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Competitive Sports Anxiety among Nepalese National Athletes: Differences by Gender, Sport Type, and Sporting Disciplines

Diwakar Lal Amatya[1], Rocky Maharjan[2*], Kumari Hira Pant[3], Shreeram Bhandari[1], & Chandan Koju[1]

[1] National Association for Sports Health and Fitness Nepal, Kathmandu, Nepal
[2] Mangal Multiple Campus, Kirtipur, Kathmandu, Nepal ORCID: 0000-0002-0758-2926
[3] Sports Science Academy of Nepal, Kathmandu, Nepal
*Corresponding Author: rockymaharjan222@gmail.com

Abstract

Sport psychology focuses on the influence of competitive anxiety on performance, despite a paucity of work with athletes in Nepal. The prevalent patterns of sports competition anxiety based on gender, sports type and sporting disciplines are examined in this study. The sample consisted of 496 athletes (281 males and 215 females) who participated in 21 events from the 9th National Games in Pokhara. Competitive anxiety was measured using the Sports Competition Anxiety Test (SCAT). Nonparametric statistical techniques were used as the anxiety scores violated normality assumptions. A Mann–Whitney U test indicated male and female athletes did not show statistically significant differences in anxiety ($U = 29701.50$, $p = .749$, $r = 0.014$). However, athletes competing in individual sports reported significantly higher anxiety than compared to team events ($U = 25813$, $p = .002$, $r = 0.14$). A Kruskal–Wallis test revealed significant differences in anxiety across the 21 sports examined ($H = 134.87$, $p < .001$, $\eta^2 = .27$). Kabaddi, Kho-Kho and Archery athletes had the highest anxiety levels, while Football, Rugby and Volleyball athletes had the lowest ones. This implies that competitive anxiety in the athletes of Nepal is more affected not by gender but by sport type and sport-specific demands. The findings emphasize the requirement for targeted psychological assistance, especially for individual and precision-based sportsmen.

Keywords: Competitive sports anxiety, gender differences, individual sports, Nepalese athletes, sport type, team sports

Introduction

Anxiety is an unusual psychological state resulted due to worry about an outcome of a specific task performance in future. It is unpleasant state of mind that is resulted due to perceived stress while attempting a task under pressure. Relating to sports context- hence – anxiety is a common emotional experience by athletes at all stages of competition (Ford et al., 2017). Mellalieu et al. (2006) defines, 'competition sports anxiety related to competition or competition-related situations'. Due to its strong influence on athletic performance, competitive anxiety remains a major area of study in sports psychology research, which has been, yet, not duly lensed. As, anxiety is common emotion among athletes, its intensity varies according to competition level and psychological

preparedness. In addition, sports anxiety can undermine athletes' ability to perform skills effectively, both cognitively (e.g., worry, doubt) and somatically (e.g., physiological arousal, muscle tension) (Martens et al., 1990), it is significant to identify the tendency so as to develop strategies to cope with it.

In many contexts, including Nepal, structured psychological support for athletes remains limited, increasing the risk of elevated anxiety that can disrupt concentration, confidence, and performance (Rice et al., 2016). This issue is particularly relevant in Nepal, where sports infrastructure, professional coaching systems, and access to psychological services are still developing. Nepalese athletes often face multiple stressors such as limited training facilities, financial hardship, cultural pressure, and restricted access to mental health professionals, all of which may contribute to heightened psychological stress (Sangroula, 2022). Managing competitive anxiety is therefore not only important for individual athletic development but also for national representation and performance in international sports arenas.

Cultural and social stigma surrounding mental health in Nepal has further discouraged open discussion of performance anxiety and limited athletes' willingness to seek psychological support (Gurung et al., 2022). Psychological conditioning is often neglected in athlete training programs, with greater emphasis placed on physical skill development, despite the recognized importance of emotional regulation, resilience, and cognitive readiness for optimal performance (Park & Jeon, 2023). As a result, many Nepalese athletes enter regional and international competitions with little psychological preparation, which may increase anxiety when competing in unfamiliar or high-pressure environments (Acharya, 2025).

Although research has shown that a substantial proportion of competitive athletes' experience performance anxiety globally, Nepal-specific evidence remains limited. Some studies have examined anxiety among Nepalese athletes in particular contexts, such as football and traditional sports, indicating that anxiety levels vary across competition phases and situational demands (Bhattarai et al., 2021; Lal, 2014). However, empirical research examining competitive anxiety across gender, sport type (individual versus team), and different sporting disciplines within Nepal remains scarce.

