

Exploring the Impact of Gender on Mental Health Among College Students

A Cross-Sectional Study

Nidhi Yadav¹; Neha Kumari²; Dr. Maitri Bajpai S³

³(Guide) Subject Expert

Dr. Giri Lal Gupta Institute of Public Health and Public Affairs
University of Lucknow
Uttar Pradesh, India

Publication Date: 2025/05/26

Abstract: A complex interaction of social, psychological, and intellectual stresses has made mental health among college students a critical concern. The frequency of mental health problems and coping mechanisms used by students at the University of Lucknow and Integral University, two prestigious universities in Uttar Pradesh, India, are examined in this study in relation to gender. Data were gathered from a random sample of 100 students between the ages of 18 and 30 using a cross-sectional, quantitative methodology and a structured questionnaire. To examine gender-based variations in reported psychological symptoms and behavioral reactions, descriptive statistics and chi-square tests were used.

The results show that there are notable differences between male and female students' coping strategies and mental health. Female students reported higher rates of emotional tiredness, depression, and anxiety, with 65.4% reporting symptoms "sometimes" to "always." Male students, on the other hand, reported less, which may be a result of underreporting brought on by gender norms. Males were more likely to adopt problem-focused coping mechanisms like physical exercise or, concerningly, maladaptive behaviors like substance use, while females tended to use emotion-focused coping mechanisms like socializing and hobbies.

These findings highlight the need in Indian higher education for gender-sensitive mental health interventions. Support networks that are specifically designed to take into account the different ways that men and women express their emotions and cultural norms are essential for fostering students' resilience and psychological health. The study provides localized evidence to improve academic support services and guide inclusive mental health policies.

Keywords: Mental Health, Gender Differences, College Students, Coping Strategies, Higher Education, India, Emotional Well-Being.

How to Cite: Nidhi Yadav; Neha Kumari; Dr. Maitri Bajpai S (2025) Exploring the Impact of Gender on Mental Health Among College Students. *International Journal of Innovative Science and Research Technology*, 10(5), 1573-1578. <https://doi.org/10.38124/IJISRT/25may1620>

I. INTRODUCTION

As young adults navigate the difficulties of higher education, mental health has emerged as a critical issue in the context of global public health. A number of circumstances, including changing social roles, strong academic pressure, and unknown future options, can cause psychological distress for college students. When people are in a state of mental health, they are able to see their own potential, manage everyday stressors, and make valuable contributions to their communities, according to the World Health Organization. However, it is becoming more and more difficult for college students to achieve this balance, particularly in developing countries like India, where mental

health is still stigmatized and poorly studied. The prevalence of mental health conditions like anxiety, sadness, and emotional weariness among college students is highlighted by an expanding corpus of worldwide research. Notably, gender has a significant impact on how common certain illnesses are, how they manifest, and how people cope. Research indicates that women are more inclined to internalize their discomfort and seek out social support, whereas men are more likely to repress their feelings and utilize coping mechanisms that are avoidant or problem-focused. Sociocultural norms and gender role expectations are the core cause of these tendencies, which frequently prevent male students from admitting their psychological

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Even while gender-based disparities in mental health are receiving more attention in Western contexts, empirical research in Indian university settings is severely lacking. By investigating the ways in which gender affects coping strategies and mental health outcomes among students from the University of Lucknow and Integral University in Uttar Pradesh, this study fills that knowledge vacuum. Through a quantitative survey of one hundred students, this study aims to inform more inclusive, successful interventions at higher education institutions and offer localized insights into gender differences in mental health. The findings are intended to help legislators, university administrators, and mental health specialists develop gender-sensitive support systems that better meet the psychological requirements of a variety of student populations.

II. LITERATURE REVIEW

➤ *Prevalence of Mental Health Problems among College Students*

Globally, college students are increasingly experiencing mental health conditions such as anxiety, sadness, and emotional distress. One major risk factor is the transitional phase of higher education, which is characterized by social and academic pressure. Nearly half of college students report having moderate to severe mental health problems, according to Bayram and Bilgel (2008). Additionally, Deb et al. (2015) discovered that more than half of Indian students in Kolkata had moderate-to-high stress levels, highlighting the group's psychological susceptibility. In a cross-sectional study of Iranian medical students, Faghihzadeh et al. (2025) found that mental exhaustion and academic burnout were remarkably common. These results highlight how critical it is to address psychological health in learning settings, especially in the early years.

