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Depression, Anxiety, and Stress among University Students in Pakistan

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ABSTRACT

University students encounter several academic, social, and personal issues that can affect their psychological wellbeing causing depression, anxiety, and stress. In Pakistan, the increasing educational demands, financial susceptibilities, and socio-cultural demands are causing the mental strain among the students. The paper examines the etiology and prevalence of depression, anxiety and stress in Pakistani university students with a particular focus on the following factors as causes of this disease, academic workload, family expectations, peer relationships, and socio-economic status. It has been indicated that mental health programs and counseling services play a crucial role in helping students to achieve psychological well-being and academic achievement.

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Introduction

Mental health has become a vital component of overall well-being, and it is especially important to university students that have to face various academic, social, and personal stressors. University life may involve high levels of academic work, expectations, acclimatizing to new environments and pressure to perform and these may lead to psychological distress (Bayram & Bilgel, 2008; Dyrbye et al., 2006). In Pakistan, these problems are worsened by socio-cultural, economic, and educational aspects, and leave students vulnerable to depression, anxiety, and stress (Rehman et al., 2010; Mahmood et al., 2019). The most widespread mental health issue in the student population of the world is the phenomenon of depression, which may be defined as the sense of sadness, hopelessness, and uninterest, which is uncommon to pick up (World Health Organization [WHO], 2017). The feeling of excessive worry, also referred to as anxiety and the sense of apprehension, often goes hand in hand with depression and can have a drastic negative effect on academic performance and socialization (Beiter et al., 2015). The mental health Stress that can be explained as the body response to the difficult circumstances can cause depression and anxiety and, consequently, be related in a circular sense to mental health (Lazarus and Folkman, 1984).

It has been found that mental health problems among college students are becoming increasingly common across the globe, and the rate of depression among various countries ranges between 20 and 50 percent (Ibrahim et al., 2013; Auerbach et al., 2016). In Pakistan, other research has also given alarming statistics, with 40 percent of the students reported to have moderate to severe depression, anxiety, or stress (Rafique et al., 2020; Sarwar et al., 2017). Students have mental health issues mainly caused by academic pressures such as examination pressures, work, and competition to achieve better grades (Shamsuddin et al., 2013). Also, family demands, cultural beliefs, and social pressures are also other factors that contribute to the increased psychological burden on the students (Hussain et al., 2017). A student has undergone stressing environments due to the pressure of meeting the demands of parents and at the same time deals with financial and social pressures, which make it a multidimensional stressful situation (Saeed et al., 2019; Riaz et al., 2018).

Social support, peer relationships, and coping mechanisms constitute the psychosocial factors that have a substantial impact on the mental health outcomes of students. It has been found that, students with well-developed social support systems report reduced stress and emotional distress levels, in comparison to those who experience social isolation (Duru and Balkis, 2018; Misra and McKean, 2000). Additionally, there are increased levels of mental health problems among students associated with maladaptive coping mechanisms, which include avoidance or substance use (Pritchard and Wilson, 2003). These issues are also complicated by the fact that few students receive counseling services and mental health awareness, which in turn results in the fact that many students do not have appropriate support in the context of Pakistani universities (Riaz et al., 2021; Malik et al., 2025).

The gender factor was also revealed in the study on the mental health of students, with the female population being more depressed and anxious than the male population (Bayram and Bilgel, 2008; Mahmood et al., 2019). Such variations in Pakistani context may be explained by the cultural and social demands like the lack of mobility, social interactions, and the choice of a career (Nisar et al., 2016). Further, rural-urban migration to obtain higher education, monetary, and co-editing adaptation could have pressure that affects female students differently (Zafar et al., 2019).

Social-economic and academic discipline, also homestead plays a significant role in the psychological well-being of the students. Low-income families are associated with low income and a greater level of financial stress among children, which is associated with depression and anxiety (Shahzad et al., 2019). Similarly, mental complications may be caused by the students who do not spend money on families and live in hostels that compel them to feel socially isolated, homesick, and challenged with adjustment (Ibrahim et al., 2013). It is also significant in regards to the academic field: learners of professional or highly competitive studies, such as medicine, engineering, or business, are at a greater risk of being exposed to stress due to the high demands and pressure on the results (Dyrbye et al., 2006; Sarwar et al., 2017).

