INSIGHTS-JOURNAL OF
LIFE AND SOCIAL SCIENCES

INSIGHTS-JLSS
Insights-Journal of Life and Social Sciences

GENDER-BASED APPROACH TO THE IMPACT OF EMOTIONAL INTELLIGENCE ON LEARNED HELPLESSNESS: INSIGHTS FROM UNIVERSITY STUDENT-ATHLETES OF TEAM SPORTS

Original Article

Memoona Ayub Mughal[1], Asif Ali[2]*, Muhammad Usama[1], Chaudhary Ameer Muhammad[1]
[1]BS Physical Education & Sports Sciences, Government College University Lahore, Punjab, Pakistan.
[2]Associate Professor, Department of Physical Education & Sports Sciences, Government College University Lahore, Punjab, Pakistan.
Corresponding Author: Asif Ali, Associate Professor, Department of Physical Education & Sports Sciences, Government College University Lahore, Punjab, Pakistan, asif.ali@gcu.edu.pk

Conflict of Interest: None
Grant Support & Financial Support: None
Acknowledgment: The authors gratefully acknowledge the cooperation of all participating universities and athletes who contributed to this study.

ABSTRACT

Background: Emotional intelligence (EI) is increasingly recognized as a protective psychological resource that supports resilience, motivation, and well-being in athletes. Learned helplessness (LH), conversely, reflects a maladaptive belief system in which individuals perceive diminished control over outcomes. University athletes participating in team sports often encounter substantial academic and competitive pressures, making the interplay between EI and LH an important area for investigation. Despite growing interest in sports psychology, limited evidence exists regarding gender-specific pathways through which EI influences LH in athletic populations.

Objective: The objective of this study was to examine the gender-specific impact of emotional intelligence on learned helplessness among university student-athletes competing in team sports.

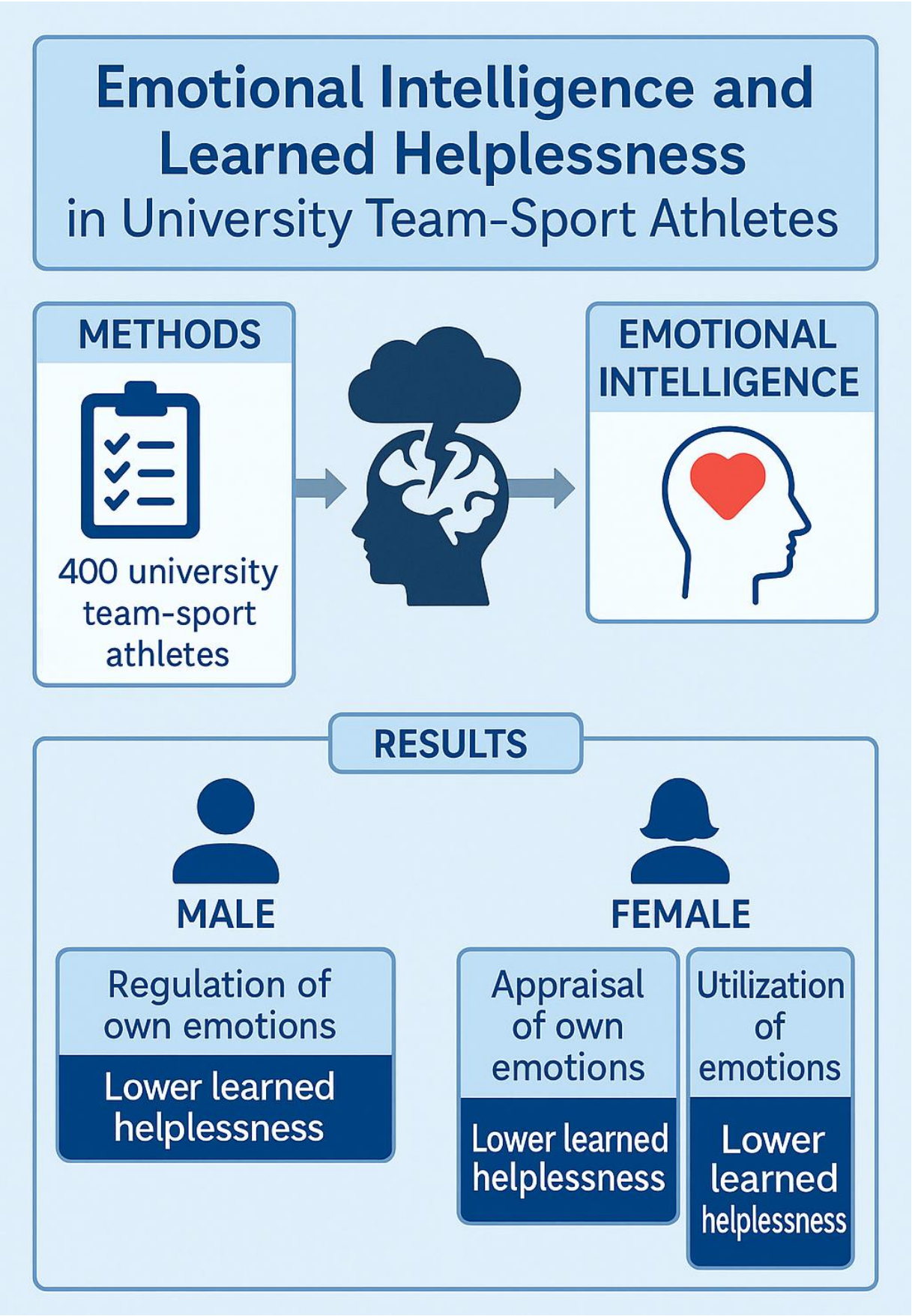
Methods: A quantitative, cross-sectional research design was employed using a sample of 400 university team-sport athletes, comprising 200 male athletes (M = 20.59, SD = 1.672) and 200 female athletes (M = 20.29, SD = 1.609), recruited from eight universities. Emotional intelligence was measured using the Brief Emotional Intelligence Scale (BEIS-10), while learned helplessness was assessed through the Learned Helplessness Scale (LHS-20). Multiple linear regression analyses were performed separately for male and female athletes to determine the predictive influence of EI components on LH. Ethical procedures, including informed consent and confidentiality assurances, were fully observed.

