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# **RESEARCH PAPER**

# Family Stress Levels and Causes: An analysis of Female University Students

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### **ABSTRACT**

Female students are being admitted to institutions at a higher rate than ever before, but they are also experiencing a variety of stress levels. The primary goal of the study was to investigate female university students' stress levels, its causes and also to investigate the impact of stress on various levels of their life. Furthermore, the aim of study was to investigate the female students' family stress and its sources in university life by conducting a thorough evaluation of stressors and their effects. All female undergraduate students of the first and final semesters from the faculty of social sciences were part of the population. More than 75% of students in the faculty of Social Sciences were females. The sample consisted of 350 female students, 50 were selected randomly from each of seven departments. A self-developed questionnaire was verified by five experts and pilot tested on 100 students, with a Cronbach Alpha reliability rate of 82. The data was collected personally, and the response rate was 92%. To examine the data, t-test, mean, standard deviations, and frequencies were used. The study found that while most female university students experienced modest levels of stress, a significant minority experienced moderate to high levels. Additionally, urban female students reported higher levels of stress than their rural counterparts. It is recommended that department heads should establish counseling services and peer support networks for anxious female students.

# **KEYWORDS** Anxious Female Students, Counseling Services, Stress Levels

## Introduction

In contemporary society, the pursuit of higher education often intersects with an array of stress factors that can affect the well-being of university students, particularly among female students. As females increasingly enroll in universities and pursue diverse academic paths, understanding the intricacies of their stress levels and the underlying causes becomes paramount. This research endeavors to explore the multifaceted dimensions of stress experienced by female university students and to delineate the myriad factors contributing to its prevalence (Herman, 2019). The transition to university life is a critical stage of personal and academic development for young women. Despite the excitement of newfound independence and intellectual discovery, many female students face pressures that can hamper their overall development (Chaube, S. K. 2018). Academic obligations and societal expectations, as well as financial restrictions and domestic responsibilities, are all sources of stress, and they frequently cross. Furthermore, the frequency of stress among female university students highlights the need for a deeper comprehension of the underlying determinants. Cultural standards, societal expectations, gender roles, and individual variances all have a significant impact on how these demographic experiences become distress. Exploring these characteristics highlights the particular problems experienced by female students and emphasizes the need for tailored interventions and support mechanisms (Madara, Cherotich, 2016).

Stress is a human feature, yet different people experience it in various ways. Different life events, such as family desires, social customs, and the challenge of changing lives, cause varying levels of stress. Apart from the others, family stress is the most important factor influencing students' educational success. Keles et al. (2020) identified family stress as a syndrome alongside social and cultural norms. These pressures have an impact on students' mental health likewise. Research on stress-related problems is being undertaken in various regions of the world, however in Pakistan, research on stressors, particularly family stress, is scarce. That is why it was critical to identify the stressors that female students experience.

By diving into the intricacies of stress experienced by female university students and analyzing its core causes, this study sought to target the components required for student promotion, well-being, and academic achievement, particularly among females. This study aims to investigate female students' family stress and its sources in university life by conducting a thorough evaluation of stressors and their effects.

#### Literature Review

According to Alkhawaldeh et al. (2023), stress factors can be identified based on the student's specific characteristics, such as a handicap, family desires, guardians' word-related position, or child-rearing techniques. Research indicates a strong correlation between stress and bad consequences in kids, particularly in familial settings.

#### **Stress Factors**

Stress factors are probably going to be related with each other (Rafidah, 2009). It is conceivable that each stress has a particularly spacious impact. Endeavoring to recognize defensive elements like collaboration between probable factors and stress factors and effects on results. It is imperative to know which are dangerous for various results. The factors like low birth weight, by birth underweight kids (for their gestational age) will probably have learning challenges or social issues, and to have deferred dialect advancement (Singh, Chouhan, & Sidhu, 2008). Youngsters with lacking weight control plans will probably have poor visual-engine aptitudes and do less well in intellectual appraisals, for example, outline duplicating, vocabulary and perusing (Roberts, 2022).

# **Family Stress Factors**

Constantly recognized stress factors are within the domain of family. Maximum researches of stress included poverty or less income, different of family structure, functioning and social environment were related to results all through youth. More factors are matters relevant to parents, such as parental education level occupation, SES status etc. (Ali, & Habib, 2023).