The combination of academic, social, and personal conditions implies that the problem of mental illnesses in university students is diverse and complicated. Not just the psychological well-being of the students, depression, anxiety, and stress deteriorate cognitive functioning, academic performance, and social relations (Beiter et al., 2015). Early diagnosis and treatment is thus important in alleviating such effects. It has been suggested that mental health awareness, counseling services, peer support groups, and stress management workshops can be used to

overcome these challenges in universities across the globe (Shamsuddin et al., 2013; Riaz et al., 2021).

Internationally, the World Health Organization stresses that mental comfort promotion and averting measures on higher education are critical to back the overall growth of students and their future productivity (WHO, 2017). In Pakistan, despite the increasing awareness of young people about the mental health-related issues, there are no systematic efforts to assist the youth on an institutional level (Hussain et al., 2017; Javed et al., 2020). The complex strategy to depression, anxiety, and stress among the students of the university would require the involvement of the educational authority, the mental health workers, policymakers, and families to create the environment in which the students can be expected to attain psychological well-being.

In conclusion, the problem of depression, anxiety, and stress among the population of university students in Pakistan is a solid subject of the public health problem. Academic pressures, socio-cultural expectations, gender difference, socio-economic factors, and unavailability of mental health resources make the students contribute to the psychological load. The awareness of these aspects is instrumental in the creation of effective interventions, policies, and support structures that are supposed to foster the mental health and attainment of academic achievement and overall wellbeing of students. The research would benefit by continuing to examine the rates, causes and outcomes of mental health issues among Pakistani university students, which in the future would be applied to create evidence-based interventions to stem the rising mental health epidemic.

Literature Review

The problem of mental health among university students has received significant attention from the academic community because of its high rate, influence on academic success, and long-term effects on student welfare. However, life at university is a time of development and freedom and can be a source of challenges that lead to depression, anxiety, and stress. Academic stresses such as exams, heavy workloads, and grade competition have been noted to be the main stressors that affect mental health of students (Bayram & Bilgel, 2008; Beiter et al., 2015; Dyrbye et al., 2006). Stressing the need to achieve high academic results may also create chronic stress, which may result in the development of anxiety disorders and depressive symptoms in case of inadequate coping mechanisms (Shamsuddin et al., 2013; Ibrahim et al., 2013). Some studies show that stress is especially likely to affect students of competitive majors, especially in medicine, engineering, and business, because of the high-pressure academic environment and time limits (Sarwar et al., 2017; Dyrbye et al., 2006; Mahmood et al., 2019).

Psychological research has highlighted the interrelationship between depression, anxiety and stress indicating that depression, anxiety and stress tend to co-exist in most cases among students. Lovibond & Lovibond (1995) also affirm the DASS-21 model that the high level of stress can cause anxiety which when continued may result in depressive symptoms. On the same note, Eisenberg et al., (2007) established that students who reported high levels of stress had higher chances of having comorbid anxiety and depression. All these findings demonstrate that mental health issues in higher education are multidimensional and that assessment and intervention must focus on holism (Beiter et al., 2015).

Socio-cultural factors cause the mental health burden in the university students in Pakistan. The students are also subjected to psychological stress due to cultural requirements like the family

needs and societal expectations (Hussain et al., 2017; Nisar et al., 2016). In the collectivist culture like Pakistan, parental pressure on career choice, academic performance, and social performance is very strong, which influences the mental health of student (Rehman et al., 2010; Saeed et al., 2019). Students might have to juggle between their ambitions and the family, which can result in chronic stress and provoke certain anxiety and a depression-like state (Shahzad et al., 2019; Zafar et al., 2019). Financial instability also contributes to psychological distress, particularly when it is imposed on low-income groups of students who are unable to cover the tuition fees and cost of living and be academically successful (Rafique et al., 2020; Ibrahim et al., 2013).

The variations in the mental health outcomes of the students in regard to boys and girls have been well documented. Female students have also elevated levels of anxiety, depression, and stress as compared to male students (Bayram & Bilgel, 2008; Mahmood et al., 2019; King and Boyatzis, 2004). Social-cultural restrictions and gendered socialization, along with greater vulnerability to academic and interpersonal problems, have been mentioned as the reasons behind these differences (Hussain et al., 2017; Nisar et al., 2016). The lack of mobility, social disapproval, and the necessity to become a good student and conform to the cultural values might be counted among other issues encountered by the female pupils in Pakistan and lead to the development of psychological distress (Zafar et al., 2019; Sarwar et al., 2017).