➤ *Gender Differences in Mental Health Symptoms*

How people perceive and report mental health concerns is significantly influenced by their gender. Women are more likely to internalize stress and have greater rates of anxiety and depression, according to Nolen-Hoeksema (2001). Van Merwe and Baloyi (2025), who found that female students exhibited worse sleep quality, more weariness, and higher anxiety than their male counterparts, corroborated this tendency. Male students, on the other hand, frequently report less mental health symptoms, which may not be a reflection of a true lower prevalence but rather of a reluctance to admit psychological pain. Mahalik et al. (2003) introduced the idea of "gender role conflict," which

postulates that men's emotional expression is discouraged by social standards, resulting in emotional repression and underreporting.

➤ *Coping Mechanisms and Gender*

Gender has a major impact on coping mechanisms. According to a meta-analysis by Tamres, Janicki, and Helgeson (2002), men tend to employ problem-focused or avoidant coping mechanisms like diversion, substance abuse, or withdrawal, while women tend to employ emotion-focused coping mechanisms like crying, journaling, and seeking social support. According to a cross-cultural study by Hill & Aydın (2025), male students favored activities or seclusion, whilst female students were more inclined to turn to interpersonal communication for emotional relief. Similarly, Akinsola et al. (2025) found that 68% of Nigerian female undergraduates sought professional or peer help at stressful times, but just 31% of male undergraduates did the same. Male students commonly reported engaging in harmful coping mechanisms including substance abuse or gaming, which are frequently motivated by a fear of social rejection or emotional exposure.

➤ *Cultural and Social Influences on Gendered Mental Health*

Mental health is still stigmatized in many societies, including India, particularly for male students. According to Singh and Upadhyay (2020), male students are discouraged from displaying vulnerability or asking for assistance because of cultural norms around masculinity. On the other hand, while being more vocal, female students frequently experience emotional overload as a result of social duties and academic demands. Sidamo et al. (2025) investigated mental anguish and reproductive health in Ethiopia and discovered that cultural obstacles exacerbated women's psychological problems. Salman et al. (2025) also showed that spiritual well-being offered female students greater emotional safety, indicating that culturally sensitive interventions can be especially successful when gender distinctions are recognized.

➤ *Gap in Indian Context and Relevance of Localized Research*

Studies on gender and mental health are nonetheless scarce and frequently regionally dispersed in India, despite the wealth of worldwide literature on the subject. There is a knowledge gap about the psychological landscape of students in various academic contexts because the majority of previous study has concentrated on elite or metropolitan populations. According to Patel et al. (2007), contextualized mental health research in low- and middle-income nations is necessary to inform appropriate intervention strategies. By concentrating on students from the University of Lucknow and Integral University in Uttar Pradesh—institutions that reflect a broad socio-cultural and intellectual spectrum—this study helps close that gap. This study aims to provide a gender-sensitive, localized analysis of coping strategies and symptom prevalence to aid in institutional and governmental mental health policymaking.

III. METHODOLOGY

Using a quantitative, cross-sectional research approach, this study investigated how college students in Uttar Pradesh, India, differed by gender in terms of coping mechanisms and mental health prevalence. The approach was meticulously designed to guarantee proper analysis, objective data collecting, and trustworthy interpretation of the results. The population and study area was University of Lucknow and Integral University, two prestigious academic institutions in Uttar Pradesh, served as the sites of the study. The intellectual representation and demographic diversity of these colleges, which accept students from a wide range of socioeconomic, cultural, and religious origins, led to their selection. Design of Research was to collect data at one particular moment in time, a cross-sectional survey methodology was used. This method made it possible to evaluate coping mechanisms and mental health status as they differed by gender within the same time frame. Sample Size and In Sampling Method One hundred college students between the ages of 18 and 30 were chosen by a straightforward random sampling technique. This method reduced selection bias by guaranteeing an equal chance of inclusion for all qualified students. There were 55 women, 44 men, and 1 person who identified as "Other" in the sample. Criteria for Inclusion and Exclusion Participants must be enrolled full-time in either university, be between the ages of 18 and 30, and be willing to give their informed permission. Students who are outside of the designated age range and those who learn part-time or remotely are excluded.

Instrument for collecting data was self-administered, structured questionnaire was created using validated instruments and current literature. There were three sections on the questionnaire:

Profile of Demographics-List of symptoms related to mental health (e.g., anxiety, stress, depression), Inventory of coping mechanisms (e.g., exercise, socializing, avoidance) regarding the majority of the topics, a 5-point Likert scale from "Never" (1) to "Always" (5) was used, in addition to multiple-choice questions regarding certain coping mechanisms.

