academic achievement motivation and home environment among standard pupils. The results indicated a low but positive relationship (0.15) of parental education with academic achievement of the students that revealed a positive relationship between parental education and academic achievement of their children.

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Kazmi et al. (2011) evaluated the impact of father's style of dealing with their children at home and their academic achievements at school. The results of this study revealed father's involvement had positive significant relationship with academic achievement of their wards.

On parental involvement and academic achievement, studies have shown to date that the two constructs seems to be positively related. Findings have demonstrated that parent's involvement in the education of the children has been found to be of benefit to parents, children, and schools (Tella and Tella, 2003; Campbell, 1995). Zhang and Carrasquillo (1995) also similarly remarked that when children are surrounded by caring, capable parents and are able to enjoy nurturing and moderate competitive kinship, a foundation for literacy is built with no difficulty. We can state that the more intensively parents are involved in their children's learning; the more beneficial are the achievement effects. Thus, it is believed that when parents monitor homework, encourage participation in extracurricular activities, are active in parents-teacher associations, and help children develop plans for their future; children are more likely to respond and do well in school.

Therefore it can be summed up that home environment including parental encouragement, involvement, parental interest, behaviour, parental aspirations, parenting skills and parenting styles have direct influence on the academic achievement of the students. Parenting styles are found to be more important that influence significantly the educational achievement of the students. Educated parents provide conducive home environment that entails parent encouragement that proves to be catalyst in boosting and maintaining achievement motivation among the students that in turn influence their academic achievement.

METHODOLOGY

Objectives

1. To study the academic achievement of adolescents.
2. To study the family environment of adolescents.
3. To study the interaction effect among all the variables under study.

Hypotheses

1. It is hypothesized that there exists significant difference in the academic achievement of male and female adolescents.
2. It is hypothesized that there exists significant difference in the family environment of male and female adolescents.
3. There lies positive interaction effect among all the variables under study.

Sample

A convenient random sampling technique was used for present sample of 200 students at Secondary and higher secondary school level selected from various secondary and higher secondary schools of Chandigarh, Mohali and Panchkula, including male (n = 100) and female students (n = 100). The age ranges from 15 to 18 years. As per the requirement of 2x2 cells (50 in each cell of the paradigm) the sample of 200 adolescents was chosen. In the end the researcher thanked the participants for their valuable cooperation.

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Tools

The following tools were used in the present study to obtain reliable data:

Family Environment Scale: The Family Environment Scale (FES), which is development by Moos (1974). It consists of 90 true/false questions divided into three dimensions and 10 subscales. In the Relationship dimension are three subscales: cohesion, expressiveness, and conflict. The Personal Growth dimension consists of five subscales: independence, achievement orientation, intellectual cultural orientation, active-recreational orientation, and moral-religious emphasis. The System Maintenance dimension includes two subscales: organization and control. This instrument has good internal consistency with alphas that range from 0.74 to 0.87 for three subscales and the overall stability is very good with two-week test-retest reliabilities that range from 0.77 to 0.92 (Hill, 1995). In the current study, the internal consistency was 0.71, 0.74, and 0.75 for the Relationship, Personal Growth, and System Maintenance subscales respectively.

Academic achievement: The aggregate percentage of marks from the previous two classes, serve as indicators of academic achievement. Academic achievement of the students was collected by giving them self constructed information sheets, in which they had to given the aggregate marks of the previous two classes.

Procedure

To study academic achievement of school going adolescents the researcher will visited different schools of Chandigarh, Mohali and Panchkula for which the prior permission was obtained from the concerned school authority. After selecting a convenient group of adolescents the test scores, obtained by the students, were collected by providing a self constructed information sheets in which they had given the aggregate marks of previous two classes. The scores were then categorized into, by calculating median, high academic scores and low academic scores. Thereafter, the family environment scale was administered with each group of adolescents.

