

Frequency and Contributing Factors of Depression, Anxiety and Stress Among Youth

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ABSTRACT

Objectives: To study the frequency and demographic correlates of depression, anxiety and stress among university students.

Study Design: Cross sectional analytical study.

Place and Duration of Study: University of Gujrat, Gujrat Pakistan, from Feb to Apr 2019.

Methodology: A sample of 400 students selected by random sampling technique was approached from randomly selected departments from Faculty of Social Sciences and Faculty of Sciences respectively. Depression, Anxiety, Stress Scale-42 (DASS-42) along with demographic sheet and informed consent forms was administered.

Results: Most of the individuals showed moderate to extremely severe level of depression, anxiety, and stress as 219 (54.8%), 294 (73.5%), and 177 (44.3%) respectively was found among university students. Depression, anxiety, and stress were found to be positively and significantly related, having high Cronbach's Alpha Reliability coefficients. Among demographic variables, type of study group significantly predicted level of depression, anxiety, and stress among students. Age and income significantly predicted level of depression, while the former also contributed in anxiety. However, gender was significant predictor of stress only among university students.

Conclusion: The frequency of depression, anxiety and stress was high among university students in Gujrat. There is a need for launching of counseling and preventive interventions to halt psychiatric disorders at early stages among university students.

Keywords: Anxiety, Depression, Prevalence, Stress, Students, Youth.

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INTRODUCTION

The most perilous time period of life span is young age because one faces a lot of challenges while entering into adolescence and adulthood from the transection of childhood. The major sources of stress are concerned with academic domain, relational aspects, and career exploration originating psychological and behavioral illnesses.^{1,2} Academic performance bothers every student who either possess physical, social, emotional, religious, and mental welfare or who are not well.³ It has been found that depression and anxiety related with performance inversely in which high psychological distress yielded low grade point average and absenteeism among students.^{4,5} Depression is the subjective perception of worthlessness, sadness, and apathy. Anxiety appears as an autonomic effects and situational tension. Stress is continual frightened provocation, and effortlessly restlessness, over reaction and intolerance of the hassles of life.⁶ Prevalence of psychological issues among 1850 university students between age range 19-26 year were studied in Lahore. The findings showed that 47% of them suffered from severe to very severe level of mental health problems

in Pakistan.⁷

Worldwide, varied but high prevalence of depression, anxiety, and stress have been empirically found out in various countries among students. moderate to severe level of depression, anxiety, and stress have been estimated for prevalence in these countries for university students. In Canada, depression, anxiety and stress was found to be 39.5%, 23.8%, and 80.35% in students with 22 years of median age.⁷ In Ethiopia, depression, anxiety and stress among university students in 2019 were found to be 46.3%, 52% and 28.6% respectively.⁸ However, results from Jordan exhibited 78.7%, 67.9% and 58.7% depression, anxiety and stress respectively in university undergraduate during covid.^{9,10}

The preliminary objective of the study was to find out the frequency of the depression, anxiety, and stress among university students. The students who are physically and mentally sound, excel in their educational performance than those who are not fit. In other words, those who are suffering from any kind of psychological illness like depression, stress or anxiety cannot outrival. For this reason, it's far very essential to assess, evaluate and observe the mental welfare of the undergraduates. The results can help to provide preventive check and help to identify at risk student

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who are in need of counseling services so that they can perform better and successfully achieve their educational goals. Depression, stress, and anxiety are the common mental problem which are present in the undergraduates that detrimentally effect their academic performances.

METHODOLOGY

This was a cross-sectional analytical study. The participants were approached between 6 Feb 2019 to 5 April 2019, via permission letter no. PSY/UOG/19/2219. Department of Psychology and Department of Environmental Sciences were selected by Simple Random Sampling Technique from the Faculty of Social Sciences and faculty of Science. A sample of 209 and 191 was chosen through Yumane Formula.¹⁰ Sampling frame comprised of roll numbers of registered students obtained from Department of psychology and Department of Environmental Sciences.

Inclusion Criteria: MSc and BS students of age range between 18 to 26 years were included in the study.

Exclusion Criteria: M.Phil, PhD scholars and non-willing students were excluded from the study.

A 20-minutes gathering after a class was organized for each class and teachers were contacted with permission for this purpose. The participants were briefed about the study and hard copies of demographic sheet, informed consent form, and Urdu version,¹¹ of Depression, Anxiety, Stress Scale-42 (DASS-42),^{12,13} were distributed among them.

