ISSN Print: 2664-7559
ISSN Online: 2664-7567
Impact Factor (RJIF): 8.19
IJSHPE 2025; 7(2): 342-347
www.physicaleducationjournal.in
Received: 16-07-2025
Accepted: 17-08-2025

Vijay Bhatt
Research Scholar, Department of Physical Education, Panjab University, Chandigarh, India

Gurmeet Singh
Professor, Department of Physical Education, Panjab University, Chandigarh, India

Corresponding Author:
Vijay Bhatt
Research Scholar, Department of Physical Education, Panjab University, Chandigarh, India

Assessment of competitive anxiety among soccer players with regard to their playing positions and performance

Vijay Bhatt and Gurmeet Singh

DOI: https://doi.org/10.33545/26647559.2025.v7.i2e.269

Abstract
The present study employed a quantitative, cross-sectional research design to examine the variables of competitive anxiety among athletes from various colleges affiliated to Panjab University, Chandigarh and athletes playing for clubs registered with the Chandigarh Football Association (UT). Participants were selected through purposive sampling, and selected participants were briefed in detail about the objectives and protocol of the study. The sample consists of four hundred fifty (N=450) male participants, comprising of one hundred fifty (n1 = 150) defenders, one hundred fifty (n2 = 150) midfielders and one hundred fifty (n3 = 150) forwards, who have participated in the inter college, state and national level tournaments during the session 2024-2025. The age group of the participants ranged between 18 to 25 years. Competitive State Anxiety Inventory-2 (Martens *et al*., 1990) was used for collection of data. Descriptive statistical analysis was used to calculate means and standard deviations of the key variables. Analysis of Variance (ANOVA) was conducted to analyse significant differences in competitive anxiety. Least Significant Differences (LSD) Post-hoc test was applied to find out the direction and degree of difference. 0.05 level of significance was set for testing of hypotheses.

Keywords: Sports competitive anxiety, soccer, ANOVA

Introduction
Soccer is a sport that requires a high level of physical fitness, but alongside physical characteristics such as explosive strength, speed, and endurance, peak performance is also influenced by psychological elements like focus, motivation, confidence and effective management of anxiety. Identifying psychological aspects to prioritize and training them for enhanced performance are significant challenges faced by athletes, coaches, and sports psychologists today. A significant body of knowledge has established a connection between anxiety and effective performance, with some studies suggesting that an experience of anxiety prior to and at the time of the competition indicates an enhanced degree of arousal and heightened apprehension and nervousness. Such a state may also lead to greater errors during the competition, and thus, a poorer performance. Due to the close link between competitive anxiety and performance, this study aims to examine the relationship between performance in soccer and experience of competitive anxiety.

The abilities of athletes in quick sprints, rapid acceleration or deceleration, turning, jumping, kicking, and tackling, alongside the increasing dynamics of direct one-on-one encounters, motor and mental readiness, and the enhancement of technical and tactical abilities, contribute to soccer being recognized as the most popular team sport globally (Bangsbo & Krustrup, 2008) [1]. The sport demands high levels of mental focus and physical fitness. Attributes such as speed, strength, agility, balance, and flexibility are essential for elite soccer players. To improve performance, sports scientists emphasize the importance of training quality over training quantity. In addition to their technical, physiological, and physical development, the psychological advancement of the player is also a focal point (Bradley *et al*., 2009) [2]. To perform at their best in a match, a player must be both mentally and physically prepared. Soccer games involve a combination of technical skills, mental, and physical activity that requires athletes to move in multiple directions (Wallace & Norton, 2014) [3]. In athletics, attributes like physical power, skill level, and strategic insight are often regarded as key indicators of success. However, there is a growing recognition that psychological factors play an equally important, if not greater, role in reaching optimal athletic performance.

Mental components such as management of competitive anxiety are essential in determining how athletes perform under pressure, navigate challenges, and maintain consistency. Recent studies emphasize that achieving athletic excellence requires as much mental strength as physical ability, underscoring how proficiency in psychological skills tend to be a hallmark of distinguished elite athletes.

