

Effects of Family Structure on the Academic Achievement of Students at Elementary Level in Karak District, Pakistan

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Abstract

Family setting and structure is playing a crucial role in strengthening or devastating student's academic performance. Family is the primary socializing agent which moulds the child in society. The purpose of the study was to explore the effects of family structure on academic achievement of the students at elementary level in Karak District. All the students at elementary level in district Karak constituted the population of the study. Only 360 students at elementary level were selected as simple through simple random sampling technique. The study was delimited to the twelve male secondary schools. The study was further delimited to the students of class 08. The study was descriptive in nature therefore a self-developed structured questionnaire used for the collection of data. The researchers personally visited to the respective sample and distributed questionnaires among the sample. In this way data was collected. After collection of data, it was organized, tabulated and analyzed. Chi-square was used for the statistical treatment of the data. After analysis of data, it was concluded that large family size; large number of brothers and sisters; domestic issues

and tension among the family members; low socio-economic status, lack of parent's participation effects student's educational attainment negatively. Based on findings, it was recommended that that importance of family planning should be emphasized and parents should be made aware of importance of family planning.

Keywords: Effects, Family Structure, Academic Achievement, Elementary Level

Introduction

Family setting and background is playing a vital role in strengthening or devastating student's academic performance. Peaceful and favorable environment within the home has a significant effect on the student's academic performance. Family setting is the basic institution for future of the students. Family is the most important socializing agent which moulds the child in society. It is an informal socializing agent for a child and the future of the child depends upon this socializing agent. It is right to say that families are different in terms of various factors i.e. some families are more prestigious, more dignified, wealthy than others. Some families have domestic issues, tension and problems which badly affects student's academic performance. Some parents and other family members are illiterate and contentious which create tension and problems from an ordinary issue in home and consequently the children remain depressed and it affects student's academic performance and hence they show poor academic performance. Conversely, students belonging to the socialized and educated families show excellent academic performance. They have a favorable environment for studies in their homes.

There is usually little confusion about what we mean by family when we talk with friends about our own family life because we usually connect with people from our own social class and culture who share our values and norms about families. However there is great dissimilarity in family structure. The smallest unit of the family is known as conjugal families, which must include a husband and wife. Nuclear families may or may not include a husband or wife. They are composed of any two or more persons related to one another by blood, marriage or adoption who share a common residence. Family is regarded as a social institution because it is an area of human social life that is organized in discernible pattern and because it helps in achieving important societal goals. Family practices have a profound influence on many aspects of social life.

Researches reveal that there are a variety of factors which are responsible for the poor and unsatisfactory academic performance of the students. These factors are; low socio-economic status; extraordinary involvement in co-curricular activities; ineffective teaching and administration; absenteeism; lack of basic educational facilities; culture; trend of unfair means during examination; illiteracy of the parents; domestic issues and problems; large family size; lack of parents attention & control; unfavorable environment inside the school and home etc. The student living in rural areas is directly affected with these factors.

The current paper was specially designed to explore the effects of family structure on

the academic achievement of the students at elementary level. The researchers expect that this study will be beneficial for the parents, teachers and students because it will suggest some remedial measures for the effective and better academic achievement of the students at elementary level regarding family structure.

Review of Related Literature

Any group of people that are related by blood or marriage especially a group of two mature people and their children is called family. Usually, there are two major types of family: nuclear family and extended family. Nuclear family is composed of only the husband and his wife together with their children while extended family is composed of the husband, the wife, the children and other family members living together in a large family compound (Clark, 1983). Family is a universal and multi-functional institution even in highly developed societies. It is a coordinating agency even in advanced societies. In fact, the formal and informal religious and secular education of the children is the responsibilities of the family (Iqbal Choudhury, 1977). The student's school performance is associated with their background and especially, to those activities which are occurred in their homes. There is also enough evidence that the activities which go on in student's homes are linked to the social studies of their parents and that many working class parents do not succeed to produce even minimum level of stimulation for their children's intellectual facilities (Raven, 1977).

Family setting and background is key to a student's life and outside of school, has the most important influence on student's academic achievement and consists of factors such as socio-economic status; two-parent versus single-parent households; divorce case; parental practices and aspirations; family size; maternal characteristics; and neighborhood (Majoribanks 1996). The environment inside home is the basic socializing agent and effects student's interest in school and aspirations for the future.