#### **Income and Poverty**

Economic stress is prevalent among middle-class individuals. Poverty and poor income are strongly linked to educational results. They are related to the impact of conduct (Crosnoe and Ansari, 2016). Cooper and Stewart (2021) discovered a correlation between income and cognitive and behavioral impacts inside individuals. According to Kiernan and Huerta (2008), low school performance is linked to financial deprivation, income poverty, depression, and depression among distant and mother figures. Research indicates that children raised in low-income households tend to exhibit problematic conduct (Hobcraft & Kiernan, 2010). According to Dickerson and Popli (2012), persistent poverty can lead to cognitive and behavioral issues.

# Living Situations and Material Deprivation

Living conditions often include residential or tenant accommodation or social accommodation at home. Constant deprivation and negative life conditions are clearly linked to outcomes and educational results (Benner, et al., 2001).

#### **Poor Social Status**

According to Benner et al. (2001), parents with uncommon occupations tend to have less serious outcomes. Siraji et al. (2023) found that female students' academic achievement is influenced by their socio-economic level and parental education. Low-income students often struggle with identity issues that hinder their academic progress (Matschke & Cress, 2022). Parents who work in unusual occupations typically had less serious results (Benner et al., 2001). According to Siraji et al. (2023), parental education and socioeconomic status have an impact on the academic success of female students. Identity problems are a common problem for low-income students and can impede their academic achievement (Matschke & Cress, 2022).

# Family Structure and Breakdown

The relationship between students' parents demonstrates negative behavior (Benner et al., 2001). Cao, Fine, & Zhou (2022) discovered that children living with separated, single, or divorced parents exhibit greater behavioral problems than those who are living with both parents. In Pakistani society, female's education traditionally neglected. However, the number of female university students has increased in recent years. While the family structure is not changing rapidly, male students are still prioritized over females in family and social affairs as well. As a result, female students continue to feel stressed, and their academic performance may suffer.

# Hypotheses of the Study

- H<sub>0</sub>1: There is no significant difference between the social stress level of urban and rural female undergraduate students.
- H<sub>0</sub>2: There is no significant difference between the stress level relevant to family environment of rural and urban female undergraduate students.
- H<sub>0</sub>3: There is no significant difference between the economic stress level of rural and urban female undergraduate students.

#### **Material and Methods**

The nature of the study was descriptive and a survey method was adopted to collect data.

# **Population and Sampling**

The survey comprised all female undergraduate students from the University of Sargodha who were enrolled in the first and final semesters. A sample of 350 students was drawn from the faculty of social science from all departments, with 50 female students (25 in the first semester and 25 in the final semester) from each of the seven (07) departments (Education, Economics, Psychology, Sociology, Social Work, International Relations, History, and Pakistan Studies) chosen randomly. Because female students are overrepresented in social science departments (75% or higher) compared to all other departments.

# **Instruments of the Study**

A five-point rating scale was developed to find the stress level of undergraduate students. This self-developed rating scale consisted of demographic information and three factors; social stress, family environment stress and economic stress. The rating scale included 18 items; family environment stress also contained 6 items, economic stress contained 6 items and social stress contained 6 items. To validate the rating scale expert's opinion(s) was acquired from five Ph. Ds in the subject of social work and Education sufficiently experienced in research and academics. The improved scale with incorporated recommendations of experts, was pilot tested on 100 students not involved in the real sample. The collected data were analyzed and reliability coefficient Cronbach Alpha value was 0.82 which show the high reliability.

# Data Collection and Data analysis

Self-visits were made to all of the selected departments to collect data; 350 copies of questionnaires were sent to each department, but only 321 were entirely filled out, indicating a 92% response rate. The data was evaluated using frequency, mean scores, standard deviation, range, and the t-test. The study's total sample size was 321 female students, with 191 students (59%) from urban areas and 130 (40%) from rural areas.

#### **Results and Discussion**

Table 1
Stress Levels among Female Students

Range	Level	Frequency	Percent
23-54	Low stress	5	1.6%
55-84	Moderate stress	205	64%
85-115	High stress	111	34.6%
	Total	321	100%

The above table shows that levels were made through scores; range of 23-54 demonstrate low stress level, 55-84 shows moderate stress level and 85-115 demonstrate high level of stress in students. There were 1.6% students showing low level of stress, whereas 64% students showed moderate level of stress and 34.6% students showed high level of stress. The trend shows that majority of students were at moderate level of stress.

