"Effect of Home and Family Related Factors on Academic Achievement of Secondary School Students"

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ABSTRACT

The purpose of this study was to explore home/family and study related factors and their effect on the academic achievement of the students. This study was based on the descriptive research design in which survey method was used. The population of this study was all students enrolled in 10th in Secondary Schools under the Lahore Board of Intermediate and Secondary Education. The sample of this study was 2010 10th grade students form 60 public secondary schools. The data was collected through questionnaires for exploring the effect of home and family related factors on the students' academic achievement in Board of Intermediate and Secondary School Examination. For analyzing the data, descriptive and inferential statistics were used. The findings showed that home and family related factors had significant effect on the students' academic achievement at secondary school level. Only one aspect of home and family i.e. type of accommodation had no significant effect on students' academic achievement. This study suggested that school administrators who conducted BISE exams and policy makers should also focus on different contextual factors for improving students' academic achievement.

Introduction

Students are the most important component of a system of education. Home is an important place for children, parents and their early social, emotional and cognitive development takes place. The family is a social unit in any society and it is the source of early encouragement and involvement in the children (Collins, 2007). The siblings, guardians/parents and material things in children's immediate environment are considered most critical for enhancing or decreasing the self-confidence and academic achievement of children (Ekanem, 2004). Different contextual factors and their effect on the students' academic achievement has been an important aspect in the educational research. The home and family environment are considered to be the important factors which effect the students' academic achievement.

Parents' educational level, social-economic status, and number of siblings at home determine the home environment of the students. The home environment refers to the children family background factors which include all human and significant assets within the family that influence the status of children living such as education of the parents, occupation, economic prestige, and other facilities available at home (Faaz, 2017).

The home and family related factors are the combination of physical and psychosomatic environment. Home and family components are the mixture of metal and physical situation. Physical environment including living place, water, protect, dress, nourishment and additional people physical essentials. Whereas, in psychosomatic situations of family different aspects are included such as the mutual interactions of family members, and respect. Both aspects of home and family related factors and environment directly and significantly influenced the overall development and students'' academic achievement (Mukama, 2010; Muola, 2010). Though, here are definite dominant aspects that affect the family and home background and incorporates environment of family, specialist (family head), instructive status of guardians, state of mind of guardians towards children and monetary position of the family; all these components are noteworthy for home/family environment (Codjoe, 2007; Mukama, 2010; Muola, 2010). Similarly, Farooq et al., (2011) also established financial family status, students' academic achievement factors and support such as factors that influence students' academic achievement. Guardians and instructors provide proper direction, communication abilities, and education opportunities have too been initiated significant and important factor to students' academic achievement (Narad & Abdullah, 2016).

Similarly, academic achievement is the result of schooling and teaching, it is the degree to which a learner, institution and teachers have accomplished the instructive objectives. Students' academic achievement and continue evaluation (Bossaert et al., 2011). There are different contextual factors which have been explored and discussed at national and international level related to academic achievement with specific subjects. But in Pakistan, no such study has been conducted at a large scale level. Board of intermediate and Secondary Education conducts examination at the large-scale level but they do not maintain any data about different contextual and family retailed factors of students and their effect of students' achievement. Therefore, the purpose of this research was to investigate the influence of family and home related factors on students' academic achievement in BISE exams.

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Literature review

Contextual factors are essential background factors about which several studies have been conducted. These factors had been studied in the diverse countries to evaluate their influence on students' academic achievement at different levels. Parents' qualification and their support in study and the socio-economic position had an influence on the academic achievement of students in the subject of English language and Mathematics in Pakistan (Farooq et al., 2011). Furthermore, the study conducted in in South Africa by Sibanda, Iwu and Olumide (2015) which explored that student interest in reading books, study habit as self-study, and availability of reading books are the important factors which contribute in the students' academic achievement. On the other hand, Ali at el. (2013) also establish that socio-economic status of parents regular study hours, and students' age had also important impact on students' academic achievement. Numerous researches have emphasized the affirmative association between the family and home background and academic achievement of students at secondary school level (Frank, 2003) found that encouragement and motivation by parents significantly affect the students' academic achievement and demonstrated to be a positive support for youthful students.