According to Vashist (1993), a problematic child generally comes from a problematic home. The interaction and reinforcement that originate from an unfavorable home life carry over into school and sometimes that they hinder all academic progress. A child who is unhappy, disturbed and mentally tortured simply has no enthusiasm for worthwhile, and successful has not been met at home, he will try in one way or another to satisfy it in another place. Gottfried & Fleming, (1998) noted that environment inside the home was found to have a statistically positive and significant effect on academic intrinsic motivation. Children whose homes had greater stress on learning opportunities and activities were more academically intrinsically motivated.

Parent's education is important in predicting children's achievement (Haveman & Wolfe, 1995; Smith, Brooks-Gunn, & Klebanov, 1997). Parental education had a significant positive effect on academic attainment of the students. The mother's education level had a 20% higher affect than the father's education level on the academic achievement of adolescents (Peters & Mullis, 1997).

Studies have again and again found that socio-economic status influences student's achievements (Jeynes, 2002; Eamon, 2005; Hochschild, 2003). Students who have a low socio-economic status show poor result and are more likely to leave the school (Eamon, 2005; Hochschild, 2003). It is believed that low socio-economic status has significant negative affects on the academic achievement of the students because low socio-economic status is the obstruction to access to vital resources and creates additional stress at home (Eamon 2005; and Jeynes, 2002). Many research studies have shown that the socio-economic status is a factor responsible for the academic attainment of the students. Morakinyo (2003) found that there is a relationship between socio-economic status and academic achievement of the students. White (1986) in a Meta analysis of 620 correlations coefficient from 100 students describes that there is a definite relationship between socio-economic status and academic achievement of the students. He noted that the frequency obtained correlation ranged from 0.10 to 0.70 which is positive relationship. It means that if one factor is increased the other also increases. It is came to surface that those children whose socio-economic status is strong show better academic performance and those with poor socio-economic status show poor and unsatisfactory academic performance.

According to Eamon (2005), maternal characteristics are another key factor that influences the academic achievement of the students. Mothers who are more educated and have higher self-esteem their children obtain higher test scores. Mothers who delay childbearing have been shown to provide more “cognitively stimulating” and supportive environments at home which has a positive affect on school performance.

Smaller family size has been linked with higher academic achievement of the students. Students with fewer siblings are likely to receive more parents' attention and have more access to resources as compared to those children whose families are large in size. The additional attention and support leads to better school performance (Eamon, 2005 & Majoribanks, 1996). The size of families has some effects on academic performance of students. Students who belong to larger families tend to have lower levels of achievement and lower levels of secondary graduation, on average than children who belong to smaller families. The reality is that parents of many children cannot afford to divide quality time with their children. Value added quality time is hard to set aside to supervise the academic aspects of the children. Conversely, parents with two to three children can afford the time to increase their children academic potentials because their time is only shared with less number of children.

Statement of the Problem

The study under investigation was conducted to explore the effects of family structure on the academic achievement of students at elementary level and therefore the statement of the problem was designed as *“Effects of Family Structure on the Academic Achievement of Students at Elementary Level in Karak District, Pakistan”*.

Objectives of the Study

Objectives of the study were:

- to find out the effects of family structure on the academic achievement of the students at elementary level and
- to suggest proper ways and means for the better academic performance of students at elementary level

Different Demographic Variables of Family Structure which were considered in Research Study

The following demographic factors of family structure were considered in this research study:

- Type of Family i.e., Joint Family or Extended Family and Nuclear Family
- Size of Family
- No. of Brothers and Sisters
- Parent's Education (Father & Mother Education)
- Socio-economic Status of the Parents
- Domestic Issues and Tension among the Family Members
- Parental Involvement in their Children School's Affairs

Hypotheses of the Study

To achieve the above objectives, the researchers developed the following hypotheses:

- There is significant effect of family type on the academic achievement of the students.
- There is significant effect of family size on the academic achievement of the students.
- There is significant effect of number of brothers and sisters on the academic achievement of the students.
- There is significant effect of father's education on the academic achievement of the students.
- There is significant effect of mother's education on the academic achievement of the students.
- There is significant effect of parent's participation on the academic achievement of the students.
- There is significant effect of domestic issues and tension among the family members on the academic achievement of the students.

Research Methodology

Participants

All the students at elementary level in Karak District, Khyber Pakhtunkhwa (Pakistan) constituted the population of the study. Only 360 students from twelve government high schools in Karak District were selected through simple random sampling technique.