Table 2
Factor Wise Analysis of Social Stress

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Sr.	Statement	SA	Α	UN	DA	SDA	MEAN	S.D	
1	Bad habits of friends make me	46	35	19	83	138	2.42	1.4	
1	stressful.	14.3%	11%	6%	25.8%	43%	2.43		
	Ill cooperated behavior of	40	57	22	97	11/			
2	neighbors and relatives produces	40			86	116	2.44	1.442	
	stress.	12%	17%	6%	26%	36%			
	My poor circumstances as	34	65	35	82	105			
3	compared to my friends and	-					2.50	1.397	
	classmates make me stressful.	10.6%	20.2%	10.9%	25.5%	32.7%			
4 Stri	Strictness of my family members	51	53	21	98	98	2.58	1.462	
4	make me stressful.	15.9%	16%	6%	30%	30%			
	My stress is due to my family								
5	culture which is not academically	38	62	41	84	96	2.57	1 20E	
3	supportive to me for my future	11%	19%	12%	26%	29%	2.57	1.395	
	career.								
6	Hostile conduct of family members	53	36	37	71	124	2.45	1 407	
O	makes me stressful.	16%	11.2%	11.5%	22.1%	38%	2.45	1.497	
	Total	272	315	176	498	665	2.5	1.4	
10tai		<b>14.1</b> %	<b>16.3</b> %	9.1%	25.8%	34.5%	4.5	1.4	

Results of the above table shows that the majority (68.8%) of female students with mean score=2.43 and SD=1.4, opined that friends' bad habits like smoking etc. do not make them stressful. Similarly, majority (63%) of respondents, disagreed or strongly disagreed with the statement (mean score=2.44 and SD=1.442) and expressed that ill cooperated behavior of relatives and neighbors do not make me stressful. Likewise, majority (58.2%) of respondents opined that their poor circumstances as compared to friends and classmates did not make them stressful (mean score=2.50 and SD=1.397). Whereas majority (60.4%) of respondents with mean score=2.58 and SD=1.462, also expressed that they did not feel stress due to strictness of family members. Whereas majority (56.1%) respondents with mean score=2.57 and SD=1.395, opined that they did not feel stress because of their non-supportive family culture. Likewise, majority (60.7%) of respondents with mean score=2.45 and SD=1.497 expressed that hostile conduct of their family members did not make them stressful. Overall majority of the female students (60.3% with mean score 2.5 & SD 1.4) expressed that social factor is not cause of stress for them.

Table 3
Factor wise analysis of Family Environment

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Sr.	Statement	SA	$\mathbf{A}$	UN	$\mathbf{D}\mathbf{A}$	SDA	mean	SD	
1	Unavailability of separate space at home for study make me stressful.	26 8%	48 15%	14 4.3%	143 44.5%	110 34.2%	2.5	1.382	
2	unavailability of study resources (Books, Computer, Guides etc.) by the parents creates stress.	47 14%	64 19.9%	20 6.2%	102 31%	88 27%	2.63	1.437	
3	Joint family problems create stress.	43 13.4%	49 15.3%	45 14%	80 24%	104 32%	2.52	1.419	
4	Some drugs addicted family members and relative are source of stress for me.	48 15%	46 14%	39 12%	82 25%	106 33%	2.53	1.449	
5	I feel Stress because I am not allowed to participate in family decisions.	42 13%	52 16.2%	28 7%	116 36.1%	83 25%	2.55	1.371	
6	Strict behavior of parents is stressful for me.	13 4%	88 27%	12 4%	90 28%	118 36%	2.34	1.325	
	Total	229 11.8%	367 19%	168 8.7%	593 30.6%	589 30.58%	2.52	4.191	