Eamon (2005) assessed that the student whose parents are wealthy are children of rich parents are possible extra success in lifetime than the poor parents. Prosperous parents had further income and they scan spend more money on their students' education than poor parents. The investment of the parents causes the effective outcomes. The entire home environment impacts the interface of children with the family. On the other hand, low financially parents do not afford the educational expense and not focus in their study for getting highest achievement scores (Rouse & Barrow, 2006). Sander (2001) expresses that educated parents, home and family environment related factors are most powerful strength to achieve the high achievements of the students (Parveen, 2007; Sirin, 2005). Good interaction between parents and children contributes for improving their different skills such as linguistic, social and intellectual skills. Supportive and interactive family/home environment increase child's confidence makes them sociable. Then this confidence positively influences the students' academic achievement (Parveen, 2007; Bandhana & Sharma, 2012). Students' interest in study, their absenteeism from school has also considered as the study related factors which influence the students' academic achievement. Likewise, students' high and low attendance affects their academic achievement (Rothman, 2001; Zamudio, 2004). Students who regular attend their classes then they perform well in studies attendance of the students (Khalid, 2017).

The above literature showed that home and family related factors influence the students' academic achievement with several aspects. This literature also displayed the positive effect of these factors on students' academic achievement. Based on literature, the aim of this study was to identify the home and family related factors, and their effect on the academic achievement of students at large scale level in BISE Lahore.

Objectives of the Study

There were objectives of this study:
- recognize the home and family related factors at the secondary school level.
- examine the effect of home and family related factors on the academic achievement at secondary school level

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- Explore gender differences in students' academic achievement at secondary school level.

Methodology

This research study was based on descriptive research design by using survey method for investigating the home and family related factors and their effect on academic achievement of e secondary school students. This study was informed by the positivist paradigm in which only one truth and explanation of a phenomenon that can be reached using empirical methods and quantitative methodologies. The target population of the study was all 10th grade students appearing in Lahore Board of Intermediate and Secondary Education (BISE) from four districts i.e Lahore, Nankana, Kasur, and Sheikupura under BISE Lahore.

Simple random sampling technique was used for selecting sample of 2010 from 74 schools. Data was collected by using a questionnaire about family and home related factors (such as parents' education and qualification, socioeconomic status, types of transportation and accommodation, number of siblings, available books and interest in book reading, basic facilities for study at home and support in study from family. The reliability co-efficient value of this questionnaire was 0.73. The researcher personally administered the questionnaire by getting permission from schools. The academic achievement was measure by obtaining results of the BISE examination for grade 10 of the sampled students.

Data analysis and interpretation

Descriptive and inferential statistics were used for analyzing data. For exploring the effect of different factors on academic achievement, regression analysis was applied, and independent sample t-test was used to identify the gender differences in the academic achievement by using SPSS

software. This analysis presented the results and interpretations to determine home/family and study related factors and their effect on students' academic achievement.

Table 1
Sample Description on the base of Gender and Age

Variables	*f*	*%*
Male	1000	49.8
Female	1010	50.2
15-year-old	274	13.7
16-year-old	875	43.5
17-year-old	861	42.8

Above table tells that there were 50% male students and 50% female students. The age of the 43% of the students 16- and 17-years and age range was 15 to 17.

Table 2
Parents' Education

Variables	Levels	*f*	*%*	*M*	*SD*
	Never went to School	263	12.6	3.25	1.718
	Primary/Middle	471	22.6		
	Matric	693	32.3		
Father's education	F. A	275	13.2		
	B. A	179	8.6		
	M.A	118	5.7		
	MPhil/PhD	38	1.8		
	Diploma	35	1.7		
	Other	34	1.6		
	Never to school	411	19.7	2.96	1.674
	Primary/middle	490	23.5		
	Matric	601	28.8		
	F. A	258	12.4		
Mother's education	B. A	159	7.6		
	M.A	85	4.1		
	MPHIL/PHD	34	1.6		
	Diploma	20	1.0		
	Other	28	1.3		

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Table 2 indicates that thirty-two percent of the fathers' education was matric. This finding illustrates that fathers' of the students were not highly educated and mothers' education was also matric. High mean score of father education shows that fathers were slightly more educated than mothers.

Table 3

Parents' Occupation

Variables	Levels	f	%	M	SD
Mother job	Doctor	33	1.6	2.29	.895
	House wife	1802	86.4		
	Police officer	47	2.3		
	Nurse	58	2.8		
	Teacher	115	5.5		
	Any other	31	1.5		
Father job	Business man	320	15.9	4.59	2.725
	Doctor	69	3.4		
	Labor	547	27.2		
	Driver	188	9.4		
	Shopkeeper	266	13.2		
	police officer	87	5.3		
	Teacher	88	4.4		
	government servant	185	9.2		
	Farmer	163	8.1		
	Other	96	4.8		

The majorities (86%) of the mothers were housewives and only one percent mothers (1%) worked at home as sewing, home tuition, and some worked in factories. Furthermore, 27% of the fathers worked as laborer and 16% were businessmen.