RESULTS AND DISCUSSION

The Results of Statistical Analysis of Research Data are presented in this Chapter. The data was analyzed and interpreted using statistical techniques such as: Mean, Standard Deviation, t-test, and the detail of the analysis, interpretation of data and discussion of results are presented as below:

Table No. 1: Shows Means, Standard deviation and t-values among boys (N= 100) and girls (N= 100)

Dimensions	Gender	Mean	Standard Deviation	t-value
Academic Achievement	Boys	65.39	13.70	-.688
	Girls	66.87	15.07	
Family Environment	Boys	54.19	9.63	2.143*
	Girls	51.28	8.55	

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The results have been calculated on the various aspects. Firstly the descriptive statistics was used. The mean was calculated on the basis of gender. The results have concluded that the mean score for males on academic achievement is 65.39 and that of female is 66.87. These results are supporting the statement as “The world has changed around boys, and they have not adapted as well as girls, said Claudia Buchmann, professor of sociology at Ohio State University and co-author of the book *The Rise of Women: The Growing Gender Gap in Education and What it Means for American Schools*. The present study reveals that recent claims of a “boy crisis,” with boys lagging behind girls in school achievement, are not accurate because girls’ grades have been consistently higher than boys’ across several decades with no significant changes in recent years. As for why girls perform better in academics than boys, the researcher speculated that social and cultural factors could be among several possible explanations. Parents may assume boys are better at math and science so they might encourage girls to put more effort into their studies, which could lead to the slight advantage girls have in all courses. Gender differences in learning styles are another possibility. Previous researches have shown girls tend to study in order to understand the materials, whereas boys emphasize performance, which indicates a focus on the final grades. Mastery of the subject matter generally produces better marks than performance emphasis, so this could account in part for males’ lower marks than females.

Women now far outnumber men among recent college graduates in most industrialized countries (OECD, 2008). As Goldin, Katz, and Kuziemko (2006) observe, the puzzle is: “Why have women overtaken men in terms of college completion instead of simply catching up to them?” The growing female dominance in educational attainment raises new questions about gender disparities arising throughout school-ages. Girls have long obtained better grades, on average, in high school than boys.

The probability that parents would raise their female children with totally different standards and parental behaviour than those from their male children is improbable, and unsupported by any data. On the other hand, there is evidence that in the same family a smart boy will get grades of about 20% lower than his similarly smart sister.

That the problem lies in recent social problems in families, particularly the increased number of single parent families and greater numbers of children from divorced parents. There are at least two problems with this theory. One is that girls are also affected by families under stress. The other is that the issue of academic underperformance of boys is well documented in two-parent traditional nuclear families where no family stress has occurred.

Both boys and girls perceive that teachers as favouring girls over boys, according to The Metropolitan Life Survey of the American Teacher, 1997 (11).

- Both girls (57%) and boys (64%) say the teacher pays more attention to girls.
- Girls who raise their hands see themselves as getting called on "often," by greater margins (72% vs. 66%), than boys.
- More boys than girls (31% vs. 19%) feel that it is "mostly true" that teachers do not listen to what they have to say.
- Boys demand more attention in class than girls, according to the majority (61%) of teachers.
- And teachers (47%) say that girls asked for more help after class.

If we consider the physiological neural development/structure of girls than it is found that girl's corpus callosum (the connecting bundle of tissues between hemispheres) is, on average, larger than a boy's—up to 25 percent larger by adolescence. This enables more “cross talk” between hemispheres in the female brain.

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At the same time, most teachers, parents, and other professionals involved in education know that it is mainly our boys who underperform in school. Since 1981, when the U.S. Department of Education began keeping complete statistics, we have seen that boys lag behind girls in most categories. The 2000 National Assessment of Educational Progress finds boys one and one-half years behind girls in reading/writing (National Center for Education Statistics, 2000). Girls are now only negligibly behind boys in math and science, areas in which boys have historically outperformed girls (Conlin, 2003).

Also, the mean of family environment of males is 54.19 and that of females is 51.28. Therefore, it can be seen through the scores that the mean score of females on academic achievement is high as compared to males. The reason may be that girls are equally sharing the academic opportunities and they are proving themselves in all the respective areas of education and leading the boys. Girls are not allowed much in outdoor activities and so they keep themselves busy in their academics.

According to Lumpkin and Favor (2008), did a study to find out the academic achievement separately on 5 different areas like English, Mathematics, Science, Reading and Composite between female athletes and male athletes. The mean score of female was high on 3 subjects that is, on English, Reading and Composite.