Competitive Anxiety

Fletcher *et al*. (2006) [11] provides the following definitions of competitive stress related terms, wherein competitive stress is defined as an ongoing transaction between an individual and the environmental demands associated primarily and directly with competitive performance; Competitive stressors are expressed as the environmental demands (i.e., stimuli) associated primarily and directly with competitive performance, Competitive strain is explained as an individual's negative psychological, physical and behavioral responses to competitive stressors, and; Competitive anxiety defined as a specific negative emotional response to competitive stressors. Before or during an athletic performance, competitive anxiety is a negative emotional reaction to pressures related to a competitive environment (Mellalieu *et al*., 2006) [11]. It is characterized by somatic (such as limb tremor) and cognitive (such as negative thoughts about performance) symptoms. Excessive anxiety can impair decision-making, focus, and physical coordination, which can hinder performance (Hanton *et al*., 2021) [4]. Research indicates that methods including cognitive restructuring, mindfulness, and relaxation training can successfully lower competition anxiety and improve performance (Birrer *et al*., 2020) [5]. The groundbreaking research on competitive anxiety by Martens *et al*. (1990) [6] has shed a significant deal of light on the impact of competitive anxiety on athletic performance. The usefulness of psychological therapies in lowering competitive anxiety has been investigated in recent research by Hanton *et al*. (2021) [7] and Birrer *et al*. (2020) [5]. Neil *et al*. (2021) [4] looked into how common competitive anxiety is among soccer players and how it affects their play. According to Hanin *et al*. (2004)'s [8]. Individual Zone of Optimal Functioning (IZOF) theory, athletes perform at their best when their anxiety levels are kept within a particular range. The results of this study indicate that each athlete has a different ideal anxiety zone. Excessively high or low anxiety levels are likely to have a negative impact on an athlete's performance. Coaches and sports psychologists can create customized techniques that help athletes perform at their best by determining each athlete's distinct anxiety zone.

Objectives of the Study

- To assess the significant differences in sports competitive anxiety, among male soccer players with regard to their playing positions (forwards, midfielders, and defenders).
- To assess the significant differences in sports competitive anxiety, male soccer players with regard to their performance (intercollege level, state level, and national level).

Hypotheses

1. There would be no significant difference in sports competitive anxiety among male soccer players with regard to their playing positions (forwards, midfielders, and defenders).
2. There would be no significant difference in sports competitive anxiety among male soccer players with regards to their performance (intercollege level, state level, and national level).

Methodology

The present study employed a quantitative, cross-sectional research design to examine the variable of competitive anxiety among soccer players studying in various colleges affiliated to Panjab University, Chandigarh and playing for clubs affiliated to Chandigarh Football Association (UT). Participants were selected through purposive sampling, selected participants were briefed in detail about the objectives and protocol of the study, thereafter the participants gave their consent and volunteered to participate in this study. The sample consists of four hundred fifty (N=450) male participants, consisting of one hundred fifty (n1 = 150) defenders, one hundred fifty (n2 = 150) midfielders and one hundred fifty (n3 = 150) Forwards, who have participated in the inter college, state and national level tournaments during the session 2024-2025. The age group of the participants ranged between 18 to 25 years. Competitive State Anxiety Inventory-2 (Martens *et al*., 1990) [6] was used for collection of data. Descriptive statistical analysis was used to calculate means and standard deviations of the key variables. Analysis of Variance (ANOVA) was conducted to analyse significant differences in competitive anxiety. LSD Post Hoc test was applied to find out the direction and degree of difference. 0.05 level of significance was set for testing of hypotheses.

