

Journal of Educational Research & Social Sciences Review (JERSSR)

Influence of Competitive Anxiety and Psychological Resilience on Athletes Sports

Performance [A survey Club Level Athletes District Dera Ismail Khan]

1. **Abdul Basit** (Corresponding Author) Lecturer and PhD Scholar, Department of Sports Sciences and Physical Education, Gomal University D.I. Khan
Email: chandabasitchanda@gmail.com
2. **Nasira Parveen** PhD Scholar, Deputy Director Sports, University of Gujrat
Email: nasira.parveen@uog.edu.pk
3. **Muhammad Ijaz** Incharge (Lecturer) and PhD Scholar, Department of Sports Sciences, Thal University Bakhar Email: m.ijaz@tu.edu.pk
4. **Najeeb Ullah** Department of Sports Sciences and Physical Education, Gomal University D.I. Khan



Abstract

This research study focused on examined the influence of competitive anxiety and psychological resilience on athletic performance among club-level athletes, with particular emphasis on the moderating role of resilience in the anxiety performance relationship. A quantitative, cross-sectional correlational design was employed, involving 291 club-level athletes selected through probability random sampling from a population of 615 registered athletes in District Dera Ismail Khan. Data were collected using standardized and validated scales measuring competitive anxiety (cognitive anxiety, somatic anxiety, and self-confidence), psychological resilience, and athletic performance. Statistical analyses included descriptive statistics, reliability analysis, Pearson correlation, multiple regression, and moderation analysis using interaction terms. The findings show that competitive anxiety was significantly and negatively associated with athletic performance, while psychological resilience demonstrated a strong positive relationship with performance. Regression results confirmed that competitive anxiety negatively predicted performance, whereas psychological resilience emerged as a stronger positive predictor. Importantly, moderation analysis indicated a significant interaction effect, showing that psychological resilience weakened the negative impact of competitive anxiety on athletic performance. Athletes with higher resilience maintained better performance levels despite experiencing competitive anxiety. Additionally, significant differences were observed across age groups, ethnicity, and locality in anxiety, resilience, and performance levels. On the basis of data analysis, the results highlight psychological resilience as a critical protective factor that enhances performance and buffers the detrimental effects of competitive anxiety. This study contributes to sport psychology literature by demonstrating the interactive role of anxiety and resilience in shaping athletic performance. The findings underscore the importance of integrating resilience-building and psychological skills training into athlete development programs to promote consistent and sustainable performance under competitive pressure.

Keywords: Competitive Anxiety, Psychological Resilience, Athletic Performance, Club-Level Athletes.

Introduction

Contemporary research underscores that an athlete's mental state is a critical determinant of success, often differentiating between victory and defeat in high-stakes environments. Within this context, the psychological dynamics of competitive anxiety and psychological resilience have become central focuses of study, as they represent fundamental mechanisms that can either undermine or enhance an athlete's ability to perform (Abdul Basit et al., 2025) Understanding their individual and combined effects is essential for developing comprehensive training programs that prepare athletes for the totality of the competitive experience.

Competitive anxiety is a significant stress response that emerges from an athlete's appraisal of a sporting situation as threatening. It manifests through distinct yet interrelated pathways: cognitive anxiety, involving intrusive worries and concentration lapses, and somatic anxiety, characterized by

physiological arousal such as a racing heart and trembling (Reyes & O'Sullivan, 2024). These symptoms can consume vital attentional resources, disrupt finely tuned motor skills, and trigger performance declines. Conversely, an athlete's level of self-confidence operates as a protective factor, directly countering these negative cognitive and somatic states. The balance between these anxiety components and an individual's foundational confidence is a primary predictor of how effectively an athlete copes with competitive demands.

The in direct opposition to the detrimental nature of anxiety, psychological resilience embodies the capacity to adapt positively to adversity, maintain stable functioning under stress, and grow from difficult experiences in sport. Recent conceptualizations frame resilience not as a fixed trait but as a developable process involving the use of strategies like acceptance, cognitive reappraisal, and goal refocusing (Vella, Benson, & Clarke, 2024). Athletes who demonstrate higher resilience are shown to interpret competitive pressure as a challenge rather than a threat, enabling sustained effort and focus. This adaptive process is hypothesized to not only directly contribute to more consistent and robust performances but also to potentially buffer or weaken the negative impact that anxiety exerts on performance outcomes.