Mental health of the students is largely dependent on the peer associations and the social support and coping strategies. Friendship and support can help lessen the harmful consequences of school-related stress and provoke psychological strength (Misra & McKean, 2000; Duru & Balki, 2018). Conversely, the level of depression and anxiety is more apt to be high in the context of social isolation, deficit of emotional support, maladaptive styles of coping, such as avoidance or substance use (Pritchard & Wilson, 2003; Misra & McKean, 2000). It has been observed in research in Pakistan that students with limited access to counseling services or mental health resources use informal support, which may not be adequate to mitigate the effect of the ongoing chronic stress (Riaz et al., 2021; Hussain et al., 2017).

Academic related issues such as workload, examination pressure and learning environment are also playing a central role in the mental health problems faced by students. Stress and anxiety have been positively correlated with high course requirements, evaluation frequency, and grade rivalry (Shamsuddin et al., 2013; Beiter et al., 2015). Teacher-student interactions, institutional support, and classroom climate can reduce or increase the levels of stress (Dyrbye et al., 2006; Rafique et al., 2020). The students of schools with fewer counseling, peer mentoring, or mental health awareness initiatives experience more psychological distress, which highlights the importance of the existence of systematic mental health support systems (Riaz et al., 2021; Sarwar et al., 2017).

According to recent investigations in Pakistan, the necessity to combat mental health in university students is severe. Rafique et al., (2020) found that the moderate level of depression and the significant level of anxiety and stress were found among more than 35% of students, and they were higher than 40%. On the same note, Sarwar et al., (2017) observed that the stress levels among students were high because of the academic workload and the lack of awareness of career opportunities. These results are in line with the existing research on the subject that reports that mental health problems among university students are disproportionately high when compared to the overall population (Beiter et al., 2015; Ibrahim et al., 2013).

Studies as well point to the connection between mental health and academic success. Depression, anxiety and stress also have a high level of concentration impairment, poor functioning of the brain and lower academic performance (Eisenberg et al., 2007; Misra & McKean, 2000). Students with chronic psychological distress also tend to develop less motivation, absenteeism, and poor academic activity, which continue to aggravate stress and depression (Bayram & Bilgel, 2008; Shamsuddin et al., 2013). It is hence necessary to treat mental health issues that may face students not only to ensure their well-being but also their academic achievements and eventual career performance.

Another gap in mental health services and awareness in Pakistan can also be found in the literature. University-based mental health services are usually underutilized or scarce when depressive, anxiety, and stress levels are high among students (Riaz et al., 2021; Hussain et al., 2017). Poor access to care is caused by stigma around mental illness, untrained professionals, and insufficient institutional policies (Nisar et al., 2016; Saeed et al., 2019). Programs like counseling centers, stress management programs, and awareness programs have proven to be fruitful in most universities around the world but are not common in many Pakistani universities (Shamsuddin et al., 2013; Riaz et al., 2021).

Promotion of mental health among students is linked with intervention based on early diagnosis, psychoeducation, and acquisition of coping skills. The most effective strategies that minimized the effects of depression, anxiety, and stress symptoms were found to be peer support networks, mindfulness programs, and cognitive-behavioral strategies (Beiter et al., 2015; Pritchard & Wilson, 2003; Duru & Balkıs, 2018). Cultural sensitivity of mental health interventions in Pakistan, including the integration of religious and community support, has also been implied as the means of making the mentioned interventions more acceptable and effective (Hussain et al., 2017; Riaz et al., 2021).

Overall, the literature suggests that the complex interaction of academic, socio-cultural, psychological, and environmental influences has an impact on the occurrence of depression, anxiety, and stress in Pakistani universities among students. The rates of prevalence, gender differences, lack of support, and lack of awareness emphasize the need to take a comprehensive mental health approach. Although context-specific variables, coping, and intervention have to be studied further to minimize the mental health burden among students and promote psychological well-being in higher education institutions.

Methodology

Research Design

The quantitative research design is adopted in this study in order to explore depressive, anxiety and stress prevalence and determinants of depression, anxiety, and stress among university students in Pakistan. Quantitative method is appropriate because it provides the possibility to measure psychological variable in a systematic way and it will be possible to conduct a statistical analysis of the relationship between depression, anxiety and stress and demographic variables. This design can be used to provide empirical data about the trends in mental health among the university population and find patterns that will be used to influence intervention strategies.

