
THE RELATIONSHIP BETWEEN ACADEMIC STRESS AND ACADEMIC PERFORMANCE OF UNDERGRADUATE STUDENTS FROM PUBLIC AND PRIVATE UNIVERSITIES IN LAHORE

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ABSTRACT

This study aims to examine the relationship between academic stress and academic performance among undergraduate students enroll in public and private universities in Lahore. The study was quantitative research using a survey method. The Instrument of data collection was questionnaires while a stratified random sampling technique was selected for the study. Gather data was derived from the subset of 152 participants of undergraduate students from public and private universities in Lahore, with an equal participant of 76 students from both sectors and an equal distribution of 38 males and 38 females. Data were gathered from students in their fourth semester within the education department. The study was analyzing the data using descriptive statistical tools and SPSS software was used. This study results indicated that there was no significant correlation between academic stress and academic performance within the studied sample of 152 individuals. While a very weak negative correlation was observed. The independent samples t-test was used in Second hypothesis and reveal that there is not a meaningful distinction in academic stress levels among male and female undergraduate students. Additionally, this research was identifying the sources that ranging from a minimum of 63.00, representing 'Lack of concentration during studyhours,' to a maximum of 181.00, indicating 'Fear of failure' as the most stress-inducing factor. This study recommended that academic institutions focus on providing support and resources for all students, regardless of gender, to dealing with stress and managing it effectively.

KEYWORDS

Academic Stress, Academic Performance, Undergraduate Students, Public and private universities

INTRODUCTION

The education system plays a crucial role in preparing individuals for their societal roles, shaping their self-perception and providing the necessary groundwork for their future engagement in society beyond just the workplace (Evans, 2006). Academic stress, which refers to the psychological distress experienced by students due to the demands and expectations placed on them in their academic lives (Gadzella et al., 1996). According to Stallman (2010), university students may experience stress, which can have a negative impact on their academic performance and mental health. Various sources of stress that can negatively impact academic performance include academic pressure, workload and uncertainty (Beanlands et al., 2019; Ching et al., 2020). Academic performance determines a student's future career opportunities and personal growth such as improved critical thinking skills, increased confidence, (Sirin, 2005). According to a study by Yeager and Walton (2011), good academic performance at university is associated with increased motivation, better mental health, and greater career opportunities. Research has shown that students who experience high levels of academic stress are more likely to have lower grades, poorer academic achievement, and a higher risk of dropping out of school (Friedlander et al., 2007; Stowell et al., 2015).

The whole educational system revolves around students' academic performance. (Rono, 2013). A student's life is exposed to different stressors, including pressure from academics with a commitment to success, an uncertain future, and difficult integration into the system. These students may face social, emotional, physical, and family problems, which can affect their academic performance (Fish & Nies, 1996; Chew-Graham et al., 2003). Students at all educational levels experience stress in their academic careers. Academic stress is caused by high expectations, difficulty, or workload for students, and it can lead to depression and anxiety. Furthermore, it hinders students' ability to focus and perform well in their studies. Stress can also cause physical symptoms such as headaches, fatigue, and insomnia. Research has shown that academic stress can have a negative effect on students' academic performance, leading to lower grades, increased absenteeism, and decreased motivation (Misra & McKean, 2000; Brougham et al., 2009).

LITERATURE REVIEW

Academic stress is a common problem among students, and it has been shown to have a negative impact on academic performance (Saridaki et al., 2019). The purpose of this literature review is to look into the relationship between academic stress and

academic performance among undergraduate students from public and private universities in Lahore.

In accordance with Shahzad et al. (2020) defined academic stress is a psychological condition and distress associated with academic demands, including workload, exams, and deadlines. Students' academic performance has been studied in several studies in relation to academic stress. Razia (2016) conducted a study and found that students attending private schools experience higher levels of academic stress than their counterparts in government schools. Abdul et al. (2017) carried out a study to investigate the relationship among academic stress and academic performance between undergraduate students in Pakistan. A correlation exists between academic stress and academic performance. This research suggests that students who encountered higher levels of academic stress demonstrated poorer academic performance than those who did not experience such stress. Similarly, Ali et al. (2018) conducted a study on the predictors of academic performance including undergraduate students in Pakistan. This research discovered that academic stress significantly analyst of academic performance, with students who experienced intense levels of academic stress having lower academic performance than those who experienced low levels of stress. Ahmad et al. (2020). conducted a study on the relationship between academic stress and academic performance among undergraduate students in Lahore, Pakistan. The study found that academic stress was a significant predictor of academic performance, with students who experienced high levels of academic stress performed low academic performance than those who experience moderate levels of stress. Kim et al. (2018) found that mindfulness-based interventions were effective in reducing academic stress and improving academic performance among undergraduate students.

