



A Comparative Study Of Mental Health Among Undergraduate Students

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Abstract

The present study aims to examine the mental health status of undergraduate students and to identify gender differences in their mental health levels. Mental health plays a vital role in the overall development, academic performance, and emotional stability of students in higher education. In recent years, increasing academic pressure, social expectations, career uncertainty, and lifestyle changes have significantly influenced the psychological well-being of university students. Considering the importance of mental health in students' academic and personal lives, the study was conducted to compare the mental health of male and female undergraduate students. The research adopted a descriptive survey method to collect and analyze data. The population of the study consisted of undergraduate students studying in colleges affiliated with Rabindranath Tagore University, Raisen, Madhya Pradesh. A sample of 400 undergraduate students was selected using a random sampling technique, which included 173 male students and 227 female students. A standardized Mental Health Scale was used as the research tool for measuring the mental health status of the participants. The collected data were analyzed using statistical techniques such as mean, standard deviation, standard error of mean, standard error of difference, and z-test. The findings of the study revealed that female undergraduate students obtained higher mental health scores compared to male students. The calculated z-value indicated that the difference between male and female students was statistically significant. The study highlights the importance of promoting mental health awareness and providing psychological support services in higher education institutions. It also emphasizes the need for universities to implement counseling programs, stress management workshops, and mental health education initiatives to support the overall well-being and academic success of students.

Keywords

Mental Health, Undergraduate Students, Gender Differences, Psychological Well-being, Academic Stress, Emotional Stability, Higher Education, Student Development, Mental Health Status, Counseling Services, Stress Management, Educational Psychology

1. Introduction

Mental health is a fundamental component of overall well-being and plays a significant role in the academic, social, and emotional development of individuals. In recent years, mental health issues among students have gained increasing attention due to the growing pressures associated with academic competition, social expectations, career uncertainty, and personal challenges. Undergraduate students, who are typically in the transitional stage between adolescence and adulthood, face numerous psychological demands that may influence their mental health status.

Mental health can be understood as a state of psychological well-being in which an individual is able to realize his or her abilities, cope with the normal stresses of life, work productively, and contribute to the community. A mentally healthy individual demonstrates emotional stability, self-confidence, resilience, and the ability to maintain positive relationships. Conversely, poor mental health may lead to anxiety,

depression, stress, lack of motivation, and academic difficulties. Therefore, the mental health of students has become an important area of study in educational psychology and higher education research.

The university environment exposes students to diverse experiences, including academic workload, social adjustments, financial concerns, and career-related anxieties. These factors may influence the psychological well-being of students in different ways. Research studies have indicated that mental health plays a critical role in determining students' academic performance, interpersonal relationships, and overall quality of life. Students with good mental health are more likely to demonstrate higher levels of concentration, problem-solving ability, and adaptability, whereas those experiencing mental health difficulties may struggle with academic responsibilities and emotional regulation.

Gender differences in mental health have also been widely explored in psychological research. Male and female students often experience different social expectations, coping mechanisms, and emotional responses to stress. While some studies suggest that female students may experience higher levels of emotional sensitivity and stress, others indicate that they may also possess stronger social support systems and coping strategies that help maintain mental well-being. Similarly, male students may experience societal pressures related to performance, independence, and emotional restraint, which can sometimes affect their mental health outcomes.

In the context of higher education in India, understanding the mental health status of undergraduate students has become particularly important. With increasing academic competition, changing lifestyles, and technological influences, students encounter numerous challenges that may impact their psychological well-being. Universities and educational institutions are increasingly recognizing the need to promote mental health awareness and provide counseling support services for students.

The present study aims to examine the mental health status of undergraduate students and to analyze gender differences in mental health scores. By comparing the mental health levels of male and female undergraduate students, the study attempts to provide insights into the psychological well-being of students and identify potential differences between the two groups. The findings of the study may help educators, counselors, and policymakers design appropriate mental health programs and interventions to support students in higher education institutions.

2. Review of Related Literature

The concept of mental health has been widely studied by psychologists, educators, and researchers across the world. Numerous studies have emphasized the importance of mental well-being for academic success and personal development among students.