Results: Among male athletes, the regression model was significant, showing that higher regulation of own emotions (B = –0.68, SE = 0.34, p = .045) was associated with significantly lower LH, explaining 12.3% of the variance (R^2 = .123). Among female athletes, the model explained 22.0% of the variance (R^2 = .220), with both appraisal of own emotions (B = –0.57, SE = 0.25, p = .021) and utilization of emotions (B = –0.91, SE = 0.27, p < .001) significantly predicting lower LH.

Conclusion: The findings demonstrated distinct gender-specific pathways linking EI to LH in university athletes. Male athletes benefited primarily from emotion regulation skills, whereas female athletes gained advantage from self-appraisal and constructive emotional utilization. These insights highlight the importance of gender-sensitive psychological training programs aimed at enhancing emotional competencies among university team-sport athletes.

Keywords: Athletes, Emotional Intelligence, Gender Identity, Learned Helplessness, Sports Psychology, Students, Team Sports.

© 2025 et al. -Health And Research Insights-Open access under CC BY License (Creative Commons). Freely distributable with appropriate citation



© 2025 et al. -Health And Research Insights-Open access under CC BY License (Creative Commons). Freely distributable with appropriate citation.

INTRODUCTION

Mental and emotional health has gained substantial importance within educational and athletic disciplines as university students increasingly face heightened academic expectations and competitive stressors. These pressures have drawn attention to two psychological constructs—emotional intelligence (EI) and learned helplessness (LH)—due to their considerable influence on students' motivation, performance, adaptation, and overall well-being (1). Emotional intelligence, defined as the capacity to recognize, understand, regulate, and effectively utilize emotions in oneself and others, has been acknowledged as a critical determinant of psychological resilience in sport contexts (2). Athletes with higher EI are generally better equipped to navigate competitive demands, sustain motivation, and foster positive interpersonal relationships with coaches and peers (3). Core components of EI, including the appraisal and regulation of one's own and others' emotions as well as the constructive use of emotional information, have been repeatedly highlighted as essential to effective functioning in both academic and athletic environments (4–6). Individuals who accurately appraise their emotional states tend to demonstrate stronger self-awareness and emotional stability, while those who can regulate their emotions show improved coping under stress and enhanced psychological endurance (7–9). Likewise, the capacity to perceive and influence the emotions of teammates contributes to group cohesion and performance consistency (4,6–8). In contrast, learned helplessness represents a maladaptive cognitive-emotional response characterized by feelings of loss of control, persistent failure expectations, and diminished motivation (10). LH frequently emerges when individuals repeatedly encounter uncontrollable or distressing situations, leading them to believe that their efforts have little impact on outcomes. Among students and athletes, LH manifests as avoidance, low confidence, and poor performance, often accompanied by broader psychological concerns such as anxiety, depressive symptoms, or chronic academic disengagement (11–15).

