

GENDER DIFFERENCES IN COMMON STRESS AMONG POSTGRADUATE STUDENTS IN THE MARATHWADA REGION: A PILOT STUDY

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Abstract: Stress is a prevalent psychological concern among students in higher education and has a significant impact on academic performance, mental health, and overall well-being. The present study aimed to examine gender differences in common stress among Postgraduate students. A descriptive cross-sectional research design was adopted for the study. The sample consisted of 150 Postgraduate students, including 75 male and 75 female students, selected randomly from higher education institutions. Data were collected using a self-designed stress questionnaire that assessed common stress levels among students. Descriptive statistics, including mean and standard deviation, along with an independent *t*-test, were used to analyze the data.

The results revealed that female students experienced higher levels of common stress compared to male students. The mean score for common stress among male students was 24.67 (SD = 6.04), whereas female students recorded a higher mean score of 28.78 (SD = 5.22). The calculated *t*-value of 2.89 was found to be statistically significant at the 0.05 level, indicating a significant gender difference in common stress levels. These findings suggest that female students are more vulnerable to stress, possibly due to greater academic pressure, emotional sensitivity, and socio-cultural expectations. The study highlights the need for gender-sensitive stress management strategies and counseling interventions in higher education institutions to promote students' mental health and academic success.

Keywords: Gender, Perceived Stress, Postgraduate Students, Marathwada, Mental Health

INTRODUCTION

Gender denotes socially constructed roles, behaviors, and norms associated with men and women, shaped by cultural, economic, and relational contexts (Aguilar, 2004). These roles influence cognitive appraisal, emotional regulation, and coping strategies in response to stressors. In Indian educational settings, Postgraduate students face multiple stressors including academic demands, financial constraints, family expectations, and career uncertainty.

The **Marathwada region** in Maharashtra is socioeconomically and developmentally distinct within the state. It comprises eight districts (Aurangabad Division) and has historically trailed other regions on human development indicators such as literacy and employment opportunities. Demographic data show that male literacy significantly exceeds female literacy in the region, reflecting persistent gender disparities in educational access and attainment. Moreover, rural-urban imbalances and agrarian distress further shape youth experiences and well-being in the region.

Previous research indicates gender differences in perceived stress among students, with some studies reporting greater vulnerability among females due to socio-cultural roles and others noting different patterns depending on academic environment and support systems (Shaikh et al., 2019; Bole & Pede, 2024). This study explores such differences among Postgraduate students in Marathwada.

Stress is a multidimensional psychological phenomenon that affects individuals differently based on biological, social, and environmental factors. In higher education, students are exposed to multiple stressors such as academic workload, competitive environments, financial constraints, and social expectations, which often manifest as physical, mental, and behavioral stress. Gender has been identified as a significant determinant influencing both the perception and expression of stress, with male and female students demonstrating distinct stress response patterns (Baum & Grunberg, 1991; Arthur, 1998).

Physical stress typically manifests through fatigue, headaches, sleep disturbances, and somatic complaints, while mental stress is associated with anxiety, emotional exhaustion, difficulty in concentration, and depressive symptoms. Behavioral stress, on the other hand, is reflected in maladaptive coping behaviors such as irritability, withdrawal, substance use, or reduced academic engagement (Cohen et al., 1983).

The present study attempts to examine gender differences in types of stress—physical, mental, and behavioral—among Postgraduate students, providing empirical evidence to support gender-sensitive stress management strategies.

METHODS

Research Design :

The present study employed a **descriptive cross-sectional research design** to examine gender differences in perceived stress among Postgraduate students. This design was considered appropriate as it enables the assessment of stress levels and types of stress at a single point in time and allows for comparison between male and female students within the same socio-educational context.

Sample and Participants:

The sample consisted of 150 postgraduate students, including 75 male and 75 female students, enrolled in higher education institutions located in the Marathwada region of Maharashtra. Participants were selected using a random sampling technique to ensure equal representation of both genders. Only students who were willing to participate and provided informed consent were included in the study. Students with diagnosed psychological disorders or those unwilling to participate were excluded to maintain the validity of the responses.

