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Research Article

Investigating Determinants and Prevalence of Mental Health Issues in University Students: UAE Perspective

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Abstract:

A questionnaire survey of university students' mental health problems was conducted on 250 respondents aged 19-26 years. The study scale relates to four dimensions of mental health problems as reported by university students, such as They include Disorganisation of functional sense, Inability to Trust, Impulsivity or Lack of self-control, and Susceptibility to anxiety. Interpretation of the total SPCL is also presented and the authors recommend that SC z-scores greater than one should be entered in the GERIF study and be used to consider a severe problem while scores that equal two standard deviations be considered a very severe problem. According to the results obtained here, 31% of the partakers can be referred to the condition defined as "very severe." Regarding the individual dimensions, 17% of respondents, which represent the sample of the present study, fall under the very severe category of Sense of Being Dysfunctional; the second is Loss of Confidence with 16%, followed by Lack of Self-Regulation 14% and Anxiety Proneness 12%. These observations are in parallel with the findings of other studies on the mental health of students. The consideration of individual variables such as sample characteristics, the measure used, culture as well as the context in the provision of rates are also expounded with relativity to student counselling service in prevention and intervention.

Keywords: University students, mental health, prevalence

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INTRODUCTION:

University duration is passionately & logically extra challenging compared to nearly all the other periods of learning. In this stage, a specific experiences a lot of pressure and complex challenges, which create numerous physical, social, and emotional problems (Rodgers, Tennison, 2024). Due to the new, complex and rather negative social and emotional image of university scholars, they are extra susceptible to the development of mental health issues (Benton et al., 2023; Eisenberg et al., 2007; Stanley & Manthorpe, 2023). A lot of recherche has aimed at the identification of the rate of university students and research of the understanding of mental health issues and the studies indicate that across the globe a large amount of university scholars have issues with mental health

(Adewuya 2024; Nordin, Talib, & Yaacob 2024; Ovuga, Boardman, & Wasserman 2024; Seim & Spates 2024; Verger, Guagliardo, Researches have also confirmed that the quantity of scholars who experience mental health issues is on the rise, the problems seem to become more and more severe (Hunt and Eisenberg, 2024). Thus, the idea of mental health can be described and conceptualized across cultural, community and societal borders. Depending on how one can perceive the constitution and the causal factors of psychological disorders that may define the concept of mentally healthy people and of procedures of counselling and intervention useful for handling mental health issues (Katherine, 2022). They get developmentally challenged and some of them are dealing with more complex and persistent issues. Generally, university

students chiefly present mood disturbance, self-destructive behaviour, interpersonal dysfunction and deficit of self-image (Grayson, 1989). Students from the universities do complain of stress, anxiety, some signs of clinical depression, eating disorders and other psychological and mental health difficulties that have a very undesirable effect on their act and other aspects of their lives (Cooley, Toray, Valdez, & Tee, 2007; Tosevski, Milovancevic, & Gajic, 2024).

Over the past era, the university & college counselling centres has observed a transition from the types of developmental concerns scholars require counselling to severe psychological concerns based on the data available (Gallagher et al., 2022; Pledge et al., 1998; O'Malley et al., 1990; Robbins et al., 1985; Stone & Archer, 1990). Thus, Offer and Spiro (1987) and Rimmer, Halikas & Shuckit (1982) endorsed the findings that In the study, Gallagher, Sysko, and Zhang (2023) embarked on a national survey that targeted a sample of 274 Counselling Centre organizations. The managers of the Counselling Centres were informed that the psychological difficulties were rising in the students in terms of their severity over the last five years. Hence, the level of increased psychological problems among university students was revealed to be 85%, which is considered to represent the severe type. Of these, 71 per cent have learning disabilities, 38 per cent have eating disorders, 45 per cent with alcohol issues, and concerns regarding sexual assault which is 33 per cent and drug use 49 per cent. Thus, holders of counselling centre clients had 16% of clients presented with severe psychological problems. In addition, 84% of heads of counselling centres said that the prevalence of scholars with unadorned psychological issues was worrisome. In a crosssectional study that sought to establish the stability of mental health issues in university students, Zivin, Eisenberg, Gollust and Golberstein (2024) found that common mental health disorders were stable from freshman to sophomore year among the student population. The collected data on the various mental health problems showed that their measurement was conducted twice – at the starting point & follow-up, portentous that at least half of the students had any of these mental health complications. Also, it was established that out of all the university students who attended the baseline with at least one mental health problem, 60 per cent of them were identified with mental health problems after two years. In the study conducted by Nordin, Talib and Yaacob (2024), the authors attempted to establish the correlation amongst aloneness, nature & mental health difficulties of university scholars in Malaysia. It was therefore indicated from the findings that a remarkable percentage of university students had mental health problems with loneliness being directly related to mental health problems. Stallman and Shochet (2024) on their part examined the incidence of students' mental health difficulties enrolled in Australian universities. The subjects of this study included 1168 participants- the majority of whom are female university students. The K10 was applied to assess the level of mental health issues; it was developed by Kessler et al. (2023). The K10 is a global index of non-psychotic psychological suffering and is hand-me-down to 'trial' to identify people with DSM-IV anxiety mood disorders. The result implies that 95% of the respondents had mild to severe levels of psychological distress. About 24. 4% of participants were found to be having slight psychological disorders. It is also evident that the percentage of

