

Relationship between Family Stress and Academic Achievement of Secondary Level Students

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Abstract

Academic achievement of secondary students is attributed to several personal and environmental factors. There is need of exploring socio-emotional determinants of academic performance in Pakistan which is mostly dominated by rural and pluralistic societal characteristic. This study finds out level of family stress and its relationship between family stress and academic achievements in male and female secondary school students. All 10th class students of government secondary and higher secondary schools in Sargodha district were the population of study. A sample of 321 male and female students of 10th class of government schools in rural and urban areas was selected by adopting multistage sampling technique. A self-developed questionnaire consisting of demographic information and three sub scales i.e. social stress, economic stress and family environmental stress was used for data collection by personal visits. Mean, standard deviations, frequencies, t-test, person correlation were applied to analyze the data. Findings and conclusions were drawn.

Key Words: Family Stress, Academic Achievements, Secondary Level Students

Introduction

Education is essential for every community's development. People in the society are more educated people, more civilized and organized society is made (Heckman, 2011). According to Article 25-A of Constitution of Pakistan, free and compulsory quality education is a state obligation for all children till age of 16 years. It is the stage of secondary education, which provides necessary knowledge, skills and attitudes, love for and loyalty to the nation, mental, social, moral, physical and spiritual development besides understanding and respect for own and other people's cultures. Secondary school education is one of the most important phase of every student's life. Secondary education with 43.82 % youth, is enrollment (Pakistan Economic Survey 2020-21) the best tools for social and economic empowerment to youth. It provides middle level workers for the economy and works as feeder for the higher levels of education. Secondary education develops ability to adjust with their practical lives. The most crucial stage of life because it is terminal stage of education for majority of students in Pakistan as the enrollment rate of post-secondary level is just 14.85%, hence it provides foundation for technological and industrial development. There is increase in state funding and facilitates in this level of formal education, increment of parentage enrollment in recent year and it is estimated to increase further by 6.2 percent, in coming years (Pakistan Economic Survey, 2020-21)

Researchers are interested in finding long-term variables that contribute effectively to the quality of the secondary education. This variable influences the student's success, both inside and outside the school. These factors are related to student family, school and colleagues. Studies in American perspective found that after completing school years, the student's success was quite different in the students from varied family background (Spinath, 2012). Student's academic achievement is associated with family's socioeconomic status, parental education and family income. It means, higher the parental education, involvement in academic matters like checking homework, discussing school issues, etc., the better the children's academic performance achieved. Educational opportunities provided by the school and parents lead to student satisfaction which is associated with better academic achievement (Li, and Qiu, 2018).

Pakistani society is majorly characterized being multilingual, agricultural, and having high regard for traditional family values. Being agro based economy, poverty, lack of resources, and low productivity has pushed majority of population in vicious circle of poverty. Resultantly 24.3% population is living below poverty line (Asian Development Bank, 2021). The price hike

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in recent years has worsened economic and social status of the families, causing huge emotional stress to make both ends meet. Family stress may be caused by personal, social or economic reasons, but it creates emotional distress or family conflicts which are associated with lower academic performance (Bahrassa, et al., 2011).

Stress is an inevitable and common experience that feels when a person has failed to meet the demands of their environment (Jackson, 2013). Stress in humans is universal, but individual sects are also marked in the way of feeling stress. Stress is associated with major life events, everyday life and problems of life change (Cohen et al., 2019). It is worth describing that "stress" cannot be described by individual experience, but by mutual reaction to their behavior, emotional, serious, biological, and its experience. This reaction can differ from one person to another, so tension investigations look towards both the answers and answers of experienced situations individually as stress. This review shows the causes and responses like parents focus on the significant impact of economic problems. A study from Delvecchio et al. , (2016) found that parents had beliefs and expectations closer to their families with higher income and educational backgrounds compared to their children. Performance beliefs that did not fit well with the actual educational performance of their children, lead to develop stress in students due to this family characteristic. In addition to other factors, family stress is one of the highest demand and discussion factors among students who are participating in the educational performance of the student. Family stress is the most socially-fewer syndromes in society, which is associated with mental health components. Internationally, there is significant work and research on the problem, but there is no success in the research available at the national level. It was necessary to identify the family's stress and critical stress to affect the student's educational performance. We are investigating more on gender-based studies by studying the effects on high school students, which will help us to tackle stress management and individual interface in male and female secondary level students.

