



Effect of Academic Stress on Mental Health of Undergraduate Students

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Original Article

ARTICLE INFORMATION

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Keywords: Health, Academic, Stress, Psychology, Students, Mental.

ABSTRACT

The study looks at how undergraduate students' mental well-being is affected by academic stress, emphasizing how academic pressures contribute to mental health challenges. Academic stress can appear in various forms, such as frustration, pressure, and anxiety, and may lead to both mental and physical health issues. Factors like parental expectations, peer influence, and extracurricular activities intensify this stress. University life brings additional challenges, such as increased academic demands, decision-making responsibilities, and separation from family, which heighten students' vulnerability to mental health problems like depression and anxiety. A quantitative descriptive survey was conducted with 150 students at Superior University, Lahore, using structured questionnaires to assess their academic stress and mental health. The results showed that 79% of students experience high levels of academic stress, while 72% report moderate mental health. The study found a significant negative correlation between academic stress and mental health, meaning that higher stress levels are linked to poorer mental health. Additionally, higher academic stress was associated with health problems. The research concludes that universities must implement strategies to reduce academic stress and promote students' mental well-being. Despite the high levels of stress, many students effectively manage their mental health through various coping mechanisms. To make more accurate generalizations, a similar study with a bigger sample size can be conducted to evaluate undergraduate students' academic stress and mental health. Undergraduate students' experiences with academic stress and mental health might be investigated through a qualitative study. To put the stress management sessions into practice and assess their efficacy, an experimental study might be carried out. The study suggests further research with larger samples and emphasizes that interventions to manage academic stress are crucial for improving students' academic performance and overall well-being.

Introduction:

Academic stress refers to the emotional strain students experience due to the fear of academic failure and the pressure to meet academic demands that exceed their available resources. It can manifest in four key ways: academic frustration (difficulty achieving goals), academic conflict (clashing priorities), academic pressure (demands on time and energy) and academic anxiety (fear of failure).

This stress negatively impacts academic performance and can lead to mental and physical health issues. Factors like parental expectations, peer pressure, and extracurricular activities also contribute. A significant portion of students face stress-related mental health problems.(1)

The transition to university life presents significant challenges for young people, such as adjusting to academic demands, making independent decisions and being distanced from familiar support networks. These challenges can affect students' mental health, with research showing that mental strain increases upon entering university and it does not fully return to pre-university levels. University students are particularly vulnerable to issues like depression, anxiety, and stress which tend to peak in early adulthood.

Recent years have seen growing concern over a potential "mental health crisis" in higher education, with studies indicating rising mental health issues and help-seeking behaviors among university students. Psychological distress in this period can negatively impact academic performance, engagement, and personal well-being both in the short and long term.

Despite the importance of addressing mental health at universities, many students do not receive adequate treatment and services are not keeping pace with the growing student population. This study aims to provide an overview of research on university students' mental health using a bibliometric approach, offering insights into the evolution of the field, key contributors and gaps in the literature. The research hopes to guide policy and practice in improving mental health care for students in higher education institutions.(2)

Stress has become a critical topic in both academic research and society, with numerous behavioral science studies highlighting its significance and consequences. Academic stress, particularly among university students, can have both positive and negative effects if not properly managed. University students face various academic stressors, such as



assignments, competition, and personal problems, which can lead to harmful impacts on their well-being. Despite this, many universities have not taken adequate steps to address student stress, which affects their academic performance and personal development. Studies suggest that institutions need to implement strategies to identify stress symptoms early and provide support, helping students deal with the pressures of academic life. Without such measures, the health and education of students may be compromised. This study aims to provide an overview of research on university students' mental health using a bibliometric approach, offering insights into the evolution of the field, key contributors and gaps in the literature. The research hopes to guide policy and practice in improving mental health care for students in higher education institutions. Stress management is a key for students to contribute positively to society, and universities play an important role in supporting this balance.(3)

LITERATURE REVIEW

The study investigates how religious orientation influences students' ability to cope with academic stress. Religion may act as a defense mechanism, helping to reduce stress levels. Pargament's theory outlines three roles of religion in coping: as part of the coping elements, a contributor to coping, and a product of coping. From an Islamic perspective, religion encompasses faith, action, and worship. The study finds that religious coping is more effective than general religious orientation in adjusting to difficult situations. However, the effectiveness of religious coping varies based on the strategies used. Positive religious coping, characterized by confidence and turning to religion for support, generally leads to beneficial outcomes. In contrast, negative religious coping, marked by struggle and doubt, is often maladaptive. Thus, religious coping can be either helpful or harmful depending on the approach taken.(4)