The statistical analysis was done on SPSS -23. To evaluate the levels of stress, depression and anxiety among the participants, frequencies, and percentages were calculated. Pearson Product Moment Correlation was used to found the relationship. Univariate analysis was inappropriate because there were a number of demographic variables influencing level of depression, anxiety and stress in students. Multiple Linear Regression Analysis was applied to assess the contribution of demographic variables for depression, anxiety, and stress among students.

RESULTS

110 (27.5%) males and 290 (72.5%) females were approached. The demographic features of sample comprised of age 193 (48.3%) in 18-20 years; 192 (48%) in 21-23 years; 15 (3.8%) in 24-26 years, in residential areas 219 (54.8%) were urban, and 181 (45.2%) were rural, with family system 262 (65.5%) in nuclear, 138 (35.5%) in joint; and monthly in come ranged Pkr. 20,000 to 100,000.

Table-I showed frequencies and percentages of normal, mild, moderate, severe, and extremely severe levels of depression, anxiety, and stress.

Table-I: Frequencies (n) and percentages (%) of levels of depression, anxiety, and stress.

Levels	Depression	Anxiety	Stress
	n (%)	n (%)	n (%)
Normal	109 (27.3)	80 (20.0)	152 (38.0)
Mild	72 (18.0)	26 (6.5)	71 (17.8)
Moderate	131 (32.8)	92 (23.0)	114 (28.5)
Severe	62 (15.5)	89 (22.3)	60 (15.0)
Extremely severe	26 (6.5)	113 (28.2)	3 (0.8)

Table-II showed that there was a significant positive high correlation coefficients and internal consistency among subscales Depression, Anxiety, Stress and full scale DASS.

Table-II: Inter-correlation coefficients and Cronbach alpha of subscales and scale of DASS.

Variables	Anxiety	Stress	DASS	M ± SD	Alpha
Depression	00.81**	00.72**	0.92**	140.63 ± 70.58	0.84
Anxiety	-	00.74**	0.93**	140.88 ± 70.86	0.85
Stress		-	0.89**	170.38 ± 70.42	0.82
DASS			-	460.89 ± 10.22	0.94

Table-III showed that age, type of study group (Natural Sciences vs. Social Sciences), and monthly income have significantly predicted the scores for depression (R=0.26; R²=0.07; F=4.64, p<0.01) among university students.

Table-III: Multiple linear regression analysis for demographic predictors of depression.

Model	Unstandardized Coefficients		Standardized Coefficients	t	p-value
	B	Std0. Error	Beta		
(Constant)	150.86	30.12		50.07	<0.001
Age Groups	-10.47	0.68	-0.10	-20.14	0.032
Gender	-0.39	0.90	-0.02	-0.44	0.659
Type of Study Group	20.48	0.81	0.15	30.06	0.002
Family System	-0.95	0.80	-0.05	-10.18	0.236
Area	-10.07	0.77	-0.06	-10.38	0.166
Monthly Income	90.39	0.000	0.10	20.06	0.040
R	0.26				
R ²	0.07				
F	40.64**				

Table-IV showed that age and type of study group (Natural Sciences vs. Social Sciences) have

significantly predicted the scores for anxiety ($R=0.24$; $R^2=0.06$; $F= 4.00$, $p< 0.01$) among university students.

Table-IV: Multiple linear regression analysis for demographic predictors of anxiety.

Model	Unstandardized Coefficients		Standardized Coefficient	t	p-value
	B	Std0. Error	Beta		
(Constant)	160.32	30.14		50.18	<0.001
Age Groups	-10.59	0.69	-0.11	-20.30	0.022
Gender	-0.08	0.90	-0.00	-0.09	0.928
Type of Study Group	20.60	0.81	0.16	30.18	0.002
Family System	-0.94	0.81	-0.05	-10.16	0.243
Area	-10.25	0.78	-0.08	-10.60	0.108
Monthly Income	40.42	0.000	0.04	0.96	0.335
R	0.24				
R ²	0.06				
F	40.00**				

Table-V showed that gender and type of study group (Natural Sciences vs. Social Sciences) have significantly predicted the scores for stress ($R=0.24$; $R^2= 0.06$; $F= 4.08$, $p< 0.01$) among university students.

Table-V: Multiple linear regression analysis for demographic predictors of stress.