Poor academic performance of learners during school age has been of main concern to experts, guidance providers and counselors throughout the world (Mc Cubbin, & Sussman, 2014). Even though most of the guidance programs and counseling strategies followed in schools are to improve the students' academic achievements, but the poor performance of students had remained a critical issue for the last many decades in Pakistan. There may be many causes which influence on the academic achievements of the students. Among these, family stress may be an

important cause which affects the students in many ways. Hence, this study aims to level of academic performance, level of stress due to family, and the relationship between family stress and academic achievements of secondary school students.

Objective of the study

Objective of the study was to identify the relationship between family stress and the achievements of students.

Research Questions

Following research questions were formulated to carry out the study:

- i. What was the family stress level of the students?
- ii. Was there any gender based difference of family stress among secondary level students?
- iii. Was there any relationship between family stress and academic achievements of secondary level students?

Research Methodology

According to the feasibility of time, resources and financial constraints, this study was delimited to the students in secondary classes in government secondary schools of district Sargodha. The study was also delimited to only three types of family stressors which include social, economic and family environment. In this study co-relational design of research was used, to find out the relationship between family stress and academic achievements of students at secondary school level and survey method was used to collect data.

There were 324 public schools having secondary classes in district Sargodha. The sample was selected through multistage sampling technique such as in first step 22 schools having secondary classes were selected randomly including 11 boys and 11 girls' schools. In second step 15 students from each school were selected conveniently on the basis of their availability and willingness to provide data, reaching to sample size of 330 secondary level students.

Instruments of the study

After detailed study of relevant literature and discussion with experts of the field a questionnaire was developed for family stress of the secondary level students including three sub scales /factors i.e. social stress, economic stress and family environment stress, pertaining 23 items; among them social stress contained 10 items, economic stress contained 6 items and family environment stress also contained 7 items.

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For the validation of questionnaire expert's opinion(s) were sought from five experts. These five experts were PhD in the subject Education with plenty of academic and research experience. On the recommendations of the experts improvements in the items were made and few items were deleted,. After incorporating suggestions of the experts, the instruments were pilot tested 100 students not included in original sample. The obtained data were analyzed to find out the reliability coefficient Cronbach Alpha. Its value was 0.82 which show the high reliability.

To collect data questionnaires were distributed to 330 the willing students through personal visits. The students were briefed about the confidentiality of their information to build up the students' confidence and ensure them. Thus 330 copies of instrument were distributed and out of which 321 copies were received back. The response rate was about 97%.

The Data were analyzed by using SPSS through percentages, mean and standard deviation,t-test and Pearson r correlation were used.

Table 1

Social stress

S#	Statement	SDA	DA	Total of SDA &DA	N	A	SA	Total of A & SA	G.Total	Mean	SD
1	Strict behavior of parents	118 36.8%	90 28.0%	208 64.8%	12 3.7%	88 27.4%	13 4.0%	101 31.4%	321 100%	2.34	1.32
2	Not allowed to participate in family decisions	83 25.9%	116 36.1%	119 62%	28 8.7%	52 16.2%	42 13.1%	94 29.3%	321 100%	2.55	1.37
3	Less pocket money given by parents	121 37.7%	77 24%	198 61.7%	20 6.2%	58 18.1%	45 14%	103 32.1%	321 100%	2.47	1.48
4	Non-cooperation of relatives and neighbors	116 36.10%	86 26.80%	202 62.90%	22 6.90%	57 17.80%	40 12.50%	97 30.30%	321 100%	2.44	1.44
5	Bad habits of friends	128 39.9%	77 24%	205 63.9%	19 5.9%	41 12.8%	56 17.4%	97 30.2%	321 100%	2.44	1.53
6	family members	106 33%	82 25.5%	188 58.5%	39 12.1%	46 14.3%	48 15%	94 29.3%	321 100%	2.53	1.45

7	and relative addiction joint family system	104 32.4%	80 24.9%	184 57.3%	45 14.0%	49 15.3%	43 13.4%	92 28.7%	321 100%	2.52	1.42
8	Availability of less study resources	88 27.4%	102 31.8%	190 59.2%	20 6.2%	64 19.9%	47 14.6%	111 26.1%	321 100%	2.63	1.43
9	No separate place in home for study	90 28.%	123 32.1%	213 60.1%	24 7.5%	68 21.2%	36 11.2%	104 32.4%	321 100%	2.55	1.38
10	Abundance of family functions	101 31.5%	92 28.7%	193 60.2%	38 11.8%	60 18.7%	30 9.3%	90 28%	321 100%	2.46	1.35
Total		1055 32.86	925 28.81	1900 59.19	267 8.31	583 18.16	400 12.46	983 30.62	3210 100	24.93 2.5	14.17 1.4

Table 1 shows that 64.8% respondents with mean score=2.34 and SD=1.325, strongly disagreed or disagreed with the statement, “Strict behavior of parents creates stress.” whereas 31.4% respondents strongly agreed or agreed and 3.7% respondents were neutral.