Table 3 shows that majority (78.7%) respondents strongly disagreed or disagreed with the statement (mean score=2.55 and SD=1.382) and opined that they did not feel stress due to non-availability of separate place of study at home. Similarly, majority (59%) of respondents expressed that non-availability of study resources (Books, Computer, guides etc.) did not create stress for them (mean score=2.63 and SD=1.437). Likewise, majority (57.3%) of respondents described that joint family problems did not create stress for them (mean score=2.52 and SD=1.419). Moreover, majority (58.5%) respondents strongly disagreed or disagreed with the statement, some addicted family members and relative are source of stress (mean score=2.53 and SD=1.449) Whereas majority (62%) of respondents expressed that as they did not feel stress as they were not allowed to participate in family decisions (mean score=2.55 and SD=1.371). Moreover majority (64.8%) of respondents did not feel stress due to Strict behavior of their parents (mean score=2.34 and SD=1.325). Overall majority (61%) of female students were not facing stress due to Family environment.

Table 4
Factor wise analysis of Economic Condition

Factor wise analysis of Economic Condition								
Sr.	Statement	SA	A	UN	DA	SDA	Mean	S.D
1	meager pocket money creates stress in me	121 37.7%	87 27%	10 3.1%	58 18%	45 14%	3.5	0.87
2	Weak economic condition makes me stressful.	112 34.8%	100 31.1%	15 4.6%	58 18%	36 11.2%	3.26	0.91
3	The burden of my uniform and books on my parents is stressful for me	94 29.2%	106 33%	24 7.4%	59 18.3%	38 11.8%	3.5	0.93
4	My brothers blame that parents are spending more money on my education makes me stressful.	107 33.3%	94 29.2%	24 7.4%	53 16.5%	43 13.4%	3.48	0.74
5	Unfulfillment of my basic necessities due to less financial resources of my family make me stressful.	112 34.8%	94 29.2%	15 4.3%	63 19.6%	37 11.5%	3.56	0.70
6	The thought of leaving education and support my family is source of stress for me.	119 37%	90 28%	21 6.5%	38 11.8%	53 16.5%	3.57	0.63
	Total	665 34.5%	571 29.64%	109 5.65%	329 17.08%	252 13.08%	3.48	0.74

Table 4 above shows that majority (64.7%) of respondents with mean score=3.5 and SD=.87 expressed that meager pocket money makes them stressful. Majority (65.9%) of respondents with mean score=3.26 and SD=0.91, opined that weak economic condition of my family makes them stressful. The majority (62.2%) of respondents with mean score= 3.56 and SD=0.93 expressed that burden of uniform and books on their parents was stressful for them. The majority (65.5%) of respondents with mean score=3.48 and SD=0.74 stated that their brothers blame that parents spend more money on their education makes them stressful. The majority (65%) of respondents with mean score=3.56 and SD=0.70, expressed that unfulfillment of their basic necessities due to less financial resources make them stressful. Majority (65%) of respondents with mean score=3.57 and SD=0.63 expressed that the thought of leaving education and support their family is source of stress for them. Overall majority (66.1%) of female students expressed that economic condition is stressful for them.

Table 5
Difference of Social Stress Between Rural and Urban Female Students

Area	N	Mean	t-value	Df	Sig(p -value)
Urban	191	20.5445	- 1.500	310	0.003
Rural	130	18.8000	- 1.300	319	0.003

Table 5 shows that the significant difference of family social stress was found between rural and urban female students as reflected by t-value =1.500, df=319 and p-value =0.003<0.05. The social stress level of urban areas students (Mean = 20.54) was higher than rural areas students (Mean = 18.8).

Table 6
Difference of Economic Stress Between Rural and Urban Female Students

Area	N	Mean	t-value	Df	Sig(p -value)
Urban	191	15.8325	1 207	210	0.015
Rural	130	14.7692	1.296	319	0.815

Table 6 shows that no significant difference of family economic stress between the rural and urban students was found as showed by t-value =1.296, df=319 and p-value =0.815>0.05. rural and Urban areas students were equal in facing economic stress.

Table 7
Difference Between Family Environment Stress and Their background as Rural and Urban

Area	N	Mean	t-value	df	Sig(p -value)
Urban	191	23.32	1 260	319	0.004
Rural	130	21.56	- 1.368		0.004

Table 7 shows that the significant difference of family environment stress between the rural and urban female students was found as reflected by t-value =1.368, df=319 and p-value =0.004<0.05. The stress level related to family environment of urban areas students (Mean = 23.32) was higher than rural areas students (Mean = 21.56)

#### **Conclusions**

Female undergraduate students reported moderate stress levels, with most citing social factors and home environments as non-stressors. The outcome is consistent with Yikealo, Tareke, and Karvinen's (2018) findings, which revealed that undergraduates had moderate levels of stress.