Jahoda (1958) defined mental health as a state characterized by positive self-attitude, personal growth, autonomy, environmental mastery, and integration of personality. According to this perspective, mental health is not merely the absence of mental illness but also the presence of positive psychological functioning.

World Health Organization (WHO, 2019) described mental health as a state of well-being in which individuals recognize their abilities, cope effectively with the stresses of life, work productively, and contribute to society. This definition highlights the importance of emotional balance and social functioning as key aspects of mental health.

A study conducted by **Keyes (2002)** emphasized that mental health consists of emotional, psychological, and social well-being. The research suggested that individuals with higher mental health levels tend to experience greater life satisfaction and better interpersonal relationships.

Research by **Kaur and Sharma (2017)** examined mental health among college students and found that academic pressure, family expectations, and peer relationships significantly influence students' psychological well-being. The study also highlighted the need for mental health counseling services in educational institutions.

Another study conducted by **Singh (2018)** investigated gender differences in mental health among university students. The findings revealed that female students demonstrated better emotional expression and social support systems, which contributed to relatively higher mental health scores compared to male students.

Similarly, **Patel and Desai (2019)** studied the mental health of undergraduate students in Indian universities. Their research found that male students reported higher levels of stress and emotional suppression, whereas female students tended to seek social support more frequently, leading to better coping mechanisms.

A study by **Reddy (2020)** examined mental health issues among college students during academic stress periods. The findings indicated that academic workload, career uncertainty, and personal expectations significantly influence mental health outcomes among students.

From the review of related literature, it is evident that mental health is an important factor influencing students' academic performance and overall well-being. Several studies highlight the existence of gender differences in mental health among students. However, further research is required to explore these differences within specific educational contexts. The present study attempts to contribute to this field by examining the mental health status of undergraduate students and comparing male and female students in terms of their mental health scores.

3. Objectives of the Study

The study was conducted with the following objectives:

1. To study the mental health status of undergraduate students.
2. To find out the difference between male and female undergraduate students in terms of mental health scores.

4. Hypothesis of the Study

The following hypothesis was formulated for the study:

H₀: There is no significant difference between male and female undergraduate students in terms of mental health score.

5. Research Methodology

Research methodology refers to the organized and systematic procedure adopted to conduct a research investigation. It involves various components such as the research design, selection of sample, tools for data collection, and statistical techniques used for analyzing the collected data. In the present study, a descriptive survey method was employed to examine the mental health status of undergraduate students and to compare the mental health levels of male and female students. The population of the study consisted of undergraduate students studying in colleges affiliated with Rabindranath Tagore University, Raisen, Madhya Pradesh. From this population, a total sample of 400 undergraduate students was selected through a random sampling technique to ensure fair representation. The sample included 173 male students and 227 female students. For the purpose of data collection, a standardized Mental Health Scale was used to measure the psychological well-being of the students. The collected data were analyzed using appropriate statistical techniques such as mean, standard deviation (SD), standard error of mean (SEM), and standard error of difference (SED) to interpret the results effectively.

6. Data Analysis and Interpretation

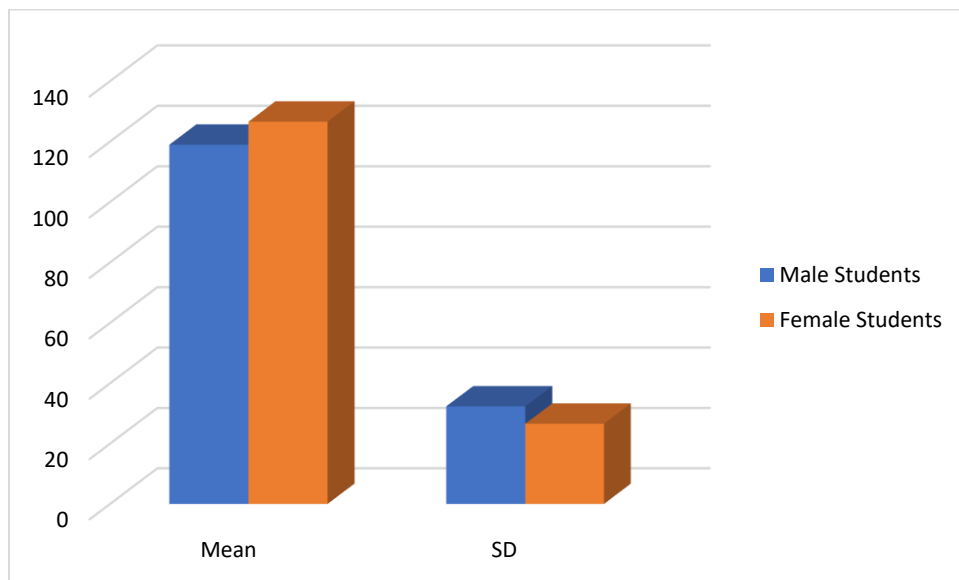
Table 1
Difference between Male and Female Undergraduate Students in Mental Health