Female athletes, in particular, may be more vulnerable due to heightened emotional burden, performance-related pressures, and societal expectations, making the interplay between EI and LH especially relevant for this group (11,12). Evidence suggests that higher EI helps reduce maladaptive attributions, enhances coping strategies, and mitigates the likelihood of LH by promoting adaptive interpretations of stressors (13,14). Moreover, team-sport environments, with their public feedback structures, role ambiguities, and interpersonal dynamics, further amplify the need for EI while simultaneously increasing susceptibility to LH when emotional regulation skills are insufficient (16,17). Despite extensive research on EI and its role in improving resilience, stress management, and performance (18–20), the literature remains limited regarding its protective influence against LH within athletic populations, particularly those engaged in university-level team sports. Existing studies often explore EI in relation to motivation, anxiety, or coping, yet rarely examine its direct association with LH, nor do they robustly consider gender-based differences in this relationship (21-23). The scarcity of empirical work exploring how EI predicts LH among male and female university athletes underscores a significant gap in current knowledge and highlights the need for more targeted investigation. Therefore, the present study aims to address this gap by examining whether emotional intelligence serves as a predictor of learned helplessness among male and female university student-athletes participating in team sports, providing insight into gender-specific psychological mechanisms and informing more effective mental-skills training interventions.

METHODS

This study employed a quantitative, cross-sectional research design to examine the impact of emotional intelligence (EI) on learned helplessness (LH) among male and female university student-athletes engaged in team sports. The target population consisted of 400 student-athletes aged 18 to 25 years (M = 20.44, SD = 1.646) recruited from 49 departments across eight universities in Lahore, Pakistan. Equal representation of gender was ensured, with 200 male athletes (M = 20.59, SD = 1.672) and 200 female athletes (M = 20.29, SD = 1.374). Athletes' competitive experience ranged from 5 to 10 years, with comparable mean experience scores for males (M = 6.17, SD = 1.623) and females (M = 6.30, SD = 1.374). Eligibility criteria required participants to be enrolled in a regular Bachelor of Science (BS) program and to have competed at the intervarsity, national, or international level. Students who were not regular university enrollees or who lacked formal competitive sports participation were excluded. The academic level, department, and study program were kept consistent across genders to minimize confounding related to institutional or educational discrepancies. Data were collected using a structured questionnaire administered on campus through coordinated visits to each university. The demographic section comprised ten items, including age, marital status, residence, sport status, sport type, years of sports experience, university name, academic program, department, year of study, and highest competition level. Emotional intelligence was assessed using the Brief Emotional Intelligence Scale (BEIS-10), initially developed by (22), a psychometrically validated instrument containing ten items scored on a five-point Likert scale ranging from strongly disagree (1) to strongly agree (5). This scale measures five EI components and has demonstrated strong

© 2025 et al. -Health And Research Insights-Open access under CC BY License (Creative Commons). Freely distributable with appropriate citation.

reliability in athletic and non-athletic populations (24). Based on the instrument manual, total scores ≤20 indicated low EI, scores of 21–26 reflected average EI, and scores ≥27 denoted high EI. Learned helplessness was measured using the Learned Helplessness Scale (LHS) created by (25), which consists of 20 items rated on a four-point Likert scale (1 = strongly agree to 4 = strongly disagree). Total scores ranged from 20 to 80, with higher scores representing greater levels of LH.

Statistical analysis was performed using SPSS version 27.0.1. Descriptive statistics were used to summarize demographic characteristics, including means and standard deviations for continuous variables. Multiple linear regression analyses were conducted separately for male and female athletes to determine the predictive influence of EI on LH, with statistical significance set at $p < .05$. Prior to regression testing, assumptions of linearity, normality, and multicollinearity were verified to ensure the robustness of model estimations. All data were handled confidentially, and no identifying information was included in the final dataset. Ethical considerations were strictly observed throughout the study. Institutional approval was obtained from the relevant university ethical review committee. Participants were informed about the study's purpose, voluntary nature, and confidentiality of their responses. Informed consent was obtained prior to questionnaire administration. The instrument was verbally explained, and participants were encouraged to raise questions for clarification. Surveys were completed individually in approximately 20 minutes, ensuring privacy and minimizing peer influence.