Results

Table 1: Descriptive Statistics of Soccer Players as per Playing Position (Defender, Midfielder and Forwards)

Descriptive Statistics				
Playing Position		**Somatic Anxiety**	**Cognitive Anxiety**	**Self Confidence**
Defender	Mean	16.93	20.22	26.67
	N	150	150	150
	Std. Deviation	4.757	5.203	5.523
Midfielder	Mean	17.32	20.02	26.09
	N	150	150	150
	Std. Deviation	4.904	5.231	6.085
Striker	Mean	16.65	20.43	26.71
	N	150	150	150
	Std. Deviation	5.434	4.822	5.117
Total	Mean	16.96	20.22	26.49
	N	450	450	450
	Std. Deviation	5.036	5.08	5.584

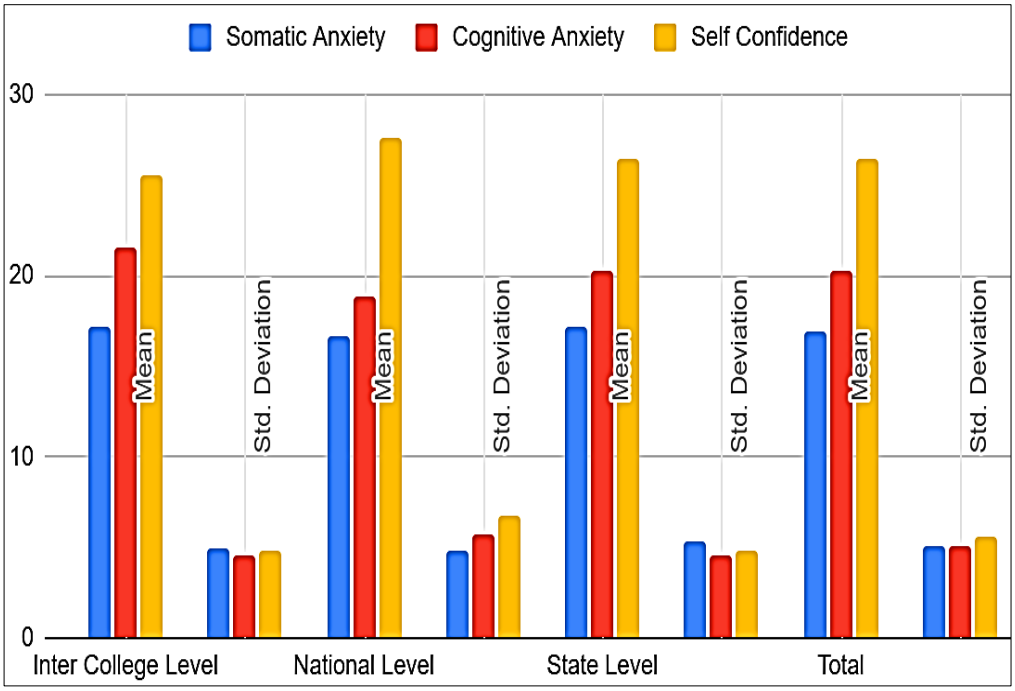

Fig 1: Descriptive Statistics of Soccer Players as per Playing Position (Defender, Midfielder and Forwards)

Table 2: One Way Analysis of Variance (ANOVA) Table of Soccer Players as per Playing Positions (Defender, Midfielder and Forwards)

ANOVA						
		Sum of Squares	**df**	**Mean Square**	**F**	**Sig.**
Somatic Anxiety	Between Groups	34.324	2	17.162	0.676	0.509
	Within Groups	11355.107	447	25.403		
	Total	11389.431	449			
Cognitive Anxiety	Between Groups	12.404	2	6.202	0.24	0.787
	Within Groups	11575.373	447	25.896		
	Total	11587.778	449			
Self Confidence	Between Groups	35.324	2	17.662	0.565	0.569
	Within Groups	13963.12	447	31.237		
	Total	13998.444	449			

By evaluating the constructs of competitive anxiety and associated self-confidence, the current study sought to determine psychological variations in competitive anxiety among male soccer players according to their playing positions—forwards, midfielders, and defenders. One-way ANOVA alongside descriptive statistics was utilized to understand better how these variables tend to differ with respect to playing positions of the soccer players.