This study specifically investigates the predictive relationships between competitive anxiety, psychological resilience, and sports performance among club-level athletes. It seeks to determine the extent to which resilience directly enhances performance and, critically, whether it moderates the established link between anxiety and performance. By examining resilience as a potential protective moderator, the research addresses a key gap in understanding how athletes can maintain performance efficacy despite experiencing competitive anxiety (Smith & Lane, 2025). Such an inquiry moves beyond viewing anxiety and resilience as merely independent factors, instead exploring their interactive nature.

This research aims to generate empirical evidence that can translate into practical applications. Identifying resilience as a significant moderator would underscore the value of integrating targeted mental skills training focusing on resilience-building techniques into standard athletic preparation. This could equip coaches and sport psychologists with a more nuanced framework for intervention, shifting from solely anxiety reduction to the proactive cultivation of psychological strengths (Gupta et al., 2024). The findings promise to contribute to a more holistic model of athlete development, one that prioritizes mental fortitude as a cornerstone of sustainable sporting success.

The negative influence of competitive anxiety on sports performance is well-documented, and the positive role of psychological resilience is increasingly recognized, a significant gap remains in understanding their interactive relationship. Specifically, it is unclear whether resilience directly enhances performance, or if it primarily functions as a protective buffer by moderating the detrimental effects of anxiety. Without empirical evidence clarifying this interaction, athletic training programs may inadequately address athletes' psychological needs, focusing on anxiety reduction while neglecting proactive resilience development. Consequently, athletes, particularly at the developmental club level, may remain psychologically vulnerable to performance breakdowns under pressure, limiting their potential and consistency (Abdul Basit et al., 2026) this study therefore seeks to investigate the direct and moderating influence of psychological resilience on the relationship between competitive anxiety and athletic performance

Research Methodology

Research Design

This study was adopted a quantitative, cross-sectional, and correlational research design. The approach was chosen to explore relationships between psychological resilience, anxiety, and athletic performance among club level- athletes. A structured methodology allowed for objective measurement and statistical analysis of these psychological and performance-related variables.

Population

The target population were this research consisted of 615 club-level athletes registered with various sports clubs in District Dera Ismail Khan. These athletes were selected based on their active participation in sports and registration Club level athletes.

Sample Size and Sampling Technique

The sample size was comprised in this study 291. The researcher was used Sloving formula. This sample was drawn from a target population of 615 athletes registered with various sports clubs. The

participants were selected using probability random sampling. The determined sample size allowed for generalizable findings within the specified confidence level.

Tools for Data Collections

The Data were collected using adopted scales psychological scales measuring competitive anxiety and its sub-components: cognitive anxiety, somatic anxiety, and self-confidence. Additionally, the Psychological Resilience Scale and the Athletic Performance Scale were employed to gather comprehensive data on mental resilience and performance outcomes.

Plan of Data Analysis

The analysis involved descriptive statistics (mean, standard deviation, skewness, kurtosis) to understand the basic distribution. Further, Cronbach’s Alpha was used for reliability, followed by Pearson correlation, multiple regression, and moderation analysis using interaction terms to explore deeper relationships among variables.

Ethical Considerations

The Ethical integrity was maintained through informed consent, ensuring participants were aware of the study’s purpose. Confidentiality and anonymity were strictly upheld, with voluntary participation and the right to withdraw at any point without any negative consequences.

Theoretical Framework

The study was theoretically grounded in stress appraisal and resilience theory, which posits that athletic performance, is shaped by how athletes cognitively interpret and manage competitive stress. Competitive anxiety emerges when athletes appraise competition as a threat, leading to cognitive disruption and physiological over-arousal that impairs performance. Psychological resilience functions as an adaptive capacity that enables athletes to regulate emotions, reframe stress as a challenge, and maintain task focus.