RESULTS

The demographic characteristics of the participants showed that the majority of both male and female athletes resided in urban areas, with 87.5% of males and 84.0% of females reporting urban residence, while 12.5% of males and 16.0% of females belonged to rural backgrounds. Academic standing was similarly distributed across both groups. Among males, 18.5% were in the first year, 24.5% in the second year, 26.5% in the third year, and 30.5% in the fourth year. Female athletes demonstrated comparable proportions, with 22.5% enrolled in the first year, 24.5% in the second, 23.5% in the third, and 29.5% in the fourth year. Regarding competitive experience, 62.5% of males and 67.5% of females competed at the intervarsity level, followed by 30.0% of males and 27.0% of females at the national level, and 7.5% of males and 5.5% of females at the international level. The mean age of male athletes was 20.59 years (SD = 1.67), while female athletes had a mean age of 20.29 years (SD = 1.61). Sports experience averaged 6.17 years (SD = 1.62) among males and 6.30 years (SD = 1.37) among females. Regression analyses were conducted separately for male and female athletes to evaluate whether the components of emotional intelligence predicted learned helplessness. Among male athletes, the regression model was statistically significant ($F = 5.43$, $p < .001$) and accounted for 12.3% of the variance in learned helplessness ($R^2 = .123$). Of the five EI components, only the regulation of one's own emotions significantly predicted LH ($B = -0.68$, $SE = 0.34$, $\beta = -0.16$, $t = -2.02$, $p = .045$). This indicated that better self-regulation was associated with lower levels of LH. Other predictors—including appraisal of one's own emotions ($p = .545$), appraisal of others' emotions ($p = .866$), regulation of others' emotions ($p = .716$), and utilization of emotions ($p = .008$)—did not demonstrate statistically significant associations, despite utilization showing a notable negative coefficient.

Among female athletes, the regression model demonstrated stronger statistical significance ($F = 10.94$, $p < .001$), explaining 22.0% of the variance in LH ($R^2 = .220$). Two EI components significantly predicted LH: appraisal of one's own emotions ($B = -0.57$, $SE = 0.25$, $\beta = -0.17$, $t = -2.33$, $p = .021$) and utilization of emotions ($B = -0.91$, $SE = 0.27$, $\beta = -0.22$, $t = -3.38$, $p < .001$). Female athletes who accurately recognized and appropriately used their emotions reported lower levels of LH. The remaining components—appraisal of others' emotions ($p = .072$), regulation of one's own emotions ($p = .077$), and regulation of others' emotions ($p = .205$)—did not reach statistical significance. A comparative evaluation of the regression models for male and female athletes revealed notable gender-based differences in the predictive strength of emotional intelligence components on learned helplessness. The female model demonstrated a substantially stronger predictive capacity, explaining 22.0% of the variance in learned helplessness ($R^2 = .220$), compared with 12.3% explained in the male model ($R^2 = .123$). Moreover, two EI components—appraisal of own emotions ($\beta = -.171$, $p = .021$) and utilization of emotions ($\beta = -.224$, $p < .001$)—emerged as significant predictors for female athletes, whereas only regulation of own emotions ($\beta = -.162$, $p = .045$) significantly predicted learned helplessness among males. These findings indicate that EI exerts a broader and more robust protective effect against helplessness among female athletes than males, reflected in both the number of significant predictors and the overall explanatory power of the model. Additionally, female athletes demonstrated stronger negative coefficients across multiple EI factors, suggesting greater sensitivity of LH to emotional processing abilities in this group. This comparative pattern highlights a gender-specific variation in the mechanisms through which EI influences psychological adaptation in competitive sports settings.

© 2025 et al. -Health And Research Insights-Open access under CC BY License (Creative Commons). Freely distributable with appropriate citation.