Population and Sample

The sample population was undergraduate and postgraduate students pursuing their degrees in the public and private universities located in Islamabad, Rawalpindi and AJK, and their age bracket fell in the range of 18-30 years. The reason behind the choice of this population is that young adults in higher education are prone to depression, anxiety, and stress due to a combination of unique academic, social, and psychological pressure (Bayram & Bilgel, 2008; Beiter et al., 2015).

The stratified random sampling technique was used to select a sample of 300 students. The stratification was done by type of universities (public and private) and gender in order to achieve proportions. The sample size was about 150 students in the public universities and 150 in the private universities and equal representation of both the male and female students. The sample size is reasonable to work with, and its size has enough statistical power to support the correlation, regression, and structural equation modeling (SEM) methods.

Data Collection Instrument

The data was collected through questionnaire which was structured in to four sections:

1. Demographic Data Age, gender, year of study, and socio-economic background.
2. Depression, Anxiety and Stress: The DASS-21 (Depression Anxiety Stress Scales -21 items) was a measure to assess the mental health of the participants. The DASS-21 is a well-tested measure that has been used to determine the degree of depression, anxiety and stress symptoms on a 4-point Likert scale (Lovibond & Lovibond, 1995).
3. Academic and Social Factors: Items assessed perceived academic pressure, workload, peer support and coping strategies.
4. Coping and Social support: The questions developed based on Misra & McKean (2000) assessed coping styles and social support system among students.

The questionnaire was completed online (through Google Forms, as well as university mailing lists) and during face-to-face on the campuses to enhance the response rates and cover students with restricted access to the internet.

Validity and Reliability

Three subject experts in the areas of psychology and educational research conducted a review of the questionnaire in order to guarantee content validity. The pilot study was done on 30 students to evaluate the clarity, comprehension and relevancy of items. Wording changes had been done to make the reading easier.

Cronbach alpha was used to test reliability of the DASS-21 scale. All sub scales were very consistent in terms of their internal consistency: depression (0.88), anxiety (0.85), and stress (0.87) meaning that the instrument is the one that will be applicable in the context of the measurement of the psychological distress in the group of university students.

Data Collection Procedure

The process of data collection took place within four weeks. The purpose of the study was explained to the participants, they were assured of confidentiality and given a consent before the study. Participation was done voluntarily and the respondents could quit at any given time

without being penalized. Online and face-to-face responses were both entered into one set of data to analyze.

Variables and Measurement

- Dependence variables: Depression, anxiety and stress levels, calculated using DASS-21.
- Independent Variables: Academic pressure, workload, peer support, coping strategies, and socio-demographic variables (age, gender, university type, socio-economic status).
- Control variables: Gender, age and type of university were used as potential confounders.

All the variables were in numerical form. The increase in the scores signified an increase in the levels of depression, anxiety, stress, or perceived academic pressure.

Data Analysis Techniques

Analysis of data was done in SPSS version 28 and AMOS version 28. The techniques used were as follows:

1. Descriptive Statistics: Demographic variables and the main variables were summarized using means, standard deviations, frequencies and percentages.
2. Correlation Analysis Pearson correlation was used to assess the associations among depression, anxiety, stress, and academic/social variables.
3. Multiple Regression Analysis: Evaluated the predictive value of academic pressure, coping styles, and social support on the depressive, anxiety, and stress levels and had demographic variables as controls.
4. Structural Equation Modeling (SEM): Tested both the direct and indirect associations between variables to examine a conceptual model of predictors of mental health outcomes.
5. Exploratory Analysis: The independent t-tests and ANOVA were employed to establish the differences in the level of depression, anxiety, and stress between genders, university type or year-of-study.

Ethical Considerations

Ethical considerations were enforced. The participants were notified regarding the purpose of the research, voluntary participation, and confidentiality. Information was anonymized and put under lock and key. Data collection was preceded by obtaining ethical approval of the institutional review boards of the concerned universities.

Data Analysis and Findings

Descriptive Statistics

The researchers compiled the answers of 300 students in universities, half of them in a public university and the other half in a private university. Among the participants 155 (51.7) were men and 145 (48.3) women. The age bracket was between 18 and 30 years with an average of 22.6 years (SD = 2.7). In terms of socio economic status, 32 percent of the students said they were low income earners, 45 percent middle income earners, and 23 percent high income earners. The study was distributed evenly with 28% first-year, 25% second-year, 22% third- year and 25% final-year students.

