

# GENDER-NEUTRAL ASSESSMENT OF SPORTS ANXIETY: A COMPARATIVE STUDY ON BADMINTON AND TENNIS ATHLETES

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## Abstract

The objective of this research was to evaluate sports-related anxiety among athletes, with a focus on gender disparities and the specific sports discipline practiced. A sample of 100 participants, chosen based on their representation at the national level in tennis and badminton, was utilized. Anxiety levels were measured using the Sports Competition Anxiety Test (SCAT) questionnaire. Independent t-tests were employed to compare anxiety levels between male and female athletes in their respective sports, with a significance level set at 0.05. The analysis revealed that females exhibited higher anxiety levels compared to males, confirming their greater susceptibility to anxiety. The study identified that the utilization of thought control strategies and metacognitive beliefs among female athletes contributes to their vulnerability to emotional and neurotic challenges. Consequently, it is imperative for female athletes to adopt alternative coping strategies for managing difficult situations. The research proposes that female athletes could benefit from learning techniques to address metacognitive worries. Furthermore, modifying negative and positive metacognitive beliefs related to worry holds potential for enhancing mental well-being. In summary, this study provides empirical evidence of heightened anxiety levels among female athletes compared to their male counterparts. It underscores the importance of addressing mental health issues among female athletes and stresses the necessity of imparting effective anxiety management strategies. By fostering the development of adaptive metacognitive skills and adjusting their beliefs regarding worry, female athletes can bolster their psychological resilience and overall mental health.

**Keywords:** Anxiety, Badminton, Tennis, Mental health, Sports

## Introduction

Sports Competition Anxiety stands as a pivotal psychological construct within the realm of Human Emotion Psychology, recognized for its profound impact on elite athletes' performance (Sharma, A., & Purashwani, P. 2021). Rooted in the intricate landscape of human emotion, anxiety serves as a complex phenomenon that intrigues our understanding of pleasure, sorrow, dread, and the underlying motivations guiding our behaviors (Arya et al.,

2023). As individuals navigate through life at varying paces, the quest to unravel the intricacies of human nature, experience, and behavior sparks numerous inquiries, with anxiety research serving as a conduit for providing logical insights into these queries.

Sports anxiety emerges as a specialized sub-discipline within psychology, meticulously examining the anxiety experienced by athletes and participants immersed in competitive sports settings (Arya et al., 2023). Operating within the crucible of high-stakes athletic performance, athletes grapple with the daunting task of delivering their best amidst pressure-laden environments synonymous with competitive sports. This competitive milieu, rife with stressors, can precipitate a myriad of psychological challenges, with anxiety emerging as a prominent hazard capable of exerting profound effects on an athlete's physiological, psychological, and behavioral performance (Sharma & Prasad, 2023). Amidst an estimated 52 million children engaging in sports, the practice yields multifaceted benefits encompassing cardiovascular health enhancement, bolstered self-esteem, and heightened bodily well-being (Iwuagwu et al., 2021). However, the inherent competitiveness inherent to sports often catalyzes anxiety and fear among players, underscoring the pivotal role of anxiety management in dictating performance outcomes. Characterized by a spectrum of negative emotional states spanning anxiety, tension, concern, and physiological arousal, anxiety's impact on performance can be nuanced, occasionally enhancing performance yet more often yielding deleterious effects (Iwuagwu et al., 2021). Hence, the principal aim of this study was to scrutinize the anxiety profiles of badminton and tennis athletes vis-à-vis their gender and sporting discipline through rigorous statistical analysis, thereby shedding light on their anxiety levels and facilitating tailored interventions aimed at optimizing performance outcomes.

## Methodology

### *Selection of the subjects*

In order to fulfill the objectives of the study, a total of 100 participants were carefully selected from the prestigious Lakshmi Bai National Institute of Physical Education (LNPE) in Gwalior, Madhya Pradesh. The participants consisted of 50 state-level tennis players, including 25 males and 25 females, as well as 50 state-level badminton players, again with 25 males and 25 females. The selection of these individuals was done with great attention to ensure a diverse and representative sample. The age range of the participants was set between 18 and 25 years, ensuring a relatively homogeneous group in terms of age. By including both male and female participants from both sports, we aimed to capture a broad perspective and account for potential gender-based differences in the study's findings. Additionally, focusing on state-level athletes ensured a certain level of expertise and proficiency in their respective sports, making them suitable candidates for the study.

### *Procedure*

The Sports Competition Anxiety Test (SCAT) was the instrument utilised for the study's goal of examining sports anxiety. The subjects had given their response to 15 statements of the questionnaire related to trait anxiety. The test monitored the Sports Competition Anxiety of

the athletes for their respective sport. There was no time limit provided for the response and instructions were clearly given before filling the questionnaire.