Conceptualizations of mental health and illness are influenced by the theoretical and paradigmatic foundations of various disciplines, including biomedical, behavioral, and social sciences. The biomedical approach, rooted in psychiatry, views mental health as a disease of the brain, typically treated with pharmacological interventions. In recent decades, advancements in genetics and neuroscience have reshaped the field, with psychiatry embracing the notion that mental disorders are brain disorders. Behavioral sciences, including clinical psychology, focus on the psychological processes driving thoughts, feelings, and behaviors. This perspective tends to prioritize a continuum approach to mental health, acknowledging the interplay of biological and social factors. Social sciences contribute by examining the influence of cultural, social, and environmental factors on mental health, highlighting the need for culturally sensitive understandings of mental illness.(5)

Mental health has evolved from being defined solely as the absence of illness to a more comprehensive view incorporating well-being. The World Health Organization defines mental health as a state of well-being in which individuals realize their potential, manage stress, and contribute to their communities. Positive psychology and positive medicine have contributed to this shift, emphasizing strengths and well-being beyond the absence of negative symptoms. However, critics argue that overly positive definitions may marginalize individuals facing

contextual or physical constraints that limit their ability to "function productively."(6)

Keyes' model integrates both mental illness and well-being, suggesting that they represent two separate but correlated spectra. Mental health is not merely the absence of illness but involves balancing low mental illness symptoms with high levels of well-being. His framework challenges binary conceptions and offers a more nuanced understanding of mental health.(7) This study aims to assess the academic stress and mental health of undergraduate students and develop a relationship between academic stress and mental health of undergraduate students.

METHODOLOGY

A quantitative methodology utilizing a descriptive survey design was chosen to ascertain the correlation between undergraduate students' mental health and academic stress. Convenient sampling was used to pick Superior University in Lahore, Punjab, Pakistan, where the study was carried out. 150 undergraduate students made up the sample, which was chosen using basic random sampling. To perform this study, 40 first-year students, 40 second-year students, 40 third-year students, and 30 fourth-year students were chosen. The Structured Questionnaire was utilized to gather demographic data, the Mental Health Questionnaire by Fliege was used to gauge undergraduate students' mental health, and a Structured Likert scale was employed to gauge academic stress and compile a checklist.

Table 1: Distribution of students by Demographic Characteristics (N=150)

Sr. No.	Sample Characters	Frequenc y	Percentag e
I	Age in years		
	19	4.0	2%
	20	29.0	19%
	21	41.0	28%
	22	40.0	27%
	Greater than 22	37.0	24%
II	Sex		
	Male	61.0	40.3%
	Female	89.0	59.7%
III	Semester		
	1 st _ ₂ nd	40.0	26.67%
	3 rd _ ₄ th	40.0	26.67%
	5 th _ ₆ th	40.0	26.67%
	7 th _ ₈ th	30.0	20%
IV	Religion		
	Muslim	139.0	93%
	Christian	11.0	7%
V	Domicile		
	Punjab	73.0	49%
	Khyber Pakhtunwa	46.0	30%
	Azad Kashmir	31.0	21%
VI	Family Income per month, Rs.		
	Below 50000	24.0	16%
	50001-100000	51.0	34%
	100001-200000	41.0	27%
	200001-500000	30.0	20%
	Above 500000	4.0	3%
VII	Support		
	Parents	88.0	59%
	Siblings	11.0	7%



	Friends Professor	46.0 5.0	31% 3%
VIII	Living in Own house	31.0	20.67%
	Hostellers	113.0	75.33%
	Relatives house	6.0	4%
IX	Reason of Joining Self Interest	90.0	60%
	Parents' Pressure	33.0	22%
	Friends	4.0	3%
	Others	23.0	15%
X	Affair Yes	80.0	53.33%
	No	70.0	46.67%
XI	Health Issue Yes	81.0	54%
	No	69.0	46%

received. Before giving the pupils the tool, the subjects gave their informed consent. Confidentiality was guaranteed and the study's goal was clarified. In order to evaluate the academic stress and mental health of the chosen individuals, a structured questionnaire was provided to them, and they had 30 minutes to complete it. It was determined that the data gathering process was adequate. To examine the data, both descriptive and inferential statistics were employed.