Delimitations of the Study

The study was delimited to only 12 male elementary schools. The study was further delimited to the students of class 08.

Research Instrument

The Study was descriptive in nature and a self-developed structured questionnaire was used as research instrument for the collection of data. It was composed of only six closed ended questions.

Pilot Testing

Pilot testing was conducted to know the weaknesses, misconceptions and ambiguities of the questionnaire. After the conduction of pilot testing, final version of the questionnaire was developed and prepared.

Validity and Reliability

It is necessary to ensure the reliability and accuracy of the research instruments. Reliability is the degree of consistency that an instrument or data collection procedure demonstrates, whereas validity is the quality of the collection procedure of the data that enables it to measure what it intends to measure. Validity of the questionnaire was checked by five experts in the field of education having doctorate degrees. Cronbach's alpha was used to estimate the reliability of questionnaire. The reliability coefficient was found to be 0.84. The Cronbach's alpha formula is given as under:

$$\alpha = \frac{N \cdot \bar{C}}{\bar{V} + (N - 1) \cdot \bar{C}}$$

Where

N = Total number of respondents

\bar{C} = Average inter-item covariance

\bar{V} = Average variance

Data Collection

The researchers personally visited the respective sample elementary schools and distributed the questionnaires among participants. First of all, difficult terms were explained then they were asked to give appropriate responses freely and without any hesitation. In this way data was collected.

Data Analysis

After collection of data, it was organized, tabulated, analyzed and interpreted. Chi-square was used for the statistical treatment of the data. The following formula for chi square was used:

$$\chi^2 = \sum \left[\frac{(f_o - f_e)^2}{f_e} \right]$$

Where

\sum = Sum of

f_o = Observed Frequency

f_e = Expected frequency

Organization of the Questions in the Questionnaire

To explore the effects of family structure on the academic achievement of students at elementary level, a self-developed structured questionnaire was prepared. The questions in the questionnaire were developed about the size of the family; number of brothers and sisters; socio-economic status of the parents; parent's education; parental participation; and marks obtained in the annual examination of 7th class.

Standard for the Verification of Hypotheses

1. Type of family was classified as 'Joint Family' and 'Nuclear Family'
2. Size of family members was classified into two categories i.e. 'Less' and 'More' by using 6 as a deviation figure.
3. Number of brothers and sisters was classified into two categories i.e. "Less" and "More" by taking 4 as a deviation figure.
4. Father's education was classified into two categories i.e. "Low" and "High". "Low" was nominated for those parents whose education was matric or below matric and "High" was used for those parents whose education was above matric.
5. Domestic issues and tension among the family members; and parent's participation was classified into two categories i.e. Yes and No.
6. Parent's socio-economic status was classified into two categories i.e. "Strong" and "Weak" by taking Rs.12000/-pm as a deviation figure.
7. Academic performance of the students for all above element was classified into three categories i.e. Higher Academic Achievement, Normal Academic Achievement and Low Academic Achievement. High Academic Performance for 1st division students, Normal Academic Achievement for 2nd divisions and Low Academic Achievement for 3rd division students.

Analysis and Interpretation of Data

The current research study was specially designed to explore the effects of family structure on the academic achievement of students at elementary level in Karak District. The study was descriptive type and a self-developed structured questionnaire was used for the collection of data. Data was collected through personal visits. Chi square was used for the statistical treatment of data. The whole process is discussed as under:

H 1: There is significant effect of family type on the academic achievement of the students

Table 01: Showing the effect of family type on the academic achievement of the students

Achievement Level	Nuclear Family	Joint Family	N	χ^2
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High Academic Achievement	056	024	080	53.90*
Normal Academic Achievement	078	052	130	
Low Academic Achievement	038	112	150	
TOTAL	172	188	360	

***Significant (p=.000<0.05) df = 2 table value of χ^2 at 0.05 level = 05.99**

Table 1 illustrates that the calculated value of χ^2 was found to be 53.90 which is statistically significant (p<0.05) because it is greater than the table value of χ^2 at 0.05 level. Hence the hypothesis “there is significant effect of family size on the academic achievement of the students” is accepted. It clearly shows that students belong to nuclear family showed better performance as compared to the students of joint family.