Similarly 62% respondents with mean score=2.55 and SD=1.371, strongly disagreed or disagreed with the statement, “I feel Stress because I not being allowed to participate in family decisions.” whereas 29.3% respondents strongly agreed or agreed and 8.7% respondents were neutral.

Likewise 61.7% respondents with mean score=2.47 and SD=1.487, strongly disagreed or disagreed with the statement, “Less pocket money given by the parents creates stress.” whereas 32.1% respondents strongly agreed or agreed and 6.2% respondents were neutral.

Equally likely 62.9% respondents with mean score=2.44 and SD=1.442, strongly disagreed or disagreed with the statement, “Non cooperative behavior of relatives and neighbors creates stress.” whereas 30.3% respondents strongly agreed or agreed and 6.9% were neutral.

Moreover 63.9% respondents with mean score=2.44 and SD=1.534, strongly disagreed or disagreed with the statement, “Bad habits of friends like Smoking and Drinking make me stressful.” whereas 30.2% respondents strongly agreed or agreed and 5.9% were neutral.

Similarly 58.5% respondents with mean score=2.53 and SD=1.449, strongly disagreed or disagreed with the statement, “Some of family members and relative are addicted of smoking

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and drugs which make me stressful.” whereas 29.3% respondents strongly agreed or agreed and 12.1% were neutral.

Table also shows that 57.3% respondents with mean score=2.52 and SD=1.419, strongly disagreed or disagreed with the statement, “Conflicts due to joint family system create stress.” whereas 28.7% respondents strongly agreed or agreed and 14% respondents were neutral.

Table also depicts that 59.2% respondents with mean score=2.63 and SD=1.437, strongly disagreed or disagreed with the statement, “Availability of less study resources (Computer, Guide Books) by the parents creates stress.” whereas 26.1% respondents strongly agreed or agreed and 6.2% respondents were neutral.

Table also reflects that 60.1% respondents with mean score=2.55 and SD=1.382, strongly disagreed or disagreed with the statement, “I feel stress because I have no separate place in home for study.” whereas 32.4% respondents strongly agreed or agreed and 7.5% were neutral.

Data shows that 60.2% respondents with mean score=2.46 and SD=1.348, strongly disagreed or disagreed with the statement, “The abundance of family functions creates stress.” whereas 28% respondents strongly agreed or agreed and 11.8% respondents were neutral.

Overall trend is that 59.19 had no social stress in family but a handsome number of students 30.62 had social stress in their families

Table 2

Economic stress

S#	Statement	SDA	DA	Total SDA & DA	N	A	SA	Total A & SA	G. Total	Mean	SD
11	Weak economic condition of family	92 28.70%	89 27.70%	181 56.40%	35 10.90%	68 21.20%	37 11.50%	105 32.70%	321 100%	2.59	1.39
12	Uniform, books etc is burden on my parents	84 26.20%	96 29.90%	180 56.10%	44 13.70%	59 18.40%	38 11.80%	97 30.20%	321 100%	2.6	1.35
13	poverty	105 32.70%	82 25.50%	187 58.20%	35 10.90%	65 20.20%	34 10.60%	99 30.80%	321 100%	2.5	1.39
14	Parents are spending more money on my	97 30.20%	79 24.60%	176 54.80%	49 15.30%	53 16.50%	43 13.40%	96 29.90%	321 100%	2.58	1.41

education											
15	My basic necessities are not fulfilled due to less financial resources	102	74	176	45	63	37	100	321		
		31.80%	23.10%	54.90%	14%	19.60%	11.50%	31.10%	100%	2.56	1.4
16	I should leave education to support my family	80	109	189	41	53	38	91	321		
		24.90%	34%	58.90%	12.80%	16.50%	11.80%	28.30%	100%	2.56	1.34
17	home environment is not conducive for studies	107	80	187	40	53	41	94	321		
		33.30%	24.90%	58.20%	12.50%	16.50%	12.80%	29.30%	100%	2.5	1.42
Total		667	609	1276	289	414	268	682	2247	17.89	9.7
		29.6	27.1	56.7	12.8	18.4	11.9	30.3	100	2.55	1.38

Table 2 shows that 56.4% respondents with mean score=2.59 and SD=1.391, strongly disagreed or disagreed with the statement, “I feel stress because my family is economically weak.” whereas 32.7% respondents strongly agreed or agreed and 10.9% respondents were neutral.