RESULTS

A sizable portion of pupils (28%) were in the 19–20 age range (Table 1). 93% of the kids identified as Muslims. The majority of pupils (49%) were residents of the Punjab area. The majority of students' families (34%) made between Rs. 50001 and Rs. 100000. Parents supported the majority of the pupils (59%) in some way. 20.67% of the students were living in their own homes, while the majority (75.33%) was hostellers. The majority of students (60%) enrolled in the course out of self-interest, whereas 22% did so as a result of parental pressure. During their time in school, the majority of students (53.33%) had affairs, and the majority of students (54%) had health issues.

The instrument's reliability was assessed using the split half reliability technique, which involved asking 10 samples to complete a questionnaire. The reliability coefficient of the tool was 0.73, indicating that it was deemed reliable. Information was gathered in September of 2024. Purposive sampling was used to choose 120 samples after administrative clearance was

Figure 1: Score distribution for academic stress (N=150)

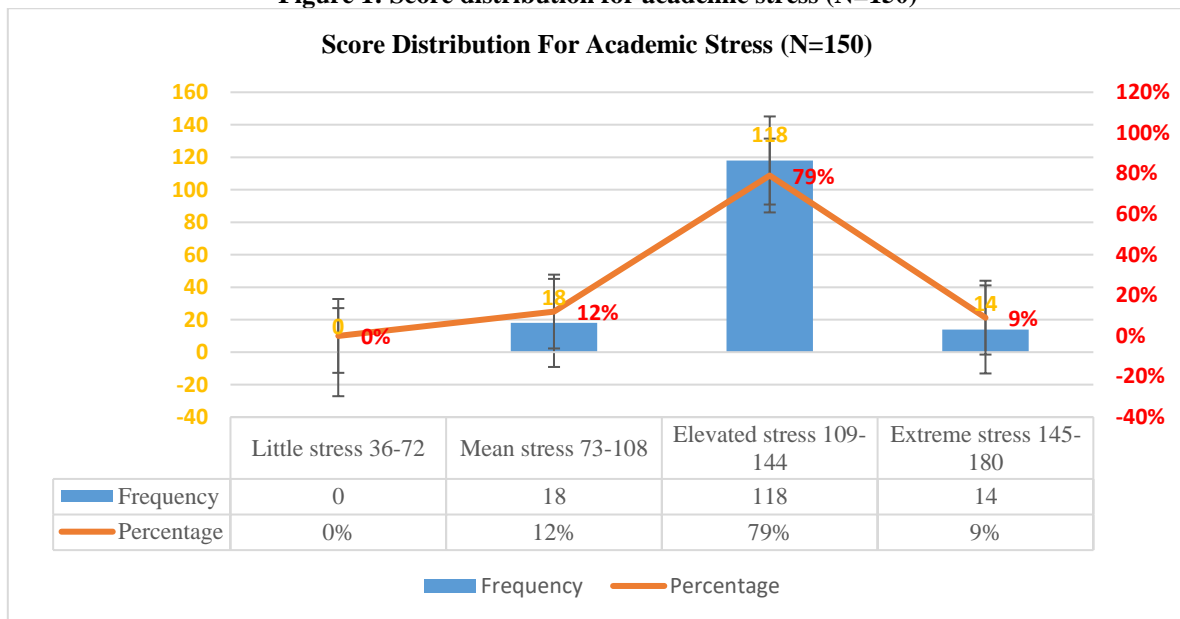




Figure 2: Score distribution for mental health (N=150)

