

# A Comparative Analysis of Emotional Intelligence, Self-Efficacy, and Coping Strategies among Male and Female College Students

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## Abstract

The present study aims to examine gender differences in emotional intelligence, self-efficacy, and coping strategies among college students. A sample of 200 students (100 male and 100 female) from different academic streams was selected. Standardized psychological tools were administered, and statistical analysis was conducted using mean, standard deviation, t-test, and Pearson's correlation. Results revealed significant gender differences in emotional intelligence and coping strategies, while self-efficacy showed marginal variation. The findings highlight the importance of developing emotional and coping competencies among college students through gender-sensitive interventions.

**Keywords:** Emotional Intelligence, Self-Efficacy, Coping Strategies, Gender Differences, College Students

## Introduction

Higher education is a crucial developmental phase marked by academic demands, career uncertainty, and psychosocial challenges. College students are expected not only to achieve academic excellence but also to manage emotional stress, interpersonal relationships, and self-regulation. Psychological constructs such as emotional intelligence, self-efficacy, and coping strategies significantly influence students' adjustment and success in academic environments.

Emotional intelligence enables individuals to perceive, understand, and regulate emotions effectively. Self-efficacy refers to beliefs about one's capability to organize and execute actions required to manage prospective situations. Coping strategies involve cognitive and behavioral efforts used to deal with stressors. Gender differences in these psychological attributes have attracted considerable attention, as males and females may differ in emotional processing, confidence levels, and stress management patterns due to socialization and cultural expectations.

Despite growing research, limited studies have examined these three constructs together from a gender-comparative perspective among college students. The present study attempts to fill this gap by providing an integrated analysis of emotional intelligence, self-efficacy, and coping strategies among male and female college students.

## Literature Review

The concept of emotional intelligence has received substantial attention in psychological research due to

its significant role in emotional regulation, interpersonal competence, and psychological adjustment. Emotional intelligence refers to the ability to perceive, understand, manage, and utilize emotions effectively in oneself and others. Early theoretical foundations emphasized that emotional competencies are as important as cognitive intelligence in determining success in life. Studies have consistently shown that individuals with higher emotional intelligence demonstrate better academic performance, social adjustment, and mental well-being (Daniel Goleman, 1995). Research on college students indicates that emotional intelligence contributes positively to stress management and adaptive behavior in academic settings.

Several studies have explored gender differences in emotional intelligence among students. Empirical evidence suggests that female students generally score higher on dimensions such as emotional awareness, empathy, and interpersonal sensitivity, while male students tend to exhibit strengths in emotional regulation and self-control in specific contexts (Mayer, Salovey & Caruso, 2000). Cultural and socialization processes play a crucial role in shaping emotional expression patterns among males and females, leading to observable differences in emotional intelligence levels across genders.

Self-efficacy, another important psychological construct, is defined as an individual's belief in their capacity to organize and execute actions required to manage prospective situations. The concept was systematically developed by Albert Bandura (1997), who emphasized that self-efficacy influences motivation, persistence, and academic achievement. Research findings suggest that students with high self-efficacy are more confident, resilient, and goal-oriented, enabling them to cope effectively with academic challenges. Studies conducted on college populations indicate that self-efficacy is positively associated with academic engagement and psychological well-being (Schunk & Pajares, 2002).

Gender-based research on self-efficacy has yielded mixed results. Some studies report higher academic self-efficacy among male students, particularly in science and technical disciplines, while others find no significant gender differences (Pajares, 2005). These variations are often attributed to social expectations, academic stream selection, and differential reinforcement of confidence-related behaviors among males and females.

Coping strategies refer to the cognitive and behavioral efforts employed by individuals to manage internal and external demands perceived as stressful. The transactional model of stress and coping proposed by Richard Lazarus and Susan Folkman (1984) classifies coping strategies into problem-focused and emotion-focused approaches. Research indicates that effective coping strategies play a vital role in reducing stress, enhancing psychological adjustment, and maintaining emotional balance among students.

Studies examining coping strategies among college students reveal notable gender differences. Female students are more likely to adopt emotion-focused coping strategies such as seeking social support and emotional expression, whereas male students often rely on problem-focused coping or avoidance strategies (Carver, Scheier & Weintraub, 1989). These differences are influenced by societal norms related to emotional expression and stress management.

