Mental Health Challenges in University Students: The Role of Eating Disorders in Depression

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ABSTRACT

The current study emphasis that eating disorders and depression among youth especially university students becoming significant mental health concerns, so far, their interrelation remains a critical area of research study. The present research also aimed to identify the prevalence and relationship between eating disorders and depression among students of University of Gujrat, Pakistan. A sample of 250 students was selected from the six departments and data were collected using Urdu versions of Beck Depression Inventory-II (BDI-II) and Eating Attitude Test (EAT-26). The findings of the study highlighted a significant prevalence of both disorders depression and eating among university students. Moreover, results indicated statistically significant positive correlation between eating disorders and depression at p < .05 level, suggesting that students having symptoms of eating disorder are at a higher risk of developing depressive symptoms as well. Results of regression analysis also indicated that eating disorders are a significant predictor of depression among university students. These findings significantly highlight the great need for mental health awareness and interventions programs targeting all mental health issues especially eating behaviors, emotional and psychological well-being among university students. Future study should explore causes and intervention strategies to reduce the impact of eating disorders and depression on the mental health of university students.

Keywords: Depression, University Students, Eating Disorders, Pakistan

INTRODUCTION

The evolution to university life signifies a pivotal period marked by significant individuals and daily academic challenges. This phase of life often overlaps with the onset of various mental health issues such as stress, anxiety, eating disorders and depression. These symptoms not only damaged students' academic performance but also overwhelmingly affect their overall psychological well-being. Understanding the prevalence and link of eating behviors and depressive symptoms among university students developing effective prevention programs and intervention strategies suggested by psychologist is most essential (Mustafa et al., 2022).

According to DSM V TR (2022) eating disorders that include anorexia nervosa, bulimia nervosa and binge eating disorder are characterized by severe disturbances in eating behaviors, related thoughts and emotions.

Researches indicated that eating disorders often emerge during adolescence and young adulthood ages aligning with the typical age range of university population. Some recent studies also have highlighted a concerning increase rate in the prevalence of eating disorders within university students. For example, a study was conducted between 2009 and 2021 to observe a significant rise in eating disorder cases among university students and results revealed that female students' prevalence rate increasing as 31.8% in 2018 to 51.8% in 2021 and the male university students' prevalence rising rate was from 13.0% in 2009 to 31.3% in 2021 (Chang et al., 2021).

Widely considered a leading contributor to global disability, depression is states of prolonged sadness paired with a persistent feeling of hopelessness along with a lack of interest or pleasure in activities. University students are especially vulnerable due to social transitions, academic demands, and financial difficulties (Shahzadi et al., 2024).The pandemic has further deepened these issues, resulting in greater stress and negative changes in eating patterns for students (Wang et al., 2021). One study examining a group of university students in Bangladesh found a considerable correlation between ED onset risk and depressive symptoms, amplifying the already existing relationship between these phenomena (Rahman et al., 2023).

The co-occurrence of eating disorders and depression is well documented, with each condition potentially worsening the other. Studies show that patients with eating disorders are often depressed, and depressed patients have higher rates of eating disorders. A recent systematic review indicated that depressive symptoms are very common among college students together with other health disorders, including anxiety and eating behviors (Smith et al., 2022). This relationship of causation in both directions further emphasizes the importance of integrated approaches to mental health policy planning which covers both disorders simultaneously (Mufti, et al., 2024).

Pertaining to Pakistan, research has started to analyze the occurrence and consequences of eating disorders and depression in university students. A cross-sectional study among medical students in Karachi noted the prevalence of eating disorder calling for more attention and efforts to be directed to academic institutions (Khan et al., 2021). Other studies also revealed that correlation of different forms of eating disorders with the different levels of stress, depression and anxiety among undergraduates' students of Aga Khan University, which is indicative of the complex nature of these psychological disorders (Ali & Bukhari, 2023).

Handling the dual problems of eating disorders and depression among university students, mix method approach is necessary for future researches. The addition of screening, counselling and institutional mechanisms can aid in the implementation of complete mental health programs for prevention and moderation of damages from these psychological disorders (Rahman et al., 2023). Immediate prompt action can help in avoiding the progress of symptoms through enablement of healthy coping mechanisms. Furthermore, creating a culture that promotes conversation around mental well-being would help dispel negative stereotypes and encourage help-seeking behavior among students (Smith et al., 2022).