1/3rd of the university students were found to have a precise psychological ailment and that 1/4th of the entering college pupils were identified as being disturbed and requiring professional mental health exercise. Drum and his colleagues, Brownson, Denmark and Smith conducted a study in (2024) where they targeted students across seventy colleges and two universities accounting for 26, 000 students. According to the findings, 6 per cent of the respondents came from the category of undergraduates who had seriously thought of suicide; and 4 per cent among the graduate students; particularly the male alumni were most vulnerable to attempt self-destruction. Further, female scholars were also reported to be extra vulnerable to the development of unadorned sadness & indications of an anxiety disorder (Eisenberg, Gollust, Golberstein, & Hefner, 2007).

scholars in the raised range increases slightly to 83. 9%, along with the students' distress level in the mild range at 31. 7% and the moderate range at 33. 0%. Stallman (2024) also completed a comparison of university scholars & the common people on mental health problems. The participants of the sample included 6479 people. The general percentage on the index was identified as about 19. 2 %. Remuneratively, two years ago Hamdan-Mansour, Halabi and Dawani (2024) discovered that approximately 75 percent of university scholars have cheerless indications.

An additional very enlightening study was conducted by Shiels, Gabbay, and Exley (2008) as they aimed to identify the occurrence of mental health matters in university students via an e-mail questionnaire. As for the 2nd and 3rd hypotheses, it was exposed that the level of anxiety among participants was at 47% while the level of depressive thoughts was confirmed in 10 % of the individuals. Adewuya (2024) identifies the proportion of main depressive disorders utilizing alcohol-related issues. The target population of this study was students from six different colleges, with a total of 2658 participating in this investigation. The outcomes of the research displayed that the 2-week occurrence of foremost depression were moderate and was 23. 8% with alcohol necessity while that of alcohol abuse was 17. 2 % among the sample group. Bayram & Bilgel (2008) analysed the given variables, namely depression, anxiety and stress levels amongst 1617 students in Turkey. Following the original study, the Turkish version of the Depression Anxiety & Stress Scale (DASS; Antony et al., 1998) were employed. While analysing the data about the severity level of depression, it was noted that only 1% of the respondents were initiated to have moderate or above the level of depression; about 41. 1% of participants were marked as having moderate & above levels of anxiety & 27% as stress. Female students showed more anxiety and stress as compared to male students. In the same way, Guney, Khalafat and Boysan (2024) also inspected depressive signs and life satisfaction concerning anxiety among students at Ankara University. Therefore, it was established that life satisfaction had a significant moderate negative relationship with both anxiety and depression. Many students struggling with their mental health never get any therapeutic or counselling intervention (Zivin, Eisenberg, Gollust, & Golberstein, 2024). The vitality and work capacity loss and poor academic achievements among university students with mental disorders are short and long-term effects (Andrews & Wilding, 2022; Breslau et al., 2008; Lyubomirsky et al., 2023). Du Pont (2022),