Recent research has increasingly focused on the interrelationship among emotional intelligence, self-efficacy, and coping strategies. Empirical studies suggest that emotional intelligence enhances self-efficacy beliefs and promotes the use of adaptive coping strategies, thereby contributing to better psychological adjustment and academic resilience (Schutte et al., 2007). Students with higher emotional intelligence tend to perceive stressful situations as manageable and demonstrate greater confidence in their coping abilities.

Despite extensive research on these constructs individually, integrated studies examining emotional intelligence, self-efficacy, and coping strategies together—especially from a gender-comparative perspective—remain limited in the Indian higher education context. Therefore, the present study attempts to bridge this research gap by providing a comprehensive comparative analysis of male and female college students across these key psychological dimensions.

### Objectives of the Study

1. To compare emotional intelligence among male and female college students.
2. To compare self-efficacy among male and female college students.
3. To compare coping strategies among male and female college students.
4. To study the relationship among emotional intelligence, self-efficacy, and coping strategies.

### Hypotheses

1. There is no significant difference in emotional intelligence between male and female college students.
2. There is no significant difference in self-efficacy between male and female college students.
3. There is no significant difference in coping strategies between male and female college students.

### Methodology

- **Research Design** : Descriptive and comparative research design.
- **Sample** : 200 college students (100 males and 100 females) selected from arts, science, and commerce streams.
- **Tools Used** : Emotional Intelligence Scale, General Self-Efficacy Scale, Coping Strategies Inventory
- **Statistical Techniques** : Mean and Standard Deviation, Independent Sample t-test, Pearson's Product Moment Correlation

The present study is grounded in established psychological theories that explain emotional functioning, belief systems, and stress management processes among individuals. Emotional intelligence, self-efficacy, and coping strategies are interrelated constructs that collectively influence an individual's psychological adjustment and academic functioning. The theoretical foundation of this study integrates emotional intelligence theory, social cognitive theory, and the transactional model of stress and coping. The concept of emotional intelligence is primarily derived from the ability-based model proposed by Mayer and Salovey, which conceptualizes emotional intelligence as a set of cognitive abilities related to the perception, understanding, regulation, and utilization of emotions. Emotional intelligence enables individuals to process emotional information accurately and use it to guide thinking and behavior. According to this framework, individuals with higher emotional intelligence are better equipped to manage academic stress, interpersonal conflicts, and emotional challenges encountered in college life (Mayer & Salovey, 1997). Emotional intelligence is therefore considered a crucial psychological resource that facilitates adaptive functioning and well-being.

Self-efficacy is theoretically rooted in Social Cognitive Theory propounded by Albert Bandura. Bandura conceptualized self-efficacy as an individual's belief in their capability to perform actions necessary to achieve desired outcomes. According to this theory, self-efficacy influences the choices individuals make, the effort they invest, their persistence in the face of difficulties, and their emotional reactions to

challenging situations (Bandura, 1997). In academic settings, students with high self-efficacy are more likely to view challenges as manageable, remain motivated, and display resilience under stress.

Coping strategies are explained through the transactional model of stress and coping developed by Richard Lazarus and Susan Folkman. This model views stress as a dynamic interaction between the individual and the environment, emphasizing cognitive appraisal and coping responses. Coping strategies are broadly categorized into problem-focused coping, which aims at addressing the source of stress, and emotion-focused coping, which seeks to regulate emotional responses to stress (Lazarus & Folkman, 1984). The choice of coping strategy depends on the individual's appraisal of the situation and perceived control over the stressor.

The integration of these theoretical perspectives suggests a strong conceptual linkage among emotional intelligence, self-efficacy, and coping strategies. Emotional intelligence enhances emotional awareness and regulation, which in turn strengthens self-efficacy beliefs by fostering confidence in one's ability to manage emotional and academic challenges. Higher self-efficacy further promotes the use of adaptive coping strategies, enabling students to respond effectively to stressors. Empirical research supports this theoretical linkage, indicating that emotionally intelligent individuals with high self-efficacy tend to employ more constructive coping mechanisms and experience better psychological adjustment (Schutte et al., 2007).

Gender differences in these constructs are theoretically explained through socialization processes and gender role expectations. Males and females are often encouraged to develop different emotional expression patterns, confidence levels, and stress response styles, which may result in observable differences in emotional intelligence, self-efficacy, and coping strategies. Therefore, a gender-based comparative framework is essential to understanding how these psychological variables operate among male and female college students.

