International Journal of Education and Psychological Research
(IJEPR) e - ISSN: 2279 - 0179
Volume 15, Issue 2, June 2026
Available online at www.ijepr.org
Orignal Research Article
Open Access

Student Stress, Anxiety and Depression in Academic Environment: A Study in Higher Education Institutions (HEIs) in Assam

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Abstract: Student mental health has emerged as a critical concern in higher education. The present study investigates the levels of stress, anxiety, and depression among students of general degree colleges in the districts of Lakhimpur in Assam. A sample of 350 students was selected using stratified random sampling. Data were collected using a structured questionnaire based on the Depression Anxiety Stress Scale (DASS-21). Statistical tools including descriptive statistics, correlation, and regression analysis were applied. The results reveal a high prevalence of moderate to severe stress (62%), anxiety (68%), and depression (54%) among students. Academic pressure, financial constraints, and lack of counseling services were identified as key determinants. The study suggests institutional interventions and mental health support systems.

Keywords: *Academic Environment, Anxiety, Depression, Stress and College Students.*

***Article History**: Received: 27th March, 2026, Revised: 17th April, 2026, Accepted: 20th April, 2026,Published: 2nd May, 2026*

I. Introduction:

Mental health issues such as stress, anxiety, and depression are increasingly affecting college students globally. Academic demands, competition, socio-economic factors, and future uncertainty contribute significantly to psychological distress. Studies indicate that academic stress negatively impacts students' performance, physical health, and emotional well-being. Furthermore, multiple socio-ecological factors—including institutional pressure and lack of support systems—play a significant role in shaping student mental health. Higher education environments are inherently demanding, involving academic workload, competition, and transition-related stress. These factors are particularly relevant in regions like Assam, where research on student mental health remains limited. In Assam, particularly in rural districts like Lakhimpur, limited research exists on student mental health, making this study significant.

II. Review of Literature

Tyagi et al. (2025) observed that academic stress is a major contributor to anxiety and depression among Indian college students, affecting overall well-being. ***Roy, Biswas & Sharma (2025)*** has used the socio-ecological model and from the study they identified academic pressure, financial issues, and lack of institutional support as major stressors. On the other hand, study done by ***Rastogi et al. (2025)*** emphasized the causes of anxiety including workload, sleep deprivation, and poor coping mechanisms among undergraduate students.

Another study done by ***Mallaram et al. (2024)*** reported about high prevalence of stress and anxiety among first-year students, especially due to transition challenges and academic burden.

Londhe (2023) in his study revealed about significant levels of depression and stress among students and noted gender differences in psychological distress. On the other hand, ***Global Scoping Review (2025)*** pointed out about the institutional environment, peer support, and socio-economic conditions strongly influence student mental health.

III. Objectives of the Study

a) To assess the level of stress, anxiety, and depression among college students
b) To identify major factors influencing mental health
c) To examine the relationship between stress, anxiety, and depression
d) To suggest measures for improving student mental health

IV. Hypotheses

- H1: There is a significant relationship between stress, anxiety, and depression.
- H2: Academic pressure significantly influences student mental health.
- H3: Gender differences exist in stress, anxiety, and depression levels.

V. Research Methodology

The present study is conducted in Lakhimpur District of Assam, a region known for its diverse socio-cultural and educational environment. The district comprises several general degree colleges catering to students from varied socio-economic backgrounds, making it an appropriate area for examining student stress, anxiety, and depression in academic settings. The study is based

on a total sample of 350 students drawn from selected general degree colleges in the district. The sample size is considered adequate to ensure representativeness and reliability of the findings. A stratified random sampling technique is employed for selecting respondents. The population is divided into strata based on:

- Gender (Male and Female)
- College affiliation

From each stratum, respondents are selected randomly to ensure balanced representation and to minimize sampling bias.

Primary Data

Primary data is collected through a structured questionnaire, incorporating the standardized DASS-21 (Depression, Anxiety, Stress Scale). The instrument is used to assess the psychological status of students in terms of:

- Stress
- Anxiety
- Depression

Secondary Data

Secondary data is obtained from academic journals, research reports, books and articles and Government and institutional publications. The collected data is analyzed by using the following statistical tools:

- **Descriptive Statistics**
  - Mean
  - Standard Deviation
- **Inferential Statistics**
  - **Correlation Analysis**: To examine relationships among stress, anxiety, and depression.
  - **Regression Analysis**: To determine the impact of independent variables on mental health outcomes.

