

---

**| RESEARCH ARTICLE**

## **The Measure of Frequency and Correlations of DASS-21 among Students of the Education Faculty**

**Ghulam Haidar Ghulami<sup>1</sup> ✉ Mohammad Qasim Noori<sup>2</sup> and Qasim Joya<sup>3</sup>**

<sup>123</sup>*Department of Educational Management, Faculty of Education, Baghlan University, Islamic Emarat of Afghanistan*

**Corresponding Author:** Ghulam Haidar Ghulami, **E-mail:** [ghulamimohammadhaidar@gmail.com](mailto:ghulamimohammadhaidar@gmail.com)

---

**| ABSTRACT**

The primary aim of this study was to determine the prevalence of depression, anxiety, and stress among students of the Faculty of Education at Baghlan University. In addition, the research sought to examine the correlations between these psychological variables. The sample population included students from the first and second semesters, and out of a total of 126 students, 100 voluntarily agreed to participate in the study. The findings revealed that a significant proportion of the students exhibited high levels of depression, anxiety, and stress. Furthermore, statistical analyses indicated a moderate and positive correlation among the three variables. This suggests that an increase in one of these emotional states is likely to be associated with increases in the others. These results highlight the urgent need for psychological support and preventive interventions within the academic environment.

**| KEYWORDS**

Negative Emotion, Behavior Management, Mental Disorder.

**| ARTICLE INFORMATION**

**ACCEPTED:** 10 August 2025

**PUBLISHED:** 30 August 2025

**DOI:** 10.32996/jpbs.2025.5.2.4

---

### **1. Introduction**

Afghanistan's Ministry of Higher Education has witnessed many developments in recent decades, including the improved quality of professional and scientific knowledge and skills, updating, and standardization. But this ministry has its problems and responsibilities. Therefore, the Ministry of Higher Education has taken a good step in measuring educational prerequisites. To update and standardize scientific achievements, it has created various university committees to address critical issues, including the "Mental Health and Elimination of Academic Failures" committee, which has been established to share its findings with this ministry. However, Baghlan University has several faculties in different places; one of them is the Faculty of Education located in Hossin Khai, which provides educational science.

Situation and difficulties of the education faculty:

1. There is not any hostel.
2. The distance between the city and the faculty is far.
3. The student has to pay 40-60 Afghanis for rent for transportation.
4. Lack of classroom.
5. Additionally, there is a shortage of qualified instructors, which affects the quality of education provided.
6. Many students also struggle with accessing necessary resources, such as textbooks and technology, further complicating their academic experience.
7. Lack of professional teachers.

There may also be many other factors that are not easily visible, which can generally encompass the state of Afghan society, which depends on the level of hope and despair, which requires further research in all areas of life in this society to find them.

**Copyright:** © 2025 the Author(s). This article is an open access article distributed under the terms and conditions of the Creative Commons Attribution (CC-BY) 4.0 license (<https://creativecommons.org/licenses/by/4.0/>). Published by Al-Kindi Centre for Research and Development, London, United Kingdom.

In this study, which was conducted quantitatively and with objective evidence, maximum effort has been made to find the percentage and relationships of negative emotions that have affected the process of academic progress.

Al-Ani (2015) conducted a study in Malaysia, and it is stated that the range of negative emotions from moderate to severe is as follows: The depression level was 13.9% to 29.3%, the anxiety level was 51.5% to 55%, and stress was between 12.9% and 21.6%.

In a comparative study conducted in 2020 by Gholami in Kabul and Baghlan universities, Baghlan University showed the highest negative emotional states; that is, the level of depression among boys was 10% and 5% among girls, and anxiety among boys was 32.5% and 47% among girls, respectively.

In another study by Naaz A. and Anjum A. (2024) in India, it was claimed that boys had the highest level of depression compared to girls, while girls showed high levels of anxiety and stress.

These can affect the psychological situations of students; they may combat depression and anxiety. Stress may cause significant difficulty and blockage during their courses, which can negatively affect their academic achievement and performance. Sometimes, students may have dissatisfied feelings when they contribute to their universities or may experience hyper-anxiety in social environments, even among college peers.

### **1.1 Statement of the Problem**

In recent observations at the Faculty of Education, Baghlan University, a concerning pattern of behavioral and academic decline among students has emerged. A noticeable decrease in student attendance and engagement has been documented, raising serious concerns about the psychological well-being and academic motivation of the student body. Those students who do attend classes often display symptoms that suggest underlying emotional and psychological distress. These signs include irregular attendance, a general lack of preparedness (e.g., not bringing textbooks or course materials), visible hopelessness and pessimism regarding future employment and income, low academic motivation, and a pronounced desire to emigrate rather than build a career within the country.