Keyes and Flanders (2022), Lenz (2022), and Weitzman (2022) stated that the subjects in the sample had increased cigarette smoking and alcohol consumption and Restifo et al. (2024), Sonnak & Towell (2023) mentioned that they had low selfesteem. The requirement and the utility of student counselling are obvious because every time such facilities are offered, the demand for such facilities tends to grow in time. The consciousness about escalating incidences of mental disorders and their repercussions also boosts the need to extend counselling facilities to university learners (Cranford, Eisenberg, & Serrar, 2024; Harrar, Affsprung, & Long, 2024; Hunt & Eisenberg, 2024). The zone of mental health glitches between university scholars in Pakistan has remained an actual under-researched one. Zaman (1996) examined the status of depression among the medical students. The students' responses revealed that 39% of them claimed they had some low mood, 36% had anxiety, and 25% presented symptoms of depression coupled with relational & academic challenges. In an alternative current research Mahmood and Saleem (2022), analyzed the pattern of mental health difficulties in 803 university scholars. Based on the analysis of the outcomes of the research four distinct types of problem-solving outlines identified are The Sense of being dysfunctional, Damage of confidence & Nonexistence of self-regulation/Anxiety proneness.

Available literature reveals that the exacerbation of mental health issues among university students is now emerging as a subject of study among researchers and these problems are on the rise (for instance, Harrar, Affsprung, & Long, 2024; Seim & Spates, 2024). However, if one looks at Establishing where the prevalence studies are situated, one can also identify that most of the researchers have worked on the disorders instead of on problems (for instance Shiels, Gabbay, & Exley, 2008; Sysko, and Zhang 2023). University lifespan is just a transitional stage through which the students go through many burdens and tasks (Bayram & Bilgel, 2008; Grayson 1989); & thereby they can become a mentally ill state. Taking into consideration the shifts in demand and pressure, they might be hardly deemed as partaking mental disorders. Further, the rate of prevalence is very much fluctuating especially since there are lots of differences in the assessment tools, in the cutoff level in coming up with the harshness and in the description of mental health problems.

However, given all these methodological concerns, it is a point of fact that a noteworthy quantity of university scholars experiences severe mental health disorders that can impact their usual operations. Also, they are revealing that there is limited literature available in Pakistan that evaluates the incidence and prevalence of mental health-related issues faced by university scholars. The available data implies that it is very crucial to conduct pervasiveness research that could serve as a starting point for the additional advancement of services related to student counselling.

Aims

To regulate the occurrence amount of mental health difficulties between university scholars in Pakistan.

To regulate the association of mental health difficulties with important demographic variables.

Method Participants

The target population of the present research was 250 university students, among whom 61 % were females and 39% males. Therefore, when it comes to the selection of the sample, the multistage sampling technique was applied. The first stage involved the use of the stratified sampling technique in which the sample of Hon students was divided into four work-related groups about gender and BS Hon of the Business School of the selected universities out of which half the population was taken by random sampling from four public sector universities of Pakistan. The participants' age ranged between 19 and 26 years with a mean age of around 21. 48 & SD of around 1. 73 years.

Instrument

The subsequent instruments was used in the present study.

Demographic form.

The procedure included some of the literature-identified demographic characteristics which are known to be associated by mental health difficulties between university scholars. Demographic variables were age in years, sex, parents' educational level, and family structure.

Student Problem Checklist

To evaluate the level of psychological disorders among university scholars, an indigenously established Student's Problem Checklist (SPCL, Mahmood & Saleem, 2022) were utilized. SPCL consists of 45 objects assessing 4 forms of mental health the difficulties of which are; SBDF, LOCI, LSR, and APA. Regarding the psychometric properties of this scale, internality was 0. 89 which indicates an acceptable level of the properties. 94 and the inter-tester consistency of 0. 81, with a 1-week interlude. The split-half dependability of SPCL is 0. 83.