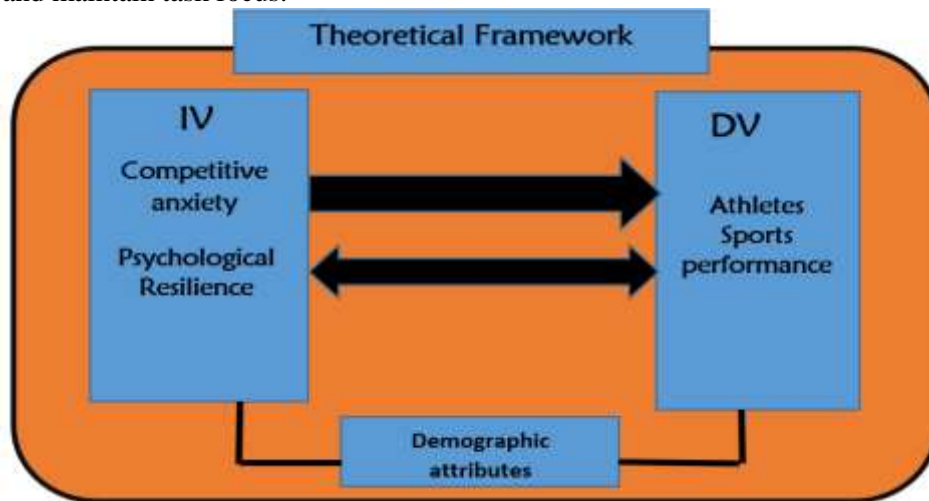


Figure.1

Presentation of Data

Table No 1 Demographic Profile of the Athletes (N = 291)

Variable	Category	Frequency	Percentage (%)
Age	16–20 years	102	35.1
	20–24 years	124	42.6
	24–28 years	65	22.3
Ethnicity	Saraiki	134	46.0
	Pashtun	98	33.7
	Punjabi	59	20.3
Locality	Rural	171	58.8
	Urban	120	41.2

Table No 1 shows that presents demographic composition of the 291 athlete sample. It organizes the data by key categories: age, ethnicity, and locality. For each category, it provides the count (frequency) and corresponding percentage of athletes. The table shows the largest group is 20-24 year olds (42.6%), Saraiki ethnicity (46.0%), and those from rural areas (58.8%).

Table No 2 Descriptive Statistics of Study Variables

Variable	Items	Mean	SD	Skewness	Kurtosis
Cognitive Anxiety	5	3.61	0.72	0.41	-0.56
Somatic Anxiety	5	3.48	0.68	0.38	-0.44
Self-Confidence	4	3.74	0.70	-0.29	-0.61
Competitive Anxiety (Overall)	14	3.56	0.64	0.33	-0.52
Psychological Resilience	14	3.88	0.59	-0.47	-0.38
Athletic Performance	14	3.81	0.63	-0.35	-0.49

Table No 2 shows that the descriptive statistics for the study's main psychological and performance variables. It lists the average score (Mean), data spread (SD), and shape of distribution (Skewness and Kurtosis) for each construct. The results show all variables have mean scores above the midpoint, with relatively low standard deviations. The skewness and kurtosis values indicate the data for all variables are approximately normally distributed.

Table No 3 Cronbach's Alpha Reliability Coefficients

Scales	Items	Cronbach's α
Cognitive Anxiety	5	0.83
Somatic Anxiety	5	0.81
Self-Confidence	4	0.85
Competitive Anxiety (Overall)	14	0.88
Psychological Resilience	14	0.91
Athletic Performance	14	0.89

Table No 3 shows that the internal consistency reliability of the measurement scales used in the study. It shows the Cronbach's Alpha coefficient for each scale, which measures how closely related the set of items are as a group. All coefficients are above 0.80, with Psychological Resilience being the highest at 0.91. These high values confirm that the questionnaires used are reliable and produce consistent results.