These patterns prompted the need to investigate whether negative emotional states specifically depression, anxiety, and **stress** may be prevalent and significantly affecting students' educational experiences and mental health. The students of the Faculty of Education face multiple challenges that likely contribute to these negative outcomes, including geographical isolation of the campus, economic hardship, separation from family support systems, insufficient academic resources, and a lack of qualified instructors.

Psychological challenges such as depression can arise from social isolation, financial stress, cultural displacement, and uncertainty about future employment. These factors often manifest in symptoms such as persistent sadness, irritability, fatigue, guilt, concentration difficulties, suicidal ideation, insomnia, and even substance abuse. As supported by Chatterjee et al. (2014), over half of surveyed nursing students reported mild to moderate levels of depression. Similarly, Chang and Law (2011) found a significant link between depressive symptoms and personal traits such as fear of judgment and self-blame.

Likewise, anxiety is a prevalent mental health issue among university students, severely affecting academic performance, interpersonal relationships, and overall well-being. Research by Asai and Kato (2014) indicates that individuals with high anxiety levels often feel rejected and unsupported, which further intensifies their emotional instability. Jensen and Nutt (2015) also emphasize that social isolation and lack of emotional support contribute significantly to heightened anxiety levels. Alvi et al. (2010) underscore that anxiety disrupts an individual's capacity to adapt to new academic and social environments, reinforcing the importance of mental health interventions.

Furthermore, stress has been identified as a dominant factor affecting university students' academic lives. According to Kittu and Patil (2013), students particularly those in highly competitive fields such as medicine experience intense stress due to high academic expectations and peer competition. While the present study focuses on the Faculty of Education, similar patterns of performance-related stress and pressure to succeed may be present among these students, further exacerbating their emotional distress.

Given the multidimensional pressures faced by students at Baghlan University, this study was designed to assess the prevalence and interrelation of depression, anxiety, and stress using the standardized DASS-21 questionnaire. The findings aim to provide evidence-based insight into the emotional and psychological challenges affecting student academic performance and to inform future mental health interventions and educational policy development.

### 1.2 Hypothesis

Depression is present among the students.

Anxiety is also prevalent among the students.

The level of stress among the students is relatively low.

There is a significant and positive correlation between depression and stress.

There is a significant and positive correlation between anxiety and stress.

There is a positive and significant correlation between anxiety and stress.

### 1.3 Objectives

To find out the emotional situation of students

To measure the level of depression, anxiety, and stress.

### 1.4 Materials and Methodology

The DASS-21 (Depression Anxiety Stress Scales – 21 Items) is a widely used, validated psychometric instrument developed by Lovibond & Lovibond (1995). It is the short version of the original DASS-42 scale. The researchers employed it to gauge negative emotions and performed a DASS21 test. This questionnaire has three self-report scales designed to measure states of depression, anxiety, and stress. On this questionnaire, you will find 21 items, and each of the three self-report scales has 7 items. Each scale of the questionnaire can measure only one trait of negative emotion. Follow it:

1. The depression scale assesses dysphoria, hopelessness, devaluation of life, self-deprecation, lack of interest/involvement, anhedonia, and inertia.
2. The anxiety scale assesses autonomic arousal, skeletal muscle effects, situational anxiety, and subjective experience of anxious effects.
3. Chronic nonspecific arousal levels can be sensed by the stress scale. It assesses difficulty relaxing, nervous arousal, being easily upset/agitated, irritability/over-reactiveness, and impatience. An analysis of the DASS21 questionnaire with Microsoft SPSS 25.

### 1.5 Sample of population

The statistical population of this study consisted of all first- and second-year students at the Faculty of Education, Baghlan University, totaling approximately 126 individuals. However, only 100 students voluntarily participated in the research. The participants ranged in age from 18 to 25 years and were selected from various departments within the faculty.

## 2. Results and discussion

Table 1: showing the specific levels of depression and stress based on DASS of students of the educational faculty of Baghlan University.