Model	Unstandardized Coefficients		Standardized Coefficient	t	p-value
	B	Std0. Error	Beta		
(Constant)	110.61	20.97		30.91	<0.001
Age Groups	-0.69	0.65	-0.05	-10.06	0.286
Gender	20.29	0.85	0.13	20.67	0.008
Type of Study Group	20.62	0.77	0.17	30.40	0.001
Family System	-10.33	0.76	-0.08	-10.74	0.081
Area	0.15	0.73	0.01	0.21	0.829
Monthly Income	60.03	0.000	0.07	10.39	0.164
R	0.24				
R ²	0.06				
F	40.06**				

DISCUSSION

There was a considerable number of students suffered from moderate to extremely severe level of depression, anxiety, and stress, with prevalence rates as 54.8%, 73.5%, and 44.3% respectively in our study. The findings were compared to the prevalence of depression, anxiety and stress reported for medical students studying in different universities of Islamabad for moderate to extremely severe levels are 31.83%, 55.61%, and 31.82% respectively,¹² prompting a relative high level of psychological distress in Gujrat as compared to Islamabad. Similarly, medical students in

Lahore reported 19.5% depression and 43.7% anxiety,¹³ where as those in Rawalpindi reported 35.1% depression and 47.7% anxiety,¹⁴ supporting the notion of high prevalence rate in Gujrat as compared to major metropolitan cities of Pakistan. A meta-analysis and systematic review of depression in university students till 2019 was carried out by Khan *et al*, in 2021, reported 42.66% prevalence of university youth in Pakistan.¹⁵

A significant positive relationship between depression, anxiety, and stress have been existed in various studies indicating them as a comorbid but distinct categories.¹⁶⁻¹⁸ The analysis of demographic correlates of depression, anxiety, and stress in various researches showed mixed results.¹⁹ Gender, age, type of study group, family system, residential area, and monthly income were found to be significantly related with depression, anxiety, and stress among students,²⁰⁻²² thereby contributing in predicting scores of these psychological issues among students.

Our results were consistent with the findings of the previous researches. Yasin *et al*, 2010; Williamson *et al*, 2014; Preeti *et al*, 2017 have found positive and significant correlation coefficients among these three variables highlighting the interaction along the comorbidity dimensions.^{17,19} Our results showed that age, type of study group, and monthly income significantly predicted scores of depression explaining 7% variance among students. These findings were consistent with the results of Iqbal *et al*, 2015.²⁰ Our findings showed that age and type of study group were significant predictors of anxiety scores among students with 6% variance explained. Similar findings have been evident in past researches,²⁰ of Bayram *et al*, 2008 in Turkey and Kamberi *et al*, 2019 in Kosovo where sophomores presented more anxious symptoms as compared to senior students. students of natural sciences are found to be more prone to distress as compared to students of social sciences and humanities. In our study, gender and type of study group explained 6% variance in stress scores among students. The findings were in line with the results of the past researches of Othman *et al*, 2019 and Othieno *et al*, 2014. There was no significant difference in the prevalence of depression, anxiety, and stress in rural and suburban areas. No significant differences between gender for depression and anxiety were found in some studies and residential areas (urban versus rural) discretion have not played any crucial role in determining the level of depression, anxiety, and stress among university students in others.²²

In the light of the findings of the present study it is implied that strategies for the prevention and management of depression, anxiety, and stress with the provision of counseling services and campus connectedness are required. Pakistani universities must introduce programs reserved for healthiness checkups for psychological issues to identify them at initial stage. Campus connectedness referred to the social connectedness of the university framework, designating an undergraduate's sense of mental happiness to his/her university surroundings that in turn might boost psychological wellness.

CONCLUSION

It was empirically observed that prevalence of stress, depression and anxiety was high amongst university undergraduates in Gujrat. The common reasons to high stress, depression and anxiety are socio-demographic features like age, economic conditions (monthly income), type of study group and gender particularly in case of the stress.

LIMITATIONS OF STUDY

The sample size is small, focusing only on students of University of Gujrat. Therefore, a large-scale research is recommended to be planned in future to include major universities of Punjab with large sample size to generalize results on Pakistani youth.

Conflict of Interest: None

Author's Contribution

SS: Conceived the topic, Data interpretation and Article writing, ZF: Data collection, Data entry and Thesis Writing, ZB: Reviewed the article and approved for submission.

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