Based on these theoretical foundations, the present study assumes that emotional intelligence and self-efficacy function as important psychological determinants of coping strategies and that gender plays a significant role in shaping these relationships. This theoretical framework provides a logical basis for the statistical analysis and interpretation of results presented in the subsequent section.

### **Statistical Analysis and Interpretation**

To examine gender-wise differences in emotional intelligence, descriptive statistics were computed for male and female college students. Mean and standard deviation scores were calculated to understand the overall level and variability of emotional intelligence among the two groups. The results are presented in Table 1.

**Table No. 1**

Mean and Standard Deviation of Emotional Intelligence Scores among Male and Female College Students

| <b>Gender</b> | <b>N</b> | <b>Mean</b> | <b>SD</b> |
|---------------|----------|-------------|-----------|
| Male          | 100      | 124.36      | 12.45     |
| Female        | 100      | 132.78      | 11.82     |

Table 1 shows that female college students obtained a higher mean score ( $M = 132.78$ ,  $SD = 11.82$ ) on emotional intelligence compared to male college students ( $M = 124.36$ ,  $SD = 12.45$ ). This indicates that

female students, on average, possess higher emotional intelligence than their male counterparts. The standard deviation values suggest moderate variability in emotional intelligence scores within both groups, with slightly greater variation observed among male students. The difference in mean scores points toward a potential gender-based variation in emotional intelligence, which is further examined through inferential statistical analysis in the subsequent table.

To examine whether the observed difference in emotional intelligence between male and female college students is statistically significant, an independent samples t-test was applied. The results of the t-test comparing emotional intelligence scores of male and female students are presented in Table 2.

**Table No. 2**  
**t-Test Showing Gender Difference in Emotional Intelligence among College Students**

| Gender | N   | Mean   | SD    | t-value     | Level of Significance            |
|--------|-----|--------|-------|-------------|----------------------------------|
| Male   | 100 | 124.36 | 12.45 |             |                                  |
| Female | 100 | 132.78 | 11.82 | <b>4.89</b> | <b>p &lt; 0.01 (Significant)</b> |

Table 2 reveals that the calculated t-value ( $t = 4.89$ ) is statistically significant at the 0.01 level of significance. This indicates a **significant difference in emotional intelligence scores between male and female college students**. Therefore, the null hypothesis stating that there is no significant difference in emotional intelligence between male and female students is rejected. The findings suggest that female students possess significantly higher emotional intelligence compared to male students.

To examine the level of self-efficacy among male and female college students, descriptive statistics such as mean and standard deviation were computed. These statistics help in understanding the average level of self-efficacy and the extent of variability within each gender group. The results are presented in Table 3.

**Table No. 3**  
**Mean and Standard Deviation of Self-Efficacy Scores among Male and Female College Students**

| Gender | N   | Mean  | SD   |
|--------|-----|-------|------|
| Male   | 100 | 31.42 | 4.18 |
| Female | 100 | 30.68 | 4.36 |

Table 3 indicates that male college students obtained a slightly higher mean score on self-efficacy ( $M = 31.42$ ,  $SD = 4.18$ ) compared to female college students ( $M = 30.68$ ,  $SD = 4.36$ ). However, the difference in mean scores between the two groups is minimal. The standard deviation values show moderate variability in self-efficacy scores for both male and female students, suggesting that individual differences exist within each group. The observed difference in mean self-efficacy scores is examined further through inferential statistical analysis in the subsequent table to determine its statistical significance.

To determine whether the observed difference in self-efficacy between male and female college students is statistically significant, an independent samples t-test was applied. The results of the t-test comparing self-efficacy scores of male and female students are presented in Table 4.

**Table No. 4**  
**t-Test Showing Gender Difference in Self-Efficacy among College Students**

| Gender | N   | Mean  | SD   | t-value     | Level of Significance |
|--------|-----|-------|------|-------------|-----------------------|
| Male   | 100 | 31.42 | 4.18 |             |                       |
| Female | 100 | 30.68 | 4.36 | <b>1.26</b> | Not Significant       |

Table 4 shows that the calculated t-value ( $t = 1.26$ ) is not statistically significant at either the 0.05 or 0.01 level of significance. This indicates that there is **no significant difference in self-efficacy between male and female college students**. Therefore, the null hypothesis stating that there is no significant gender difference in self-efficacy is accepted. The findings suggest that male and female students possess comparable levels of self-efficacy despite minor differences in mean scores.

