

## STUDY OF COMPETITIVE ANXIETY AMONG FEMALE BADMINTON PLAYERS

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### Abstract

**Background:** The study aimed to find out the competitive anxiety among female badminton players of age group of 16-20 years of age, also to evaluate the difference in anxiety levels of advance and intermediate players female badminton players and provide them with valuable insights on how to control their anxiety levels and enhance their performance.

**Methodology :** This study involved a group of female badminton players of age 16-20 years, who ranged from intermediate level to advance level. To ensure a representative sample, 30 players were chosen randomly from various badminton academies. The participants were given Google forms at their respective academies to gather data. Prior to the study, the participants were fully informed about the purpose and were asked for their consent. They were then asked to complete a form providing their personal details. Following this, the players were divided into two groups that is the advance and intermediate players, utilizing the SCAT as a criterion. The SCAT, a Sports Competition Anxiety Test developed by Martens et al. in 1990, included 15 questions for the players to answer. To assess the difference in competitive anxiety levels between the two groups, a t-test was used.

**Results and discussion :** After analysis of the present data it is exhibited that the difference is found in in competitive anxiety of different female players and there was a mean difference in scores of advance and intermediate female badminton players also significant difference between both the groups. Utilization of techniques like self-talk, guide imagery, yoga, relaxation, and mindfulness showcase their effectiveness in the reduction of competitive anxiety experienced by athletes.

**Keywords:** competitive anxiety, SCAT test, advance and intermediate, female badminton players

### 1. INTRODUCTION

Today, anxiety is reported as a general threat to physical and mental health and has been suggested to impair performance in sport. Numerous research has shown an inverse relationship between the

intensity of anxiety and athletic performance this means that as anxiety increases, there is a resulting consistent decline in performance. (Mehrsafar, 2020). Anxiety is also cited as a major reason for the attrition of talented young athletes from their respective sports. Competitive anxiety in sports can make most successful player feel nervous and is one of the most important and interesting area of sport psychology. Anxiety can affect the performance of players especially during competitions and its effect on player's moods and locomotors skills. There are many factors that can make players anxious such as the importance of game success, or the difference between their abilities and capabilities required for their performance, and these factors can have a negative effect. (amaro, 2023)

Anxiety at a moderate level can enhance performance in a competitive situation; it is known as facilitative anxiety. But an increase in anxiety considerably above a moderate level change into debilitating anxiety, which will cause a sharp decline in performance. Debilitating anxiety occurs when the athlete perceives an anxiety situation as having a significant probability of failure and/or the result having a negative consequence. The significance can cause cognitive state anxiety and a decrement in self-confidence in an athlete, whereas the consequence will cause somatic anxiety in an athlete. (ghisi, 2021).

Competitive anxiety is a distinct anxiety construct that is perceived to have an influence on performance and is defined as a predisposition of the individual to perceive competitive situations as threatening or dangerous. The Competitive State Anxiety Inventory (CSAI-2) is an instrument specifically developed to assess competitive anxiety, comprising of 3 separate, yet interrelated subscales: cognitive state anxiety, somatic state anxiety, and self-confidence. (jadhav, 2021).

In sport psychology, the goal is to identify athletes' anxiety and how to control it before it interferes with their performance. Athletes are chosen in this case because they have a high level of anxiety due to the situation and pressure to obtain a good result. Players on a team or individuals can experience anxiety at different levels depending on the situation. (thakkar, 2019) There are various tools to measure anxiety in different ways and situations. One of the most frequently used tools is the Sport Competition Anxiety Test (SCAT), which specifically measures the degree of anxiety in competitive sports and differentiates it from the normal condition where athletes feel less worried. This tool has already been validated and is reliable, with some modifications to improve its validity and reliability. (pomohaci, 2020)

The subjects will be given the competitive state anxiety questionnaire presented by Martens, 1977 to determine their anxiety level before competition commences. This questionnaire had been widely used and had good reliability and validity to measure the anxiety level in sports. This questionnaire consists of a 15-item competitive state anxiety inventory with three subscales of 5 items each, namely the competitive state anxiety on cognitive state (CSAI-C), somatic state (CSAI-S), and self-confidence (CSAI-C). (martens R. , 1977) (martens, 1990)

## 2. PURPOSE OF STUDY

The purpose of the study was to find out the competitive anxiety levels of female badminton players and also to find out the significance difference between competitive anxiety levels of advance and intermediate female badminton players of age group that ranges from 16-20 years of age.