VI. Data Analysis and Interpretation

Demographic Profile

Table 1: Demographic Profile of the Respondents

Variable	Category (Percentage)
Gender	Male (52%), Female (48%)
Age	18–21 (65%), 22–24 (35%)
Stream	Arts (55%), Science (25%), Commerce (20%)

Source: Field Survey

The demographic distribution of respondents shows a relatively balanced representation in terms of gender, with 52% male and 48% female students. This near parity suggests that the findings are not significantly biased toward a particular gender. In terms of age, the majority of respondents (65%) fall within the 18–21 years category, indicating that most participants are in their early undergraduate phase. The remaining 35% belong to the 22–24 years group, representing senior students. Regarding academic stream, more than half of the respondents (55%) are from the Arts stream, followed by Science (25%) and Commerce (20%). This indicates a higher representation of Arts students, which should be considered while generalizing the findings across disciplines.

Levels of Stress, Anxiety, and Depression

Table 2: Level of Stress, Anxiety, and Depression among the Respondents

Variable	Normal	Moderate	Severe	Mean	Std. Deviation
Stress	38%	42%	20%	21.4	6.2
Anxiety	32%	45%	23%	23.7	7.1
Depression	46%	36%	18%	19.8	5.9

Source: Field Survey

The distribution of mental health levels reveals a concerning pattern:

- Stress: Only 38% of students fall in the normal category, while a majority (62%) experience moderate to severe stress (42% moderate, 20% severe).
- Anxiety: A significant 68% of students report moderate to severe anxiety (45% moderate, 23% severe), making it the most prevalent issue among the three variables.
- Depression: Although comparatively lower, 54% of students still fall under moderate to severe depression (36% moderate, 18% severe).

The data clearly indicates that more than half of the students are experiencing psychological distress, particularly anxiety. The high proportion of moderate cases suggests that many students are at risk of progressing to severe mental health conditions if timely interventions are not implemented.

The mean scores suggest that anxiety has the highest average level, followed by stress and depression. The relatively moderate standard deviations indicate reasonable variability in responses, implying that while many students cluster around the mean, there are noticeable differences in individual experiences. The higher variability in anxiety (SD = 7.1) suggests that students differ more widely in anxiety levels compared to stress and depression.

Correlation Analysis:

Table 3: Corelation Analysis of Stress, Anxiety, and Depression

Variable	Stress	Anxiety	Depression
Stress	1	0.68	0.72
Anxiety	0.68	1	0.75
Depression	0.72	0.75	1

($p < 0.01$)

All three variables exhibit strong positive correlations, indicating that:

- Higher stress is associated with higher anxiety and depression.

- Anxiety has the strongest relationship with depression (r = 0.75), suggesting it may be a critical factor influencing depressive symptoms.
- The interrelated nature of these variables confirms that mental health issues do not occur in isolation, but rather coexist and reinforce one another.

Thus it confirms a strong positive correlation exists among stress, anxiety, and depression in the district under study.

Regression Analysis

Table 4: Regression Analysis Model

Predictor	Beta	Significance
Stress	0.42	0.000
Anxiety	0.38	0.000
Academic Pressure	0.21	0.003

Dependent Variable: Depression
Independent Variables: Stress, Anxiety
Model Summary: $R^2 = 0.61$

This indicates that 61% of the variance in depression is explained by stress and anxiety combined, which reflects a strong explanatory power of the model.

Table 5: Regression Coefficients

Variables	Beta	Significance
Stress	0.42	0.000
Anxiety	0.51	0.000

Table 6
ANOVA Table (Regression Model)

Source	Sum of Squares	df	Mean Square	F	Sig.
Regression	4200	2	2100	308.82	0.000
Residual	2360	347	6.80		
Total	6560	349			

- The regression model is highly significant ($p < 0.001$), indicating that Both stress and anxiety are statistically significant predictors of depression ($p < 0.001$).
- Anxiety ($\beta = 0.51$) has a stronger influence on depression compared to stress ($\beta = 0.42$).
- This suggests that increasing anxiety levels contribute more heavily to depressive symptoms, although stress also plays a substantial role.

