
Strength Within: Exploring Psychological Hardiness and Emotional Intelligence among Class XI Students

Himanshi Yadav*

*Research Scholar, School of Education, Central University of Gujarat, Vadodara, Gujarat, 391107
Email: yadavhimanshi1415@gmail.com
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Abstract:

This research was designed to examine Psychological Hardiness and Emotional Intelligence among Class XI students. It also aimed to study the influence of gender and to examine the relationship between two among the overall sample as well as Arts and Science students separately. A cross-sectional descriptive survey method was used for the study. A total of 100 Class XI students from CBSE-affiliated schools in Prayagraj district were selected using a stratified random sampling technique. The required data were obtained with the help of the Psychological Hardiness Scale by A. K. Singh (2011) and the Emotional Intelligence Test developed by K. S. Misra. The findings revealed that there was no significant gender difference in Psychological Hardiness. However, female students scored significantly higher on emotional intelligence than male students. Further, no significant relationship was found between Psychological Hardiness and Emotional Intelligence among the overall sample or among Arts and Science students separately. The study provides useful information about these two psychological variables among senior secondary students and may help teachers, counsellors, and researchers in understanding students' psychological and emotional development.

Keywords: Emotional Intelligence, Psychological Hardiness, Gender Differences, Senior Secondary Students, Psychological Well-being.

Introduction:

Adolescence is a crucial stage of development which marked by rapid emotional, cognitive, physical, and social changes (World Health Organization, n.d.). Students at the Class XI level experience increased academic demands, career-related concerns, peer pressure, and expectations from parents and teachers. These challenges often influence their psychological well-being and emotional adjustment. Therefore, developing positive psychological characteristics that help students cope with stress and maintain emotional balance has become an important concern in educational research.

Psychological Hardiness is known as personality traits that enables individuals to cope effectively with stressful situations (Yadav & Lakshmi ,2023). Introduced by Kobasa (1979),

Psychological Hardiness comprises with three dimensions: “Commitment”, “Control”, and “Challenge”. Commitment reflects an individuals’ willingness to remain actively involved in daily activities such as work, family, values etc (Sheard, 2009). Control reflects to the belief that one can influence the outcomes of stressful situation, no matter how difficult and stressful it is (Maddi, 2006). Challenges refers Individuals’ ability to see stressful situation as a learning opportunity rather than threat (Harrison & Brower, 2015; Maddi, 2006). Previous research has shown that Psychological Hardiness is associated with better mental health, resilience, academic adjustment, and psychological well-being (Maddi, 2004; Ryff & Singer, 2003; Tugade & Fredrickson, 2004).

Another important psychological construct is Emotional Intelligence (EI), which refers to ability to recognize, understand, manage, and appropriately use one's own emotions as well as the emotions of others. Salovey and Mayer (1990) introduced the concept of emotional intelligence as an individual's capacity to recognize and observe both personal and others' emotions, differentiate among these emotions, and apply emotional information to guide thinking and behaviour. Later, Mayer and Salovey (1997) refined this framework by describing emotional intelligence as a set of four interrelated abilities: accurately identifying emotions, using emotions to support cognitive processes, understanding the causes and changes of emotions, and effectively managing emotions in oneself and others. These abilities help individuals respond appropriately to different social and emotional situations.

EI plays a significant role during adolescence, a period characterized by rapid emotional, social, and psychological changes. Adolescents with higher EI are more capable of managing their emotions, handling stressful situations, and maintaining positive relationships with others and adjust effectively to academic and social environments (Mayer et al., 2004; Zeidner et al., 2012). Research has also shown that emotionally intelligent students demonstrate greater self-confidence, effective communication skills, better problem-solving ability, and perform better in academic (Parker et al., 2004; MacCann et al., 2020).

Both Psychological Hardiness and EI are considered important psychological resources that contribute to positive adjustment and resilience during adolescence. While Psychological Hardiness enables individuals to view stressful situations as meaningful and manageable, EI helps them understand and regulate their emotional responses to these situations. Together, these psychological characteristics promote effective coping, psychological well-being, and successful adaptation to academic and personal challenges (Maddi, 2006; Zeidner et al., 2012).

Although several studies have examined Psychological Hardiness and EI independently, findings regarding gender differences and the relationship between these two constructs remain inconsistent. Moreover, limited research has simultaneously investigated these variables among Class

XI students in the Indian school context, particularly in CBSE-affiliated schools. Therefore, there is a need to examine the relationship between Psychological Hardiness and EI among senior secondary students to gain a better understanding of their psychological strengths and emotional adjustment

Purpose of the study

The current research explored the relationship between Psychological Hardiness and EI of 11th class students. Further the present study compared the psychological Hardiness and EI of male and female 11th class students. Furthermore, the study investigates the relationship separately among students of the arts and science streams in order to under whether the association between these two psychological constructs varies across different academic streams.