To sum up, the growth of eating problems in mixture with depressive symptoms among university students' remainders as urgent a public health issue. Eating practices, body image, and emotional control symptoms significantly involved with eating disorders in cluster anorexia nervosa, bulimia nervosa and binge eating disorder. Due to increasing academic pressure, social comparison, and body dissatisfaction, university students especially women are more susceptible to acquiring these diseases. According to recent studies,

stress and peer pressure are two of the main causes of the growth in eating disorders among Pakistani students. 38% of participants in a survey of medical students in Lahore had disordered eating behaviors, with a higher frequency among females (Khan et al., 2022). According to a different study, university students in Karachi are engaging in unhealthy eating habits as a result of increased body dissatisfaction brought on by the social media representation of ideal body types (Ahmed & Raza, 2021).

Feelings of melancholy, disinterest, and exhaustion are often linked to depression, which is a major contributor to the decline of mental health in young adults. Pakistani university students deal with a variety of pressures, such as a heavy schoolwork, limited funds, and unknown career paths, all of which exacerbate depression symptoms. These mental health issues were made worse by the COVID-19 epidemic, which caused students' stress levels to rise and their eating habits to change. According to a study done at a public university in Islamabad, 45% of students had moderate to severe depression symptoms, and there was a strong link between disordered eating and academic stress (Malik & Farooq, 2023). Depression-related mental distress frequently affects eating habits; some students use overeating as a coping strategy, while others turn to food restriction.

Studies have continuously shown a high correlation between depression and eating disorders, indicating that the two conditions may worsen one another. Students in Pakistani colleges who have emotional distress and body image problems are more likely to acquire eating disorders (EDs), and those who already have EDs are more likely to have depressive symptoms. 56% of eating disorder sufferers also showed symptoms of depression, according to a recent cross-sectional study among Punjabi undergraduate students, underscoring the necessity of integrated mental health interventions (Tariq et al., 2024).

Academic institutions and politicians must take quick action to address the rising rates of eating disorders and depression among Pakistani university students. Peer support groups, awareness campaigns, and mental health services that give students coping mechanisms to deal with social and academic stresses are desperately needed. Promoting a culture of candid conversations about mental health can lessen stigma and allow students to get professional assistance without worrying about being judged. Universities should engage with nutritionists and psychiatrists to create programs that encourage emotional fortitude and a healthy diet. Academic institutions can improve their students' general well-being and academic performance by placing a high priority on their mental health, creating a nurturing learning environment for coming generations.

METHODOLOGY

Research Design

For the current study cross-sectional research design was used to assess the prevalence of eating disorders and depression among university of Gujrat students. This design was chosen as it allows researcher for an efficient examination of these mental health concerns such as eating disorders and depression within a specified population at a given point in time.

Target Population

This study focused on university students enrolled in different academic programs and semesters at the University of Gujrat, Pakistan. For the study participants were required to be at least 18 years old because

before 18 diagnoses can not be given to specific person (DSM V TR, 2022). Data were collected from five departments of University of Gujrat as followed by Sociology, Economics, Education, Psychology, and environmental Sciences.

Sample Size and Sampling Technique

A sample of total 250 participant students were selected by using a convenient sampling technique. This non-probability method was selected because of students' feasibility in accessing students due to end of semesters and who were willing to participate in the study.

Instruments

Demographic information

The researcher of study designed a self-developed demographic form for students to get information on variables such as age range, gender, marital status, education, family structure, socioeconomic status, semester and department.

Beck Deprssion Inventory-II (BDI-II)

The BDI-II was developed by Beck in 1996 which is known as 21-item self-report inventory designed to assess the different severity of depressive symptoms among individuals. Each item of the scale is rated on a 4-point, ranging from 0 means no symptoms and 3 shows severe symptoms with total scores ranging from 0-63. The higher scores in BDI II indicate greater levels of depression in person and severity categorized as minimal range 0-13, mild 14-19 score, moderate range 20-28 and severe level at 29-63 scores. The Beck Depression Inventory-II has also been translated into Urdu by Ghazal & Khalid (2018) for use in Pakistan. The Urdu version BDI II has verified high internal consistency $\alpha > .85$ and strong construct validity that make it a reliable tool for assessment of depressive symptoms among Urdu-speaking individuals, university students and for clinical clients.