Table 1: Demographic Features of Male and Female University Team Sports Student-athletes

Variables	Male		Female	
	f	%	f	%
Residence				
Urban	175	87.5	168	84.0
Rural	25	12.5	32	16.0
Year of Study				
1	37	18.5	45	22.5
2	49	24.5	49	24.5
3	53	26.5	47	23.5
4	61	30.5	59	29.5
Highest level of Competition				
Inter-varsity	125	62.5	135	67.5
National	60	30.0	54	27.0
International	15	7.5	11	5.5
Age	M=20.59	SD=1.672	M=20.29	SD=1.609
Experience in Sports	M=6.17	SD=1.623	M=6.30	SD=1.374

Note: M= mean, SD= standard deviation, f= frequency, %= percentage

Table 2: Summary of ANOVA predicting Emotional Intelligence Among Male Team sports university Student-athletes

Model	Source	Sum of squares	df	Mean squares	F	Sig.
1	Regression	1382.689	5	276.538	5.431	<.001b
	Residual	9877.311	194	50.914		
	Total	11260.000	199			

Table 3: Multiple linear regression analysis of Emotional Intelligence on Male Team sports University Student-athletes

Dependent Variable	Predictors	B	SE	β	t	p
Learned Helplessness	Appraisal of own emotions	-.270	.445	-.054	-.606	.545
	Appraisal of other emotions	.064	.376	.014	.169	.866
	Regulation of own emotions	-.684	.338	-.162	-2.021	.045
	Regulation of other emotions	.108	.296	.029	.364	.716
	Utilization of emotions	-1.114	.415	-.232	-2.682	.008

Note: SE = Standardized error, β = Beta, p = Significant

© 2025 et al. -Health And Research Insights-Open access under CC BY License (Creative Commons). Freely distributable with appropriate citation.

Table 4: Summary of ANOVA predicting Emotional Intelligence Among Female Team sports university Student-athletes

Model	Source	Sum of squares	df	Mean squares	F	Sig.
1	Regression	1179.840	5	235.968	10.941	<.001b
	Residual	4184.080	194	21.567		
	Total	5363.920	199			

Table 5: Multiple linear regression analysis of Emotional Intelligence on Female Team sports University Student-athletes

Dependent Variable	Predictors	B	SE	β	t	p
Learned Helplessness	Appraisal of own emotions	-.574	.246	-.171	-2.333	.021
	Appraisal of other emotions	-.438	.242	-.129	-1.811	.072
	Regulation of own emotions	-.406	.228	-.125	-1.779	.077
	Regulation of other emotions	-.303	.239	-.086	-1.272	.205
	Utilization of emotions	-.910	.269	-.224	-3.383	<.001

Note: SE = Standardized error, β = Beta, p = Significant

Table 6: Comparison of Regression Outcomes Between Male and Female University Team-Sport Athletes

Emotional Intelligence Predictors	Male Athletes (n=200)	Female Athletes (n=200)
	β	p-value
Appraisal of Own Emotions	-0.054	.545
Appraisal of Other Emotions	0.014	.866
Regulation of Own Emotions	-0.162	.045
Regulation of Others' Emotions	0.029	.716
Utilization of Emotions	-0.232	.008
Model R^2	.123	—
Model F-value	5.43	<.001

Note: Bold values indicate statistically significant predictors at $p < .05$.

© 2025 et al. -Health And Research Insights-Open access under CC BY License (Creative Commons). Freely distributable with appropriate citation.