Procedure

The transitory purposes & objectives was forwarded to the 6 public sector universities of Lahore, which is the 2nd largest city in Pakistan. Out of these, 2 universities declined while four others allowed data to be collected from them. All the authorities were informed that all the data used in this paper will be used solely for research purposes and that the individual's identity will always be protected. After the consent was sought, the university establishments were requested to deliver the participants at random from all 8 semesters of the course named 'BS Hon'. The test was carried out in a group context. Individually group comprised approximately 20 scholars the contributors were debriefed on the key study goals and told that any information provided to the study would only be used for this study and would remain anonymous. They were also told that they have the freedom to extract from research at any phase of testing they would wish to. Following the brief introduction, the last assessment procedure in our study was the demographic form and the SPCL. They were requested how much each item of SPCL concerns them, that is, to what extent the item in question bothers them. Regarding the quantity aspect, the average testing time was fifteen minutes. Finally, all the applicants post-survey were interrogated.

Results

Table 1Means and Standard Deviations of Years of Age, Father and Mother's Years of Education of the Participants(N=250)

| Variables | M | SD |
|----------------------------|-------|------|
| Age | 21.47 | 1.71 |
| Father's education (years) | 12.20 | 3.16 |
| * | 10.51 | 3.43 |

Table 1 shows that the average level of respondents' fathers' education is Intermediate whereas that of mothers is Matriculation.

Table 2 Percentages of the Demographic Characteristics of the Participants (N= 250)

| Variables | Male | Female | Total |
|---------------|-------|--------|-------|
| | % | % | % |
| Gender | 38.80 | 61.20 | 100 |
| Age | | | |
| 19 or less | 51.91 | 48.09 | 9.89 |
| 20 | 43.36 | 56.64 | 21.57 |
| 21 | 34.67 | 65.33 | 24.32 |
| 22 | 36.43 | 63.57 | 20.92 |
| 23 | 39.01 | 60.99 | 9.84 |
| 24 or more | 32.93 | 67.07 | 13.46 |
| Family System | n | | |
| Nuclear | 44.02 | 55.98 | 65.50 |
| Joint | 61.35 | 38.65 | 34.50 |

Table 2 discloses that there are additional members in the age group 21 yrs (24%) and a comparatively greater number of participants come from the nuclear family system (65.50%).

Psychometric Properties of SPCL

Though it was identified that SPCL had acceptable psychometric properties, However, the inner steadiness, test-retest reliability, and split-half reliability were also calculated for this investigation study.

Table 3 Cronbach Alpha of four factors and total score on SPCL Coefficients

| Factors No of items | Alpha Coefficients Dysfunctional1 | | | | |
|-------------------------|-----------------------------------|-----|--|--|--|
| Loss of confidence | 12 | .87 | | | |
| Lack of self-regulation | 8 | .86 | | | |
| Anxiety proneness | 9 | .90 | | | |
| Total SPCL Score | 45 | .95 | | | |

The overhead table exposed that SPCL were initiated to have high inside steadiness for the present sample.

Forms A and B originated to be 0.89 & 0.91 (p<0.001) correspondingly.

Split half reliability

The split-half consistency of SPCL employing the odd & even method originated at $0.82\ (p\ 0.001)$. The Cronbach alpha for

Test-retest reliability

A week test-retest consistency of SPCL on 15% (n= 279) contributors shows r = 0.84 (p < 0.001).

| Factors | Male | | Fe | male | Total | |
|--------------------------------|-------|-------|-------|-------|-------|-------|
| | M | SD | M | SD | M | SD |
| I Sense of being dysfunctional | 15.93 | 8.54 | 20.27 | 8.54 | 18.59 | 7.56 |
| II Loss of confidence | 12.85 | 7.59 | 13.32 | 8.01 | 13.14 | 7.85 |
| III Lack of self Regulation | 11.32 | 4.60 | 10.79 | 4.95 | 10.99 | 4.82 |
| IV Anxiety Proneness | 9.07 | 5.11 | 14.18 | 4.56 | 12.19 | 5.39 |
| SPCL Total | 48.18 | 22.82 | 58.57 | 19.26 | 54.93 | 21.20 |

Occurrence of Mental Health Problems

Based on the arithmetic means & SD estimated for the 4 issues & the total score on SPCL, these researchers identified the 3 groups; moderate (mean score), severe (1SD above the mean)

and very severe (2SD or above the mean). The notches for all the factors were obtained by summing up all the responses on the factors; the higher the score on any factor, the higher the level of mental health problems.