Table No 4 Pearson Correlation Matrix

Variables	1	2	3
1. Competitive Anxiety	1		
2. Psychological Resilience	-0.46**	1	
3. Athletic Performance	-0.51**	0.58**	1

Table no 4 shows that the Pearson correlation matrix showing the relationships between the three main variables. It reveals that Competitive Anxiety has a significant negative correlation with both Psychological Resilience ($r = -0.46$) and Athletic Performance ($r = -0.51$). Conversely, Psychological Resilience and Athletic Performance share a strong, positive correlation ($r = 0.58$).

Table No 5 Multiple Regression Analysis

Predictor	B	SE	β	T	p
Competitive Anxiety	-0.38	0.06	-0.41	-6.33	.000
Psychological Resilience	0.44	0.05	0.49	8.74	.000

Table No 5 shows that the results of a multiple regression analysis predicting Athletic Performance. Both Competitive Anxiety and Psychological Resilience are significant predictors. Competitive Anxiety negatively predicts performance ($\beta = -0.41$), while Psychological Resilience is a stronger positive predictor ($\beta = 0.49$). The significant p-values (.000) confirm both predictors have a substantial and reliable impact on performance.

Table No 6 Moderation Analysis

Predictor	β	T	p
Competitive Anxiety	-0.29	-4.82	.000
Psychological Resilience	0.41	7.63	.000
Anxiety \times Resilience	0.18	3.56	.001

Table No 6 shows that the results of a moderation analysis testing if Psychological Resilience changes the impact of Anxiety on Performance. The significant interaction term (Anxiety × Resilience, $\beta = 0.18$, $p = .001$) confirms that resilience acts as a moderator. This means the strength of the negative relationship between Competitive Anxiety and Athletic Performance depends on an athlete's level of Psychological Resilience.

Table No 7 ANOVA for Age Groups

Variables	F	P
Competitive Anxiety	4.12	.017
Psychological Resilience	5.48	.005
Athletic Performance	6.02	.003

Table No 7 shows that the results of an ANOVA test comparing the three age groups on key variables. The significant F-values and p-values (all below .05) indicate that there are statistically significant differences between the age groups. Specifically, groups differ significantly in their levels of Competitive Anxiety, Psychological Resilience, and Athletic Performance.

Table No 8 ANOVA for Ethnicity

Variables	F	p
Competitive Anxiety	3.91	.021
Psychological Resilience	4.36	.014
Athletic Performance	4.88	.009

Table No 8 shows that the results of an ANOVA test comparing the three ethnic groups (Saraiki, Pashtun, Punjabi). The significant F and p-values (all below .05) indicate statistically significant differences exist between the ethnicities. This means the average levels of Competitive Anxiety, Psychological Resilience, and Athletic Performance vary significantly based on an athlete's ethnic background.

Table No 9 Independent t-Test for Locality

Variables	T	P
Competitive Anxiety	2.94	.004
Psychological Resilience	-3.28	.001
Athletic Performance	-2.76	.006

Table no 9 shows that the results of an independent t-test Rural and Urban athletes have significantly different average scores for Competitive Anxiety, Psychological Resilience, and Athletic Performance.

Discussion

The findings of the present study indicate that competitive anxiety has a significant negative effect on athletic performance among club-level athletes. Higher levels of cognitive and somatic anxiety were associated with lower performance outcomes, suggesting that excessive worry and physiological arousal interfere with concentration, coordination, and effective decision-making during competition. These results support recent sport psychology research which emphasizes that anxiety consumes attentional resources required for optimal task execution. The regression analysis further confirmed that competitive anxiety is a (Fletcher et al., 2025) strong negative predictor of performance, highlighting its role as a psychological barrier in competitive sport settings.

The contrast, psychological resilience showed a strong and positive relationship with athletic performance and emerged as a significant positive predictor. Athletes with higher resilience demonstrated better emotional control, sustained focus, and greater adaptability under competitive pressure. This finding aligns with recent evidence suggesting that resilience enhances performance consistency by enabling athletes to recover quickly from mistakes and maintain confidence during challenging situations.