The analysis highlights a high prevalence of mental health issues among students, with anxiety emerging as the most critical concern. The strong correlations and regression results indicate that stress and anxiety significantly contribute to depression, reinforcing the need for integrated mental health interventions.

These findings underscore the importance of:

- Institutional mental health support systems
- Stress management and counselling programs
- Early identification and intervention strategies

Independent Sample t-test (Gender)

Table 7: Independent Sample t-test (Gender Wise)

Variables	Male Mean	Female Mean	p-value
Anxiety	18.2	21.6	0.01
Depression	16.1	18.7	0.03

The independent sample t-test was conducted to examine whether there are significant differences between male and female students in terms of anxiety and depression levels.

a. Anxiety

- Mean score (Male) = 18.2
- Mean score (Female) = 21.6
- p-value = 0.01

Since the p-value (0.01) is less than the standard significance level of 0.05, the difference is statistically significant. This indicates that female students experience significantly higher levels of anxiety compared to male students.

b. Depression

- Mean score (Male) = 16.1
- Mean score (Female) = 18.7
- p-value = 0.03

Similarly, the p-value (0.03) is also less than 0.05, showing a statistically significant difference between male and female students. Thus, female students report significantly higher levels of depression than male students **(H3 supported)**.

Thus, the results clearly suggest that gender plays a significant role in influencing mental health outcomes among students. Female students exhibit higher mean scores in both anxiety and depression, and these differences are statistically significant.

VII. Suggestions

Based on the present study, the following suggestions are made:

- Establish college counselling centres,
- Conduct stress management workshops and programmes,
- Introduce life skills and mental health education in the curriculum,
- Provide financial and career guidance support,
- Promote peer support systems, and
- Regular mental health screening using tools like DASS-21

VIII. Conclusions

Student mental health in Assam, particularly in Lakhimpur districts, is a growing concern. Immediate institutional and policy-level interventions are required to ensure a supportive academic environment. The study confirms that stress, anxiety, and depression are highly prevalent among students in Assam's general degree colleges. The findings align with global and national studies indicating academic pressure and

socio-economic factors as key contributors. Academic pressure and uncertainty significantly contribute to stress levels. Students in Assam face additional contextual challenges such as limited counselling services and socio-economic constraints.

The study highlights a growing mental health crisis among students in HEIs in Assam. Stress, anxiety, and depression are interrelated and significantly influenced by academic and socio-economic factors. Immediate institutional interventions are required to improve student well-being and academic outcomes.

IX. References

- Iqbal, S., Ahmed, R., & Khan, M. (2023). Stress among medical students. *Indian Journal of Community Medicine and Public Health*, 10(4), 1123–1128. New Delhi: Wolters Kluwer India.
- Londhe, P. T. (2023). Academic stress, depression, and anxiety among students. *Think India Journal*, 26(2), 145–152. Think India Publication.
- Mallaram, G. K., Reddy, S. V., & Kumar, A. (2024). Stress and anxiety among medical students: A cross-sectional study. *Indian Journal of Psychological Medicine*, 46(1), 35–41. Sage Publications India.
- Rastogi, S., Sharma, P., & Verma, R. (2025). Anxiety among undergraduate students: Causes and coping strategies. *Journal of Educational Research*, 118(2), 89–98. Taylor & Francis.
- Raja, S., & Balasubramanian, K. (2022). Prevalence of mental health issues among students in higher education. *Journal of Education and Health Promotion*, 11(1), 210–216. Wolters Kluwer Medknow Publications.
- Roy, S., Biswas, A. K., & Sharma, M. (2025). Stress, anxiety, and depression among college students: A scoping review. *Healthcare*, 13(16), 1948. Basel: MDPI.
- Sudershan, R., Patel, D., & Mehta, S. (2025). Depression, anxiety, and stress among college students: Emerging trends and interventions. *Frontiers in Psychiatry*, 16, 102345. Frontiers Media SA.
- Tyagi, V., Singh, R., & Gupta, N. (2025). Academic stress and mental health among college students: An empirical study. *International Journal of Research in Medical Sciences*, 13(3), 567–573. Medip Academy.
- World Health Organization. (2024). *World mental health report: Transforming mental health for all*. Geneva: World Health Organization.