Significant group-level differences were not observed with respect to playing positions in the somatic anxiety and cognitive anxiety components of competitive anxiety, as well as self confidence. These findings suggest that playing position tend to not be associated with distinct psychological characteristics

Table 3: Descriptive Statistics of Soccer Players as per Level of Performance (Inter College, State, National Levels)

Descriptive Statistics				
Participation		**Somatic Anxiety**	**Cognitive Anxiety**	**Self Confidence**
Inter College Level	Mean	17.17	21.51	25.47
	N	150	150	150
	Std. Deviation	4.968	4.517	4.79
National Level	Mean	16.61	18.89	27.55
	N	150	150	150
	Std. Deviation	4.853	5.734	6.71
State Level	Mean	17.12	20.27	26.45
	N	150	150	150
	Std. Deviation	5.293	4.586	4.876
Total	Mean	16.96	20.22	26.49
	N	450	450	450
	Std. Deviation	5.036	5.08	5.584

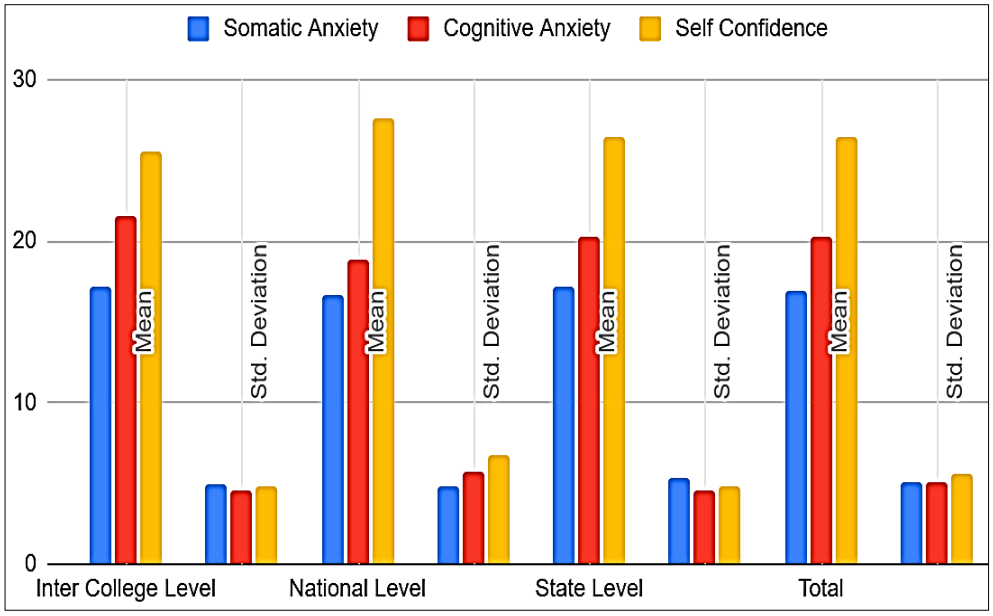

Fig 2: Descriptive Statistics of Soccer Players as per Level of Performance (Inter College, State, National Levels)

Table 4: One Way Analysis of Variance (ANOVA) Table of Soccer Players as per Level of Performance (Inter College, State, National Levels)

ANOVA						
		Sum of Squares	**df**	**Mean Square**	**F**	**Sig.**
Somatic Anxiety	Between Groups	28.964	2	14.482	0.57	0.566
	Within Groups	11360.467	447	25.415		
	Total	11389.431	449			
Cognitive Anxiety	Between Groups	515.418	2	257.709	10.404	0
	Within Groups	11072.36	447	24.77		
	Total	11587.778	449			
Self Confidence	Between Groups	326.964	2	163.482	5.345	0.005
	Within Groups	13671.48	447	30.585		
	Total	13998.444	449			

