

Psychological Distress and Wellbeing Among Young Psychology Students in Pakistan: A Descriptive Cross-Sectional Study

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Abstract

University students in low- and middle-income countries (LMICs), including Pakistan, are increasingly experiencing mental health challenges such as depression, anxiety, stress, and diminished wellbeing. This issue is particularly concerning among psychology students, as their psychological wellbeing directly influences their professional competence in supporting others. The present cross-sectional descriptive study assessed depression, anxiety, stress, and wellbeing among 321 psychology students in Pakistan. Data were collected using the Urdu versions of the DASS-21 and BBC Wellbeing Scale through convenience sampling. The sample comprised 90% female students. Findings revealed elevated rates of depression (51.6%), anxiety (62%), and stress (41.4%). Additionally, low levels of overall (52%), psychological (51.6%), physical (58.6%), and relational wellbeing (50.6%) were reported. Comorbid depression and anxiety were identified in 46.1% of participants. The findings establish baseline data and highlight the urgent need for preventive and intervention strategies targeting psychology students.

Keywords: Distress, Pakistan, Psychology, Students, Young

1. Introduction

The prevalence of mental health disorders among university students has been steadily increasing in recent years (Asif et al., 2020). Research indicates that within a 12-month period, the occurrence of mental health concerns ranges between 20.3% and 45% (Blanco et al., 2018; Auerbach et al., 2016). Among young university populations, anxiety has been reported at an average rate of 44.25% (ranging from 15.8% to 82.6%), while depression has been documented at 38.4% (ranging from 2.1% to 88.8%) (Agyapong-Opoku et al., 2023).

Youth mental health represents a significant global challenge influenced by complex social, economic, and health-related factors. This challenge is further intensified by rapid societal transformations characterized by accelerated technological advancement, digital media exposure, globalization, urbanization, migration patterns, economic restructuring, and public health crises (Fatusi & Hindin, 2010). Although these transformations affect young people worldwide, their impact is more severe in low- and middle-income countries (LMICs), where socioeconomic vulnerabilities are more pronounced (Lux et al., 2023).

Pakistan, as an LMIC, faces substantial mental health challenges among its youth population, in addition to the developmental transition from adolescence to adulthood. Approximately 36 million individuals aged 20 to 24 years reside in Pakistan, representing nearly 20% of the total population (Federal Bureau of Statistics, Government of Pakistan, 2010; Islamabad Policy Research Institute, 2018). Previous research conducted among Pakistani university students revealed alarmingly high

prevalence rates of depression (75%), anxiety (88.4%), and stress (84.4%) (Asif et al., 2020). Such elevated levels of psychological distress are concerning due to their negative effects on wellbeing, academic functioning, and productivity (Cheng & McCarthy, 2018). Given that youth constitute a nation's most valuable human capital, deterioration in their mental health carries extensive social and economic consequences (Pan et al., 2024).

The global economic burden of mental health disorders further underscores the urgency of intervention. The World Economic Forum (2024) estimated that mental health conditions cost approximately 2.5 trillion USD prior to 2010, with projections rising to 6 trillion USD by 2030. Nearly 58% of this burden is expected to be borne by LMICs, and about two-thirds of the associated costs are indirect. Despite the substantial financial investment required for mental health services, economic analyses demonstrate significant returns. For example, evidence from 36 LMICs suggests that depression accounts for nearly 80% of the global mental disorder burden. Investments in depression and anxiety treatment have shown strong economic returns, with benefit-to-cost ratios ranging from 2.3–3:1 for productivity gains alone, and 3.3–5.6:1 when broader social returns are included (Whiteford et al., 2013). Therefore, allocating resources toward mental health not only improves wellbeing but also strengthens economic productivity, particularly in countries such as Pakistan. However, effective policy responses require a clear understanding of the magnitude of mental health concerns among youth.

Existing literature consistently demonstrates high levels of stress, anxiety, and depression among Pakistani young adults. During this developmental stage, individuals are focused on career aspirations and educational achievements while simultaneously confronting various stressors, including economic uncertainty, social instability, security concerns, and demographic transitions (Khan et al., 2007). University students, in particular, encounter additional pressures such as academic workload, time management demands, irregular sleep and dietary patterns, and difficulties in maintaining self-care (Ofteidal et al., 2023; Di Benedetto et al., 2019). Consequently, this population becomes especially vulnerable to psychological distress.