The descriptive analysis of the key variables has shown the following means on the DASS-21 subscales (on a 4-point scale): depression (M = 2.38, SD = 0.72), anxiety (M = 2.21, SD = 0.69), and stress (M = 2.45, SD = 0.71). These values imply that there exists a moderate level of psychological distress between the participants, and the stress is slightly more prevalent than anxiety and depression.

Table 1: Demographic Information of the Respondents.

Table 1: Demographic Profile of Respondents

Variable	Category	Frequency	Percentage (%)
Gender	Male	155	51.7
	Female	145	48.3
Age	18–21	140	46.7
	22–25	110	36.7
	26–30	50	16.6
University Type	Public	150	50
	Private	150	50
Socio-economic	Low	96	32
Status	Middle	135	45
	High	69	23

Correlation Analysis

The correlation was done by use of Pearson correlation to test the correlation between depression, anxiety, stress, academic pressure, coping strategies and peer support. The findings showed that academic pressure had significant positive correlations with all the three mental health outcomes, which include depression ($r = 0.46$, $p < 0.01$), anxiety ($r = 0.42$, $p < 0.01$), and stress ($r = 0.49$, $p < 0.01$). There were a significant negative correlation between coping strategies and peer support and depression ($r = -0.38$, $p < 0.01$; $r = -0.32$, $p < 0.01$), anxiety ($r = -0.35$, $p < 0.01$; $r = -0.28$, $p < 0.01$), and stress ($r = -0.40$, $p < 0.01$; $r = -0.31$, $p < 0.01$), which in turn indicated that effective coping and supportive social

Table 2: Correlation Matrix

Variable	1	2	3	4	5	6
1. Depression	1.00					
2. Anxiety	0.72**	1.00				
3. Stress	0.75**	0.70**	1.00			
4. Academic Pressure	0.46**	0.42**	0.49**	1.00		
5. Coping Strategies	-0.38**	-0.35**	-0.40**	-0.22**	1.00	
6. Peer Support	-0.32**	-0.28**	-0.31**	-0.18**	0.45**	1.00

Note: **$p < 0.01$

The findings of the correlation reveal that academic pressure is a risk factor that predisposes to depression, anxiety, and stress, and coping strategies and peer support are protective factors. Stress showed the most interaction with academic pressure that underlines the excessive load of work and study-related pressure on students.

Multiple Regression Analysis

The multiple regression was done to determine the predictive value of academic pressure, coping strategies and peer support to depression, anxiety and stress with controlling gender, age and university type.

Table 3: Coefficients Regression in predicting depression, anxiety as well as stress

Predictor	B	SE	β	t-value	p-value
Depression					
Academic Pressure	0.35	0.06	0.39	5.83	<0.001
Coping Strategies	-0.28	0.05	-0.31	-5.60	<0.001
Peer Support	-0.21	0.05	-0.22	-4.20	<0.001
Gender (Control)	0.05	0.04	0.06	1.25	0.212
Age (Control)	0.02	0.03	0.03	0.67	0.502
University Type	-0.07	0.04	-0.08	-1.75	0.081
$R^2 = 0.38, F = 28.54, p < 0.001$					
Anxiety					
Academic Pressure	0.31	0.05	0.36	6.20	<0.001
Coping Strategies	-0.24	0.05	-0.28	-5.10	<0.001
Peer Support	-0.19	0.04	-0.21	-4.50	<0.001
Gender (Control)	0.04	0.03	0.05	1.10	0.270
Age (Control)	0.01	0.02	0.02	0.50	0.620
University Type	-0.05	0.03	-0.06	-1.40	0.163
$R^2 = 0.34, F = 24.90, p < 0.001$					
Stress					
Academic Pressure	0.38	0.06	0.42	6.33	<0.001
Coping Strategies	-0.29	0.05	-0.33	-5.80	<0.001
Peer Support	-0.23	0.05	-0.25	-4.85	<0.001
Gender (Control)	0.06	0.03	0.07	1.75	0.082
Age (Control)	0.02	0.02	0.03	0.90	0.370
University Type	-0.08	0.04	-0.09	-2.00	0.047
$R^2 = 0.41, F = 31.12, p < 0.001$					

According to the regression findings, academic pressure is the most predictive of depression, anxiety, and stress, and coping strategies and peer support have a significant negative effect on psychological distress. The effect of demographic controls (gender, age, university type) was not significant, which means that mental health outcomes mostly depend on academic and social factors and do not depend on demographic differences.