Table 7.1: Overall DASS& frequencies and percentages

	normal	Mild	Moderate	severe	Extremely severe
Depression	11 (%11)	2 (%2)	46 (%46)	23 (%23)	18 (%18)
Anxiety	12 (%12)	20 (%20)	58 (%58)	10 (%10)	0 (%0)
stress	17 (%17)	19 (%19)	30 (%30)	29 (%29)	5 (%5)

### 2.1 Depression

According to the findings, only 11% of students are in the normal range, while a considerable 89% experience some level of depression. The highest frequency is observed in the moderate depression category (46%), followed by severe depression (23%) and extremely severe depression (18%). These figures indicate a widespread presence of depressive symptoms among students, highlighting the urgent need for psychological interventions.

### 2.2 Anxiety

The results show that 88% of the students report some level of anxiety, with only 12% in the normal range. The most common level of anxiety is moderate (58%), indicating significant psychological pressure among the participants. Additionally, 20% of students report mild anxiety, and 10% report severe anxiety. Notably, no cases of extremely severe anxiety were recorded.

### 2.3 Stress

Regarding stress, 83% of students fall within one of the non-normal categories. The highest proportions are seen in moderate (30%) and severe (29%) stress levels. 19% experience mild stress, 5% suffer from extremely severe stress, and only 17% are in the normal range. This suggests that academic, social, and personal factors are significantly contributing to students' stress levels.

The results clearly show that the majority of students are affected by psychological issues—particularly depression and anxiety, which appear at moderate to severe levels in most cases. The percentage of students in the "normal" category for all three variables is below 20%, which serves as a serious warning signal for educational, psychological, and student support institutions. Therefore, preventive, counseling, and support programs must be designed and implemented at the university level to promote students' mental health and academic success.

Table 7.2: Overall DASS & mean and SD

	N	mean	S.D
Depression	100	3.35	1.14
Anxiety	100	2.66	0.82
Stress	100	2.86	1.16

### 2.4 Depression

The mean score is 3.35, which is relatively high, suggesting that students experience a notable level of depressive symptoms. The standard deviation is 1.14, indicating a moderate to high variability in depression levels among students. This implies that while some students report severe depressive symptoms, others may experience mild or no symptoms.

### 2.5 Anxiety

The mean score is 2.66, which is lower than depression but still reflects a moderate level of anxiety in the sample population. The standard deviation is 0.82, which is the lowest among the three variables. This suggests that students' anxiety levels are more consistent and clustered around the mean, with less individual variation.

### 2.6 Stress

The mean score is 2.86, placing stress levels between depression and anxiety in terms of severity. The standard deviation is 1.16, the highest among the three variables, indicating a wider range of stress experiences among students—from very low to very high.

The findings reveal that depression is the most prevalent and intense psychological issue among the students, followed by stress and then anxiety. Furthermore, depression and stress show higher standard deviations, suggesting more diversity in how students experience these conditions. These results highlight the need for targeted psychological interventions and support systems within the academic environment to address the mental health challenges faced by students.

**Table 7.3:** showing overall DASS correlations among variables

	level of depression	level of anxiety	level stress
level of depression	Pearson Correlation1	.475**	.395**
	Sig. (2-tailed)	.000	.000
	N100	100	100
level of anxiety	Pearson Correlation.475**	1	.267**
	Sig. (2-tailed).000		.007
	N100	100	100
level stress	Pearson Correlation.395**	.267**	1
	Sig. (2-tailed).000	.007	
	N100	100	100

\*\* . Correlation is significant at the 0.01 level (2-tailed).

### 2.7 Depression and Anxiety

The Pearson correlation between depression and anxiety is  $r = 0.475$ , which indicates a moderate positive relationship. This suggests that as levels of depression increase, levels of anxiety also tend to increase, and vice versa. The  $p$ -value = 0.000, which is less than 0.01, confirms that the relationship is statistically significant.

### 2.8 Depression and Stress

The correlation between depression and stress is  $r = 0.395$ , also indicating a moderate positive correlation. This result implies that students who report higher levels of depression are also more likely to experience increased stress. Again, the  $p$ -value = 0.000, confirming statistical significance.

### 2.9 Anxiety and Stress

The correlation between anxiety and stress is  $r = 0.267$ , representing a weak to moderate positive correlation. While the association is weaker than the previous two, it still suggests a meaningful connection between anxiety and stress. The  $p$ -value = 0.007 indicates that this correlation is statistically significant at the 0.01 level.

The results indicate that all three psychological constructs depression, anxiety, and stress are positively and significantly correlated with one another. Specifically:

Students with higher depression scores tend to also have higher anxiety and stress levels. Similarly, higher anxiety is associated with increased stress. Although the strength of the relationships varies, all correlations are moderate to low but statistically significant, which aligns with existing psychological literature that highlights the comorbidity and interrelatedness of these negative emotional states.