Students enrolled across different academic disciplines experience notable levels of stress and mental health challenges. For instance, 45.5% of Pakistani medical students aged 19–22 reported symptoms of depression and anxiety (Hashmi et al., 2014). Similarly, another study found prevalence rates of 31% for depression, 41.9% for anxiety, and 12.5% for stress among dental and medical students (Naz et al., 2017). Comparable or higher rates have been documented in broader university populations (Khan et al., 2023). Although psychology is commonly perceived as a discipline that equips individuals to address mental health concerns, psychology students themselves are not immune to psychological distress (Kaur, 2023; Palos et al., 2019; Swords & Ellis, 2017; Jamil & Baseer, 2023).

While depression, anxiety, and stress adversely affect individuals and communities, their impact is particularly concerning among psychologists-in-training. Evidence suggests that psychological distress can impair essential professional competencies, including empathy, emotional regulation, and the capacity to provide effective therapeutic support (Vivolo et al., 2024; Bearse et al., 2013; O'Connor et al., 2018). In a context such as Pakistan, where mental health services are already underdeveloped, compromised wellbeing among psychology trainees may further weaken service quality and accessibility.

In light of these concerns, the present study aims to examine the levels of depression, anxiety, stress, and overall wellbeing among psychology students in Pakistan.

2. Materials and Methods

Participants and Procedure

A cross-sectional research design was employed to examine levels of depression, anxiety, stress, and wellbeing among Pakistani young adults enrolled in a psychology program. Data were collected using a convenience sampling method from 323 students studying at a Sindh university campus, Jamshoro in Sindh, Pakistan.

Measures

Data were collected using a structured protocol that included a demographic information form and two standardized self-report psychological instruments administered in Urdu. The demographic sheet gathered information regarding gender, academic program (BS/MS), and semester of enrollment. The psychological measures included the Depression, Anxiety, and Stress Scale (DASS-21) and the BBC Wellbeing Scale.

Depression, Anxiety, and Stress Scale (DASS-21)

The DASS-21 (Lovibond & Lovibond, 1995) is a condensed version of the original 42-item scale. The present study utilized the Urdu translation developed by Haqqani (2009). The instrument comprises 21 items rated on a 4-point Likert scale ranging from 0 (“did not apply to me at all”) to 3 (“applied to me very much or most of the time”).

The scale consists of three subscales—Depression, Anxiety, and Stress—each containing seven items. Subscale scores are calculated by summing the respective items and multiplying the total by two. Higher scores reflect greater severity of symptoms. Established cut-off scores categorize symptom severity into mild, moderate, severe, and extremely severe levels.

The DASS-21 demonstrates strong psychometric properties. Previous research reported Cronbach’s alpha values of .81 for depression, .73 for anxiety, and .81 for stress (DiGiacomo et al., 2007). In the current study, reliability coefficients were .79 for depression, .78 for anxiety, and .77 for stress, indicating satisfactory internal consistency.

BBC Wellbeing Scale

The BBC Wellbeing Scale (Kinderman et al., 2011) assesses subjective wellbeing across multiple life domains. It is a self-report measure originally consisting of 24 items. The scale evaluates three dimensions:

- **Psychological Wellbeing** (Items 4 [reverse scored], 5–15)
- **Physical Health and Wellbeing** (Items 1–3, 21–24)
- **Relationship Wellbeing** (Items 16–20)

An Urdu-adapted version comprising 23 items was employed in this study (Khalid, 2014). Item 19 was removed in the Urdu adaptation due to cultural considerations. The scale has demonstrated excellent internal consistency ($\alpha = .935$) in previous research (Kinderman et al., 2011). In the present sample, Cronbach’s alpha was .88 for overall wellbeing, .75 for psychological wellbeing, .76 for physical wellbeing, and .76 for relationship wellbeing, reflecting acceptable reliability.

Statistical Analysis

Data were analyzed using the Statistical Package for the Social Sciences (SPSS-29). Data entry was followed by cleaning procedures, and missing values were coded as 99. Cases containing missing data were excluded from subsequent analyses.

Descriptive statistics—including frequencies, percentages, means, medians, standard deviations, skewness, and kurtosis—were calculated to examine data distribution. Internal consistency reliability for all scales and subscales was assessed using Cronbach’s alpha coefficient (α).

Ethical Approval

Ethical clearance for the study was obtained from the Institutional Ethical Review Board (IRB) of Capital University of Science and Technology, Islamabad (Reference No. CUST/ORIC/IERB/2023/03). Participants were provided with an information sheet outlining the purpose of the study and assurances regarding confidentiality. Written informed consent was obtained from all participants prior to data collection.