Additionally, the present study aimed to examine psychological variables across soccer players at three competitive levels: Inter College, State, and National. The ANOVA results revealed statistically significant differences among the three groups, which are Inter College, State, and National players. Notably Cognitive Anxiety and Self-Confidence highly significant differences ($p < 0.05$), indicating that the psychological attributes of players improve with increased levels of play. Self-confidence was significantly elevated in National players (M = 27.55) compared to Inter College (M = 25.47) and State players (M = 26.45), demonstrating the combined influence of psychological conditioning, skill development, and recurrent achievement. Further, highly significant difference ($p < 0.05$) was also observed with respect to the experience of cognitive anxiety, with National level soccer players experiencing the least degree of cognitive anxiety (M=16.61), followed by State level soccer players (M=17.12) and Inter College level players experiencing the highest degree of cognitive anxiety (M=17.17) The post-hoc test of Least Significant Differences was used to determine the extent and direction of the difference in paired means of the psychological variables competitive anxiety with respect to the playing positions of forwards, defenders, and midfielders and the performance levels of intercollegiate, state, and national athletes. The test results are displayed in Tables 5 and 6.

Table 5: Analysis of Least Significant Difference (LSD) Post-hoc Test for Soccer Players as per Playing Position (Defender, Midfielder and Forwards)

Least Significant Difference				
Dependent Variable	**(I) PlayingPos**	**(J) PlayingPos**	**Mean Difference (I-J)**	**Sig.**
Somatic Anxiety	Defender	Midfielder	-0.393	0.499
		Striker	0.28	0.631
	Midfielder	Defender	0.393	0.499
		Striker	0.673	0.248
	Striker	Defender	-0.28	0.631
		Midfielder	-0.673	0.248
Cognitive Anxiety	Defender	Midfielder	0.2	0.734
		Striker	-0.207	0.725
	Midfielder	Defender	-0.2	0.734
		Striker	-0.407	0.489
	Striker	Defender	0.207	0.725

		Midfielder	0.407	0.489
Self Confidence	Defender	Midfielder	0.573	0.375
		Striker	-0.04	0.951
	Midfielder	Defender	-0.573	0.375
		Striker	-0.613	0.342
	Striker	Defender	0.04	0.951
		Midfielder	0.613	0.342

Table 5 suggests that with respect to playing positions, the soccer players tend to not express any significant difference in the experience of somatic anxiety, cognitive anxiety and self-confidence.

Table 6: Analysis of Least Significant Difference (LSD) Post-hoc Test for Soccer Players as per Level of Performance (Inter College, State and National Level)

Least Significant Difference				
Dependent Variable	**(I) Level of Performance**	**(J) Level of Performance**	**Mean Difference (I-J)**	**Sig.**
SomAnx	Inter College	National	0.56	0.337
		State	0.047	0.936
	National	Inter College	-0.56	0.337
		State	-0.513	0.378
	State	Inter College	-0.047	0.936
		National	0.513	0.378
CogAnx	Inter College	National	2.620*	0
		State	1.233*	0.032
	National	Inter College	-2.620*	0
		State	-1.387*	0.016
	State	Inter College	-1.233*	0.032
		National	1.387*	0.016
SelfConf	Inter College	National	-2.087*	0.001
		State	-0.98	0.126
	National	Inter College	2.087*	0.001
		State	1.107	0.084
	State	Inter College	0.98	0.126
		National	-1.107	0.084

Table 6 suggests that the National level soccer players significantly experience reduced cognitive anxiety and enhanced self-confidence as compared to their state level and inter-college level counterparts.

Discussion of Findings

The present study provides critical insights into the psychological profiles of soccer players by examining competitive anxiety across both playing positions (Defender, Midfielder, Forwards) and competitive levels (Inter College, State, National). The results collectively highlight how the unique demands of specific roles on the field and differing levels of competitive experience influence psychological preparedness and resilience in soccer.