### 3.1 RESEARCH METHODOLOGY

The study began by informing the participants about its purpose and obtaining their consent. They were then asked to complete a form with their personal details, as well as the Sport Competition Anxiety Test formulated by Martens. The Google forms were distributed to the participants at their respective sport academies and collected their data. Afterward, the participants were categorized into two groups based on their level of competitive anxiety using the SCAT as a criterion. The participants were then given the SCAT again, and some of them filled out the form containing the SCAT on the day of their competition. This was done to replicate an actual competitive state when completing the SCAT during a tournament, and to control for any potential situational factors that could influence the participants' competitive state. Following this, the data from the high and low anxiety groups were combined, and the scores of each subcomponent of competitive anxiety, as well as its intensity, were recorded.

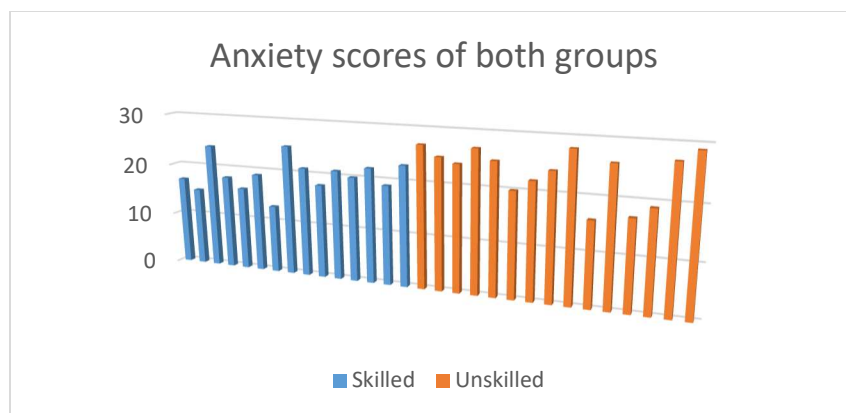
### 3.2 SELECTION OF SUBJECTS

The sample of the study consisted of 30 female badminton players that participated in any type of tournament. The sample age ranges was between 16 to 20 years. For the data collection, the Sports Competition Anxiety Test (SCAT) model developed by Martens was used. The Google forms were distributed to the participants at their respective sport academies and data was collected. Afterward, the participants were categorized into two group.

Participants of both the groups was choosen on the basis of some criteria. Advance and intermediate female players were selected and divided on the basis on:

- A) Their experience level that is for how long they have been playing badminton.
- B) Tournament participation level.
- C) Their latest achievements in the past last year.

The test consists of fifteen items which include five built up items, eight positive items and two negative items to be answered by making on the multiple-choice questions on the questionnaire that was prepared with the help of google forms. Every statement consisted of three responses, i.e., rarely, sometimes and often. Before the game, the purpose and procedure of the test were making clear to the players for better understanding. For the statistical analysis of the data, mean, sum of squares, degree of freedom, and mean squares were computed in order to estimate the differences among advance and intermediate female players. Descriptive statistics was used to compare the mean values of the scores of players and also to compare the data, 't' test was used for testing significance difference of the values of females players.



**FIGURE NO.1: SCORES OF ADVANCEAND INTERMEDIATE ATHLETES**

This figure shows the different anxiety score of different athletes calculated using the evaluation process of the SCAT anxiety tool.

#### 4. ANALYSIS OF DATA

Table 1 shows the descriptive findings of advance and intermediate badminton players like mena values of the anxiety scores ,SD , Variance of both groups from each other.

