# Prevalence of Anxiety and Depression Among College Students in Andhra Pradesh: A Clinical Psychology Perspective

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**Abstract—The mental health of college students has become a growing concern in Andhra Pradesh, particularly in districts such as Vizianagaram where academic, social, and economic pressures affect student well-being. This study examines the prevalence of anxiety and depression among 400 undergraduate students selected from various colleges in Vizianagaram district. Standardized screening tools GAD-7 for anxiety and PHQ-9 for depression were used to assess symptom severity. Results show that 43% of students experience moderate to severe anxiety and 45% report moderate to severe depression. Independent sample t-tests revealed significant differences based on gender, locality, and management type, with female, rural, and government-college students reporting higher distress. ANOVA results indicated significant variations in mental-health scores across parental income and parental education levels. These findings highlight the urgent need for district-level mental-health screening, accessible counselling services, and preventive programs grounded in clinical psychology principles to support student well-being in Vizianagaram.**

**Index Terms—Anxiety; Depression; College Students; Mental Health; Academic Stress; Financial Stress; Clinical Psychology; Prevalence Study; Andhra Pradesh; Higher Education.**

## I. INTRODUCTION

Mental health among college students has become a significant area of concern in India, as young adults increasingly experience academic, social, emotional, and economic pressures during their higher education years. Anxiety and depression are among the most common psychological difficulties reported by students, often affecting their academic performance, social relationships, decision-making abilities, and overall well-being. The transition from adolescence to adulthood brings new responsibilities, expectations, and uncertainties, making college students particularly vulnerable to psychological distress. In the context of Andhra Pradesh, student mental health has gained increased attention due to rising academic competition, unemployment concerns, financial instability, and sociocultural expectations related to family and career achievements. While metropolitan regions have more access to counselling and mental-health services, semi-urban and rural districts often lack structured support systems. Vizianagaram district represents such a context, where a large proportion of students come from rural or economically disadvantaged backgrounds. These students often experience pressures associated with adjusting to urban-based educational demands, managing financial difficulties, and coping with the expectations placed on them by their families. As a result, they may be more susceptible to mental-health issues such as anxiety and depression. Despite this growing concern, there is limited district-specific research focusing on the mental health of college students in Vizianagaram. Most existing studies on student mental health in India examine broader state or national samples, often overlooking the unique demographic and socio-economic conditions of smaller districts. This gap is important because factors such as rural background, parental income, parental education, and type of educational institution can significantly influence students' mental-health outcomes. Understanding these variations is essential for designing interventions that address the specific needs of students in the region. The present study aims to address this research gap by systematically examining the prevalence of anxiety and depression among undergraduate students in Vizianagaram district. Using a sample of 400

students drawn from government and private colleges, the study investigates the severity levels of anxiety and depression using standardized psychological tools: the Generalized Anxiety Disorder-7 (GAD-7) scale and the Patient Health Questionnaire-9 (PHQ-9). These instruments are widely used in mental-health research and provide reliable assessments of anxiety and depressive symptoms. In addition to estimating prevalence, the study also analyses differences in anxiety and depression scores across key demographic variables, including gender, locality (rural vs. urban), type of college management (government vs. private), family type, parental income, and parental education. Independent sample t-tests are used to compare two-group variables, while ANOVA is applied to examine differences across multi-level variables. These statistical analyses help identify which groups of students are at higher risk and enable a clearer understanding of the underlying socio-economic and cultural factors influencing their mental health. By generating district-specific evidence, the study contributes to the growing body of literature on student mental health in India. The findings can support educational institutions, policy-makers, and mental-health professionals in planning targeted interventions such as counselling services, awareness programs, stress-management workshops, and support systems tailored to the needs of students in Vizianagaram. Ultimately, the study aims to highlight the importance of prioritizing mental health within higher education and to encourage institutions in semi-urban districts to adopt evidence-based strategies to promote student well-being.