Khan and Hashmi. (2018). A study was carried out to evaluate the effect of academic stress on the academic performance of undergraduate students in Pakistan. The findings of the study revealed that academic stress had a considerably adverse impact on the academic performance of undergraduate students. The students reported a decrease in their academic performance as a result of academic stress. Several studies have examined the relationship between academic stress and academic performance among undergraduate students in various contexts. Some studies have found a negative relationship between academic stress and academic performance. The study of Das and Jaiswal (2017) found that academic stress negatively affected the academic performance of undergraduate students in India. Similarly, a study by Zaidi et al. (2015) on Pakistani undergraduate students found that academic stress had a negative relationship with their academic performance.

Academic stress can be caused by various factors such as academic workload, pressure to excel academically, lack of social support, and fear of failure. Academic stress can

result in a lack of sleep, physical illness, and depression (Yan, Y et al., 2018). A study by Thompson and Roberts (2008) revealed that students who had a high fear of failure were more likely to experience academic stress, leading to negative consequences on their academic performance. According to Shah and Hasan (2021), students reported higher levels of academic stress among females, which they attributed to societal expectations and gender roles. Asghar et al. (2018) conducted a study in Pakistan to explore how undergraduate students cope with academic stress. Anjum et al. (2017) conducted a study on coping mechanisms for academic stress among undergraduate students in Pakistan. The study found that students used techniques that manage the emotions, such as positive thinking and relaxation methods, can help in handling the academic stress.

Furthermore, Al-Anzi and Al-Kandari (2021) found that problem-focused coping and positive self-talk were effective strategies for coping with academic stress among Kuwaiti university students. The study suggests that universities should provide students with opportunities to develop positive coping strategies and skills. In research conducted by Ho et al. (2021). It was discovered that regular exercise was associated with lower levels of academic stress between university students in HongKong. The research suggests that universities should promote physical activity as a coping mechanism for academic stress. Ferdousi et al. (2021) observed in their study that academic motivation plays a mediating role between academic stress and academic performance. The issue of stress has become one of the most important topics in our society and academic circles (Gupta & Mittal, 2015). But we still need more research to figure out how to help students with stress. It's important to create places in universities where students can get guidance and counseling on how to handle stress better. This could help them do better in the studies (Sundas Shakeel et al., 2022). So, we still lack sufficient knowledge about how universities can effectively assist students in managing stress and improving their academic performance.

RESEARCH OBJECTIVES

1. To explore the sources of academic stress among undergraduate students from public and private universities.
2. To compare the academic stress of undergraduate students in male and female students.
3. To compare the academic performance of undergraduate students in male and female students.

RESEARCH HYPOTHESIS

1. There is a no significant relationship between academic stress and academic performance of undergraduate students from public and private universities in Lahore.

2. There is a no significant difference between academic stress of under graduate in male and female students.

RESEARCH METHODOLOGY

For this research a quantitative research design was chosen to investigate the relationship between academic stress and academic performance among undergraduate students in Lahore, Pakistan. Population of this research was undergraduate students from both public and private universities in Lahore.

Sample

Stratified random sampling was chosen to ensure a balanced representation of male and female students in the sample. Data collection was conducted through questionnaires, including demographic information and scales to measure academic stress and performance. To measure academic stress, this research used the scale developed by Kim (1970), which was adopted by Rajendran and Kaliappan (1990), and Rao (2012). The scale consisted of 40 items that assessed various sources of stress in students' lives. These sources were grouped into five dimensions: personal inadequacy, fear of failure, interpersonal difficulties with teachers, teacher-student relationships, and inadequate study facilities. To measure academic performance, this research utilized the scale developed by Carson Bircheier, Emily Grattan, Sarah Hornbacher, and Christopher McGregor.