Sn	Particulars	N	Mean	SD	SEM	SED	z value
1	Male Students	173	118.96	32.35	2.46		
2	Female Students	227	126.57	26.59	1.76	3.03	2.51

Degree of Freedom = 398

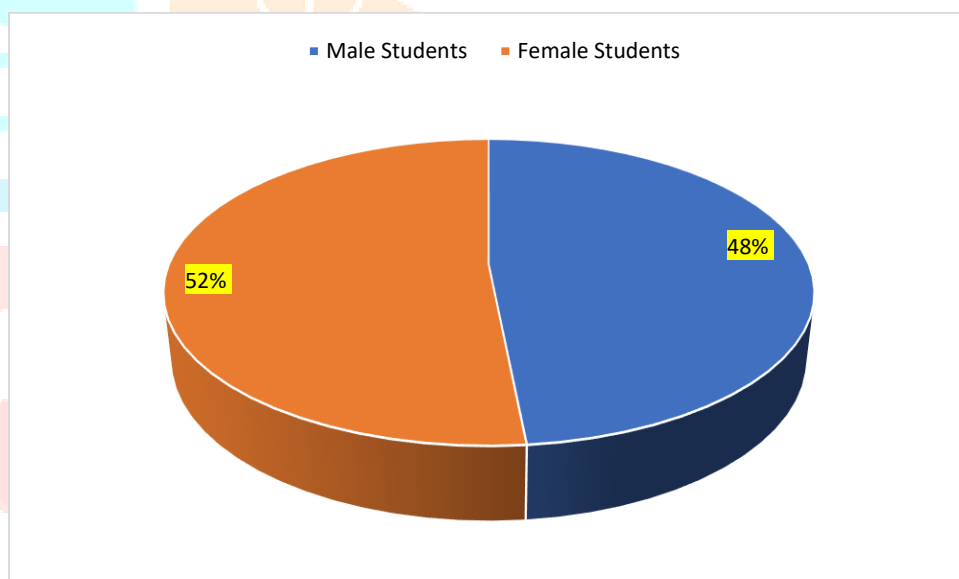
P-value = 0.012

Graph 4.5



Graph 4.1

Pie Graph of Difference between Male and Female Undergraduate Students in Mental Health



Interpretation

Table 1 presents the comparison between male and female undergraduate students with respect to their mental health scores. According to the table, the number of male students included in the analysis is 173, while the number of female students is 227. The mean mental health score for male students is reported as 118.96 with a standard deviation of 32.35. This value represents the average level of mental health observed among male students participating in the study. On the other hand, female students have a mean mental health score of 126.57 with a standard deviation of 26.59. The difference between the mean values indicates that female students demonstrate comparatively higher mental health scores than male students.

The table further provides the standard error of the mean values, which are 2.46 for male students and 1.76 for female students. These values indicate the level of precision associated with the estimated means of each group. The standard error of difference between the two means is reported as 3.03. The calculated z-value is 2.51 with 398 degrees of freedom. The corresponding probability value ($p = 0.012$) indicates that the obtained difference between the two groups is statistically significant at the 0.05 level of significance. Since the calculated z-value exceeds the critical value, the difference between male and female students in terms of mental health scores is considered

statistically significant. This finding indicates that gender differences exist in the mental health levels of undergraduate students included in the sample.