## II. REVIEW OF LITERATURE

Research on student mental health has expanded globally over the past decade, with numerous studies highlighting an increase in anxiety and depression among young adults. The World Health Organization reports that a substantial proportion of higher-education students worldwide experience psychological distress, largely due to academic pressure and lifestyle changes (WHO, 2019). Studies from Western countries further support this trend. For example, research conducted in the United States found rising levels of depressive symptoms among college students, associated with academic overload and reduced social engagement (Hunt & Eisenberg, 2020). Similar findings in East Asian contexts show that competitive educational systems significantly contribute to student anxiety (Li, Wang, & Zhang, 2019). In India, several studies have documented high rates of mental-health problems among students. Sharma and Kaur (2021) reported that nearly 40 percent of undergraduate students exhibit symptoms of depression, influenced by academic workload, parental expectations, and financial stress. Another study by Rao, Singh, and Verma (2020) found that anxiety among undergraduates was strongly linked to exam pressure and uncertainty about career prospects. Research from metropolitan areas such as Bengaluru shows similar patterns, with engineering students reporting high anxiety due to demanding academic environments (Menon, Prakash, & Rao, 2022). Studies conducted in South India also reflect these concerns. Research in Kerala found that both academic burden and socio-economic disadvantages contributed significantly to student distress (Joseph & Thomas, 2021). Students from rural backgrounds face additional challenges such as language barriers and adjustment difficulties. Sujatha, Ramesh, and Devi (2022) observed that rural-origin students in Andhra Pradesh reported greater psychological distress due to financial limitations and inadequate academic preparation. Gender differences are another recurring theme in the literature, with female students consistently showing higher levels of anxiety and depression, influenced by sociocultural expectations and emotional expressiveness (Naidu, 2022). Although substantial research exists nationally and internationally, district-level studies focusing on semi-urban regions like Vizianagaram are limited. Most studies conducted in India address large cities or state-wide samples, overlooking the unique social, educational, and economic conditions of smaller districts. For instance, Kumar and Reddy (2023) examined academic stress in engineering students across Andhra Pradesh but did not explore district-specific variations or factors such as parental income, parental education, or type of college management. This gap is critical because such demographic variables have been shown to significantly influence mental-health outcomes (Patel, Desai, & Varma, 2021). Many earlier studies lack the use of standardized screening tools such as GAD-7 and PHQ-9, which are essential for generating reliable and comparable data. Few studies employ statistical

methods like t-tests and ANOVA to systematically examine differences across demographic groups. This limits the generalizability and policy relevance of existing findings. The literature highlights the need for localized, methodologically sound research that considers demographic and socio-economic variations. The present study addresses these gaps by exploring the prevalence of anxiety and depression among college students in Vizianagaram district and by comparing mental-health outcomes across gender, locality, college management type, family type, parental income, and parental education using validated tools and appropriate statistical tests.

## III. RESEARCH METHODOLOGY

### Research Design

The present study employed a descriptive cross-sectional research design to assess the prevalence of anxiety and depression among college students in Vizianagaram district. This design was chosen because it allows for the collection of data at a single point in time and is appropriate for estimating prevalence and comparing demographic groups.

### Sample

A total sample of 400 undergraduate students was selected from six colleges in Vizianagaram district. A stratified random sampling method was used to ensure representation across gender, locality, and type of college management.

The sample distribution was as follows:

- Gender: 210 females and 190 males
- Locality: 240 rural and 160 urban students
- College Management: 220 government and 180 private students
- Family Type: 310 nuclear and 90 joint families
- Parental Income Groups: low (<1 lakh), middle (1–3 lakh), and high (>3 lakh) income categories
- Parental Education: illiterate, school-level educated, and degree-level educated

Students from arts, science, commerce, and professional streams were included to ensure academic diversity.

### Instruments

1. Generalized Anxiety Disorder Scale (GAD-7): The GAD-7 was used to measure anxiety levels. It contains seven items rated on a four-point scale ranging from 0 (not at all) to 3 (nearly every day). Total scores classify anxiety as minimal, mild, moderate, or severe.
2. Patient Health Questionnaire (PHQ-9): The PHQ-9 was administered to assess depressive symptoms. It consists of nine items rated on the same four-point scale as the GAD-7. Scores categorize depression into minimal, mild, moderate, moderately severe, and severe levels.
3. Demographic Proforma: A structured demographic sheet was used to collect details about gender, locality, type of college management, family type, parental income, and parental education.

### Data Collection Procedure

Permissions were obtained from college authorities prior to data collection. Students were informed about the purpose of the study and ensured confidentiality. Participation was voluntary. The questionnaires were administered in classroom settings under the supervision of the researcher. Students completed the GAD-7, PHQ-9, and demographic sheet within approximately 20 minutes.

## IV. ANALYSIS AND INTERPRETATION

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This section presents the findings based on descriptive statistics, t-tests, and ANOVA to understand the prevalence of anxiety and depression and their differences across demographic variables.

Table 1
Prevalence of Anxiety (GAD-7)

| Anxiety Level | Percentage |
|---|---|
| Minimal | 26 |
| Mild | 31 |
| Moderate | 28 |
| Severe | 15 |
| Moder | 43 |

Interpretation:

Nearly half of the students (43%) reported moderate to severe anxiety, indicating substantial emotional

distress among undergraduates in Vizianagaram district.

Table 2
Prevalence of Depression (PHQ-9)

| Depression Level | Percentage |
|---|---|
| Minimal | 22 |
| Mild | 33 |
| Moderate | 27 |
| Moderately Severe | 12 |
| Severe | 6 |
| Moderate–Severe Total | 45 |

Interpretation:
Forty-five percent of students experienced moderate to severe depressive symptoms, reflecting a significant mental-health burden.
t-Test Results

Table 3
Gender Differences in Anxiety and Depression

| Variable | Male Mean | Female Mean | t-value | Sig. (p) |
|---|---|---|---|---|
| Anxiety | 9.2 | 11.0 | 4.12 | <0.05 |
| Depression | 9.5 | 11.4 | 3.88 | <0.05 |

Interpretation:
Female students reported significantly higher anxiety and depression compared to male students.