Eating Attitude Test (EAT-26)

The Eating Attitudes Test-26 (EAT-26) originally developed by Garner et al. (1989), is a widely used self-report screening tool designed to assess symptoms and concerns related to eating disorders, including anorexia nervosa, bulimia nervosa, and binge eating disorder. This scale includes 26 items that are scored on 6-point Likert scale ranging from 1=never and 6= always with a cutoff score of 20 that indicate prevalence of eating disorders. This scale has verified with high internal consistency $\alpha = .90$. In the Pakistani context, EAT-26 has been translated and validated in Urdu by Rahat and Khalid (2018) to ensure language and cultural variation. The Urdu version EAT-26 also shown good reliability $\alpha > .85$ and has been widely used in research on different psychological issues and eating behaviors among Pakistani adolescents especially among university students.

Procedure

A written informed consent was developed for the study including all confidentiality protocols, and rights of participation and withdraw was given to students. Permission was taken from the concerns department head/ chairperson. The BDI-II and EAT-26 tools permissions were also taken from concerning original and

Urdu translated authors then administered after they had finished a demographic survey. To maintain anonymity and attention, the survey was conducted in separate sessions.

Analysis of Data

IBM SPSS Statistics was used to evaluate the data that was gathered (Version 21). Using descriptive statistics (mean and standard deviation) to characterize sample characteristics was part of the analysis. correlation analysis to evaluate the connection between eating disorders and depression. Regression analysis is used to investigate possible determinants of university students' eating disorder symptoms.

The present study aimed to examine the risk of eating disorders and depression among university students. The data was analyzed using SPSS-21, and the results are presented in two stages: first, descriptive statistics of the demographic variables, and second, hypothesis testing.

Table 1

Descriptive Analysis of Demographics (N = 250)

Variables	Category	Frequency (%)
Age of respondents	19-21 years	159
	22-24 years	91
Semester	2nd	55
	4th	65
	6th	59
	8th	71
Department	Psychology	50
	Sociology	64
	Economics	40
	Education	45
	Environmental Sciences	51
Socioeconomic Status	Lower	5
	Middle	221
	Upper	24

As shown in Table 1, the majority of the respondents (159 participants) fall within the 19-21 years age group, while 91 participants belong to the 22-24 years category. The distribution of students across semesters indicates that the highest proportion is in the 8th semester (71%), while the lowest is in the 2nd semester (55%). Department-wise analysis reveals that the sociology department has the highest frequency (64%), whereas economics has the lowest (40%). Regarding socioeconomic status, most respondents belong to the middle class (221 participants), with a smaller proportion

from the upper class (24 participants) and the lowest representation from the lower class (5 participants).

Table2

Correlation Between Risk of Eating Disorder and Depression (N = 250)

Variables	Eating Disorder	Depression
Eating Disorder	-	.34**
Depression		-
** correlation is significant 0.01 level		

A Pearson correlation analysis was conducted to assess the relationship between the risk of eating disorders and depression among university students. The results indicated a statistically significant positive correlation between eating disorders and depression, $r(248)=.343, p<.001 r(248) = .343, p < .001$ $r(248)=.343, p<.001$. This suggests that higher risk of eating disorders is associated with higher levels of depression. The effect size indicates a small-to-moderate correlation between the two variables.

Table3

Regression Analysis for Eating Disorder Risk as a Predictor of Depression (N = 250)

	Depression			
	B	SEB	B	t
Depression	.299	.05	.34	5.7**
Eating	10.38	1.8		8.8**
R²	.11			
Δ R	.34			

A linear regression analysis was conducted to examine whether eating disorder risk predicts depression among university students. The results indicate that eating disorder risk is a significant predictor of depression, $B=0.299, SE=0.052, \beta=0.343, t(248)=5.74, p<.001 B = 0.299, SE = 0.052, \beta = 0.343, t(248) = 5.74, p < .001 B=0.299, SE=0.052, \beta=0.343, t(248)=5.74, p<.001$. The model explains 11.8% of the variance in depression ($R2=.118 R^2 = .118 R2=.118$), suggesting that while eating disorder risk contributes to depression levels, other factors account for the remaining 88.2% of the variance.