Most female students reported financial stress. The outcome is consistent with Tran, Lam, and Legg's (2018) findings that college female students experience financial stress.

Urban students had higher levels of social and family stress compared to rural students. However, students in both urban and rural areas experienced economic stress in equal measure. The study supports Kamau's (2013) results that urban female students experience higher levels of stress than their rural counterparts.

# Recommendations

The department heads may build and expand support systems that meet the various stress levels of students, particularly female students, such as counseling services, mental health resources, and peer support networks. University administration can help to build a culture of well-being on campus by promoting self-care practices, stress management skills, and healthy coping strategies. This can be accomplished through workshops, lectures, and awareness campaigns.

#### References

- Ali, S. S., Habib, Z. (2023). Influence of stress on students' academic and social lives: a case of a private college of Karachi. Pakistan Journal of Educational and Research, Vol 6 (2), p.189-203.
- Alkhawaldeh, A., Omari, O. A., Aldawi, S. A., Hashmi, I. A., Ballad, C. A., Ibrahim, A., Sabei, S. A., Alsaraireh, A., Qadire, M. A., & ALBashtawy, M. (2023). Stress Factors, Stress Levels, and Coping Mechanisms among University Students. *The Scientific World Journal*, 2023. P. 1-09. https://doi.org/10.1155/2023/2026971
- Benner, G. J., Strycker, L. A., Ralston, N. C., Michael, E., Jolivette, K., Baylin, A., & Zeng, S. (2021). Promoting engagement of U. S. Elementary students with emotional and behavioral disorders: Evidence of efficacy of the Classroom Reset program. *International Journal of Educational Research Open*, 3, 100122. https://doi.org/10.1016/j.ijedro.2022.100122
- Bhui, K., Dinos, S., Galant-Miecznikowska, M., de Jongh, B., & Stansfeld, S. (2016). Perceptions of work stress causes and effective interventions in employees working in public, private and non-governmental organisations: a qualitative study. *BJPsych bulletin*, 40(6), 318-325
- Cao, H., Fine, M.A. & Zhou, N. (2022). The Divorce Process and Child Adaptation Trajectory Typology (DPCATT) Model: The Shaping Role of Predivorce and Postdivorce Interparental Conflict. *Clin Child Fam Psychol Rev* 25, 500–528. https://doi.org/10.1007/s10567-022-00379-3
- Chaube, S. K. (2018). Impact of stress on female reproductive health disorders: Possible beneficial effects of shatavari (Asparagus racemosus). Biomedicine & pharmacotherapy = *Biomedecine & pharmacotherapie*, 103, 46–49
- Cooper, K., & Stewart, K. (2021). Does Household Income Affect Children's Outcomes? A Systematic Review of the Evidence. *Child Indicators Research*. 14, 981–1005. https://doi.org/10.1007/s12187-020-09782-0
- Crosnoe, R., & Ansari, A. (2016). Family Socioeconomic Status, Immigration, and Children's Transitions Into School. *Family Relations*, 65(1), 73.
- Dickerson, A., & Popli, G. K. (2016). Persistent Poverty and Children's Cognitive Development: Evidence from the UK Millennium Cohort Study, *Journal of the Royal Statistical Society Series A: Statistics in Society, Volume* 179(2). 535–558, https://doi.org/10.1111/rssa.12128
- Herman, K. C., Prewett, S. L., Eddy, C. L., Savala, A., & Reinke, W. M. (2020). Profiles of middle school teacher stress and coping: Concurrent and prospective correlates. *Journal of School Psychology*, 78, 54–68. https://doi.org/10.1016/j.jsp.2019.11.003
- Heydari, F., Motaghed, Z., & Abbaszadeh, F. (2017). Could urinary tract infection cause female stress urinary incontinence? A clinical study. *Nephro-Urology Monthly*, 8(1). P.1-04.
- Hobcraft, N. & Kiernan, K. E. (2010). *Predictive factors from age 3 and infancy for poor child outcomes at age 5 relating to children's development, behaviour and health: evidence from the Millennium Cohort Study.* University of York.