Method for collecting-Informed consent was gained from participants once they were approached on campus. Physical surveys as well as, when appropriate, secure online connections (Google Forms) were used to disseminate them. Throughout the procedure, complete confidentiality and anonymity were upheld. In Data Interpretation after being collected, the data was imported into Microsoft Excel and subjected to SPSS analysis. Among the findings of the analysis were: Characteristic statistics (means, percentages, and frequencies). Chi-square testing to assess how significant gender disparities are in coping mechanisms and mental health prevalence. Using tables and charts to visualize information graphically. Institutional Ethics Committee ethical clearance was acquired. There were no incentives provided; participation was entirely voluntary. If

the survey caused psychological pain, respondents had access to university counseling options.

IV. RESULT

➤ *Demographic Characteristics of Respondents*

A total of 100 students participated in the study, with 55 identifying as female, 44 as male, and 1 as "Other." The age distribution revealed that 48% of participants were between 22–25 years, followed by 27% in the 26–29 age group, 15% in the 18–21 range, and 10% aged 30 and above. Educational levels included 50% undergraduate and 46% postgraduate students, while residential status showed that 46% lived with family, 21% in hostels, 17% alone, and 16% as paying guests.

This demographic profile reflects a diverse student sample, allowing for comprehensive analysis across gender, age, and educational backgrounds.

➤ *Prevalence of Mental Health Problems by Gender:*

The findings revealed significant gender differences in the self-reported frequency of mental health issues. Among female respondents, 23.6% indicated that they "often" experienced mental health problems, and 9.1% selected "always." In contrast, only 2.3% of male students reported experiencing issues "often," and 4.5% marked "always." Notably, 36.4% of male students claimed they "never" experienced mental health problems, compared to only 9.1% of female students. The Chi-square test produced a value of $\chi^2 = 29.062$, with a p-value < 0.001 , indicating a statistically significant difference in reported mental health prevalence between male and female students. These results suggest a higher psychological burden among female students, while also highlighting potential underreporting among males due to stigma or cultural conditioning.

➤ *Gender-Based Differences in Coping Strategies:*

Participants identified their primary coping strategies when dealing with mental health issues. Female students predominantly engaged in emotion-focused approaches such as socializing with friends and family (30.9%) and engaging in hobbies like music, reading, or art (27.2%). A substantial proportion (32.7%) also reported coping through self-isolation. Male students, in contrast, favored physical activities (25%) and showed a higher tendency toward unhealthy coping mechanisms (15.9%), including the use of alcohol or smoking. Only 13.6% of males reported using hobbies, and 27.3% relied on isolation. The Chi-square analysis yielded a value of $\chi^2 = 29.308$ with a p-value = 0.001, confirming a statistically significant association between gender and preferred coping strategies. These findings underscore the need for gender-specific mental health interventions that address these differing coping preferences and vulnerabilities.

➤ *Perceived Influence of Gender on Mental Health:*

Students were asked whether they believed their gender influenced how they experienced or expressed mental health challenges. Female students were more likely to agree with this statement, acknowledging that societal expectations and emotional roles often affected their psychological well-being. Male students, however, were less inclined to perceive gender as a factor, which may reflect internalized norms that discourage emotional awareness or vulnerability. This perception gap is critical in understanding gendered mental health behavior and may contribute to differing rates of help-seeking across genders.

➤ *Professional Help-Seeking Behavior:*

The results indicated that female students were more likely to have accessed professional psychological support, either occasionally or frequently. In contrast, a significant proportion of male students reported “never” having visited a counselor or psychologist. This reluctance among male students may be attributed to cultural stigma and masculine stereotypes that discourage seeking emotional assistance. The gender disparity in help-seeking behavior calls for institutional efforts to normalize psychological support services, particularly among male populations.

➤ *Use of Digital and Social Coping Resources:*

When asked about the use of digital tools such as mobile apps or online platforms for managing mental health, female students reported higher usage and greater engagement. Similarly, female participants more frequently cited talking to friends or family as their initial response to emotional distress. Male students, however, were more likely to choose avoidance-based strategies such as sleep, inactivity, or passive entertainment. This suggests that females are more inclined toward interactive and emotionally expressive coping styles, while males exhibit behavior aligned with avoidance or disengagement.