Structural Equation Modelling (SEM)

SEM was done to test both direct and indirect association between academic pressure, coping strategies, peer support and mental health outcomes. The hypothesized model was acceptable: 0.10/df = 2.10, CFI = 0.95, TLI = 0.94, RMSEA = 0.046.

Table 4: SEM Path Coefficients

Path	Standardized β	SE	t-value	p-value
Academic Pressure → Depression	0.41	0.06	6.83	<0.001
Academic Pressure → Anxiety	0.38	0.05	7.10	<0.001
Academic Pressure → Stress	0.44	0.06	7.30	<0.001
Coping Strategies → Depression	-0.32	0.05	-6.40	<0.001
Coping Strategies → Anxiety	-0.29	0.05	-5.85	<0.001
Coping Strategies → Stress	-0.34	0.05	-6.90	<0.001
Peer Support → Depression	-0.25	0.04	-5.50	<0.001
Peer Support → Anxiety	-0.21	0.04	-4.90	<0.001
Peer Support → Stress	-0.27	0.05	-5.75	<0.001

The findings of the SEM outcomes are corroborated by the findings of the multiple regression: academic pressure is a significant cause of depression, anxiety, and stress, whereas coping strategies and peer support are protective. These findings indicate that multidimensional model of student mental health in which risk factors and protective factors co-determine psychological outcomes is valid.

Exploratory Analysis: Gender and Type of University

Gender differences were modest as observed using independent t-tests. The mean scores of depression (M = 2.45) and anxiety (M = 2.29) in female students were slightly higher than those of males (depression M = 2.32; anxiety M = 2.14), although only the value of stress was significant ($t = 2.56$, $p < 0.05$). There were also slight variations in university type; students in the private universities were a little less depressed and stressed than those in the public universities, indicating institutional support or academic environment.

The data show that academic pressure is the risk factor with the best predictive power in relation to the psychological distress among university students in Pakistan, which is consistent with the previous research pointing to the high academic workload, stress during exams, and the expectations of performance among students (Beiter et al., 2015; Bayram & Bilgel, 2008). Coping patterns and peer support were considered important forms of protection, which implies that stress management skills and availability of social networks play a vital role in helping to overcome mental health difficulties.

The SEM analysis sheds light on the complexity of mental health as depression, anxiety and stress are all factors whose presence is simultaneously attributable to risk and protective factors. The contribution of gender and the type of university is minor yet not dominating over the main influences of academic and social factors.

These results highlight that there is a need to intervene with academic stress management, promotion of coping skills and improvement in peer support network to help reduce depression, anxiety and stress in university students.

Discussion

The results of the present research indicate that there is a high incidence of depression, anxiety, and stress among the Pakistani university students, which demonstrates that young adults have a profound psychological burden under academic settings. Academic pressure came out as the

strongest indicator of mental health of the issues with high workloads, examination stress, and performance expectations being significant to high levels of distress. This is in line with previous studies that revealed that academic pressures are a uniform risk factor on the mental health of students in any part of the world (Beiter et al., 2015; Bayram and Bilgel, 2008). The positive relationship between depression, anxiety, and stress also suggests that these constructs interact, and the idea of psychological distress arising in several domains at the same time is enhanced.

On the other hand, peer support and coping strategies proved to be very protective in relation to psychological distress. Students who used effective coping strategies in relation to time management, relaxation skills, and problem-solving skills had lower scores in depression, anxiety, and stress. On the same note, the negative effect of academic pressure was cushioned by the available networks of support peers, which stresses a social aspect of mental health. These results are in line with the earlier researchers that social support and adaptive coping are very important in reducing stress and enhancing the psychological health of university students (Misra and McKean, 2000; Sarason et al., 1990).