Table 4

Family Income

Variables	Levels	F	%	M	SD
Income	10000-50000	1747	86.9	1.13	.337
	above 50000	263	13.1		

Table 4 shows that the family income of 86% of students was 10000-50000 rupees.

Table 5

Mode of Transportation for Going to School

Variables	Levels	f	%	M	SD
Mode of Transportation	Walk to School	801	39.9	2.68	1.769
	Personal Bicycle	168	8.4		
	Own Motorbike	600	29.9		
	Car	70	3.5		
	School Van	84	4.2		
	Public Transport	267	13.3		
	Other	20	1.0		

Table shows that one third of the students (40%) walked to school and only eight percent students had a personal bicycle.

Table 6

Means of Transport at Home

Variables	Levels	f	%	M	SD
Means of transport	Motor Bike	1412	70.2	1.60	1.052
	Car	243	12.1		
	Bicycle	97	4.8		
	Nothing	258	12.8		

The data shows that seventy percent of the student used motor bike as the means of transport. Thirteen percent students had not any means of transport at home.

Table 7

Types of Accommodation

Variables	Levels	f	%	M	SD
Types of accommodation	own home	1339	66.6	1.52	.792
	Rented home	292	14.5		
	Joint family home	379	18.9		

The table presents that sixty-six percent of the students lived in their own home separately while very few (14%) students lived in rented homes.

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Table 8
Number of Siblings

Variables	Levels	f	%	M	SD
	No	110	5.5	4.82	1.62
	One	60	3.0		
Number of siblings	Two	220	10.9		
	Three	385	19.2		
	Four	517	25.7		
	Five	356	17.7		
	more than five	362	18.0		

Table 8 indicates that nineteen percent of the students (19%) had three, 18% had five and more than five siblings, while few (5%) students had no sibling; they were only one brother/sister.

Table 9
Study Time at Home

Variables	Levels	f	%	M	SD
Study time	No study time	162	8.1	2.04	4.45
	1-5 hours	1610	80.1		
	More than 5 hours	238	11.8		

Table 8 tells that majority of the (80%) students spent one to five hours for study, and only eight percent did not spent time for study.

Table 9
Interest in Reading Books

Variables	Levels	f	%	M	SD
Interest reading book	Yes	1321	65.7	1.34	.475
	No	689	34.3		

Table 9 presents that sixty-six percent of the students showed their interest in books reading while 34% students did not show interest in books reading.

Table 10
Numbers of Books at Home

Variables	Levels	f	%	M	SD
Numbers of books	0-10 books	1830	91.0	1.12	.414
	11-20 books	115	5.7		
	More than 20	65	3.2		

Table 10 shows that the majority (91%) of students in this study had almost 10 books at home; while 6% of students had 11–20 books.

Table 11
Basic Facilities for Study at Home

Factors	Category	f	%	M	SD
Tablet					
	Yes	997	49.6	1.50	.500
	No	1013	50.4		
Internet facility					
	Yes	1020	50.7	1.49	.500
	No	990	49.3		
Internet skill					
	Yes	904	45.0	1.55	.498
	No	1106	55.0		
Study desk					
	Yes	1166	58.0	1.42	.493
	No	844	42.0		
Study room					
	Yes	903	44.9	1.55	.498
	No	1107	55.1		
Mobile phone					
	Yes	642	31.9	1.68	.467
	No	1368	68.1		

Table 11 presents that 49% percent of students were used tablet while 50% students did not use the tablet. Fifty percent of students had an internet facility at home. On the other hand, 45% of the students had internet skills. Nearly half (58%) of the students had a study desk at home for studying. Fifty-four percent of students had study room at home. Thirty-one percent (31%) of the students were used mobile phones. High mean scores shows that mostly students had mobile phones other than facilities.

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Table 12

Help in Study at Home

Variables	Levels	f	%	M	SD
Help in study	Father	252	12.5	3.24	1.181
	Mother	204	10.1		
	Brother and Sister	588	29.3		
	Tutor	781	38.9		
	Self-Study	148	7.4		
	Other	37	1.8		

Table 12 shows that thirty nine percent students (39%) reported that they take help in study from tuition/tutor in their studies, while 7% of the students did not take help from anyone in the studies.