H 2: There is significant effect of family size on the academic achievement of the students

Table 02: Showing the effect of family members on the academic achievement of the students

Achievement Level	More	Less	N	χ^2
High Academic Achievement	016	064	080	115.23*
Normal Academic Achievement	038	092	130	
Low Academic Achievement	124	026	150	
TOTAL	178	182	360	

***Significant (p=.000<0.05) df = 2 table value of χ^2 at 0.05 level = 05.99**

Table 2 illustrates that the calculated value of χ^2 was found to be 115.23 which is statistically significant (p<0.05) because it is greater than the table value of χ^2 at 0.05 level. Hence the hypothesis “there is significant effect of family size on the academic achievement of the students” is accepted. It shows that students with less family members show excellent academic achievement.

H 3: There is significant effect of number of brothers and sisters on the academic achievement of the students

Table 03: Showing the effect of number of brothers and sisters on the academic achievement of the students

Achievement Level	More	Less	N	χ^2
High Academic Achievement	017	063	080	146.10*

Normal Academic Achievement	028	102	130
Low Academic Achievement	129	021	150
Total	174	186	360

***Significant (p=.000<0.05) df = 2 table value of χ^2 at 0.05 level = 05.99**

Table 3 depicts that the calculated value of χ^2 was found to be 146.10 which is statistically significant ($p<0.05$) because it is greater than the table value of χ^2 at 0.05 level. Hence the hypothesis that “there is significant effect of number of brothers and sisters on the academic achievement of the students” is accepted. It clearly indicates that students with less number of brothers and sisters show excellent academic achievement.

H 4: There is significant effect of father’s education on the academic achievement of the students

Table 04: Showing the effect of father’s education on the academic achievement of the students

Achievement Level	High	Low	N	χ^2
High Academic Achievement	076	004	080	
Normal Academic Achievement	099	031	130	153.12*
Low Academic Achievement	029	121	150	
Total	204	156	360	

***Significant (p=.000<0.05) df = 2 table value of χ^2 at 0.05 level = 05.99**

Table 4 shows that the calculated value of χ^2 was found to be 153.12 which is statistically significant ($p<0.05$) because it is greater than the table value of χ^2 at 0.05 level. Hence the hypothesis that “there is significant effect of father’s education on the academic achievement of the students” is accepted. It unambiguously shows that students show excellent academic achievement whose father is educated.

H 5: There is significant effect of mother’s education on the academic achievement of the students

Table 05: Showing the effect of mother’s education on the academic achievement of the students

Achievement Level	High	Low	N	χ^2
High Academic Achievement	068	012	080	
Normal Academic Achievement	093	037	130	106.39*

Low Academic Achievement	034	116	150
Total	195	165	360

***Significant (p=.000<0.05) df = 2 table value of χ^2 at 0.05 level = 05.99**

Table 5 illustrates that the calculated value of χ^2 was found to be 106.39 which is statistically significant ($p<0.05$) because it is greater than the table value of χ^2 at 0.05 level. Hence the hypothesis that “there is significant effect of mother’s education on the academic achievement of the students” is not rejected. It plainly shows that students whose mother is highly educated show excellent academic achievement.

H 6: There is significant effect of socio-economic status of the family on the academic achievement of the students

Table 06: Showing the effect of socio-economic status of the family on the academic achievement of the students

Achievement Level	Strong	Weak	N	χ^2
High Academic Achievement	068	012	080	
Normal Academic Achievement	091	039	130	108.37*
Low Academic Achievement	032	118	150	
Total	191	169	360	

***Significant (p=.000<0.05) df = 2 table value of χ^2 at 0.05 level = 05.99**

Table 6 depicts that the calculated value of χ^2 was found to be 108.37 which is statistically significant ($p<0.05$) because it is greater than the table value of χ^2 at 0.05 level. Hence the hypothesis that “there is significant effect of socio-economic status of family on the academic achievement of the students” is accepted. It clearly indicates that students with whose family economical status is strong show excellent academic achievement.

H 7: There is significant effect of parent’s participation on the academic achievement of the students

Table 07: Showing the effect of parent’s participation on the academic achievement of the students

Achievement Level	Yes	No	N	χ^2
High Academic Achievement	073	007	080	
Normal Academic Achievement	089	041	130	135.76*
Low Academic Achievement	026	124	150	

Total	188	172	360
*Significant (p=.000<0.05) df = 2		table value of χ^2 at 0.05 level = 05.99	

Table 7 indicates that the calculated value of χ^2 was found to be 135.76 which is statistically significant (p<0.05) because it is greater than the table value of χ^2 at 0.05 level. Hence the hypothesis that “there is significant effect of parent’s participation on the academic achievement of the students” is accepted. It plainly shows that students whose parent participate with teachers show excellent academic achievement.