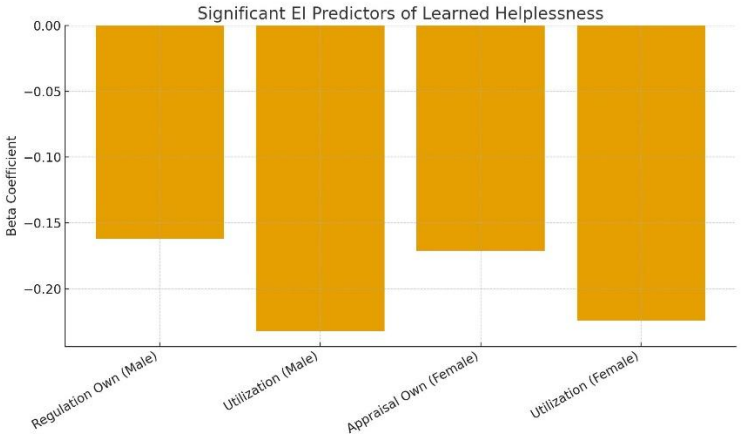


Figure 2 Significant EI Predictors of Learned Helplessness

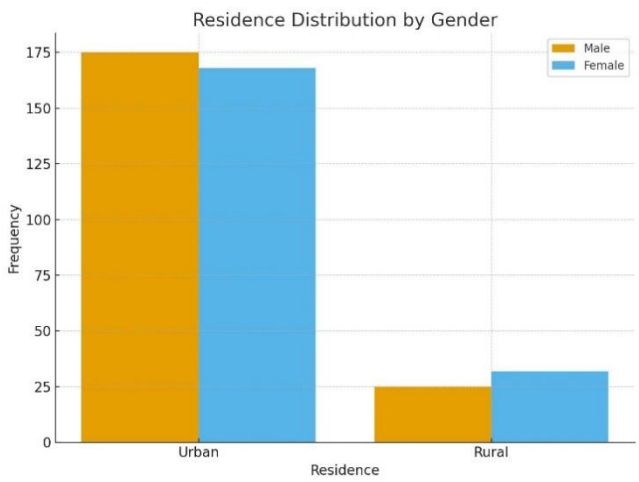


Figure 2 Residence Distribution b Gender

DISCUSSION

This study explored the gender-specific impact of emotional intelligence on learned helplessness among university student-athletes competing in team sports and provided new insight into psychological mechanisms that promote resilience in high-pressure athletic environments. No previous research had simultaneously examined emotional intelligence, learned helplessness, and gender differences within the same analytical framework, thereby situating the present findings as an important contribution to the literature on athlete mental well-being. The patterns observed demonstrated that emotional intelligence influenced learned helplessness through different pathways for male and female athletes, reinforcing the view that gendered emotional processing shapes psychological responses to competitive stressors. The results indicated clear gender-related variations in the predictive role of emotional intelligence. Among male athletes, the regulation of their own emotions emerged as the only significant protective factor against learned helplessness. This pattern suggested that males who effectively managed emotional responses—such as frustration, disappointment, or competitive pressure—were less likely to internalize uncontrollable outcomes or develop helplessness. Similar associations have been reported in earlier work where stronger regulatory abilities corresponded with lower stress reactivity and more adaptive competitive behavior (14,17). Additional studies similarly highlighted the value of cognitive reappraisal strategies in minimizing adverse psychological effects, supporting the present findings (18,20). However, the wider literature has not always aligned with this pattern. Other authors contended that emotional regulation alone may not consistently alleviate psychological strain and that the effectiveness of this skill may depend heavily on contextual demands, including whether the sport is team- or individual-based (20,22). Such divergence indicated that regulation provides protection but may require complementary emotional competencies to produce sustained benefits.

Among female athletes, appraisal of their own emotions and utilization of emotions were the components most strongly associated with lower levels of learned helplessness. Female athletes who demonstrated higher emotional awareness and used their emotions constructively appeared better able to navigate the psychological pressures inherent in team-sport environments. Prior research has shown that a strong capacity for emotional awareness among female athletes enhances psychological flexibility and improves coping in competitive settings (10,13). Additional studies further noted that the ability to channel emotions effectively increases motivation and reduces burnout risk in student-athletes (23). These findings were consistent with literature suggesting that female athletes rely more heavily on introspective coping styles and self-appraisal, which may explain the stronger predictive role of these components for this group (22). Nonetheless, not all empirical findings showed consistent benefits. Some earlier work suggested that while emotional appraisal fosters self-knowledge, it may also heighten sensitivity to negative affect, contributing to increased stress under certain conditions (13). Other analyses emphasized that emotional awareness without adequate emotional control could lead to rumination and cognitive overload (14). These contrasting patterns implied that although appraisal and utilization were protective factors, they functioned optimally when paired with regulatory skills, underscoring the complexity of emotional processes in female athletes. The broader implications of these findings emphasized the need for gender-responsive psychological support in athletic contexts.

© 2025 et al. -Health And Research Insights-Open access under CC BY License (Creative Commons). Freely distributable with appropriate citation.

Interventions designed for male athletes may benefit from prioritizing emotional regulation training, particularly techniques that strengthen self-management during performance fluctuations and competitive pressure. For female athletes, programming that integrates emotional appraisal, self-reflection, and constructive emotional utilization may be more impactful. University athletic departments may consider incorporating emotional intelligence-based training modules—such as cognitive evaluation strategies, mindfulness, and compassion-focused techniques—aligned with gender-specific psychological needs to reduce helplessness and foster more adaptive performance behaviors.