To assess the level of coping strategies among male and female college students, descriptive statistics were computed in terms of mean and standard deviation. These measures help in understanding the average coping ability and the variability of coping strategies within each gender group. The results are presented in Table 5.

**Table No. 5**  
**Mean and Standard Deviation of Coping Strategies Scores among Male and Female College Students**

| Gender | N   | Mean  | SD   |
|--------|-----|-------|------|
| Male   | 100 | 76.15 | 9.34 |
| Female | 100 | 81.92 | 8.87 |

Table 5 indicates that female college students obtained a higher mean score on coping strategies ( $M = 81.92$ ,  $SD = 8.87$ ) compared to male college students ( $M = 76.15$ ,  $SD = 9.34$ ). This suggests that female students, on average, employ more effective coping strategies than male students. The standard deviation values reflect moderate variability in coping strategies within both groups, with slightly greater variation observed among male students. The observed difference in mean scores is further examined through inferential statistical analysis in the subsequent table to determine whether the difference is statistically significant.

To determine whether the observed difference in coping strategies between male and female college students is statistically significant, an independent samples t-test was applied. The results of the t-test comparing coping strategies scores of male and female students are presented in Table 6.

**Table No. 6**  
**t-Test Showing Gender Difference in Coping Strategies among College Students**

| Gender | N   | Mean  | SD   | t-value     | Level of Significance            |
|--------|-----|-------|------|-------------|----------------------------------|
| Male   | 100 | 76.15 | 9.34 |             |                                  |
| Female | 100 | 81.92 | 8.87 | <b>3.98</b> | <b>p &lt; 0.01 (Significant)</b> |

Table 6 reveals that the calculated t-value ( $t = 3.98$ ) is statistically significant at the 0.01 level of significance. This indicates a **significant difference in coping strategies between male and female**

**college students.** Consequently, the null hypothesis stating that there is no significant gender difference in coping strategies is rejected. The findings suggest that female students employ significantly more effective coping strategies compared to male students.

To examine the relationship among emotional intelligence, self-efficacy, and coping strategies among college students, Pearson’s Product Moment Correlation was computed. This analysis helps in understanding the degree and direction of association among the selected psychological variables. The results of the correlation analysis are presented in Table 7.

**Table No. 7**

**Correlation among Emotional Intelligence, Self-Efficacy, and Coping Strategies among College Students**

| Variables              | Emotional Intelligence | Self-Efficacy | Coping Strategies |
|------------------------|------------------------|---------------|-------------------|
| Emotional Intelligence | 1.00                   | 0.46**        | 0.52**            |
| Self-Efficacy          | 0.46**                 | 1.00          | 0.41**            |
| Coping Strategies      | 0.52**                 | 0.41**        | 1.00              |

**\*\* Correlation is significant at 0.01 level**

Table 7 indicates a **positive and statistically significant relationship** among emotional intelligence, self-efficacy, and coping strategies. Emotional intelligence shows a moderate positive correlation with self-efficacy ( $r = 0.46, p < 0.01$ ), suggesting that students with higher emotional intelligence tend to have stronger beliefs in their abilities. Emotional intelligence also exhibits a significant positive correlation with coping strategies ( $r = 0.52, p < 0.01$ ), indicating that emotionally intelligent students are more likely to adopt effective coping mechanisms.

Further, self-efficacy is positively and significantly correlated with coping strategies ( $r = 0.41, p < 0.01$ ), implying that students who possess higher self-efficacy are better equipped to manage stress and challenges. These findings confirm the interrelated nature of emotional intelligence, self-efficacy, and coping strategies and support the theoretical framework of the present study.

**Discussion**

The present study aimed to examine gender differences in emotional intelligence, self-efficacy, and coping strategies among college students, as well as to explore the interrelationships among these psychological variables. The findings provide meaningful insights into how male and female students differ in emotional functioning and stress management, while also highlighting the integrative role of emotional intelligence and self-efficacy in coping behavior.

The results related to emotional intelligence revealed a significant gender difference, with female college students demonstrating higher emotional intelligence than male students (Tables 1 and 2). This finding is consistent with earlier research suggesting that females tend to exhibit greater emotional awareness, empathy, and interpersonal sensitivity due to socialization patterns that encourage emotional expressiveness among women (Goleman, 1995; Mayer, Salovey & Caruso, 2000). The higher emotional intelligence observed among female students may contribute to their enhanced ability to understand and manage emotions in academic and social contexts.