Table 5 Percentage of Sample (N= 250) Falling into Three Groups on 4 Factors and Total Problems Scores on SPCL

| Factors | Moderate | Severe | Very Severe | |
|-----------------------------|----------|--------|----------------|--|
| I Dysfunctional | 56 | 27 | 17 | |
| II Loss of Confidence | 56 | 28 | 16 | |
| III Lack of self-regulation | 54 | 32 | 14 | |
| IV Anxiety Proneness | 52 | 36 | 12 | |
| SPCL Total | 53 | 31 | 16 | |

From the above table, we can infer that if we categorize the 'very severe' group as the category that requires clinical attention due to serious mental health issues In the sample, 16 per cent of the participants required clinical consideration. Thus, the "Severe" category involves nearly 31% of the total

participants. Of all the problems, the sense of being Dysfunctional was confirmed with the highest percentage (17%) among students shadowed by Damage of Confidence (16%), Nonexistence of self-regulation (14%) and Anxiety proneness (12%).

Table 6 Means, SD t and p--values of Males (n=718) and Females (n=1132) on 4 Factors & Total Problems Score on SPCL

| Factors | Gender | M | SD | t | p< | 95% Cl | | |
|-----------------------------|---|----------|-------|-------|------------|--------|------|-----------|
| | | | | | | LL | UL | Cohen's d |
| I Being Dysfunctional | Being Dysfunctional Male 15.93 8.54 12.55 | 0.001*** | 1.17 | .62 | .58 | | | |
| | Female | 20.27 | 8.54 | | | | | |
| II Loss of Confidence | Male | 12.85 | 7.59 | 1.27 | 0.205 (ns) | 1.01 | .27 | .06 |
| | Female | 13.32 | 8.01 | | | | | |
| III Lack of Self-Regulation | Male | 11.32 | 4.60 | 3.34 | 0.001*** | .37 | 2.92 | .16 |
| | Female | 9.79 | 4.95 | | | | | |
| IV Anxiety Proneness | Male | 9.07 | 5.11 | 22.40 | 0.001*** | 1.54 | 3.29 | .63 |
| • | Female | 14.18 | 4.56 | | | | | |
| Total Score | Male | 48.18 | 22.82 | 9.51 | 0.001*** | 1.61 | 2.77 | .44 |
| | Female | 58.57 | 19.26 | 3.02 | | | | |

df =1848 ***p<0.001

Above table shows that male and female university scholars are heterogeneous in SOB, Nonexistence of self-regulation, Anxiety Proneness & Total score (t= -3. 408, t= -2. 088, t= -2. 200, t= -3. 162 respectively) where females were more prone to SOB, Anxiety proneness and Total problems in SPCL. Also, a significant difference was observed for Lack of self-regulation, dominated by male participants as opposed to the females. However, on the Loss of confidence factor, it was found that there remained no significant gender variances mainly because the number of males and females that reported being affected in this aspect was relatively close.

Demographic Variables and Mental Health Problems Age

As a result of the above hypotheses, Analysis of Variance (ANOVA) was conducted to notice a mean difference between the participants (N=250) across the age bracket on the aspects of SPCL total score and the 4 extents. A study of the outcome of the study designated that there was no difference in the level of mental health problems based on the age bracket of the study subjects (p>0.05).

Parental education & family system

To analyse the presence of such a correlation between the subjects of the study – mental health difficulties of university scholars and the levels of parental education & the efficiency of the family system, several statistical measures were employed. It was found that parental education, family system and mental health difficulties had no significant correlation with the Mental Health Problems of university scholars p > 0.