The exploratory analysis showed that there were minor differences between different genders as female students had slightly higher scores on depression and anxiety though they all were more significant in terms of stress levels. These findings are consistent with the patterns in the global context, indicating that the female students tend to develop an increased sensitivity to stress and emotional issues because of the patterns of the socialization process and societal expectations (Zhou et al., 2020). University type also had smaller effects and students of the private universities showed a little lower level of distress, which could be explained by their easier access to institutional support, counseling activities, or resources that mitigate academic and social stressors. But these demographic variables were not able to override the dominant role of academic pressure and protective social processes supporting the key role of psychosocial factors in mental health outcomes.

On the whole, the research indicates a multifaceted interplay of the risk and protective factors on the mental health of students. The level of academic pressure is also a significant risk factor, and peer support and coping strategies are resilience avenues. These results highlight the need to pay more attention to managing mental health in an active manner in any academic institution, which should integrate the stressor-reducing elements with the programs aimed at enhancing coping and social support systems. Another important point that the results help to make is the importance of focusing on the cultural, institutional, and social contexts when designing mental health interventions in Pakistan because students are influenced by not only academic requirements but also the socio-cultural expectations.

Conclusion

The paper has validated the hypothesis that depression, anxiety, and stress are not uncommon among university students in Pakistan, and academic pressure is the greatest risk factor. Peer support and the coping strategies were found to be influential protective factors, and both personal and social resources play an essential role in reducing psychological distress. There were also minor influences on gender and type of university indicating that although the demographic factors could also play a role in the differences in the mental health outcomes, the overall factors influencing them are the academic and social ones.

The results highlight the importance of incorporating mental health awareness, stress management programs and peer support programs in universities to facilitate psychological well-being. Besides, the interdependence of depression, anxiety and stress implies that interventions ought to be conducted in a holistic manner which is to address a number of the psychological functioning aspects at the same time. Such findings will help the policymakers and university administrators in developing countries to develop specific mental health policies because they will have a better idea of student mental health in these nations.

Recommendations

According to the findings of the study, there are recommendations that can be offered to enhance the mental health among the Pakistani university students. To provide effective coping mechanisms, first, universities ought to adopt formal stress management intervention to enable students to manage stress through workshops on time management, relaxation methods, mindfulness, and problem-solving. Second, it is important to build on peer support networks; universities ought to promote mentorship and counseling services, and group work and activities which can allow social cohesion and emotional support. Third, academic policies must seek to lower the work overload and balance the pressure of assessment to minimize the stressful environments. Fourth, there is the need to promote mental health awareness that will help ease stigma, attitude towards seeking help and availing professional psychological services to students. Finally, longitudinal trends in mental health among the students and the influence of cultural and family factors on mental health and the effectiveness of the interventions peculiar to the Pakistani higher education situation should be taken up in the future research. Through these strategies, the universities will be able to reduce the risk factors and increase the protective measures, which will eventually result in a healthier and more resilient student population, which can succeed in their studies and life.

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References

1. Ahmad, I., & Yousaf, S. (2017). Mental health challenges of university students in Pakistan: A review. *Pakistan Journal of Psychological Research, 32*(2), 201–220.
2. Allport, G. W., & Ross, J. M. (1967). Personal religious orientation and prejudice. *Journal of Personality and Social Psychology, 5*(4), 432–443.
3. Bayram, N., & Bilgel, N. (2008). The prevalence and socio-demographic correlations of depression, anxiety, and stress among a group of university students. *Social Psychiatry and Psychiatric Epidemiology, 43*(8), 667–672.
4. Beiter, R., Nash, R., McCrady, M., Rhoades, D., Linscomb, M., Clarahan, M., & Sammut, S. (2015). The prevalence and correlates of depression, anxiety, and stress in a sample of college students. *Journal of Affective Disorders, 173*, 90–96.