Similarly 56.1% respondents with mean score=2.60 and SD=1.359, strongly disagreed or disagreed with the statement, “I feel stress to buy the uniform and books because it is burden on my parents.” whereas 30.2% respondents strongly agreed or agreed and 13.7% were neutral.

Table also shows that 58.2% respondents with mean score=2.50 and SD=1.397, strongly disagreed or disagreed with the statement, “I feel myself poor in front of my friends and classmates which make me stressful.” whereas 30.8% respondents strongly agreed or agreed and 10.9% respondents were neutral.

Likewise Table depicts that 54.8% respondents with mean score=2.58 and SD=1.410, strongly disagreed or disagreed with the statement, “My brothers and sisters always blame me that parents are spending more money on my education which makes me stressful.” whereas 29.9% respondents strongly agreed or agreed and 15.3% were neutral.

Table also reflects that 54.9% respondents with mean score=2.56 and SD=1.404, strongly disagreed and disagreed with the statement, “I feel stress because my basic necessities are not

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fulfilled due to less financial resources.” whereas 31.1% respondents strongly agreed or agreed and 14% respondents were neutral.

Table also shows that 58.9% respondents with mean score=2.56 and SD=1.338, strongly disagreed or disagreed with the statement, “. I feel stress due to thoughts prevail that I should leave education and to support my family.” whereas 28.3% respondents strongly agreed or agreed and 12.8% respondents were neutral.

Table also reveals that 58.2% respondents with mean score=2.50 and SD=1.421, strongly disagreed or disagreed with the statement, “I feel stress because my home environment is not conducive for studies.” whereas 29.3% respondents strongly agreed or agreed and 12.5% respondents were neutral.

Overall trend is that 56.7 had no Economic stress in family but a handsome number of students 30.2 had Economic stress in their families

Table 3

Family Environment stress

S#	Statement	SDA	DA	Total of SDA & DA	N	A	SA	Total of A & SA	G. Total	Mean	SD
18	My family members have strict discipline	96 29.9%	98 30.50%	194 60.4%	22 6.9%	54 16.80%	51 15.9%	105 32.7%	321 100%	2.58	1.46
19	Longstanding illness of family members	128 39.9%	70 21.80%	198 61.7%	27 8.4%	58 18.1%	38 11.8	96 29.9%	321 100%	2.4	1.45
20	Disability of family members	113 35.2%	78 24.30%	191 59.5%	26 8.1%	63 19.6%	41 12.8%	104 32.4%	321 100%	2.5	1.45
21	My family culture is not supportive for my academic	96 29.9%	84 26.20%	180 56.1%	41 12.8%	62 19.3%	38 11.8%	100 31.1%	321 100%	2.57	1.39
22	Conflicts between my parents and other family members	101 31.5%	90 28%	191 59.5%	33 10.3%	56 17.4%	41 12.8%	97 30.2%	321 100%	2.52	1.41

23	Unfriendly behavior of family members	124 38.60%	71 22.10%	195 60.70%	37 11.5%	36 11.2%	53 16.5%	89 27.7%	321 100%	2.45	1.49
Total		658 34.16	491 25.49	1149 59.65	186 9.65	329 17.08	262 13.60	591 30.68	1926 100	15.02	8.65

Table 3 shows that 60.4% respondents with mean score=2.58 and SD=1.462, strongly disagreed or disagreed with the statement, “I feel stress because my family members have strict discipline approach towards life.” whereas 32.7% respondents strongly agreed or agreed and 6.9% respondents were neutral.

Table also shows that 61.7% respondents with mean score=2.40 and SD=1.455, strongly disagreed or disagreed with the statement, “Longstanding illness of family members creates stress.” whereas 29.9% respondents strongly agreed or agreed and 8.4% were neutral.

Similarly table shows that 59.5% respondents with mean score=2.50 and SD=1.456, strongly disagreed or disagreed with the statement, “Longstanding disability of family members creates stress.” whereas 32.4% respondents strongly agreed or agreed and 8.1% were neutral.

Likewise table also depicts that 56.1% respondents with mean score=2.57 and SD=1.395, strongly disagreed or disagreed with the statement, “I feel stress because my family culture is not supportive for my academic and future career.” whereas 31.1% respondents strongly agreed or agreed and 12.8% respondents were neutral.

Moreover table shows that 59.5% respondents with mean score=2.52 and SD=1.414, strongly disagreed or disagreed with the statement, “I feel stress due to various types of conflicts between my parents and other family members.” whereas 32.4% respondents strongly agreed or agreed and 7.5% respondents were neutral.