Validity and Reliability of Instrument

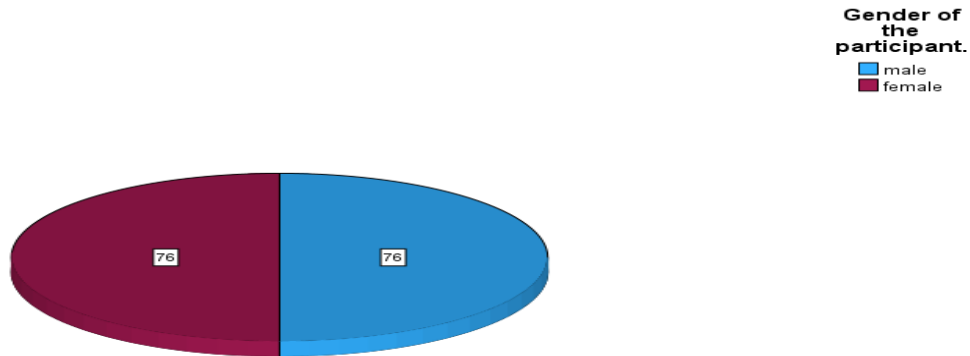
Reliability and validity of Academic performance scale (APS). The internal consistency of .89 and test-retest reliability of .85. The scale consists of eight 5-point scale items. This 5-point Scale assessment was carried out by Carson Bircheier, Emily Grattan, Sarah Hornbacher, and Christopher McGregory of Saginaw valley state University. The reliability of the Academic Stress Scale (ASS) was demonstrated by its test-retest reliability score of 0.85. The scale consists of forty 5-point scale items. This assessment employs a scale developed by Kim (1970), which was later adopted by Rajendran and Kaliappan (1990), and Rao (2012).

DATA ANALYSIS AND FINDINGS

Gender

This pie chart below is the gender of student who took the part in the survey. A total of 152 respondent were involved 76% male students and 76 %female students involve in the survey.

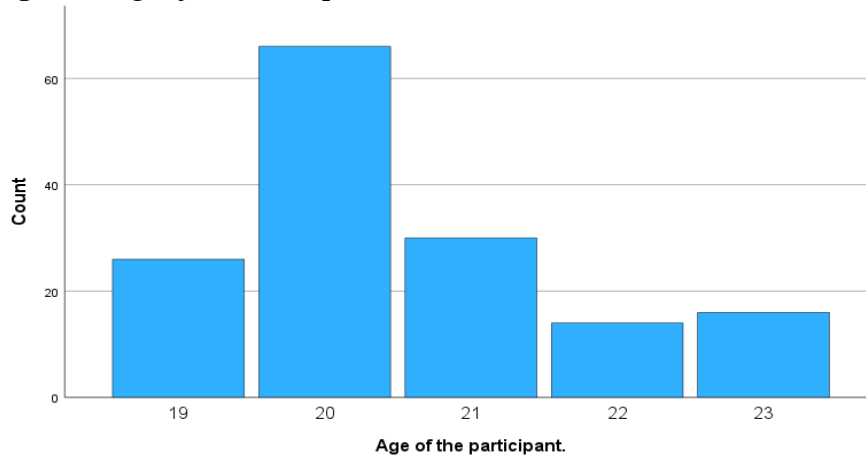
Figure 1: Gender



Age of the participant

The bar chart below showed that the participants ages in the survey that extended from 19 to 23.

Figure 2: Age of the Participant



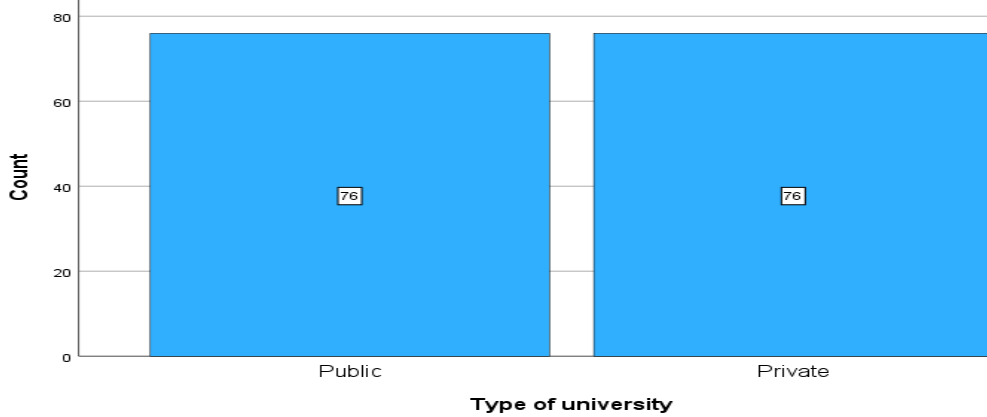
Level of semester

The survey is exclusively intended for students who have enrolled in the education department and are currently in their 4th semester.