Results

A total of 323 psychology students were approached through convenience sampling. Of these, 321

completed questionnaires were returned and included in the final analysis, while two blank responses were excluded.

The final sample consisted of 290 BS and 31 MS psychology students. The majority of participants were female (90%). Table 1 presents the frequency and percentage distribution of gender and semester enrollment among BS and MS psychology students (N = 321).

Table 1 Frequency (f) and Percentages (%) of Gender and Semesters of BS and MS Psychology Students (N=321).

Variables and categories		f (%)
Gender		
Females		289 (90%)
Males		32 (10%)
BS Psychology	Semester 1	34 (10.6)
	Semester 2	24 (7.5)
	Semester 3	51 (15.9)
	Semester 4	3 (.9)
	Semester 5	71 (22.1)
	Semester 6	46 (14.3)
	Semester 7	37 (11.5)
	Semester 8	24 (7.5)
MS Psychology	Semester 1	20 (6.2)
	Semester 2	11 (3.4)

Table 2 presents descriptive statistics (mean, median, standard deviation), distributional properties (Skewness and Kurtosis) for subscales of depression, anxiety, stress, and overall, psychological, physical and relationship wellbeing. These statistics indicate that data was fairly normally distributed as value of mean, median and mode are very close to one another and skewness and kurtosis values are between -1 to +1.

Table 2 Descriptive Statistics of Depression, Anxiety Stress Scale and BBC Wellbeing Scale (N=321).

Variable	Items	M	Mdn	Mode	SD	Min	Max	Skewness	Kurtosis
DASS-Dep	7	11.5	10	4	8.78	0	38	.92	.21
DASS-Anx	7	11.5	10	4	8.88	0	42	.89	.36
DASS-Stress	7	14.5	14	10	8.76	0	40	.56	-.21
BBC- Total ^A	23	61	61	55	12.4	4	93	-.26	.27
BBC-Psy ^A	12	32	33	35	5.99	15	53	-.12	.27
BBC-Phy ^A	6	13	13	13	3.45	5	20	-.03	.27
BBC- Relat ^A	5	14	15	12	3.99	4	24	.24	.27

Note: A= 2 missing values; M= Mean, Mdn = Median, SD= Standard Deviation, Min Minimum score, Max = Maximum score, DASS= Depression Anxiety and Stress Scale BBC= BBC Wellbeing Scale; Dep= Depression, Anx= Anxiety, Psy=

Psychologica wellbeing, Phy = Physical health and wellbeing
Relat= Relationship

The classification of depression, anxiety and stress into mild, moderate, severe and extremely severe is presented in the Table 3 along with categorization of overall, psychological, physical and relationship wellbeing into low and high wellbeing. For classification of DASS-21 subscale cut off values given by the authors of the scale were used and are indicated in table3.

For BBC wellbeing scale cut off were decided based on median scores for overall wellbeing and each subscale.

Table 3 Frequencies (f) and Percentages (%) of Depression anxiety and stress (N=321).

Variables/ Categories	f (%)
DASS-21 Depression ^A	
	Normal (0-9) 155 (48.4)
	Mild (10-13) 57 (17.8)
	Moderate (14-20) 57 (17.8)
	Severe (21-27) 29 (9.1)
	Extremely severe 22 (6.9)
DASS-21 Anxiety	e (28+)
	Normal (0-7) 122 (38)
	Mild (8-9) 26 (8.1)
	Moderate (10-14) 71 (22.1)
	Severe (15-19) 40 (12.5)
	Extremely Sever 62 (19.3)
DASS-21 Stress	e (20+)
	Normal (0-14) 188 (58.6)
	Mild (15-18) 44 (13.7)
	Moderate (19-25) 43 (13.4)
	Severe (26-33) 37 (11.5)
	Extremely severe (34+) 9 (2.8)

BBC- Overall Wellbeing ^B

BBC-Psychological Wellbeing
C
BBC-Physical Health and Wellbeing^B

BBC-Relationship wellbeing ^C	
Low (≤ 61)	166 (52)
High (≥ 62)	153 (48)
Low (≤ 33)	164 (51.6)
High (≥ 34)	154 (48.4)
Low (≤ 15)	187 (58.6)
High (≥ 16)	132 (41.4)
Low (≤ 13)	161 (50.6)
High (>13)	157 (49.4)