The boys mean score is high on family environment as compared to the scores of females. The mean score of boys was 54.19 and for girls it was 51.28 and the t-value (2.143) is significant at 0.01 levels. The standard deviation of males in family environment is 9.63 and that of female scores is 8.55, which means that the deviation of males is more in relation to family environment than the female score. The reason may be that ours is a male dominated society and the males take more and more external and family responsibilities of their family and developing a tendency to cater the family needs and demands as per the requirements. This shows their leadership skills and decision making caliber which makes them able to involve in number of family tasks and supporting in all possible respects. It is the place, where they learn how family relationship work, by observing their parents, grandparents, siblings and rest of the family members deal with each other. Though the girls mean scores is also close to their boys counterpart. This also reveals that the girls are also contributing in catering the family environment. Family environment has been conceptualized as the quality of human interactions, from the point of view of the child. It includes those aspects which foster growth and development, such as family trust and confidence, sharing of ideas, making discussions, parental approval, affection and approval of peer activities. The obtained means and t-value shows that Parents having strong bonding with their children provide them with a secure atmosphere in which to perceive life as a series of challenges that build confidence, rather than as a progression of unsolvable problems that destroy self worth. When households are unmanaged emotionally, family relations jam up.

The family environment also affects the academic achievement, which is the product of maturational forces within the adolescent and the experiences provided by the environment (Bernard, 1971).

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Table No. 2: Means, Standard deviation and t-values among High (N=100) and Low (N=100) groups

Dimensions	High/Low	Mean	Standard Deviation	t-value
Academic Achievement	High	78.10	10.059	20.217**
	Low	54.16	5.005	
Family Environment	High	56.12	8.461	5.301**
	Low	49.34	8.692	

The mean and standard deviation was also calculated on the basis of high and low groups. The female high and low group was formed separately and male high and low group was formed and then the mean and standard deviation was calculated respectively. The mean of the high group on academic achievement is 78.10 and the mean of the low group on academic achievement is 54.16. The mean of academic achievement of high group is more than that of the low group. The standard deviation of the high group on academic achievement is 10.05 and 5.00 of the low group. The obtained 't' value is 20.217 and this is found to be significant at .01 level. The obtained scores show that the high group is having healthy family environment, cooperation and support from their family. This shows that the parents are very much involved in the academics of adolescents (both boys and girls). They have every check on the academic and other activities of their wards. The family is aware about the short comings of these adolescents and tries to rectify their academic hurdles. This may be the reason that these adolescents are high in academic achievement.

Factors of independence and conflict emerged as predictors of academic achievement. Independence positively contributes to academic achievement. When adolescent perceive their families as self sufficient, having freedom to make their own decisions then academic performances increases.

Families of successful students showed high achievement orientation and organization in the family regardless of social class (Paul, 1988). Steven (1990) showed a concomitant relationship between family environment and school outcome variables. The results of Whitehead and Deborah (1991) study indicated that best predictor of grade point average was the intellectual cultural orientation of the family environment.

On the other hand, the low academic achievers may not have proper and required health family environment. The reason may include their low SES, working conditions of parents and family, educational status of parents etc. Adolescents have a poor 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. 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 (Coleman, 1974). Families of delinquent or uncontrollable adolescents are characterized by poorer family relationships and less social connectedness. In general, these families are lower on cohesion and independence and higher on conflict and control (Fox et al., 1983). The family environment also affects the academic achievement, which is the product of maturational forces within the adolescent and the experiences provided by the

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environment (Bernard, 1971). Studies of Paul (1996) revealed that there is significant degree of conflict with less cohesion and organization in the emotionally disturbed families.

When adolescent perceive more anger, criticism and arguments in the family their academic performance goes down (Bernard, 1991).

Family environment group is 56.12 and that of low overall family environment group is 49.34, with SD 8.461 and 8.692 respectively. The obtained 't' value is 5.301 and this is found to be significant at .01 level. Thus, it can be inferred that the two groups differ significantly in their academic performance. The mean academic performance score of enriched family environment group is higher than that of low family environment group. It indicates that children with enriched family environment are found to have better academic achievement than those belonging to low family environment group.

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