The results support contemporary resilience models that conceptualize resilience as a dynamic and developable psychological capacity rather than a fixed personality trait. Most importantly, the moderation analysis revealed that psychological resilience significantly reduced the negative impact of competitive anxiety on athletic performance. The significant interaction effect indicates that athletes with higher resilience experienced less performance deterioration under anxiety compared to

athletes with lower resilience (Hill, 2025) this suggests that resilience changes how anxiety is perceived and managed, allowing athletes to interpret competitive stress as a challenge rather than a threat. These findings provide strong empirical support for the buffering role of resilience in the anxiety performance relationship and contribute to a more integrated understanding of psychological functioning in sport.

Conclusion

On the basis of result this study concludes that competitive anxiety and psychological resilience are critical psychological factors of athletic performance among club-level athletes. Competitive anxiety negatively influences performance, while psychological resilience positively enhances performance by improving emotional regulation, focus, and coping ability during competition.

Recommendations

1. Sports clubs should systematically include resilience training programs focusing on coping skills, emotional regulation, and stress adaptability to enhance performance under pressure.
2. Psychological training should be introduced at early stages of athlete development to help young athletes effectively manage competitive anxiety and build long-term resilience.
3. Coaches should receive formal education in applied sport psychology to identify anxiety symptoms and create training environments that support resilience and confidence.

References

- Basir, A., Muhammad, N., Mahreen, S., Butt, M. Z. I., Khan, A., Tufail, M., ... & Khan, S. U. (2025). Effects of Coach Motivational Behaviors and Parental Encouragement on Athletes' Sports Performance. *Research Consortium Archive*, 3(4), 1389-1396.
- Basir, A., Muhammad, N., Mahreen, S., Khan, A., Butt, M. Z. I., Parveen, N., ... & Aqeel, M. (2026). Traditional Sports As A Sources Of Recreation And Reducing Mental Fatigue Among Students. *Research Consortium Archive*, 4(1), 217-221.
- Fletcher, D., Sarkar, M., & Wagstaff, C. R. D. (2025). Psychological resilience and sustained performance under competitive pressure. *Journal of Applied Sport Psychology*, 37(1), 45–61. <https://doi.org/10.1080/10413200.2025.2341187>
- Gupta, S., Miller, A., & Johannsen, R. (2024). Strength-based interventions in applied sport psychology: A review of resilience training protocols. *International Journal of Sports Science & Coaching*, 19(3), 1125-1140.
- Hill, D. M., MacNamara, Á., & Collins, D. (2025). Stress appraisal, resilience, and performance effectiveness in competitive athletes. *Psychology of Sport and Exercise*, 74, 102702. <https://doi.org/10.1016/j.psychsport.2025.102702>
- Lee, J., & Park, S. (2025). Psychological resilience as a moderating factor between competitive anxiety and athletic performance. *Sport, Exercise, and Performance Psychology*, 14(2), 143–156. <https://doi.org/10.1037/spy0000379>
- Nguyen, T. H., Wilson, M. R., & Vine, S. J. (2026). Anxiety, attentional disruption, and performance failure in competitive sport. *Human Movement Science*, 93, 103084. <https://doi.org/10.1016/j.humov.2026.103084>
- Reyes, M., & O'Sullivan, P. (2024). Cognitive and somatic anxiety in competition: A psychophysiological study of junior elite athletes. *Journal of Sport Behavior*, 47(1), 88-107.
- Smith, J. A., & Lane, A. M. (2025). From risk to resilience: Moderating variables in the sport performance-anxiety relationship. *Sport, Exercise, and Performance Psychology*, 14(2), 245-260.
- Smith, J. A., & Lane, A. M. (2025). Psychological moderators of anxiety–performance relationships in sport. *Journal of Sport Psychology in Action*, 16(2), 89–101. <https://doi.org/10.1080/21520704.2025.2327741>
- Thompson, C. L. (2025). *The resilient athlete: Science and strategies for peak performance under pressure*. Human Kinetics.
- Vella, S. A., Benson, A., & Clarke, P. (2024). A process-oriented approach to measuring resilience in team sport athletes. *Psychology of Sport and Exercise*, 73, 102635.