- Kamau, L. M. (2013). *Relationship between family background and academic performance of secondary school students: A case of Siakago Division, Mbeere North District* [Unpublished master's dissertation]. College of Education and External Studies.
- Keles, B., McCrae, N., & Grealish, A. (2020). A systematic review: the influence of social media on depression, anxiety and psychological distress in adolescents. *International Journal of Adolescence and Youth*, 25(1), 79–93.
- Kiernan, K. E., Huerta, M. C. (2008). Economic deprivation, maternal depression, parenting and children's cognitive and emotional development in early childhood. *Br J Sociol. Vol.* 59(4). P.783-806 DOI: 10.1111/j.1468-4446.2008.00219.x. PMID: 19035922.
- Madara, D. S., Cherotich, S. (2016). Challenges Faced by Female-Students in Engineering-Education. *Journal of Education and Practice*, 7 (25). p.1-10
- Matschke, C., & Cress, U. (2022). Social identities and the achievement gap: Incompatibility between social class background and student identity increases student disidentification, which decreases performance and leads to higher dropout rates. *British Journal of Social Psychology*, 62(1), 161-180. https://doi.org/10.1111/bjso.12563
- Patterson, J. M. (2002). Integrating family resilience and family stress theory. *Journal of marriage and family, 64*(2), 349-360.
- Prasad, S., Tiwari, M., Pandey, A. N., Shrivastav, T. G., & Chaube, S. K. (2018). Impact of stress on oocyte quality and reproductive outcome. *Journal of biomedical science*, 23, 1-5
- Rafidah, K., Azizah, A., Norzaid, M. D., Chong, S. C., Salwani, M. I. & Noraini, I. (2009). The Impact of Perceived Stress and Stress Factors on Academic Performance of Pre-Diploma Science Students: A Malaysian Study. *International Journal of Scientific Research in Education*, 2(1), 13-26. http://www.ijsre.com.
- Roberts, M., Tolar-Peterson, T., Reynolds, A., Wall, C., Reeder, N., & Mendez, G. R. (2022). The Effects of Nutritional Interventions on the Cognitive Development of Preschool-Age Children: A Systematic Review. *Nutrients*, 14(3). P.4-23.
- Singh, G., Chouhan, R., & Sidhu, K. (2008). Maternal Factors for Low Birth Weight Babies. Medical Journal, Armed Forces India, 65(1), 10-12
- Siraji, M. J. et al (2023). Study of the Factors Affecting the Quality of Students' Academic Performance in Higher Secondary Schools of Khyber-Pakhtunkhwa. Journal of Asian Development Studies, 12 (4). P.212-214.
- Sreedevi, A., Rao, G. V., Bharath, P., Reddy, K., Parigala, R., Pappu, S., ... & Parem, S. (2016). Study on stress among first-year medical students of Kurnool Medical College, Kurnool. *Int J Med Sci Public Health*, 5(5), 852. https://www.academia.edu
- Tran, A. G. T., Lam, C. K. & Legg, E. (2018). Counseling and Counseling Psychology, College of Integrative Sciences and Arts, Arizona State University, The Counseling Psychologist, 46(7) 846–869
- Wulsin, A. C., Wick-Carlson, D., Packard, B. A., Morano, R., & Herman, J. P. (2019). Adolescent chronic stress causes hypothalamo-pituitary-adrenocortical hypo-

- responsiveness and depression-like behavior in adult female rats. *Psychoneuroendocrinology*, 65, 109-117. https://onlinelibrary.wiley.com
- Yang, Y., Pei, X., Jin, Y., Wang, Y., & Zhang, C. (2016). The roles of endoplasmic reticulum stress response in female mammalian reproduction. *Cell and Tissue Research*, 363(3), 589-597
- Yikealo, D., Tareke, W. Karvinen, I. (2018). The Level of Stress among College Students: A Case in the College of Education, Eritrea Institute of Technology. Open Science Journal 3(4). P.12-17.
- Yusuf, L. (2016). Depression, anxiety and stress among female patients of infertility; A case control study. *Pakistan journal of medical sciences*, 32(6), 1340.