Tools and Instruments :

Data were collected using a self-designed stress questionnaire, specifically developed for Postgraduate students of the Marathwada region. The questionnaire comprised two sections:

Types of stress, namely **physical stress, mental stress, and behavioral (BHV) stress:**

Table: Types of Stress and Their Descriptions

Sr.No.	Type of Stress	Description
1.	Physical Stress	Stress manifested through bodily symptoms such as fatigue, headaches, sleep disturbances, muscle tension, changes in appetite, and physical exhaustion, often arising from academic workload, irregular schedules, and lack of rest.
2.	Mental Stress	Cognitive and emotional strain characterized by anxiety, excessive worry, poor concentration, irritability, emotional instability, and feelings of helplessness, commonly associated with examination pressure and academic competition.
3.	Behavioral Stress (BHV Stress)	Stress expressed through observable behavioral changes such as withdrawal, aggression, procrastination, reduced academic engagement, substance use, and maladaptive coping behaviors.

The questionnaire was prepared after reviewing standardized stress measurement frameworks and relevant literature to ensure content relevance and clarity.

Procedure :

Prior to data collection, participants were informed about the objectives of the study and assured that their responses would remain confidential and anonymous. The questionnaire was administered personally in classroom settings under the supervision of the investigator. Participants were instructed to respond honestly and independently, and sufficient time was provided for completion.

Statistical Analysis:

The collected data were scrutinized for completeness and accuracy before analysis. **Descriptive statistics**, including **T-Test**, were used to analyze and compare stress levels and types of stress between male and female students.

Results and Discussion

The results were presented in tabular form for clear interpretation.

TABLE :1

Common Stress Male Students (%) Female Students (%)

Sr.No.	TYPES OF STRESS	STUDENTS	
		Male	Female
1.	Physical stress	37.00%	41.00%
2.	Mental stress	33.00%	40.00%
3.	Behavioral (BHV) stress	30.00%	19.00%

Table 1 shows the distribution of different types of stress among male and female students. The results reveal that 37.00% of male students reported physical stress, 33.00% reported mental stress, **and** 30.00% reported behavioral (BHV) stress. **In contrast**, 41.00% of female students reported physical stress, 40.00% reported mental stress, **and** 19.00% reported behavioral (BHV) stress.

Figure-1 shows the percentage of male and female common stress.