Therefore, the present study aims to investigate competitive anxiety among Nepalese athletes by considering gender, sport type, and specific sports. By addressing these variables, the study seeks to contribute context-specific evidence that can inform coaching practices, athlete training programs, and sports policy development in Nepal, while also supporting the holistic development of athletes across different levels of competition.

Methods

This study is a cross-sectional, descriptive and quantitative study. This study was conducted among athletes participating in the 9th National Games held from June 5 to 11,

2022 in Pokhara, located in the Gandaki Province. The population for this study comprised 6,102 athletes participating across 36 sports events organized into 11 teams. The questionnaires were distributed to 544 athletes. A total of 496 complete questionnaires were received from athletes participating in 21 events. Among the respondents, 281 were male athletes representing 17 events, and 215 were female athletes representing 14 events. Sports events were selected using simple random sampling to ensure each event had an equal chance of inclusion. However, the selection of individual athlete participants was conducted through convenience sampling, based on their availability and willingness to participate during the data collection period.

Sport competition anxiety was measured by using the Sports Competition Anxiety Test (SCAT) developed by Martens (1977). The SCAT is a self-report questionnaire consisting of 10 statements related to competitive anxiety feelings. With the consent of the National Sports Council, data was collected on-site during the 9th National Games in Pokhara. Prior to distributing the SCAT questionnaire, the purpose of the study was explained to each potential participant and clear instructions on how to complete the questionnaire. Participation was voluntary, confidentiality was ensured, and no personal identifiers were collected. Athletes who provided consent were selected. Selected participants then completed the SCAT questionnaire independently. The data was analyzed in SPSS 25.

Results and Discussion

The normality of Anxiety Scores was examined using the Kolmogorov–Smirnov and Shapiro–Wilk tests. Both tests were found significant, Kolmogorov–Smirnov $D(496) = .09$, $p < .001$, and Shapiro–Wilk $W(496) = .97$, $p < .001$. The distribution, therefore, deviated from normality, and nonparametric tests were used for subsequent analyses. The Mann-Whitney Test was conducted to compare anxiety scores between genders (male and female) and sports types (individual and team), and the Kruskal–Wallis Test was conducted to determine if there were differences in competitive sports anxiety across the 21 sports. The analysis was organized according to gender, types of sport, and individual sports.

Sports Anxiety and Gender

A Mann-Whitney U test was conducted to compare anxiety scores between male athletes ($n_1 = 281$) and female athletes ($n_2 = 215$).

Table 1: Mann–Whitney U Test Comparing Sports Anxiety Scores by Gender

		N	Mean	U	Z	*p*	*r*
Gender	Male	281	18.09	29701.500	-.321	.749	0.014
	Female	215	17.86				

The mean anxiety scores between male and female athletes were 18.09 and 17.86, respectively. Results of the U test indicate no difference in anxiety scores between male

and female athletes, U = 29701.500, p = .749, effect size r = 0.014. Its effect size was negligible (0.014).

The current study demonstrated no significant difference in competitive sports anxiety scores for males and females and is consistent with other research which found comparable anxiety scores between genders. Reports by (Ríos et al., 2024; Qasim & Khan 2024) also found no significant gender differences in competitive anxiety – the gender may not affect the level of anxiety in athletes. But other studies have shown opposite trends. Whereas Kushwaha & Tyagi (2023) discovered that females experienced more sports anxiety compared to males, Amjad & Irshad (2025) concluded that male athletes experience more competition anxiety than female athletes.

These findings taken on their own together demonstrate that the findings of gender differences in sport anxiety are often mixed in strength and could be attributed to differences in culture and sample characteristics, sport type, and measurement equipment across studies.

Sports Anxiety and Sport Types

A Mann-Whitney U test was conducted to compare anxiety scores between individual sports athletes (n_1= 259) and team sports athletes (n_2 = 237).