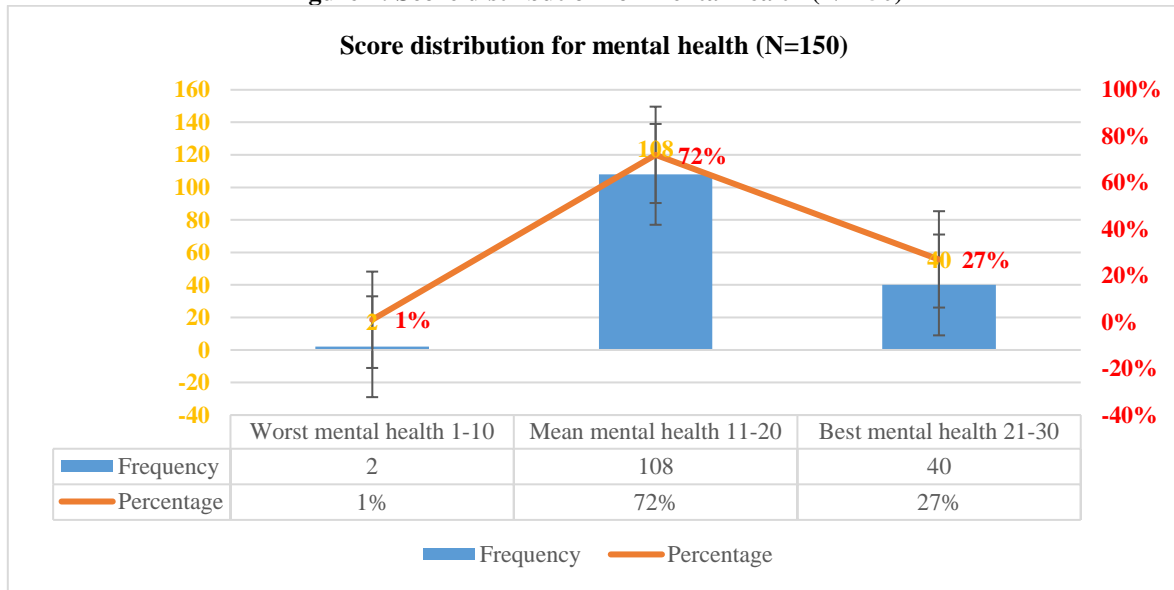
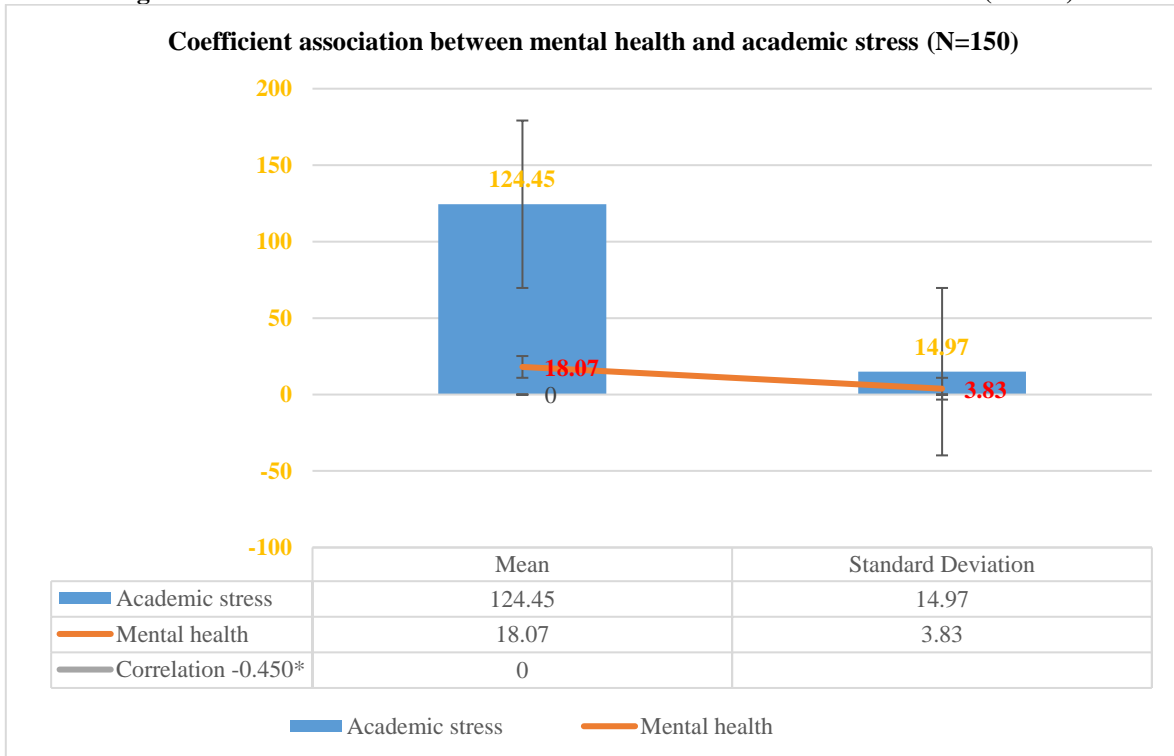


Figure 3: Coefficient association between mental health and academic stress (N=150)



* $r = 0.159$ for $df (148)$ at 0.05 level of significance

Undergraduate students' mental health and academic stress. The mental health ratings range from 1 to 30 and the academic stress scores from 36 to 180 (Fig 2). The average mental and academic stress ratings are 18.08 ± 3.84 and 124.4 ± 14.99 , respectively. The majority of pupils (79%) fell into the high stress range of 109–144. The majority of undergraduate students (72%) had average mental health, falling between the ages of 11 and 20.