This study demonstrated several strengths, including a large sample size, representation across multiple universities, and robust statistical procedures that allowed for gender-specific analyses. The use of established and psychometrically supported scales further strengthened the reliability of the findings. However, several limitations warrant consideration. The cross-sectional design restricted the ability to infer causality, and future longitudinal work may help determine whether enhancing emotional intelligence leads to sustained reductions in learned helplessness over time. The study focused exclusively on team-sport athletes, which limited generalizability, as emotional processes may differ in individual sports where competition dynamics vary considerably. Qualitative research approaches may also enrich the understanding of emotional experiences and provide deeper insight into gender-specific emotional mechanisms that numeric scales cannot fully capture. Additionally, emotional intelligence was assessed using self-report instruments, which may introduce response bias and limit accuracy. Future research would benefit from examining whether similar gender-specific patterns emerge in individual sports or in mixed-method designs that combine numerical and experiential data. Furthermore, intervention-based studies could evaluate whether targeted emotional intelligence training directly reduces learned helplessness and improves psychological resilience across genders. Addressing these areas would expand current knowledge and contribute to more refined and effective athlete mental-skills development programs.

CONCLUSION

This study demonstrated that emotional intelligence plays a gender-specific protective role against learned helplessness in university athletes participating in team sports. Male athletes appeared to rely primarily on their ability to regulate their own emotions to minimize feelings of helplessness, whereas female athletes benefited more from accurately understanding and effectively using their emotional experiences. These findings underscored the importance of integrating tailored psychological training that reflects the distinct emotional needs of male and female athletes. By highlighting how emotional competencies contribute to resilience, well-being, and performance, the study added meaningful evidence to the limited literature on emotional intelligence and learned helplessness in sport settings and emphasized the value of incorporating EI-focused development into university athletic programs.

AUTHOR CONTRIBUTION

Author	Contribution
Memoona Ayub Mughal	Substantial Contribution to study design, analysis, acquisition of Data Manuscript Writing Has given Final Approval of the version to be published
Asif Ali*	Substantial Contribution to study design, acquisition and interpretation of Data Critical Review and Manuscript Writing Has given Final Approval of the version to be published
Muhammad Usama	Substantial Contribution to acquisition and interpretation of Data Has given Final Approval of the version to be published
Chaudhary Ameer Muhammad	Contributed to Data Collection and Analysis Has given Final Approval of the version to be published

© 2025 et al. -Health And Research Insights-Open access under CC BY License (Creative Commons). Freely distributable with appropriate citation.

REFERENCES

1. Cassady JC, Finch WH. Revealing nuanced relationships among cognitive test anxiety, motivation, and self-regulation through curvilinear analyses. Frontiers in Psychology. 2020;11:1141.

2. Mercader-Rubio I, Ángel NG. The importance of emotional intelligence in university athletes: analysis of its relationship with anxiety. International journal of environmental research and public health. 2023;20(5):4224.

3. Jowett S, Wachsmuth S, Boardley I, Balduck A. The role of emotional intelligence and quality relationships in athletes' and coaches' levels of satisfaction: a multi-study analysis. Sports Coaching Review. 2024:1-24.

4. Koenka AC. Academic motivation theories revisited: An interactive dialog between motivation scholars on recent contributions, underexplored issues, and future directions. Contemporary Educational Psychology. 2020;61:101831.

5. Poczwardowski A, Andersen MB, Van Raalte JL, Harwood C, Si G, Tshube T, et al. ISSP position stand: competent supervision in sport psychology. International Journal of Sport and Exercise Psychology. 2023;21(6):931-50.

6. Dweck CS. Personal perspectives on mindsets, motivation, and psychology. Motivation Science. 2024;10(1):1.

7. Zysberg L, Zisberg A. Days of worry: Emotional intelligence and social support mediate worry in the COVID-19 pandemic. Journal of health psychology. 2022;27(2):268-77.

8. Kopp A, Jekauc D. Trait emotional intelligence in competitive sports: are there differences in dimensions of emotional intelligence when comparing different sports? BMC psychology. 2025;13(1):253.