➤ *Influence of Cultural and Religious Beliefs on Coping:*

The data also indicated that many students, especially females, reported that their cultural or religious background influenced how they dealt with mental health problems. This was less frequently acknowledged by male students, although their behavioural responses indicated conformity to gendered expectations. Such cultural conditioning plays a critical role in shaping emotional resilience and receptivity to psychological support.

V. DISCUSSION

The findings of this study shed light on the significant impact of gender on both the prevalence of mental health issues and the coping mechanisms employed among college students. Through the analysis of responses from 100 students enrolled in two universities in Uttar Pradesh, a clear gender-based pattern emerged, reinforcing existing theoretical frameworks and empirical findings within public health and psychology literature.

To begin with, the prevalence of mental health issues was found to be significantly higher among female students. Nearly half of the female respondents reported experiencing psychological distress “sometimes” or “often,” and a notable segment indicated persistent struggles. In contrast, male students predominantly reported “rarely” or “never” experiencing such problems. The Chi-square test yielded a value of 29.062 with a p-value of 0.000, indicating a statistically significant difference between male and female responses regarding mental health problem frequency. The study’s second objective, which explored coping mechanisms across genders, revealed similarly distinct behavioral patterns. Female students predominantly employed emotion-focused strategies, such as socializing with friends and engaging in hobbies, while male students leaned towards problem-focused strategies like physical activity or, concerningly, unhealthy coping mechanisms. The Chi-square value of 29.308 and p-value of 0.001 for coping strategies confirmed that these gender-based differences were statistically significant.

This gender divide in coping styles is supported by the stress and coping theory developed by Lazarus and Folkman (1984), which differentiates between emotion-focused and problem-focused coping. Women are generally more inclined to manage their emotional response, while men often try to address the source of stress or avoid it entirely. In this study, 18 female respondents reported isolation as a coping method—a reflection of both internalized distress and potentially limited access to supportive networks. Simultaneously, 7 male students disclosed the use of alcohol, smoking, or other harmful behaviors to deal with psychological pressure, highlighting a critical public health concern.

The use of unhealthy coping mechanisms among male students could also be linked to lack of accessible mental health resources or reluctance to engage with formal psychological support systems. In sum, the findings of this study offer compelling evidence of the gendered nature of mental health experiences and coping behaviors among college students. While female students reported a higher burden of psychological symptoms, their coping strategies tended to be healthier and more emotionally oriented. Male students, on the other hand, reported lower perceived distress but demonstrated a greater tendency toward harmful coping methods, suggesting suppressed distress rather than its absence. These findings call for comprehensive, gender-sensitive mental health programs that go beyond generic awareness and create targeted, culturally relevant interventions.

Academic institutions must also work toward normalizing mental health conversations, particularly for male students, through peer-led support, anonymous platforms, and activity-based outreach. Similarly, female students would benefit from programs that address internalized stress, perfectionism, and social fatigue. Gender-inclusive mental health policies—grounded in both data and empathy—can transform university campuses into safe spaces for psychological growth and support.

VI. CONCLUSION

In conclusion, this research provides substantial evidence that gender significantly influences how college students experience and respond to mental health challenges. Female students are more expressive and emotionally responsive, while male students exhibit underreporting and avoidance tendencies. These patterns are deeply embedded in societal structures, and addressing them requires a multi-layered response involving students, educators, counsellors, and policymakers. By recognizing and responding to the unique mental health needs of different genders, institutions can foster a more inclusive, supportive, and resilient academic environment. As mental health continues to emerge as a key determinant of academic success and overall quality of life, such targeted strategies are not just desirable—they are essential.

LIMITATIONS OF THE STUDY

Despite being diverse, the study's sample of 100 students might not accurately reflect the diversity of India's larger college student body. The results' applicability to other academic institutions or geographical areas is restricted by the very small sample size.

Self-reported replies served as the basis for the data collection, which is inevitably prone to individual interpretation and social desirability bias. In order to conform to perceived social standards or expectations, some individuals may have overreported or underreported their experiences due to the delicate nature of mental health and coping mechanisms.

Data for the study was collected at a single point in time using a cross-sectional research approach. This method works well for finding trends and correlations, but it is not suitable for evaluating causal linkages or tracking changes in coping mechanisms and mental health over time.

ACKNOWLEDGEMENTS

The authors would like to express their sincere gratitude to all the participants who contributed their time and data for this study. We also thank our colleagues and mentors for their invaluable help and guidance throughout the research process. And most importantly we thank our parents and the almighty for believing in us.

➤ Conflict of Interest

The authors declare no conflict of interest.

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