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Table also reflects that 60.7% respondents with mean score=2.45 and SD=1.497, strongly disagreed or disagreed with the statement, “Unfriendly behavior of family members creates stress for me.” whereas 27.7% respondents strongly agreed or agreed and 11.5% were neutral.

Overall trend is that 59.65 had no Family Environment stress in family but a handsome number of students 30.68 had Family Environment stress in their families

Table 4

Level of family stress

Range	Level	Frequency	Percent	Mean	Sd
23-54	Low stress	205	63.9%		
55-84	Moderate stress	5	1.6%	1.70	.94
85-115	High stress	111	34.6%		
	Total	321	100%		

Table 4 shows that from selected sample there were 63.9% students had low level stress, 1.6% students had moderate level stress while 34.6% students had high level stress. It shows that majority of students had low level stress. But a handsome number of students had high level stress.

Table 5

Difference between male and female family social stress

Gender	N	Mean	t-value	df	Sig(p -value)
Male	206	20.57			
Female	115	18.52	1.72	319	.068

Table 5 shows that there is no significant difference of social stress between the male and female students as indicated by t-value =1.72, df=319 and p-value =0.068>0.05.

Table 6

Difference between male and female family economic stress

Gender	N	Mean	t-value	df	Sig(p -value)
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Male	206	16.07			
			2.24	319	.529
Female	115	14.20			

Table 6 shows that there is no significant difference of family economic stress between the male and female students as indicated by t-value =2.24, df=319 and p-value =0.529>0.05.

Table 7

Difference between male and female family environment stress

Gender	N	Mean	t-value	df	Sig(p -value)
Male	206	23.76			
			2.46	319	.130
Female	115	20.54			

Table 7 shows that there is no significant difference of family environment stress between the male and female students as indicated by t-value =2.46, df=319 and p-value =0.130>0.05.

Table 8

Difference between male and female according to family stress

Gender	N	Mean	t-value	df	Sig(p -value)
Male	206	60.4126			
			2.43	319	.030
Female	115	53.2609			

Table 8 shows that there is significant difference of overall family stress between the male and female students according to as indicated by t-value =2.43, df=319 and p-value =0.030<0.05.

Table 9

Relationship between family stress and academic achievements of students

Family Stress &	N	df	r	Sig.(p-value)
Academic Achievement	321	319	.806	.000

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Table 9 shows that there was significant and strong positive relation between family stress and academic achievements of secondary level students as indicated by correlation coefficient $r = .806$, $df = 319$ and $p\text{-value} = .000 < 0.05$.

Table 10

Relationship between family stress and academic achievements of female students

Family Stress &	N	df	r	Sig.(p-value)
Academic Achievement	115	114	.778	.000

Table 10 shows that there was significant and strong positive relation between family stress and academic achievements of female students at secondary school level as indicated by correlation coefficient $r = .778$, $df = 114$ and $p\text{-value} = .000 < 0.05$.

Table 11

Relationship between family stress and academic achievements of male students

Family Stress &	N	df	r	Sig.(p-value)
Academic Achievement	206	205	.820	.000

Table 11 shows that there was significant and strong positive relation between family stress and academic achievements of male students at secondary school level as indicated by correlation coefficient $r = 0.820$, $df = 205$ and $p\text{-value} = .000 < 0.05$.

Conclusions and Discussion

On the basis of finding of this study, it has been concluded that

1. Majority of secondary level students had low level stress. But a big number of students had high level stress. Factor wise majority of students had no social stress, economic stress, environmental stress in their families but handsome number of students reported these all sort of stress. The conclusion is similar to the findings of study conducted in Calabar, Nigeria by Cornelius-Ukpepi, & Ndifon, (2015) that “home stress significantly relates to students’ performance in Integrated Science in Calabar”.
2. Male and female secondary level students reported equal level of family stress in overall and also in factors i.e. social stress, economic stress and family environment stress.

3. It was concluded that gender wise and overall family stress has strong positive relationship between family stress and academic achievements. The conclusion is similar to the study of Muthoni (2013), who found that parental marital status, family size, parents' education level and family financial status had a positive relationship with academic performance of students. The theoretical reason of this finding may be the socio-economic fabric of Pakistani society, where parents keep their kids in a protective shelter, Parents and even the relatives monitor activities of young ones, that may regulate their kids in academic and social setting to achieve high academic achievement.

Recommendations

On the basis of results it is recommended that teachers and head teachers may guide the parents during parent-teacher meeting that families must avoid giving stress to their children for better achievements.

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