Table 2: Mann–Whitney U Test Comparing Sports Anxiety Scores by Sports types

		N	Mean	U	Z	*p*	*r*
Sport type	Individual	259	18.59	25813	-3.06	.002	0.14
	Team	237	17.33				

Table 2 indicates that the mean anxiety scores for individual sports and team sports athletes were 18.59 and 17.33. The U test showed a significant difference in anxiety difference for individual and team sport athletes, U = 25813, p = .002, r = 0.14. The size of effect was small (0.14) (Cohen,1992). This current manuscript found a noteworthy difference of anxiety scores between athletes in both individual and team sports as individual-sport athletes scored more on anxiety.

This finding is supported by previous research showing that athletes in individual sports tend to experience higher levels of competitive anxiety than those in team sports (Kemarat et al., 2022; Ariffin et al., 2025). Such differences are often explained by the solitary nature of individual sports, where performance pressure rests primarily on the athlete. Rosli et al. (2022) found no individual and team sports differences in anxiety symptoms, despite differences in other mental health indicators. These mixed findings suggest that anxiety in sport may vary depending on the specific dimension of anxiety measured, the competitive context, and broader environmental conditions.

Sports Anxiety and Sporting Disciplines

A Kruskal-Wallis H test was conducted to determine if there were differences in competitive sports anxiety across the 21 sports.

Table 3: Kruskal–Wallis Test for Anxiety Scores across Sports

Sports	N	Mean Rank	H	*df*	*P*	η^2
Archery	4	405.00				
Kabaddi	15	400.37				
Kho-Kho	12	393.21				
Soft Tennis	6	371.75				
Tennis	7	361.36				
Cricket	10	358.30				
Wushu	27	352.57				
Badminton	6	332.83				
Handball	20	326.03	134.87	20	.000	.27
Basketball	16	309.88				
Taekwondo	41	276.12				
Wrestling	6	266.25				
Karate	49	263.74				
Gymnastics	13	254.08				
Table Tennis	4	246.63				
Athletics	55	226.70				
Boxing	32	219.84				
Volleyball	83	202.34				
Squash	9	189.83				
Rugby	21	159.00				
Football	60	134.96				
Overall Test	496					

As shown in Table 3, the difference in anxiety across sport types was statistically significant, $\chi^2(20, N = 496) = 134.87$, $p < .001$. The effect size ($\eta^2 = .27$) indicates a large effect, suggesting that approximately 27% of the variance in anxiety scores can be attributed to sport type (Cohen, 1992). This finding highlights the substantial role of sport-specific characteristics in shaping athletes' anxiety levels.

While comparing mean ranks, it is revealed that athletes in sports such as archery, Kabaddi, Kho-Kho, soft tennis, and cricket reported higher anxiety levels than those in football, rugby, and squash. Higher anxiety in precision-based and individual-focused sports may be linked to greater performance responsibility and sustained concentration demands, whereas lower anxiety in team and contact sports may be associated with shared responsibility and collective support (Nicholls et al., 2007; Lim, 2016). Team cohesion and collective efficacy are also known to reduce competitive anxiety in group sports, particularly those involving physical contact (Leprince & Doron, 2018).

Differences observed among traditional and contact sports further suggest that the nature of play and decision-making pressure influence anxiety levels. Sports such as Kabaddi and Kho-Kho involve rapid movement, unpredictability, and continuous tactical decisions, which may increase psychological pressure on athletes (Rathod & Kaur, 2021).

Overall, these findings indicate that anxiety in sport is strongly shaped by the structural and psychological demands of specific sports, reinforcing the importance of considering sport type when examining athlete mental health.

Conclusion and Implications

The present study examined competitive anxiety among Nepalese athletes by considering gender, sport type, and specific sporting disciplines as key areas of analysis. Gender did not show a significant effect on anxiety levels, suggesting that male and female athletes experience competitive stress in similar ways in this context. Sport type, however, emerged as an important factor. Athletes involved in individual sports reported higher anxiety than those in team sports, which may be linked to greater personal responsibility for performance. Clear differences were also found across specific sports, with athletes in Kabaddi, Kho-Kho, and Archery showing the highest anxiety levels, while Rugby, Football, and Volleyball showed the lowest.

These findings indicate that psychological demands vary across sports and should be considered when planning mental training and support programs. Athletes in individual and precision-based sports may require more focused psychological support than those in team sports. Coaches, sport psychologists, and sport organizations should therefore give greater attention to both general and sport-specific sources of anxiety. Future research could examine anxiety patterns over time, include additional psychological factors such as coping strategies and resilience, and place more emphasis on traditional South Asian sports to better understand their unique psychological demands.

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