Discussion

There are many assumptions that in general students are additional susceptible to mental health issues than normal people (Benton et al., 2023; Eisenberg et al., 2007). This is because apart from academic challenges there are numerous factors including growth to spiritual and calendar adulthood, challenges of the looming practical life, relationships and other extraneous factors, as has been proposed by Rodgers and Tennison (2024). The very issue that can be supported by a great number of studies is that some of the issues occurring to students in childhood might be long-term and negatively influence the psychosocial sphere in the later years (for example, Cooley et al., 2007; Tosevski et al., 2024; Zivin et al., 2024). Some are temporary and every growing student leaves at some stage in their education. When it comes to measuring such issues, the common practice that several researchers have adopted is a nomothetic view, it is suggested that 'above average' indicates strength of the symptoms is equal to 'severity of the symptom'. But again, having symptoms is a far cry from having a disorder. Thus, in this case, it was not so much focused on the occurrence of various diagnostic groups, nonetheless more on the appearances of the belongings of stress by students. Moreover, the diagnosis is a clinical decision, which means that apart from the presence or absence of a symptom, certain other factors may be needed. Such decisions cannot be considered as reliable if they are based only on the subject's self-reports without taking into account such factors as a growing history of the problem, the sequence of the indications, a comparative influence of pre-dispositional & experiential factors, etc. As has

been observed in the earlier prevalence research reviews, there is always a vast difference in the results found (Hamdan-Mansour et al., 2024; Stallman & Shochet, 2024). Concerning student populations, the occurrence rate ranges from 4% to 85% (Drum et al., 2024; Gallagher et al., 2023; Zivin et al., 2024). It may also mean that besides the comparative undependability of the diagnostic method, there could be other motives for the differences in the described findings in the occurrence studies. Besides, the mentioned differences in occurrence rates identified in various studies could be explained by several situational factors. For instance, the population under consideration, how a given problem is explained, the type of device used, time, place & background may all affect the findings of an occurrence study. Nevertheless, based on the research findings, it is evident that no matter the actual percentage of University students with psychological issues, a significant number of this population group is at risk of experiencing such issues that require detection at an early stage to prevent undue consequences.

This way, it would be more beneficial to have a functional viewpoint to enquire when a sign transforms into an issue. The first case would be when it disrupts the normal life of that person in society avoiding Which do you think is the most appropriate answer to this question? This is more related to the aspect of intensity than the aspect of clustering of the problems. In this manner, much more emphasis was placed on symptoms than on the analysis sign of what was stated by the scholars. For this study, a total of 250 university students were identified from different stratified smaller classes of the university and were requested to rate themselves on an indigenously established Student Problems Checklist (SPCL, Mahmood & Saleem, 2022). The percentage for prevalence was arrived at by utilizing the formula of % of sample landing in the "severe" category (1SD above the mean) & "very severe" (2SD above the mean for separately of the 4 factors and the final total score of SPCL. Total occurrence data hence may not be analogous to alike research. All 4 factors and the total SPCL scores have been derived from the study and no diagnostic categories have been examined. The first of However, this inference would be considered more functional; one conclusion derived from the association of 'compassionate' and 'love' as functions. More specifically, 27 per cent of the sample population falls in 1 SD of the population mean & an additional 17 per cent of the sample population is within 2 SD of the population mean. The same scenario applies to other factors such as Absence of Confidence, Nonexistence of the ability to Self-Regulate and Anxiety Sensitivity. The average percentage of the "severe" and "very severe" population rating classifications is 31% and 16% separately. The extent of psychological issues that the university students in this sample exhibit is rather high. Rates such as these therefore call for stern and detailed action that needs to be taken by the authorities in the shortest time possible. The right counselling services provided by professional and qualified personnel must be accessible to university students so that the impacts caused by the services can be reduced through early intervention. Regarding gender, the female university population perceived more problems in such dimensions as a Sense of Being Dysfunctional and Anxiety Proneness. The results of the present study corroborate the preceding literature (etc, Eisenberg et al., 2007). In addition, the adaptive scores of

the Male participants were significantly higher as associated with that of the Female participants in Nonexistence of self-regulation. It also opens the method for conducting longitudinal research to define the type of students who gradually demonstrate signs of vulnerability and those students who, on the contrary, become chronically ill throughout their school time. It also indicates that the described problems can be useful for the definition of policy-making & providing appropriate counselling services.