**Table 1: Descriptive statistic from anxiety test using the SCAT tool**

GROUPS	SUM	MEAN	VARIANCE	SD	COUNT
ADVANCE	291	19.4	11.4	3.37	15
INTERMEDIATE	356	23.7	16.49	4.06	15

This table focuses on the mean values of different groups as shown in the table that is 19.4 and 23.7 also a significant difference in SD in the scores that is 3.37 and 4.06 respectively. The findings are explained only by using mean and standard values.

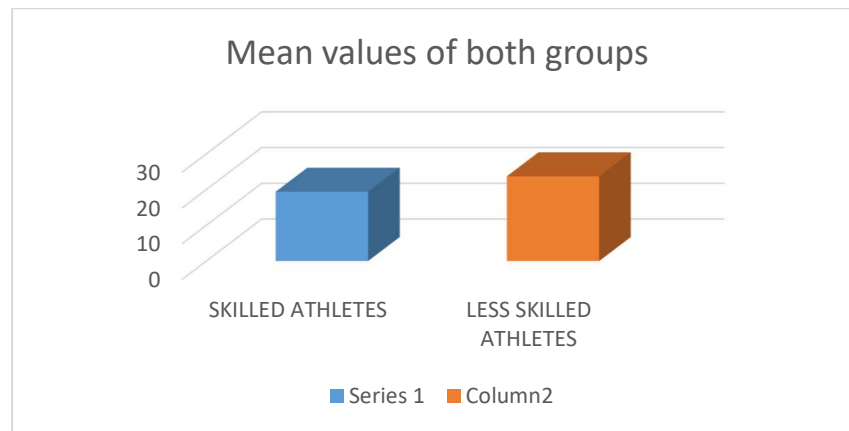
**Table 2:**

GROUPS	NO. OF PLAYERS	MEAN	VARIANCE	DEGREE OF FREEDOM	'T' - VALUE
ADVANCE	15	19.4	11.4	27	3.178*
INTERMEDIATE	15	23.73	16.495		

\*Significant at 0.05 level(2.052)

't' Test analysis between the advance players and intermediate players..

This table shows the finding that is analyzed by using paired 't' test inferential statistics to find out whether there is a significant difference between the mean score of the advance players group and intermediate players group. The findings of the analysis show that there is a significant difference between the groups. Df between both the groups analyzed was 27 and t-value is significant to the value of (0.05).



**FIGURE-2**

The following figure shows the significant difference in the mean value of the scores of advance and intermediate athletes.

## 5. RESULT

- There was a significant difference in the anxiety scores of advance and intermediate badminton players with intermediate experiencing a difference of anxiety levels during competition as compared to advance players.
- Based on the analysis , difference in the mean values of both the groups were **4.33** and difference in the SD of both the groups were **0.69** , this shows difference in the anxiety scores of advance and intermediate players and also advance players have less anxiety scores than intermediate players.

## 6. DISCUSSION AND FINDINGS

. This study was done to find out the competitive anxiety levels in female badminton players, to find out the significant difference between the anxiety level scores of advance female badminton players and intermediate female badminton players during competition and also to give valuable insights about different methods on how to cope up or maintain the anxiety levels during competitions that will help the athletes to improve their performance during competitions. The

statistical procedure used for the analysis was descriptive statistics, t-test to see the significant difference between both the groups. T-test was used as shown in table 4 and the result (3.178) to the significant value of 0.05 showed that there was a significant difference between the scores and advance and intermediate players

To enhance performance, athletes must tackle and minimize their anxiety. To attain this goal, a systematic analysis was performed, examining relevant literature that examined strategies to alleviate competition anxiety in athletes. The chosen literature, comprising articles and journals, underwent a thorough study and explanation. The evidence suggests that incorporating techniques such as self-talk, guided imagery, yoga, relaxation, and mindfulness can effectively diminish the competitive anxiety experienced by athletes. Particularly, when combined, techniques like relaxation and imagery work in conjunction with one another to yield positive results.

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