9. Çar B, Kurtoglu A, Eken Ö, Baskonus T, Elkholi SM. Relationship between mental endurance, mental training, and emotional intelligence in elite athletes. Medicine. 2025;104(20):e42526.

10. Zoghlami W, Hawani A, Khiari H, Mnedla S, Marsigliante S, Elloumi A, et al. The relationship between emotional intelligence, anxiety, and performance in physical education and sport students. Frontiers in Psychology. 2023;14:1236070.

11. Solmaz S, Şimşek B, Buğdaycı S, Yarayan YE, Ekin A. The Mediating Role of Emotional States in the Relationship Between Self-Efficacy and Athletic Performance of Young Female Athletes. Gazi Journal of Physical Education and Sport Sciences. 2025;30(1):10-6.

12. Li J, Jiang X, Zhou Y. Culture, emotion, and cognition: Understanding the psychological dynamics of Chinese sports with emotional regulation skills and cognitive reappraisal. Heliyon. 2024;10(14).

13. Robazza C, Morano M, Bortoli L, Ruiz MC. Athletes' basic psychological needs and emotions: the role of cognitive reappraisal. Frontiers in psychology. 2023;14:1205102.

14. Yu C, Xue A, Zeng Z, Wu Q. Effects of emotional intelligence on physical activity engagement and the mediating roles of achievement motivation and interpersonal relationship in Chinese undergraduate students. Frontiers in Public Health. 2024;12:1476150.

15. Mercader-Rubio I, Ángel NG, Silva S, Furtado G, Brito-Costa S. Intrinsic motivation: knowledge, achievement, and experimentation in sports science students—relations with emotional intelligence. Behavioral Sciences. 2023;13(7):589.

16. Shahan MF, Ali A, Rasool M. Assessing emotional intelligence and academic performance among male field hockey varsity student athletes and non-athletes. Journal of Development and Social Sciences. 2023;4(3):371-81.

17. Zhou X, Guo J, Lu G, Chen C, Xie Z, Liu J, et al. Effects of mindfulness-based stress reduction on anxiety symptoms in young people: A systematic review and meta-analysis. Psychiatry research. 2020;289:113002.

18. Kopp A, Reichert M, Jekauc D. Trait and ability emotional intelligence and its impact on sports performance of athletes. Sports. 2021;9(5):60.

19. Sitko S, Francín-Gallego M, Pano-Rodríguez Á, Oviedo-Caro M, Mayolas-Pi C, Legaz-Arrese A. Sport practice and depression during adolescence: Special emphasis on performance level and sport discipline. J Sci Med Sport. 2024;27(11):759-64.

© 2025 et al. -Health And Research Insights-Open access under CC BY License (Creative Commons). Freely distributable with appropriate citation.

20. Mesquita Vieira M, Melo Neves L, Felisberto da Silva PV, Fernandes RA, Leite da Silva Xavier R, Almeida Queiroz Rossi P, et al. Non-modifiable and modifiable factors affecting anxiety and depressive symptoms in young athletes. Phys Sportsmed. 2025;53(4):328-36.

21. Lue C, Petrie TA, Moore EWG. NCAA international student-athletes' psychological wellbeing during COVID-19: Gender and academic year. J Am Coll Health. 2025;73(4):1856-64.

22. Harenberg S, Keenan L, Ingram Y, Wilson S, Vosloo J, Kaye M. Factorial validity and gender invariance of the Patient Health Questionnaire (PHQ-9) in student-athletes. J Am Coll Health. 2025;73(5):1906-12.

23. Xu L, Ji Y, Wen X. Associations of physical activity and sedentary behavior with mental health among university students: the mediating role of cardiorespiratory fitness and moderating role of gender. BMC Public Health. 2025;25(1):3260.

24. Murray RM, Sabiston CM, Doré I, Bélanger M, O'Loughlin JL. Association between pattern of team sport participation from adolescence to young adulthood and mental health. Scand J Med Sci Sports. 2021;31(7):1481-8.

25. Sanfilippo JL, Haralsdottir K, Watson AM. Anxiety and Depression Prevalence in Incoming Division I Collegiate Athletes From 2017 to 2021. Sports Health. 2024;16(5):776-82.

© 2025 et al. -Health And Research Insights-Open access under CC BY License (Creative Commons). Freely distributable with appropriate citation.