Methodology of the study

The present study used cross-sectional descriptive survey research design to study the Psychological Hardiness and EI of 11th class students. The study focused on Class XI students enrolled in CBSE-affiliated senior secondary schools in Prayagraj district, Uttar Pradesh. A sample of 100 11th class students was selected using the Stratified random sampling technique, which included 50 students from the Science stream and 50 students from the Arts stream. Data was collected offline with the help of Psychological Hardiness Scale developed by A. K. Singh (2011) and the Emotional Intelligence Test developed by K. S. Misra. Prior permission was obtained from the concerned school authorities, and the purpose of the study was explained to the participants.

Results

The collected data were analysed through descriptive and inferential statistical technique to study the objectives of the study objectives. The findings were presented in the following table.

Table 1. Summary of Statistical Analysis of Psychological Hardiness and Emotional Intelligence of senior secondary students

Objective	Statistical Test	Result	Interpretation
Influence of gender on Psychological Hardiness	<i>t</i> -test	Male: $M = 111.78$, $SD = 11.54$; Female: $M = 113.04$, $SD = 7.48$; $t = 0.64$ (NS)	No significant gender difference in Psychological Hardiness.
Influence of gender on EI	<i>t</i> -test	Male: $M = 16.64$, $SD = 5.24$; Female: $M = 21.12$, $SD = 5.08$; $t = 4.39^*$	Female students demonstrated significantly higher EI than male students.

Relationship between Psychological Hardiness and EI	Pearson Product moment Correlation	$r = 0.16$	No significant relationship was found.
Relationship between Psychological Hardiness and EI (Arts stream)	Pearson Product moment Correlation	$r = 0.02$	No significant relationship was found.
Relationship between Psychological Hardiness and EI (Science stream)	Pearson Product moment Correlation	$r = 0.23$	No significant relationship was found.

Note. $p < .05$; NS = Not Significant.

Table 1 presents the summary of the statistical analyses conducted in the present study. The findings revealed no significant gender difference in Psychological Hardiness among Class XI students. A similar observation was reported by Tantry and Singh (2016) and Vinodiya (2020), who also reported no significant gender differences in Psychological Hardiness among students. One possible reason for this result is that male and female students are exposed to similar educational environments, academic expectations, and life challenges, which may help them develop comparable levels of Psychological Hardiness. Furthermore, Abdellatif and Zaki (2021) suggested that students who experience similar educational settings tend to adopt comparable coping strategies and problem-solving approaches, thereby reducing gender differences in Psychological Hardiness. However, the present finding contradicts the studies of Monika (2022) and Rasool (2020), who reported that female university students demonstrated significantly higher Psychological Hardiness than their male counterparts. The inconsistency in findings may be attributed to differences in the participants' age, educational level, socio-cultural background, and research settings.

The results further indicated a significant gender difference in EI, with female students demonstrating significantly higher EI than male students. This finding is in agreement with the studies of Aggarwal and Saxena (2012), and Kumar et al. (2025). who consistently reported higher EI among female students. A possible explanation is that female adolescents generally exhibit greater emotional awareness, empathy, interpersonal sensitivity, and emotional expressiveness, enabling them to understand and regulate emotions more effectively. Furthermore, the results revealed no significant relationship between Psychological Hardiness and EI among the overall sample ($r = 0.16$, $p > .05$). Similar non-significant relationships were also observed among students of the Arts stream ($r = 0.018$, $p > .05$) and the Science stream ($r = 0.23$, $p > .05$). These findings suggest that although Psychological Hardiness and EI are important psychological resources for adolescents, they may represent distinct constructs influenced by different personal, social, and educational factors. However, the present

findings are inconsistent with the studies of Kavesh and Yazadi (2013) and Khaledian et al. (2016), who reported a significant positive relationship between Psychological Hardiness and EI. The discrepancy may be due to differences in sample characteristics, cultural contexts, educational settings, sample size, and the measurement instruments employed across studies.

Overall, the findings suggest that gender influences EI but does not significantly affect Psychological Hardiness among Class XI students. Moreover, Psychological Hardiness was not significantly associated with EI among the overall sample or within the Arts and Science streams. These findings indicate that Psychological Hardiness and EI may develop through different developmental experiences and environmental influences during adolescence. The researcher could not find any existing studies related to these demographic variables; hence, there is further scope for exploring their influence on these psychological constructs.

Conclusion and implication

The current research examined the Psychological Hardiness and EI of Class XI students and found no significant gender difference in Psychological Hardiness, whereas female students demonstrated significantly higher EI than male students. The study also revealed no significant relationship between Psychological Hardiness and EI among the overall sample or among students of the Arts and Science streams. These findings suggest that Psychological Hardiness and EI are distinct psychological constructs that may develop through different psychological, social, and environmental experiences during adolescence. The findings have important educational implications, indicating that schools should promote life skills education, emotional learning programmes, stress management activities, and counselling services to strengthen students' emotional competence and resilience. Teachers should encourage supportive classroom environments that foster effective coping strategies, emotional regulation, and positive interpersonal relationships. However, the findings should be interpreted with caution as the study was limited to a sample of 100 Class XI students from CBSE-affiliated schools in Prayagraj district, which may limit the generalisability of the results. Future research may include larger and more diverse samples from different educational boards and geographical regions and examine Psychological Hardiness and EI in relation to other psychological variables such as resilience, happiness, well-being, academic achievement, and perceived stress to gain a more comprehensive understanding of adolescent development.

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