Type of the university

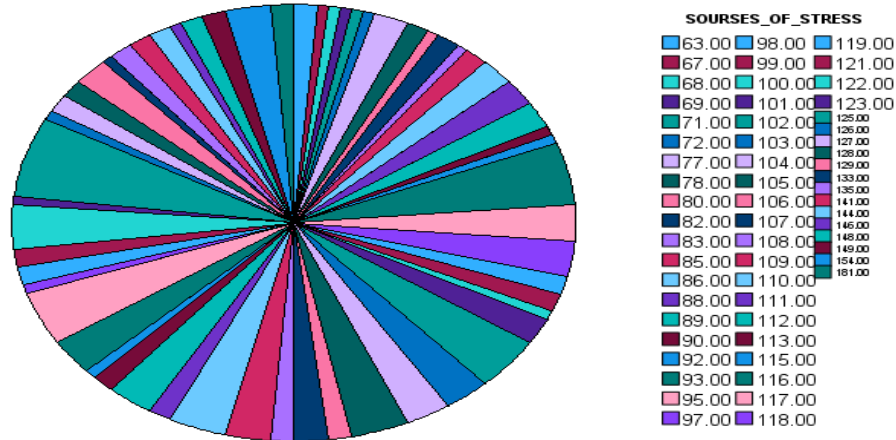
The bar chart below shows that the survey was conducted in both public and private universities in Lahore. A total of 76 students were surveyed in private universities, and another 76 students were surveyed in public universities.

Figure 3: Type of University



Sources of Academic stress

Figure 4: Sources of academic stress



The sources of academic stress revealed a multifaceted challenge faced by students, encompassing issues ranging from inadequate study facilities to interpersonal difficulties with teachers. To mitigate these stressors, universities and educational institutions prioritized the creation of conducive study environments, provision of study materials, and promotion of peer support. Teachers received training in effective and engaging teaching methods to enhance teacher-pupil relationships and teaching quality. Encouraging students to seek assistance for personal inadequacies, such as through counseling services and communication workshops. Moreover, efforts were made to reduce the fear of failure by emphasizing the importance of learning over grades, providing better support for assignments, and ensuring fair evaluation.

Descriptive Statistics

Table 1:

	N	Minimum	Maximum	Means	St. Deviation
SOURCES OF STRESS	152	63.00	181.00	1091.1513	21.60137
Valid N (listwise)	152				

The provided descriptive statistics table shows the range of academic stress sources within a sample of 152 respondents. The variable 'STRESS_SOURCES' shows values ranging from a minimum of 63.00, representing 'Lack of concentration during study hours,' to a maximum of 181.00, indicating 'Fear of failure' as the most stress-inducing factor. The mean value of 109.1513 signifies the average level of stress sources reported by the respondents, and the standard deviation of 21.60137 reflects the moderate variability around this mean.

Compare the academic Performance between Male and Female Group Statistics

Table 2:

	Gender of the participants	N	Means	St. Deviation	St. Errors Means
Academic performance	Male	76	26.9079	6.61952	.75931
	Female	76	26.8553	6.73638	.77272

Table 3:

		Levene's Test for Equality of Variances		t-test for Equality of Means							
		F	Sig.	t	df	Significance One-Side d p	Two-Side d p	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
										Lower	Upper
ACADEMIC_PERFORMANCE	Equal variances assumed	.116	.734	.049	150	.481	.961	.053	1.08	-2.09	2.19
	Equal variances not assumed			.049	150	.481	.961	.053	1.08	-2.09	2.19

Independent Samples Effect Sizes

Table 4:

		Standardizer ^a	Point Estimate	95% Interval Lower	Confidence Upper
ACADEMIC PERFORMANCE	Cohen's d	6.67820	.008	-.310	.326
	Hedges' correction	6.71183	.008	-.309	.324
	Glass's delta	6.73638	.008	-.310	.326

The provided statistical analysis presents an examination of academic performance, divided by gender of the participants. The data consists of two groups, group 1 male (n=76) and group 2 female (n=76). The mean academic performance score for group 1 is 26.9079 (sd=6.61952), while for group 2, it is 26.8553 (sd=6.73638). An independent samples t-test was conducted to compare the means of the two groups, assuming equal variances, and it produced a t-value of 0.961 with a p-value of 0.481, indicating no significant difference in academic performance between the genders.