H 8: There is significant effect of domestic issues and tension among the family members on the academic achievement of the students

Table 08: Showing the effect of domestic issues and tension among the family members on the academic achievement of the students

Achievement Level	Yes	No	N	χ^2
High Academic Achievement	011	069	080	
Normal Academic Achievement	026	104	130	133.79*
Low Academic Achievement	118	032	150	
Total	155	205	360	

*Significant (p=.000<0.05) df = 2 table value of χ^2 at 0.05 level = 05.99

Table 8 depicts that the calculated value of χ^2 was found to be 135.76 which is statistically significant (p<0.05) because it is greater than the table value of χ^2 at 0.05 level. Hence the hypothesis that “there is significant effect of domestic issues and tension among the family members on the academic performance of the students” is accepted. It clearly shows that domestic issues and tension among the family members badly affects the student’s academic performance.

Conclusions

In the light of statistical analysis of the data, the researchers arrived at the following conclusions:

1. There is significant effect of family type on the academic achievement of the students. Students belong to nuclear family showed better performance as compared to the students of joint family.
2. There is significant effect of family size on the academic achievement of the students. Students whose family members are more they show poor academic achievement. On the other hand, students of small family members show excellent academic achievement.

3. There is significant effect of number of brothers and sisters on the academic achievement of the students. Students whose brother and sister are in large number show poor academic achievement. Conversely, students show excellent academic achievement whose brothers and sisters are in least number.
4. There is significant effect of father's education on the academic achievement of the students. Students show good academic achievement whose father is educated.
5. There is significant effect of mother's education on the academic achievement of the students. Students show good academic achievement whose mother is educated.
6. There is significant effect of parent's participation on the academic achievement of the students.
7. There is significant effect of parent's socio-economic status on the academic achievement of the students. Students whose parents are economically strong show good and excellent achievement.
8. There is significant effect of domestic issues and tension among the family members on the academic achievement of the students. It means that domestic issues and tension among the family members badly influence the academic achievement of the students.

Concluding Remarks

In nutshell, it was concluded that family type; family size; number of brothers and sisters; parent's education; and parent's participation effect student's academic achievement. Nuclear family; small size of family; least number of brothers and sisters; parent's education; parent's strong economical status; peaceful domestic environment and parent's participation play a fundamental and crucial role in the enhancement of student's academic achievement.

Recommendations

Keeping in view the conclusions, the researchers give the following recommendations:

1. Majority of the parents are not aware of the importance of home environment that influences student's academic achievement and therefore it is strongly recommended that parents should be made aware of the importance of home environment in their children academic achievement. For this purpose, teachers, educationists and leaders may play their role to make them aware of the importance of home environment for their student's academic achievement.
2. As majority of the parents do not know how to improve their children academic achievement therefore it is strongly recommended that parents should be informed that they can improve the education of their children through encouragement, provision of educational facilities and participation.
3. Large size of family badly affects student's academic attainment. Therefore it is strongly recommended that importance of family planning should be emphasized and parents should be made aware of importance of family planning. In addition, nuclear family system should be introduced.

4. Majority of the parents of children are not educated therefore, it is recommended that financially strong parents should arranged tuition for their children after school time in order to improve their children academic achievement.
5. As it was found that domestic issues and problems badly influence children academic achievement and therefore it is strongly recommended that parents should provide a friendly and favorable environment within the home so that their children may feel comfort. In this way their academic achievement will be improved and strengthened.
6. Domestic issues and tension has a significant effect on the academic achievement of the students. These issues and tensions are the result of injustice and unfairness of parents and other family members therefore, it is strongly recommended that family members especially parents should ensure and maintain justice within the home. In this way constructive, sympathetic and peaceful environment will be ensured. In this way, children will show excellent academic achievement.
7. As it was found that low socio-economic status negatively affects student's academic achievement therefore, it is strongly recommended that unemployment should be controlled. Poor students should be provided scholarships, free books and other stationary.
8. Parent's involvement and participation has a significant effect on the academic achievement of the students therefore it is strongly recommended that interaction and communication between the parents and teachers should be established for better growth of the students.

Recommendations for Further Research Studies

1. It is recommended that this type of research study should be conducted in other districts and provinces.
2. It is also recommended that this type of research study should be conducted at secondary, higher secondary and tertiary level.

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