References

- Adewuya, A. O. (2024). Prevalence of major depressive disorder in Nigerian college students with alcohol-related problems. *General Hospital Psychiatry*, 28, 169-173.
- Andrews, B., & Wilding, J.M. (2022). The relation of depressionand anxiety to life-stress and achievement in students. *British Journal of Psychology*, *95*, 509-521.
- Antony, M. M., Bieling, P. J., Cox, B.J., Enns, M. W., & Swinson, R.P. (1998). Psychometric properties of the 42 item and 21 item versions of the depression anxiety stress scales in clinical groups and a community sample. *Psychological Assessment 10*,176-181.
- Bayram, N., & Bilgel, N. (2008). The prevalence and sociodemographic correlations of depression, anxiety and stress among a group of university students. *Social Psychiatry and Psychiatric Epidemiology*, 43, 667-672.
- Benton, S. A., Robertson, J. M., Tseng, W., Newton, F. B., & Benton, S. L. (2023). Changes in counseling center client problems across 13 years. *Professional Psychology: Research and Practice*, 34, 66-72.
- Breslau, J., Lane, M., Sampson, N., & Kessler, R. C. (2008). Mental disorders and subsequent educational attainment in a US national sample. *Journal of Psychiatric Research*, 42, 708-716. Cooley, E., Toray, T., Valdez, N., & Tee, M. (2007). Risk factors for maladaptive eating patterns in college women. *Eating and Weight Disorders*, 12 (3), 132–139.
- Cranford, J.A., Eisenberg, D., & Serrar, A. M. (2024). Substance use behaviors, mental health problems, and use of mental health services in a probability sample of college students. *Addictive Behaviors*, *34*, 134-145.
- Drum, D.J., Brownson, C., Denmark, A.B., & Smith, M.E. (2024). New data on the nature of suicidal crises in college students: Shifting the paradigm. *Professional Psychology: Research and Practices*, 40,213-22.
- Eisenberg, D., Gollust, S.E., Golberstein, E., & Hefner, J.L. (2007). Prevalence and correlates of depression, anxiety, and suicidality among university students. *American Journal of Orthopsychiatry*, 77, 534-542.
- Gallagher, R., Gill, A., & Sysko, H. (2022). *A national survey of counselling center directors*. Alexandria, VA: International Association of Counseling Services.
- Gallagher, R., Sysko, H., & Zhang, B. (2023). *National survey of counseling center directors*. Alexandria, VA: International Association of Counseling Services
- Grayson, P.A.(1989). The college psychotherapy client: An overview. In P. A. Grayson., &K. Cauley.(Eds.), *College Psychotherapy* (pp 8-28). New York: The Guilford Press.
- Guney, S. Khalafat, T., & Boysan, M. (2024). Dimensions of mental health: Life satisfaction, anxiety and depression: A preventive mental health study in Ankara University students