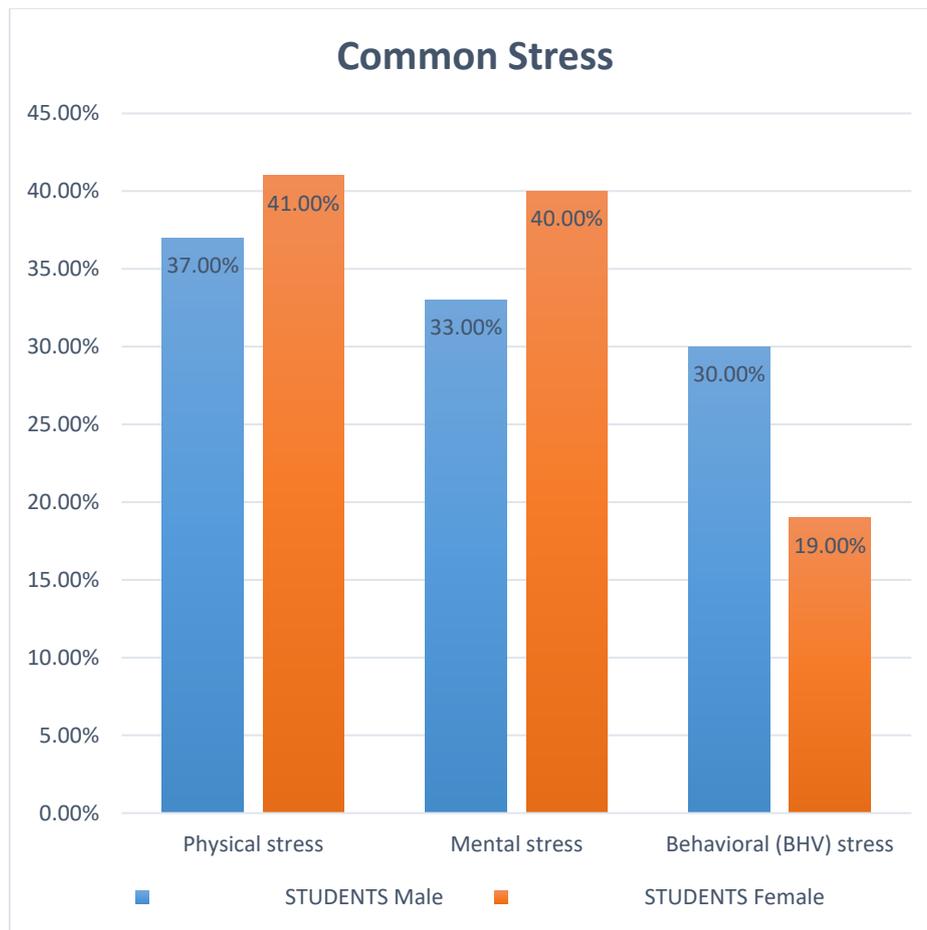


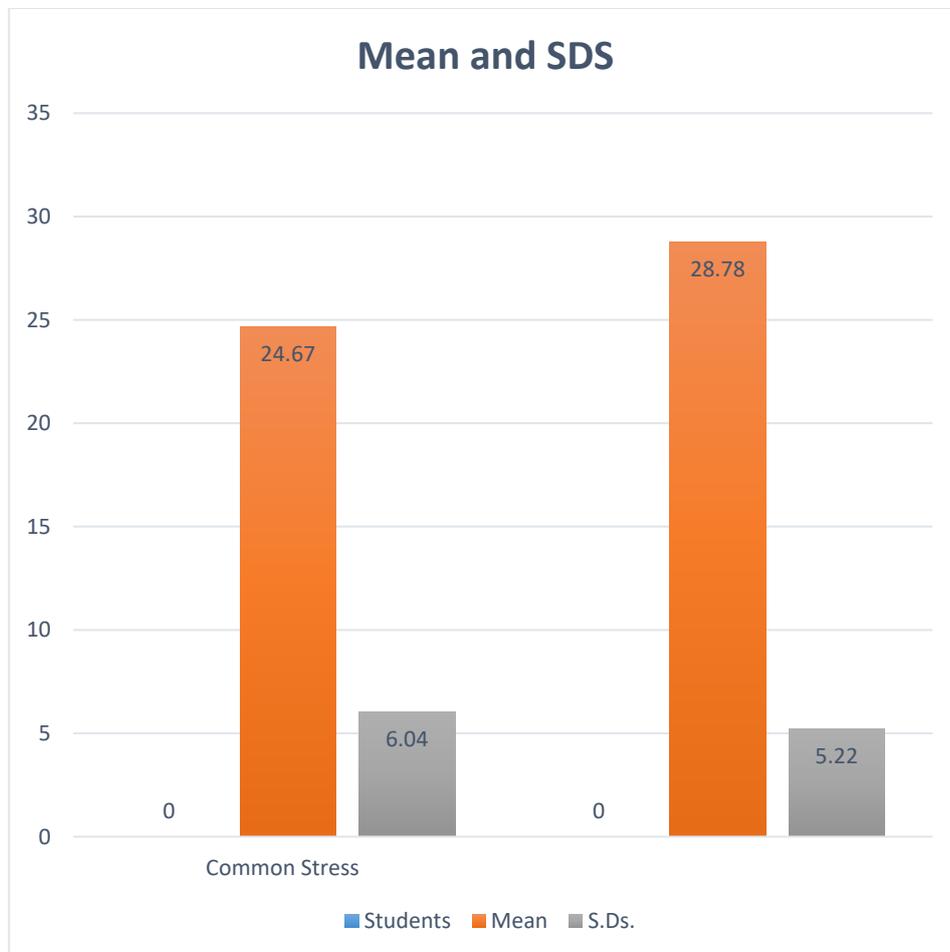
Table-2 : Mean Scores, Standard Deviation and t-ratio of Common Stress between Male and Female students