Table 3 shows that approximately half of the sample reported mild to extremely severe depression (51.6%), anxiety (62%) and stress (41.4%). Anxiety is most prevalent followed by depression and stress among psychology students. Out of those who reported experiencing symptoms of depression, anxiety and stress, 30% reported severe to extremely severe depression. Around 23% reported having severe to extremely severe anxiety and 34.5% reported severe to extremely severe stress. Scores on BBC scale reflected a complementary picture where almost half of the sample reported low overall, psychological, physical and relationship wellbeing. More respondents reported low physical health and wellbeing (58%) as compared to other wellbeing subscales. In this sample, 46.1

The proportion of the participants identified as depression and/ or anxiety cases was high. There were 216 cases out of 321, which is 67.28%. Comorbidity of depression and anxiety was reported by 46.1% respondents. Among 289 females, depression, anxiety and stress was reported by 51.4% (N=48), 63.3% (N=183) and 42.9% (N=124), respectively. Comorbidity of depression and anxiety was 46.71% (135/289). Although number of males is very low (10%) in this sample, analyses of depression, anxiety and stress among males indicated similar trends that is 53.1% (N=17/32), 50% (N=16/32), and 28.1% (N=9/32) depression, anxiety and stress, respectively. Comorbidity of depression and anxiety was 40% (13/32) among males.

Discussion

The present study explored frequency of depression, anxiety, stress and wellbeing among students enrolled in BS and MS psychology programs. Severity of depression, anxiety and stress was also calculated. In this study, 90% of the students were female. This can be attributed to the fact that the study of psychology is considered a female dominated field globally (Olos & Hoff, 2006). In almost all universities, there are far more females enrolled in psychology than males in Pakistan. Another reason for low male enrolment in psychology could be the wide spread perception that job perspectives are grim for psychology graduates in Pakistan and culturally males are considered breadwinners of the family (Adil et al, 2017).

The prevalence rates of depression (51.6%), anxiety (62%) and stress (41.4%) among psychology students are alarming. These findings are higher but comparable to rates reported by other studies conducted in Pakistan and other countries (Hashmi et. al., 2014; Naz et al., 2017; Blanco et al., 2018; Auerbach et al., 2016; Agyapong-Opoku et al., 2023). As stated in the introduction while these high rates can be partly attributed to pressures exerted by the fast-paced

changes of the modern world (Fatusi & Hindin, 2010), they raise an alarm for mental health pandemic approaching fast. Considering the already staggering mental health care system of Pakistan and mental health of the psychology students, the condition of mental health care seems to be getting worse over time. A psychologist with compromised mental health will not be able to provide quality service in terms of empathy and emotional support (Vivolo et al., 2024; Bearse et al., 2013; O'Connor et al., 2018). This is also resulting in considerable economic burden in terms of health care and years lost due to disability.

There were more students reporting anxiety than depression and stress. This could be a depiction of anxiety experienced due to the predominant stressful academic environment of the universities that require students to take greater responsibilities, and manage time effectively under pressure. Students also struggle with changed eating and sleeping patterns due to continuous assessment practices. They struggle with self-care (Ofstedal et al., 2023; Di Benedetto et al., 2019). Since the introduction of modern media, students are also struggling with managing their cognitive load (Pittman & Haley, 2023). Research has indicated that cognitive overload is linked with increased anxiety (Cezar & Macada, 2023). Thus, interventions must be aimed at teaching psychology students to manage their cognitive load and regulate emotions in an effective manner in stressful situations. The overall wellbeing and psychological wellbeing scores were supplementing the depression anxiety and stress scores. It was interesting to note that 41.4% and 49.4% students reported to be struggling with physical health and relationship wellbeing. According to research, relationships are strongly correlated with depression, anxiety and suicidal ideation (Zheng et al. 2023). Therefore, a dysfunction in this domain as well as depression, anxiety and/ or stress must be taken seriously and addressed through various interventions. From an alternative point of view good interpersonal relations act as protective factor. Thus identification of problem in this domain can provide a starting point for interventions aimed at improving mental health of students. This study provided a baseline for rates of mental health concerns of psychology students. However, its results must be interpreted with caution as convenient sampling was employed and only depression, anxiety and stress were measured. Scores showing low wellbeing can also be indicative of presence of other mental health concerns and hence a comprehensive survey of all the mental concerns can be done in the future studies. Nevertheless, the result of approximately half of the psychology students suffering from symptoms of depression, anxiety and stress is calling for immediate intervention and preventive measures. In order to create a better academic journey, healthy future prospects in the field of mental health and to improve mental health care system with resilient psychologists, mental health of psychology students must be focused during their training and academic journey.

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