Table 2: Relationship Between A Few Specific Elements and Academic Stress (N=150)

Sr. No.	Selected Varying Values	Academic stress			Mental health		
		X ² (NS)	Df	Table value	X ² (NS)	Df	Table value
I	Age in years 19 20 21 22 Greater than 22	8.371	8.0	15.508	7.198	8.0	15.508
II	Sex Male Female	5.754	2.0	5.992	0.0641	2.0	5.992
III	Semester 1 st -2 nd 3 rd -4 th 5 th -6 th 7 th -8 th	4.083	6.0	12.591	2.752	6.0	12.591
IV	Religion Muslim Christian	1.994	4.0	9.487	1.630	4.0	9.487
V	Domicile Punjab Khyber Pakhtunkhwa Azad Kashmir	2.980	4.0	9.487	3.399	4.0	9.487
VI	Family Income per month, Rs. Below 50000 50001-100000 100001-200000 200001-500000 Above 500000	6.391	8.0	15.508	7.138	8.0	15.508
VII	Support Parents Siblings Friends Professors	10.956	8.0	15.508	2.977	8.0	15.508
VIII	Living in Own house Hostellers Relatives house	7.874	6.0	12.591	1.706	6.0	12.591
IX	Reason of Joining Self Interest Parents' Pressure Friends Others	7.324	6.0	12.591	4.349	6.0	12.591
X	Affair Yes No	5.135	2.0	5.992	1.681	2.0	5.992
XI	Health Issue Yes No	17.010*	2.0	5.992	3.279	2.0	5.992

*Significant p value= 0.05; NS-Not Significant p value= 0.05.

The relationship between academic stress and mental health At the 0.05 level of significance for df (148), the r value (-0.45), which is greater than the tabular value (0.159), indicates a strong negative correlation between academic stress scores and mental health scores (Figure 4). This demonstrates the relationship between academic stress and mental health for undergraduate students, i.e., the reduction of academic stress with an improvement in mental health. relationship between a few key components, academic stress, and mental health. There is a significant link between health issues and academic stress, as shown by the calculated chi-square value (17.01), which is

less than the table chi-square value (5.991) at 2 df and 0.05 level of significance (Table 5). Thus, it can be said that there was a noteworthy correlation between undergraduate students' health issues and their academic stress.

DISCUSSION

The current study's findings are in line with those of Jayanthi et al. (2015), who found that adolescents were experiencing extreme stress. Early identification of adolescents experiencing extreme scholastic stress is necessary since treatments aimed at easing this strain may have an impact on the incidence and intensity of depression.(8) According to A Singh and P



Kumar's (2024) evaluation, psychological well-being is a state of mental prosperity that enables people to comprehend their abilities, study effectively and perform magnificently, contribute to their community, and adjust to life's challenges. (9) Academic stress has a negative impact on undergraduate nursing students' mental health, according to research done by Javeth (2018) involving undergraduate nursing students at a private college (1). Mishra et al. (2016) investigated how male and female college students perceived their academic stress and compared the views of faculty and students on the subject. They discovered that college students experienced high levels of stress, which is perceived negatively or as excessive, which can have an impact on both academic performance and health. In terms of mental health, it was discovered that Catholic students scored higher on the mental health symptom scale and that this correlation was consistent with the study conducted by Whitley OJ (2011) regarding the mental health status, use of mental health services, and attitudes toward mental health professionals among the random sample of college students. (10) When Biyan J. & Beili Z. (2003) looked at middle school and college students' mental health and how exercise related to it, they discovered that students' mental health was better.

CONCLUSION

The study's findings demonstrated that while university students were in good mental health, they were also under stress related to their studies. To manage their stress and perform better academically, students were employing a variety of coping strategies, meditation and improved sleep cycle. Since the study's sample size was small, it is unable to draw broad conclusions.

Secondly, the chosen university was not public. Thus, the study's conclusions can only be applied to students attending private universities. To make more accurate generalizations, a similar study with a bigger sample size can be conducted to evaluate undergraduate students' academic stress and mental health. Undergraduate students' experiences with academic stress and mental health might be investigated through a qualitative study. To put the stress management sessions into practice and assess their efficacy, an experimental study might be carried out.

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CONFLICT OF INTEREST

Authors declared no conflict of interest, whether financial or otherwise, that could influence the integrity, objectivity, or validity of their research work.

GRANT SUPPORT AND FINANCIAL DISCLOSURE

Authors declared no specific grant for this research from any funding agency in the public, commercial or non-profit sectors

DATA SHARING STATEMENT

The data that support the findings of this study are available from the corresponding author upon reasonable request



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