7. Findings of the Study

Based on the analysis and interpretation of data, the following findings were obtained:

1. The study revealed that female undergraduate students have a higher mean mental health score (126.57) compared to male students (118.96).
2. The variability in mental health scores is greater among male students compared to female students.
3. The calculated z-value (2.51) indicates a statistically significant difference between male and female students in terms of mental health.
4. Female students demonstrate comparatively better mental health status than male students.
5. Gender differences exist in the mental health levels of undergraduate students.

8. Testing of Hypothesis

H₀₃: There is no significant difference between male and female undergraduates in terms of Mental health score.

The third hypothesis of the study proposed that there is no significant difference between male and female undergraduate students in terms of their mental health scores. To test this hypothesis, a **z-test for difference between two independent means** was applied to the data obtained from the respondents. According to Table 4.5, the number of male students included in the sample is **173**, while the number of female students is **227**. The mean mental health score for male students is **118.96** with a standard deviation of **32.35**, whereas female students have a mean mental health score of **126.57** with a standard deviation of **26.59**. These descriptive statistics indicate that female students, on average, demonstrate higher mental health scores compared to male students. The standard error of the mean for male students is **2.46**, while the standard error for female students is **1.76**, indicating the level of precision in estimating the population mean from the sample data.

Further statistical comparison reveals that the **standard error of difference (SED)** between the two groups is **3.03**. Based on these values, the calculated **z-value is 2.51** with **398 degrees of freedom**. The corresponding probability value reported in the table is **p = 0.012**, which is lower than the **0.05 level of significance**. Since the obtained probability value is less than the prescribed level of significance, the difference between male and female students in terms of mental health scores is considered statistically significant. The higher mean score observed among female students indicates that they tend to demonstrate comparatively better mental health levels than male students in the context of this study.

Considering the statistical findings, the null hypothesis stating that there is no significant difference between male and female undergraduate students in terms of mental health score cannot be maintained. The calculated **z-value (2.51)** exceeds the critical value required for statistical significance at the **0.05 level**, and the **p-value (0.012)** confirms that the observed difference is statistically meaningful. Therefore, the **null hypothesis is rejected**. The results indicate that gender differences exist in the mental health status of undergraduate students included in the study. Female students appear to demonstrate relatively higher mental health scores compared to their male counterparts, suggesting a statistically significant variation between the two groups.

9. Conclusion

Mental health plays a crucial role in the overall development and academic success of students in higher education institutions. The present study aimed to examine the mental health status of undergraduate students and identify gender differences in their mental health scores.

The findings of the study revealed that female undergraduate students demonstrate comparatively higher mental health scores than male students. The statistical analysis using the z-test indicated that the difference between male and female students is significant at the 0.05 level of significance. This result

suggests that gender plays an important role in influencing the mental health status of undergraduate students.

One possible explanation for this finding is that female students may possess stronger social support networks and emotional expression skills, which help them cope with stress and maintain psychological well-being. On the other hand, male students may experience societal expectations related to emotional restraint and independence, which may sometimes affect their mental health outcomes.

The study highlights the importance of promoting mental health awareness and providing psychological support services in educational institutions. Universities and colleges should take proactive steps to identify students experiencing mental health difficulties and provide counseling facilities, workshops, and stress management programs.

Overall, the study emphasizes that mental health is a critical aspect of student development and must be addressed through collaborative efforts involving educators, counselors, administrators, and policymakers.

10. Suggestions

Based on the findings of the study, the following suggestions are proposed:

1. Educational institutions should establish **mental health counseling centers** to provide psychological support for students.
2. Colleges should organize **workshops and awareness programs** related to stress management and emotional well-being.
3. Teachers should create a **supportive and encouraging academic environment** to reduce stress among students.
4. Students should be encouraged to participate in **co-curricular and recreational activities** to maintain mental balance.
5. Universities should implement **mental health education programs** to promote awareness about psychological well-being.

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