5. Berger, P. L. (1967). *The sacred canopy: Elements of a sociological theory of religion*. Doubleday.
6. Bruce, S. (2002). *God is dead: Secularization in the West*. Wiley-Blackwell.
7. Casanova, J. (1994). *Public religions in the modern world*. University of Chicago Press.
8. Clarke, G., & Jennings, M. (2008). *Development, civil society and faith-based organizations: Bridging the sacred and the secular*. Palgrave Macmillan.
9. Durkheim, E. (1912). *The elementary forms of religious life*. Free Press.
10. Esposito, J. L. (2010). *Islam and politics* (4th ed.). Syracuse University Press.
11. Giddens, A. (1991). *Modernity and self-identity: Self and society in the late modern age*. Stanford University Press.
12. Graham, J., & Haidt, J. (2010). Beyond beliefs: Religions bind individuals into moral communities. *Personality and Social Psychology Review, 14*(1), 140–150.
13. Habermas, J. (2006). Religion in the public sphere. *European Journal of Philosophy, 14*(1), 1–25.
14. Haidt, J. (2001). The emotional dog and its rational tail: A social intuitionist approach to moral judgment. *Psychological Review, 108*(4), 814–834.
15. Haidt, J. (2012). *The righteous mind: Why good people are divided by politics and religion*. Pantheon Books.
16. Hunter, J. D. (1991). *Culture wars: The struggle to define America*. Basic Books.
17. Inglehart, R., & Welzel, C. (2005). *Modernization, cultural change, and democracy: The human development sequence*. Cambridge University Press.
18. Javed, S., Hussain, S., Shabbir, S. W., & Rizwan, M. (2020). The Role of Educational Stress and Coping Strategies on Achievement Motivation. *Journal of Languages, Culture and Civilization, 2*(1), 39-46.
19. Khan, F., & Ahmad, N. (2018). Psychological well-being of university students: Impact of academic stress. *Journal of Education and Practice, 9*(30), 45–55.
20. King, P. E., & Boyatzis, C. J. (2004). Exploring adolescent spiritual and religious development: Current theoretical and empirical perspectives. *Applied Developmental Science, 8*(1), 2–6.
21. Kohlberg, L. (1981). *Essays on moral development, Vol. I: The philosophy of moral development*. Harper & Row.
22. MacIntyre, A. (1981). *After virtue: A study in moral theory* (2nd ed.). University of Notre Dame Press.
23. Malik, N., Zafar, Z., Rizwan, M., & Bilal, A. (2025). Adaptationand Integration of Pakistani Students of Higher Education Institutions in China. *The Critical Review of Social Sciences Studies*, *3*(1), 3034-3046.
24. Misra, R., & McKean, M. (2000). College students' academic stress and its relation to their anxiety, time management, and leisure satisfaction. *American Journal of Health Studies, 16*(1), 41–51.
25. Nisar, N., & Rehman, A. (2019). Mental health problems among university students: A study in Pakistan. *Asian Journal of Psychiatry, 42*, 80–86.
26. Norris, P., & Inglehart, R. (2011). *Sacred and secular: Religion and politics worldwide* (2nd ed.). Cambridge University Press.
27. Okin, S. M. (1999). *Justice, gender, and the family*. Basic Books.
28. Pargament, K. I. (1997). *The psychology of religion and coping: Theory, research, practice*. Guilford Press.

29. Putnam, R. D., & Campbell, D. E. (2010). *American grace: How religion divides and unites us*. Simon & Schuster.
30. Riaz, S., Bano, Z., Abbas, R., & Rizwan, M. (2018). Dilemmas of adolescents: Dark triad and relational aggression, moderated by economic status. *Review of Economics and Development Studies, 4*(2), 209.
31. Saroglou, V. (2013). Religion, spirituality, and altruism. In K. I. Pargament (Ed.), *APA handbook of psychology, religion, and spirituality* (Vol. 1, pp. 439–459). American Psychological Association.
32. Saroglou, V., Pichon, I., Trompette, L., Verschueren, M., & Dernelle, R. (2009). Prosocial behavior and religion: New evidence based on projective measures and peer ratings. *Journal for the Scientific Study of Religion, 48*(2), 323–348.
33. Smart, N. (1998). *The world's religions* (2nd ed.). Cambridge University Press.
34. Smith, C., & Denton, M. L. (2005). *Soul searching: The religious and spiritual lives of American teenagers*. Oxford University Press.
35. Sullivan, K. (2000). Religious education and moral development in adolescence. *Religious Education, 95*(4), 493–502.
36. Taylor, C. (1989). *Sources of the self: The making of modern identity*. Harvard University Press.
37. Taylor, C. (2007). *A secular age*. Harvard University Press.
38. Turner, B. S. (2011). *Religion and modern society: Citizenship, secularisation, and the state*. Cambridge University Press.
39. Yuval-Davis, N. (2006). *Gender and nation*. Sage Publications.
40. Zhou, Y., Huang, R., & Li, X. (2020). Gender differences in stress and coping among university students. *Frontiers in Psychology, 11*, 570.