These findings suggest a need for comprehensive mental health interventions that address these emotional states holistically rather than in isolation, as they often co-occur and may influence one another in academic settings.

## 3. Conclusion

Based on the findings from all statistical tables, it can be concluded that students from the Faculty of Education at Baghlan University experience high levels of depression, anxiety, and stress. These psychological challenges are not only prevalent but also significantly interrelated.

### 3.1 Recommendations

The results underscore the urgent need for comprehensive mental health interventions, including:

- Establishing on-campus counseling and psychological services.
- Promoting mental health awareness among students and staff.
- Improving academic conditions and resources, especially in underdeveloped regions.
- Providing training and support for faculty to recognize and respond to student mental health concerns.

Addressing these factors holistically is essential to improving students' academic success and overall quality of life.

**Funding:** This research received no external funding

**Conflicts of interest:** The authors declare no conflict of interest

**Publisher's Note:** All claims expressed in this article are solely those of the authors and do not necessarily represent those of their affiliated organizations, or those of the publisher, the editors and the reviewers

## References

- [1] Afghanistan Ministry of Higher Education. (2023). Strategic plan for educational reform and mental health in universities. MoHE Publication Unit.
- [2] Al-Ani, Radeef, A. S., & Ghazi, F. G. (2015). Depression, anxiety, and stress among undergraduate science students in Malaysia. 17th Johor Mental Health Conference, Malaysia, 17–18 April 2015. <http://irep.iium.edu.my/42809>
- [3] Ali, A. M., Alkhamees, A. A., Hori, H., Kim, Y., & Kunugi, H. (2022). The Depression Anxiety Stress Scale-21: Development and validation of the Depression Anxiety Stress Scale-8-item in psychiatric patients and the public for easier mental health measures in the post-COVID-19 world. *International Journal of Environmental Research and Public Health*, 18(19). <https://doi.org/10.3390/ijerph181910142>
- [4] Alvi, T., Assad, F., Ramzan, M., & Khan, F. A. (2010). Depression, anxiety, and their associated factors among medical students. *Journal of the College of Physicians and Surgeons Pakistan*, 20(2), 122–126.

- [5] Cao, C. H., Dang, C. Y., Zheng, X., Chen, W. G., Chen, I. H., & Gamble, J. H. (2023). The psychometric properties of the DASS-21 and its associations with problematic internet use among Chinese college first-year students. *Healthcare (Basel)*, 11(5), 700. <https://doi.org/10.3390/healthcare11050700>
- [6] Chang, S. M., Law, D. W., & Chang, H. K. (2011). The impact of personality on depression among university students in Taiwan. *Chang Gung Medical Journal*, 34(5), 528–534.
- [7] Chatterjee, S., Saha, I., Mukhopadhyay, S., Misra, R., Chakraborty, A., & Bhattacharya, A. (2014). Depression among nursing students in an Indian government college. *British Journal of Nursing*, 23(6), 316–320.
- [8] Depression, Anxiety, and Stress Scale (DASS-21) among Malaysians during COVID-19: A methodological study. (2022). *Humanities and Social Sciences Communications*, 9, Article 220. <https://doi.org/10.1057/s41599-022-01229-x>
- [9] Ghulami, M. H. (2020). A comparative study of depression, anxiety, and stress among Baghlan and Kabul students. *International Journal of Advance Research and Innovative Ideas in Education (IJARIIE)*. [www.ijariie.com](http://www.ijariie.com)
- [10] Jensen, F. E., & Nutt, A. E. (2015). *The teenage brain: A neuroscientist's survival guide to raising adolescents and young adults*. London, UK: HarperThorsons.
- [11] Kittu, D., & Patil, R. (2013). Study of the association of psychological stress and depression among undergraduate medical students in Pondicherry. *National Journal of Community Medicine*, 4(4), 555–558.
- [12] Naaz, A., Anjum, A., Goswami, U., & Kala, K. (2024). To measure the level of depression, anxiety, and stress using a DASS21-based questionnaire on the students of Shri Guru Ram Rai University, Dehradun. *Indian Journal of Pharmacy Practice*, 17(4), 363–368. <https://www.ijpp.org>
- [13] World Health Organization (WHO). (2008). *The global burden of disease 2004 update*. Geneva, Switzerland: WHO Press.