#### Statistical Technique

First, normality assumption of data was checked by kolmogorov Smirnov (Das & Jhajharia, 2022b) and Shapiro-Wilk test (Das et al., 2023). The assumptions of normality were not violated, thus parametric test was implemented (Das & Jhajharia, 2022a), to compare between games and gender independent 't' test was applied with the help of SPSS Version 26.

## Result

**Table 1 General Characteristics of the subjects**

Game	Gender	N	Age (Mean±SD)
Tennis	Male	25	20±4.2
	Female	25	19±3.5
Badminton	Male	25	21±2.2
	Female	25	20±1.2

Table 1 represent the general characteristics of the subjects and this table revealed the mean and standard deviation of age.

**Table 2 Mean Comparison of Anxiety of male and female (independent t-test)**

Game	Gender	N	Mean	SD	Sig
Tennis	Male	25	21.53	4.54	0.04
	Female	25	24.73	3.11	
Badminton	Male	25	22.02	4.10	0.03
	Female	25	25.22	2.23	

Table 2 represent the mean difference of anxiety between male and female in their respective games and this table revealed that there was significant difference between male and female as the p-value is less than 0.05.

**Table 3 Mean Comparison of Anxiety of tennis and badminton Players (Independent t-test)**

Game	Gender	N	Mean	SD	Sig
Tennis	Male	25	21.53	4.54	0.07
Badminton	Male	25	22.02	4.10	
Tennis	Female	25	24.73	3.11	0.06
Badminton	Female	25	25.22	2.23	

Table 3 represent the mean difference of anxiety between their respective games, and this table revealed that there was no significant difference between tennis and badminton games as the p-value is greater than 0.05.

## Discussion

The outcomes gleaned from the meticulous statistical scrutiny unveiled a salient revelation: females manifest a heightened prevalence of anxiety-related issues in comparison to their male counterparts. Intriguingly, no discernible disparity emerged between tennis and badminton players regarding their anxiety levels. Consequently, it behooves coaches, physical educationists, and sports trainers to accord paramount importance to the mental well-being of female athletes (Bahrami & Yousefi, 2011; Schaller et al., 2016). Furthermore, a corpus of antecedent studies consistently corroborates these findings, underscoring the overarching trend of elevated anxiety levels among females vis-à-vis males (Bahrami & Yousefi, 2011; Schaller et al., 2016). This underscores the imperative of proactively addressing and managing anxiety-related apprehensions prevalent among female athletes. With regards to the typology of sports, a conspicuous trend emerged wherein athletes engaged in individual sports evinced significantly elevated levels of general sport anxiety. These findings resonate with antecedent research, which uniformly elucidates that athletes partaking in individual sports are predisposed to heightened susceptibility to competitive anxiety relative to their counterparts in team sports (Kirkby & Liu, 1999; Ramis et al., 2015). This propensity could be ascribed to the singular burden borne by individual athletes in realizing desired outcomes, thereby exacerbating symptoms of anxiety. However, an intriguing incongruity surfaced in the realm of the worry subscale, wherein team sports athletes exhibited markedly heightened levels of worry in comparison to their counterparts in individual sports. This intriguing finding posits that athletes engaged in team sports grapple with augmented levels of worry vis-à-vis their counterparts in individual sports (Turman, 2003). The quest for optimal performance in team sports is inexorably intertwined with the pursuit of acceptance and validation from team members, thus fostering a milieu conducive to positive interpersonal relationships. Moreover, the incessant scrutiny and evaluation perpetuated by team members, spectators, parents, and coaches alike further accentuates the manifold pressures besetting athletes, thereby engendering a fertile breeding ground for anxiety, particularly in the form of worry.

## Conclusion

The study's findings underscore a discernible gender disparity, elucidating a heightened susceptibility to anxiety among females relative to their male counterparts. This pronounced vulnerability is intricately linked to the cognitive mechanisms employed by females, particularly in the realm of thought control strategies and metacognitive beliefs, which invariably precipitate emotional and neurotic tribulations. Consequently, there exists an imperative to instigate interventions aimed at furnishing females with alternative cognitive frameworks tailored to navigating threatening scenarios adeptly. Drawing upon the insights gleaned from this inquiry, it is tenable to posit that females stand to accrue substantial benefits from acquiring proficiency in efficacious techniques conducive to managing their metacognitive worries. Moreover, a judicious endeavour to recalibrate their metacognitive beliefs pertaining to worry, both negative and positive, holds promise for nurturing enhanced mental well-being among females.

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