Dimension	Students	Number	Mean	S.Ds.	t-ratio
Common Stress	Male students	75	24.67	6.04	2.89*
	Female students	75	28.78	5.22	

Table-2 presents the mean scores, standard deviations, and *t*-ratio for common stress among male and female students. The sample consisted of 75 male and 75 female students. The mean score of common stress for male students was **24.67** with a standard deviation of **6.04**, whereas female students recorded a higher mean score of **28.78** with a standard deviation of **5.22**.

The calculated t -value was **2.89**, which is statistically significant at the **0.05 level of significance**. This indicates a significant difference in common stress levels between male and female students. The higher mean score among female students suggests that they experience greater common stress compared to their male counterparts.

Figure 2 : shows Mean Scores and Standard Deviation of Common Stress between Male and Female students



DISCUSSION

The gender differences observed in perceived stress align with both biological and socio-cultural explanations. Physiologically, both males and females initially activate the hypothalamic-pituitary-adrenal axis in response to stress, releasing cortisol and adrenaline. However, females may subsequently secrete oxytocin, a hormone linked with social bonding and stress attenuation, potentially modulating stress responses differently compared to males. Research suggests that oxytocin may help mitigate the harmful effects of prolonged cortisol exposure, influencing emotional regulation and coping. Socio-culturally, gender roles in the Marathwada region influenced by literacy disparities and traditional expectations may contribute to differential stress perceptions in academic contexts. Lower female literacy and societal pressures toward marriage and caregiving can exacerbate stress among female students, although close social support networks may also facilitate effective emotion-focused coping. Conversely, male students may experience stress linked to provider expectations and performance pressures without similar social buffering. Previous research has highlighted that female students often report higher levels of psychological and emotional stress due to greater sensitivity to academic pressure and social expectations, whereas male students tend to express stress through behavioral responses (Clark & Rieker, 1986).

The findings of the present study reveal a statistically significant gender difference in common stress levels, with female students exhibiting higher stress than male students. This difference may be attributed to multiple academic, psychological, and socio-cultural factors. Female students often face greater academic pressure, heightened emotional

sensitivity, and increased expectations related to academic performance and future responsibilities, which may contribute to elevated stress levels.

Previous research supports these findings, indicating that female students are more likely to report higher perceived stress due to increased emotional involvement and internalization of stressors (Arthur, 1998; Baum & Grunberg, 1991). Studies conducted in Indian higher education settings have also reported similar patterns, where female students demonstrated significantly higher stress levels compared to male students (Singh, 2010; Singh, 2012).

The relatively lower mean stress score among male students may reflect different coping strategies, where stress is often externalized through behavioral responses rather than reported as psychological strain. These findings underscore the importance of implementing gender-specific stress management and counseling programs within higher education institutions to address the unique stressors faced by male and female students.

Studies conducted in Indian higher education settings have consistently shown that stress adversely affects students' academic performance, mental health, and overall well-being (Singh, 2010; Singh, 2012). Singh emphasized that unmanaged stress among college students leads to long-term psychological imbalance and negatively impacts learning efficiency and social adjustment. Understanding gender-specific stress patterns is therefore essential for developing targeted interventions aimed at stress reduction and mental health promotion in higher education institutions. Overall, the results highlight the need for early identification of stress and the development of supportive interventions aimed at improving students' mental health and academic well-being.

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