Table 4
Locality (Rural vs Urban) Differences

| Variable | Rural Mean | Urban Mean | t-value | Sig. (p) |
|---|---|---|---|---|
| Anxiety | 10.8 | 9.1 | 3.67 | <0.05 |
| Depression | 11.0 | 9.3 | 3.54 | <0.05 |

Interpretation:
Rural students exhibited higher levels of anxiety and depression, likely due to adjustment challenges and financial limitations.

Table 5
Differences by College Management

| Variable | Government Mean | Private Mean | t-value | Sig. (p) |
|---|---|---|---|---|
| Anxiety | 11.2 | 9.3 | 4.25 | <0.05 |
| Depression | 11.5 | 9.4 | 4.11 | <0.05 |

Interpretation:
Government-college students showed significantly higher distress, reflecting academic and resource-related pressures.

ANOVA Results

Table 6
ANOVA: Differences Based on Parental Income

| Income Group | Mean Anxiety | Mean Depression | F-value | Sig. (p) |
|---|---|---|---|---|
| Low (<1 lakh) | 12.1 | 12.3 | 6.42 | <0.05 |
| Middle (1-3 lakh) | 10.2 | 10.5 | | |
| High (>3 lakh) | 8.7 | 9.0 | | |

Interpretation:

Students from low-income families reported the highest anxiety and depression. Financial instability appears to be a major stressor.

Table 7
ANOVA: Differences Based on Parental Education

| Parental Education Level | Mean Anxiety | Mean Depression | F-value | Sig. (p) |
|---|---|---|---|---|
| Illiterate | 12.0 | 12.2 | 5.91 | <0.05 |
| School-level | 10.6 | 10.9 | | |
| Degree-level | 8.9 | 9.3 | | |

Interpretation:

Students whose parents had lower educational backgrounds reported higher distress, possibly due to limited academic guidance and support.

Table 8
ANOVA: Differences Based on Family Type

| Family Type | Mean Anxiety | Mean Depression | F-value | Sig. (p) |
|---|---|---|---|---|
| Nuclear | 10.4 | 10.8 | 1.12 | <0.05 |
| Joint | 10.1 | 10.5 | | |

Interpretation:
No significant difference was found between nuclear and joint families, suggesting family structure alone does not strongly influence mental-health scores.

## V. DISCUSSION

The results reveal high levels of anxiety and depression among college students in Vizianagaram district, consistent with national and international findings (Hunt & Eisenberg, 2020; Sharma & Kaur, 2021). Female students, rural students, and those studying in government colleges reported higher distress levels. Socio-economic factors such as parental income and education significantly influenced mental-health outcomes, emphasizing the role of financial and academic support. These findings highlight the need for mental-health services, awareness programs, and institutional support tailored to the needs of students in semi-urban settings.

## VI. RECOMMENDATIONS

1. Conduct regular mental-health screening in colleges using standardized tools such as GAD-7 and PHQ-9 to identify students experiencing anxiety and depression.
2. Establish counselling centres in all colleges with trained counsellors or psychologists to provide professional support and timely intervention.
3. Organize stress-management and awareness programs, including workshops on coping skills, mindfulness, study techniques, and emotional well-being.
4. Provide special academic and psychological support for rural-background students to help them adjust to college environments and overcome learning barriers.
5. Offer financial assistance, scholarships, and guidance services to students from low-income families to reduce stress related to economic hardship.

6. Train faculty members to recognize early signs of psychological distress and to refer students appropriately for professional help.
7. Encourage peer-support groups and mentoring programs to build a supportive student community and reduce stigma associated with mental-health issues.

Limitations

1. The study used a cross-sectional design, which limits the ability to determine causal relationships between variables.
2. Data were collected through self-report questionnaires, which may be influenced by response biases such as social desirability or underreporting of symptoms.
3. The sample was restricted to six colleges in Vizianagaram district, which may limit the generalizability of the findings to other regions.
4. Standardized screening tools (GAD-7 and PHQ-9) were used, but no clinical diagnostic interviews were conducted to confirm anxiety or depressive disorders.
5. External factors such as sleep patterns, personality traits, social support, physical health, and technology use were not included, though they may impact mental-health outcomes.
6. The timing of data collection may have influenced results, especially if conducted near examination periods when stress levels typically increase.
7. Non-response bias may be present if students experiencing severe distress chose not to participate.

## VII. CONCLUSION

The present study highlights the substantial prevalence of anxiety and depression among college students in Vizianagaram district. Nearly half of the students reported moderate to severe levels of emotional distress, indicating that mental-health challenges are widespread and cannot be ignored. Significant differences were observed across gender, locality, management type, parental income, and parental education, suggesting that psychological well-being is deeply influenced by social, economic, and educational factors. Female students, rural-background students, those studying in government colleges, and students from low-income or less-educated families emerged as particularly vulnerable groups. The findings reinforce the need for structured mental-health services within educational institutions, including routine screening, counselling facilities, faculty sensitization, and targeted support programs. Addressing these issues through early identification and intervention can help reduce psychological distress and promote healthier academic environments. The study underscores the importance of integrating mental-health awareness and support into the educational framework of Vizianagaram district, ultimately contributing to improved student well-being and academic success.

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