With respect to self-efficacy, the findings indicated no significant gender difference between male and female college students (Tables 3 and 4). Although male students showed slightly higher mean self-

efficacy scores, the difference was not statistically significant. This result aligns with studies reporting comparable self-efficacy levels among males and females in higher education, suggesting that academic environments may provide equal opportunities for the development of confidence and competence (Bandura, 1997; Pajares, 2005). The absence of significant gender differences in self-efficacy highlights that belief in one's capabilities is influenced more by academic experiences and mastery rather than gender alone.

The analysis of coping strategies revealed a significant gender difference, with female students demonstrating more effective coping strategies than male students (Tables 5 and 6). Female students' greater use of adaptive coping strategies, such as emotional expression and seeking social support, supports previous findings that women are more inclined toward emotion-focused coping mechanisms (Lazarus & Folkman, 1984; Carver et al., 1989). In contrast, male students' relatively lower coping scores may reflect a tendency toward avoidance or suppression of emotional responses, which may limit effective stress management.

The correlation analysis (Table 7) further substantiated the interrelationship among emotional intelligence, self-efficacy, and coping strategies. Emotional intelligence showed a positive and significant correlation with both self-efficacy and coping strategies, indicating that emotionally intelligent students are more confident in their abilities and employ more adaptive coping mechanisms. Additionally, the positive relationship between self-efficacy and coping strategies suggests that students who believe in their competence are better equipped to handle academic and psychological stressors. These findings strongly support the integrated theoretical framework of the study, which posits emotional intelligence and self-efficacy as important psychological determinants of effective coping behavior.

Overall, the findings of the present study emphasize the critical role of emotional intelligence in shaping students' coping patterns and psychological adjustment. Gender differences observed in emotional intelligence and coping strategies underscore the need for gender-sensitive psychological interventions in higher education institutions. Programs aimed at enhancing emotional awareness, confidence-building, and adaptive coping skills may contribute significantly to students' academic success and mental well-being.

## Conclusion

The present study was undertaken to examine gender differences in emotional intelligence, self-efficacy, and coping strategies among college students and to explore the interrelationship among these psychological variables. The findings of the study provide significant insights into the psychological functioning of male and female students in higher education.

The results revealed that female college students possess significantly higher emotional intelligence than male students. This suggests that female students are more emotionally aware, empathetic, and capable of understanding and managing emotions effectively. Emotional intelligence emerged as a crucial psychological resource that facilitates better emotional regulation and interpersonal adjustment in academic settings.

With regard to self-efficacy, the study found no significant gender difference between male and female students. Both groups demonstrated comparable levels of confidence in their abilities to handle academic tasks and challenges. This indicates that self-efficacy among college students may be influenced more by academic experiences and environmental factors than by gender alone.

The findings related to coping strategies indicated a significant gender difference, with female students exhibiting more effective coping strategies than male students. Female students were found to use adaptive coping mechanisms more frequently, enabling them to manage academic stress and emotional challenges more efficiently.

Furthermore, the correlation analysis revealed a positive and significant relationship among emotional intelligence, self-efficacy, and coping strategies. Students with higher emotional intelligence tended to exhibit greater self-efficacy and more effective coping strategies, highlighting the interconnected nature of these psychological constructs. These results strongly support the theoretical framework of the study, which emphasizes emotional intelligence and self-efficacy as key determinants of adaptive coping behavior.

In conclusion, the study underscores the importance of emotional intelligence and coping skills in promoting psychological well-being and academic adjustment among college students. The findings suggest that higher education institutions should incorporate emotional intelligence training, self-efficacy enhancement programs, and stress management interventions to support students' overall development. Addressing gender-specific psychological needs may further contribute to creating a supportive and mentally healthy academic environment.

### Educational Implications

- Incorporation of **emotional intelligence training** in college curricula to enhance emotional awareness, regulation, and interpersonal skills.
- Organization of **stress management and coping skills workshops** to help students deal effectively with academic and personal stress.
- Strengthening **self-efficacy** through learner-centered teaching methods, experiential learning, and continuous positive feedback.
- Provision of **gender-sensitive counseling services**, with special emphasis on improving adaptive coping strategies among students.
- Training of teachers and educators to recognize students' **emotional and psychological needs** and to create supportive learning environments.
- Establishment and strengthening of **college counseling and mental health support centers**.
- Promotion of **holistic student development programs** focusing on emotional, psychological, and academic well-being.

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