Table4

Department-Wise Descriptive Statistics for Eating Attitudes and Depression (N = 250)

	EAI		BDI	
Departments	Maen	SD	Maen	SD
Total	16.25	9.80	19.60	11.32
Psychology	13.73	10.07	16.16	10.83
Sociology	16.56	10.02	19.57	11.99
Economics	17.57	9.21	21.40	11.71
Education	15.84	9.96	12.84	12.29
Environmental Sciences	17.62	9.79	17.86	8.27

The mean score for eating attitudes across all departments was 16.25 (SD = 9.87). The highest eating disorder risk was observed in the Economics (M = 17.57, SD = 9.21) and Environmental Sciences (M = 17.62, SD = 9.79) departments, whereas the lowest was found in the Psychology department (M = 13.73, SD = 10.07).

Regarding depression, the overall mean score was 19.60 (SD = 11.32). The highest depression scores were found in the Education department (M = 23.84, SD = 12.29), while the lowest were reported in the Psychology department (M = 16.16, SD = 10.83). This suggests that students in Education experience higher depression levels, whereas Psychology students report lower depression levels compared to other departments.

DISCUSSION

The current study aimed to explore the connection between depression and eating disorder among university of Gujrat students. Students are more prone to suffer from eating disorders are also more likely to suffer from different level of depression. Results of the study also showed a significant positive link between the two variables. Previous researches also emphasizes that the connection between mental health problems (Schaumberg et al., 2021).

Demographic analysis in table 1indicated that most participants were in the 19–21 age range and the largest percentage belonged to the medium class level. These results are consistent with studies shown that societal expectations, poor body image and academic pressures adulthood a crucial time for the beginning of eating disorders and depression (Lahore et al., 2022). The prevalence of disordered eating behaviors, especially among university students, may be influenced by media, conventional expectations surrounding body image, and societal beauty standards in the Pakistani cultural setting (Malik & Shah, 2023).

Depression and eating disorder differences risk were found by department wise analysis in table 4. Interesting results were found as psychology students were reported to be the lowest at risk of eating disorders symptoms and economics and environmental sciences students reported the highest risk of development of eating disorder. Recent researches as supported the evidence that variations in exposure to psychological concepts, mental health self-awareness and university stress (Chang, Lee and Kim, 2021). According khan, 2023 students in fields like economics and live sciences need a lot of work analysis and quantitative skills that have higher academic stress levels which could lead towards psychological distress symptoms like poor eating as a coping strategy (Khan et al., 2023).

Results in the table 4 also highlighted that student in the psychology department again reported at the lowest levels of depression or depressive like while students in the education department reported the highest level of depression. Since the importance of mental health awareness in psychology degrees the results are quite interesting. Studies also indicated that pressure to fulfill daily societal expectations for teaching and caregiving tasks, job doubts and lack of academic support it can be found education students may be more stressed (Smith, Evans and Carter, 2022). Teachers in Pakistani society are frequently subjected to high levels of familial and societal expectations, which may be a factor in the country's higher than average rates of depression (Ali et al., 2021).

According to the regression analysis table results indicated that depression is significantly predicted by eating disorder which explains 11% of the variance. The results also shows that prevalence of eating

disorder are a contributing cause to depressed symptoms and other factors like family expectations, financial hardships, and academic stress also play a significant impact (Stice et al., 2020). Similar to this, studies carried out in South Asian contexts have highlighted the complexity of student depression and the necessity of all-encompassing mental health interventions (Zafar & Hussain, 2023).

IMPLICATIONS FOR MENTAL HEALTH INTERVENTIONS

The results have significant ramifications for university mental health services in Pakistan. Campaigns to raise awareness about eating disorders and depression are desperately needed, especially in high-risk areas. University counseling clinics ought to put in place focused interventions that deal with issues related to stress management, body image, and self-care. Peer support groups and culturally relevant therapeutic approaches ought to be promoted in Pakistan due to the stigma associated with mental health (Javed et al., 2022).

LIMITATIONS AND FUTURE DIRECTIONS

While this study provides valuable insights, several limitations must be acknowledged. First, the cross-sectional design limits causal inferences. Longitudinal research is needed to examine the temporal relationship between eating disorders and depression. Additionally, self-reported measures may introduce response bias. Future studies should incorporate clinical assessments and qualitative methods to gain deeper insights into students' experiences. Lastly, exploring gender differences and socioeconomic disparities in eating disorder risk and depression would provide a more comprehensive understanding of these issues in Pakistan.

CONCLUSION

This study emphasizes how eating disorders and depression are significantly correlated among university students in Pakistan. The results emphasize how cultural norms, societal expectations, and academic stress all influence mental health outcomes. A multifaceted strategy is needed to address these issues, one that includes early intervention, education, and the de-stigmatization of mental health care.

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