Table 13

Difference between Students' Academic Achievement and Male and Female Students

Variables	N	M	S.D	t	Sig.
Male	1000	836.3	193.58	4.16	.011
Female	1010	800.5	192.02		

Table 13 shows that these was significant differences in academic achievement of the male and female students, t value is 4.16 with p= .011. The mean scores indicate that male performed better than females.

Table 14

Effect of Home/Family and Study Related Factors on Students' Academic Achievement

Contextual Factors	R Square	Standardized Coefficients (β)	F	t	Sig.
Fathers' education	.001	.029	1.87	1.37	.001
Mothers' education	.000	.010	.210	.458	.047
Mothers' occupation	.000	.021	.922	.960	.037
Fathers' occupation	.002	.039	3.35	1.83	.049
Family income	.000	.015	.476	.690	.011
Mode of transport for going to school	.001	.029	1.84	1.36	.005
Means of Transport at home	.000	.003	.023	.150	.021
Types of accommodation	.000	.013	.340	.583	.560
Number of siblings	.001	.033	2.33	1.52	.007
Study time	.000	.033	2.38	1.54	.023
Interest in books reading	.001	.015	.462	.68	.017
Basic facilities at home	.001	.003	.022	.147	.012
Watching TV	.000	.010	.023	.479	.034
Absenteeism school	.002	.047	4.81	2.19	.028
Help in study	.000	.018	.682	.82	.009

Results of the regression analysis specified that there was a significant effect of parents' education and parents' occupation on the students' academic achievement p<005. Family income, mode of transportation for going to school, and means of transport at home had a significant effect on students' academic achievement as p value >.005. Moreover, types of accommodation had not significant effect on students' academic achievement. Similarly, other study related factors and basic facilities at study had a significant effect on students' academic achievement. Students' absenteeism from school explains the significant effect on the students, academic achievement (F (1, 2008) = 4.81, p < .010, R_2 = .002). Parents, tutor, and siblings support and help in study also had significant effect on academic achievement of students (F (1, 2108) = .628, p < .051, R_2 = .000).

Conclusion and Discussion

In general, the findings of this study support the literature that different contextual factors influence the students' academic achievement and contribute for the improving the system and education quality. This study is merely attentive on the family and home factors and home characteristics such as family income, transport facilities at home, accommodations. It is concluded from the result that family/home related factors are considered important predictors for enhancing academic achievement of the students. The influence of parents' education and their qualification and number of siblings had a great influence on students' academic achievement. This result is aligned

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with the Kieti (2012) that they imply that students' family setting is very critical in influencing the students' academic achievement. This result is also mismatching the work of parents has little effect on their child's academic performance than their education (Hanes, 2008). He also stated that socioeconomic factor of the student and achievement is statistically dependent. Home environment and basic facilities also influence on the students' academic achievement. This result is consistent with the Mwaura (2014) and Makewa at el. (2010) result that the home environment of the children storm shows an essential part in result enhancement and better achievement can be based on the economic condition and social background of the students' family. Parents involvement and support is also influenced the students' academic achievement. Though, family economic status, financial resources and parents support in learning which related with income and occupation of the parents' occupation often infer improved learning experiences and opportunities of the students at home and school. This finding is in line with Chen (2009), Razza et al. (2010), they stated that socioeconomic conditions of the parents, their involvement and support in study to a greater amount regulates students' academic achievement ad learning in the classroom/school and their modification to lifetime**.** The students watching TV also influence on student academic achievement. This study is also concluded that students' attendance is also considered important factor for students' academic achievement. Roby (2004), Sekiwu at el. (2020) supported this view. Similarly, students gender also influence their academic achievement, girls perform better in exam and get high scores and achievement. So, the result of present study supported the finding of Ceballo at el. (2004) that girls generally exhibit more

efforts which leading towards high achievement at school and they perform well in Mathematics, and English.

Recommendations

It is recommended from the conclusion that efforts should be made to improve the aspects of family-related factors, such as home background to improve the student' academic achievement who belong to poor families by providing them special incentives at secondary school level. Additional research is required to diagnose the problem on a larger scale by selecting a sample in the most dispersed areas and including other student factors, family, school and peer related factors.

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