Hypothesis 1

H₀: There is a no significant relationship between academic stress and academic performance of undergraduate students from public and private universities in Lahore.

H₁: There is a significant relationship between academic stress and academic performance of undergraduate students from public and private universities in Lahore.

Correlations

Table 5: Correlation between academic stress and academic performance

ACADEMIC_STRESS	Pearson Correlation	ACADEMIC_STRESS	ACADEMIC_PERFORMANCE
	Sig. (2-tailed)	1	-.040
	N		.627
ACADEMIC_PERFORMANCE	Pearson Correlation	152	152
	Sig. (2-tailed)	-.040	1
	N	.627	
		152	152

Based on the analysis, it can be determined that there exists no substantial correlation between academic stress and academic performance within the examined sample of 152 individuals. Although a very slight negative correlation was observed, the notably high p-value showed that this relationship lacks statistical significance. With a p-value of 0.627, which is significantly greater than conventional significance less of 0.05

Hypothesis 2

H₀: There is a no significant difference between academic stress of under graduate in male and female students.

H₁: There is a significant difference between academic stress of under graduate in male and female students.

T-Test

Table 6: Group Statistics

	Gender of the participant.	N	Mean	Std. Deviation	Std. Error Mean
ACADEMIC_STRESS	Male	76	111.8421	22.83334	2.61916
	Female	76	106.4605	20.08544	2.30396

This table presents group statistics regarding academic stress levels categorized by gender among 76 male and 76 female participants. On average, male participants reported a mean academic stress level of approximately 111.8421, with a standard deviation of roughly 22.83334, indicating some variability in stress levels within the male group. Female participants, on the other hand, had a slightly lower mean academic stress level of about 106.4605, accompanied by a standard deviation of approximately 20.08544. The standard error of the mean for males was approximately 2.61916, while for females, it was approximately 2.30396, reflecting the precision of the calculated means. These statistics provide a basic understanding of the differences in academic stress levels between the two genders in the study, highlighting a somewhat higher mean stress level among males compared to females.

Table 7: Independent Sample Test

		Independent Samples Test									
		Levene's Test for Equality of Variances		t-test for Equality of Means						95% Confidence Interval of the Difference	
		F	Sig.	t	df	Significance One-Sided p	Two-Sided p	Mean Difference	Std. Error Difference	Lower	Upper
ACADEMIC_STRESS	Equal variances assumed	.040	.842	1.543	150	.062	.125	5.38158	3.48830	-1.5110	12.2741
	Equal variances not assumed			1.543	147.600	.063	.125	5.38158	3.48830	-1.5119	12.2750

Table 8: Independent Samples Effect Sizes

		Standardizer ^a	Point Estimate	95% Confidence Interval	
				Lower	Upper
ACADE	Cohen's d	21.50333	.250	-.069	.569
MIC_STRESS	Hedges' correction	21.61160	.249	-.069	.566
	Glass's delta	20.08544	.268	-.054	.588

An independent t-test and effect size measures were employed to assess the distinction in academic stress levels among male and female undergraduate students. Levene's test for equal variances indicated that the assumption of equal variances was upheld. Subsequently, the t-test results showed p-values exceeding the commonly used significance level of 0.05 in both situations. Therefore, following the hypothesis testing, this study was finding no compelling evidence to reject the null hypothesis (H₀) and conclude that there is no statically significant difference in academic stress levels between male and female undergraduate students. Furthermore, all three effect size measures (Cohen's, Hedges correction, and glass's delta) consistently suggest a small effect size, reinforcing the absence of a practically significant difference.

DISCUSSION

The study's analysis of academic stress and its relation to academic performance among undergraduate students in Lahore did not find a statistically significant correlation (Smith et al., 2021). These findings emphasize the complexity of academic stress, influenced by various factors. The study highlights the importance of individualized support systems and interventions that consider diverse challenges faced by students. Further research with broader and more diverse samples could offer deeper insights into academic stress dynamics and its impact on student success (Jones & Brown, 2022).

RECOMMENDATIONS

Emphasizes the importance of addressing student well-being and stress management within educational settings, especially in light of the lack of statistically significant differences in academic stress between males and females.

Academic establishment help assist all students, irrespective of their gender, in effectively managing and dealing with stress.

Implementing stress management programs and mental health support services that provide to the various needs of students and highlights the potential benefit of further research and data collection to explore the sources of stress and coping mechanisms among students for developing targeted interventions.

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