A pattern emerged from the analysis by competitive level (Inter College, State, and National) wherein psychological strengths rose in alongside with level of participation. As the level of competitiveness increased, self-confidence also improved statistically significantly. Players at the national level consistently performed better than the state and inter college level soccer players, indicating that long-term exposure to high-stakes competitions and elite training settings strengthens psychological profiles that reflect the cumulative effects of professional coaching, competitive experience, psychological treatments, and personal development. This suggests that elite athletes are more sensitive to winning in competition, perhaps as a result of the demands and performance criteria related to national representation. The combination of these results suggests that experience at higher levels of competition (i.e., national representation) correlates with improved psychological skills that allow them to better manage anxiety. These findings also reject the null hypothesis that there would be no significant difference in sports competitive anxiety among male soccer players with regard to their performance (intercollege level, state level, and national level). The higher self-confidence scores of national-level athletes are a reflection of the psychological pressures and subsequent growth brought about by exposure to demanding training conditions, more competitive events, and sports psychology resources. Inter College athletes, on the other hand, routinely reported lower results on the majority of psychological variables, suggesting a possible developmental lag in these crucial characteristics. Structured psychological therapies targeted at enhancing attention, resilience, and confidence—skills essential for advancement to higher competitive levels—may be quite beneficial for these athletes.

Conclusion

These findings support the growing emphasis in sports psychology on individualized mental training, where interventions are tailored not only to the athlete's level of expertise but also to their functional role within a team. The data suggest that better management of competitive anxiety, and development of self-confidence is both a result of and a contributor to competitive success. Coaches, psychologists, and support teams should take a targeted approach-focusing on developing confidence and managing anxiety where necessary. The role of psychological support is highlighted in this study, indicating a need for providing psychological support to athletes across all levels of participation. Such support will play a beneficial role in strengthening the athlete

mentally and enabling him to have a longer and healthier playing career.

References

1. Bangsbo J, Krustrup P. Physical demands of soccer. In: Williams BA, Reilly M, editors. *Science and soccer*. 2nd ed. London: Routledge; 2008. p. 72-84.
2. Bradley PS, *et al*. The role of physical preparation in soccer performance. *J Sports Sci*. 2009;27(6):599-606.
3. Wallace J, Norton K. Soccer and the science of performance. *J Strength Cond Res*. 2014;28(3):249-57.
4. Hanton S, Neil R, Mellalieu SD. *Competitive anxiety in sport: A review of theory, research, and practice*. London: Routledge; 2021.
5. Birrer D, Röthlin P, Morgan G. Mindfulness to enhance athletic performance: Theoretical considerations and possible impact mechanisms. *Mindfulness*. 2020;11(2):327-40. DOI:10.1007/s12671-019-01263-0
6. Martens R, Vealey RS, Burton D. *Competitive anxiety in sport*. Champaign: Human Kinetics; 1990.
7. Neil R, Hanton S, Mellalieu SD. Competition anxiety in soccer: A review of theory and research. *J Appl Sport Psychol*. 2021;33(1):1-20. DOI:10.1080/10413200.2020.1838100
8. Ruiz MC, Raglin JS, Hanin YL. The individual zones of optimal functioning (IZOF) model (1978-2014): Historical overview of its development and use. *Int J Sport Exerc Psychol*. 2017;15(1):41-63. DOI:10.1080/1612197X.2015.1041545
9. Radochoński M, Cynarski W, Perenc L, Siorek-Maślanka L. Competitive anxiety and coping strategies in young martial arts and track and field athletes. *J Hum Kinet*. 2011;27:183-92. DOI:10.2478/v10078-011-0014-0
10. Cox RH. *Sport psychology: Concepts and applications*. 2nd ed. New York: McGraw-Hill; 1980.
11. Mellalieu SD, Hanton S, Fletcher D. A competitive anxiety review: Recent directions in sport psychology research. *Literature Reviews in Sport Psychology*. 2006;1:1-45.