- population. *Procedia Social and Behavioral Sciences*, 2, 1210-1213.
- Hamdan-Mansour, A.M., Halabi, J. O., & Dawani, H.A. (2024). Depression, hostility, and substance use among university students in Jordan. *Mental Health and Substance Use Dual Diagnosis*, 2(1), 52-63.
- Harrar, W. R., Affsprung, E.H., & Long, J.C. (2024). Assessing Campus Counseling Needs. *Journal of College Student Psychotherapy*, 24, 233-240.
- Hunt. J., & Eisenberg, D. (2024). Mental health problems and help-seeking behavior among college students. *Journal of Adolescent Health*, 46, 3-10.
- Katherine, W. (2022). *Promoting mental, emotional and social health: A whole school approach*. London: Routledge Falmer.
- Kessler, R. C., Barker, P. R., Colpe, L. J., Epstein, J. F., Gfroerer, J. C., & Hiripi, E. (2023). Screening for serious mental illness in the general population. *Archives of General Psychiatry*, 60(2), 184-189.
- Lenz, B. K. (2022). Tobacco, depression, and lifestyle choices in the pivotal early college years. *Journal of American College Health*, *52*, 213-219.
- Lyubomirsky, S., Kasri, F., & Zehm, K., (2023). Dysphoric rumination impairs concentration on academic tasks. *Cognitive Therapy Research*, 27,309-330.
- Mahmood, Z. & Saleem, S. (2022). Assessing psychological problems in university students in Pakistan: A psychometric study. *FWU Journal of Social Sciences* 5(1), 134-148.
- Nordin, N. M., Talib, M. A., & Yaacob, S.N. (2024). Personality, Loneliness and Mental Health among Undergraduates at Malaysian Universities. *European Journal of Scientific Research*, *36*(2), 285-298.
- Offer, D., & Spiro, R. P. (1987). The disturbed adolescent goes to college. *Journal of American College Health*, 35, 209-214.
- O'Malley, K., Wheeler, I., Murphey, J., & O'Connell, J. (1990). Changes in level of psychopathology being treated at university and college counseling centers. *Journal of College Student Development*, 31, 464-465.
- Ovuga, E., Boardman, J., & Wasserman, D. (2024). Undergraduate student mental health at Makerere University, Uganda. *World Psychiatry*, *5*(1), 51-52.
- Pledge, D., Lapan, R., Heppner, P., & Roehlke, H. (1998) Stability and severity of presenting problems at a university counseling center: A 6-year analysis. *Professional Psychology Research and Practice*, 29(4), 386-389.
- Restifo, K., Akse, J., Guzman, N. V., Benjamins, C., & Dick, K. (2024). A pilot study of self-esteem as a mediator between family factors and depressive symptoms in young adult university students. *Journal of Nervous Mental Disorder*, 197(3), 166-171.
- Rimmer, J.D., Halikas, J.A., & Shuckit, M. A. (1982). Prevalence and incidence of psychiatric illness in college students: A four year prospective study. *Journal of American College Health*, 30, 207-211.
- Robbins, S., May, T., & Corazini, J. (1985). Perceptions of client needs and counseling center staff roles and functions. *Journal of Counseling Psychology*, *32*, 641-644.
- Rodgers, L.S., & Tennison, L.R. (2024). A preliminary assessment of adjustment disorder among First-Year College Students. *Archives of Psychiatric Nursing*, 23(3), 220-230.

- Seim, R.W., & Spates, C. R. (2024). The prevalence and comorbidity of specific phobias in college students and their interest in receiving treatment. *Journal of College Student Psychotherapy*, 24, 49-58.
- Shiels, C., Gabbay, M., & Exley, D. (2008). Psychological distress in students registered at a university-based general practice. *Primary Care and Community Psychiatry*, 13, 9-18.
- Sonnak, C., & Towell, T. (2023). The impostor phenomenon in British university students: Relationship between self-esteem, mental health, parental rearing style and socioeconomic status. *Personality and*

Individual Differences, 31, 863-874.

- Stallman, H.M. (2024). Psychological distress in university students: A comparison with general population data. *Australian Psychologist*, 45(4), 249-257.
- Stallman, H.M., & Shochet, I. (2024). Prevalence of mental health problems in Australian university health services. *Australian Psychologists*, 44(2), 122-127.
- Stanley, N., & Manthorpe, J. (2023). Responding to students' mental health needs: Impermeable systems and diverse users. *Journal of Mental Health*, *10*(1), 41-52.
- Stone, G., & Archer, J. (1990). College and university counseling centers in the 1990s: Challenges and limits. *Counseling Psychologist*, 18, 539-607.
- Tosevski, D.L., Milovancevic, M.P., & Gajic, S.D. (2024). Personality and psychopathology of university students. *Current Opinion in Psychiatry*, 23(1), 48-52.
- Verger, P., Guagliardo, V., Gilbert, F., Rouillon, F., & Kovess-Masfety, V. (2024). Psychiatric disorders in students in six French universities: 12-month prevalence, comorbidity, impairment and help-seeking. *Social Psychiatry Psychiatric Epidemiology*, 45(2), 189-199.
- Weitzman, E. R. (2022). Poor mental health, depression, and associations with alcohol consumption, harm, and abuse in a national sample of young adults in college. *The Journal of Nervous and Mental Disease*, 192, 269-277.
- Zaman, R. M. (1996). Psychological problems of medical students in Pakistan: Data from the Aga Khan University, Karachi. *Teaching and Learning in Medicine*, 8(1), 19-27.
- Zivin, K., Eisenberg, D., Gollust, S. E., & Golberstein, E. (2024). Persistence of mental health problems and needs in a college student population. *Journal of Affective Disorders* 117, 180-185.