

## Conceptual Study regarding the Effect of Cognitive Anxiety and Self-confidence on the Performance of Basketball and Volleyball Players

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**Abstract:** *The goal of the current study was to find out how cognitive anxiety and self-confidence affected the performance of basketball and volleyball players. Female intercollegiate volleyball and basketball players made up the study's sample. For this investigation, a stratified sampling strategy was employed. Each segment's sample of 150,150 females age was limited to 16 to 21 (Mean=18.5 and Stander Deviation=1.87). Female basketball and volleyball teams from Sargodha District College that took part in the district of Sargodha in Sargodha District from 2015 to 2016 were the only ones included in the innovative study. To investigate the effect of an independent variable on a dependent variable, adopted questionnaires were utilized. The data was tabulated and then subjected to regression and inferential statistics. Results showed that anxiety has a significant negative impact on the performance of basketball and volleyball players. Additionally, it was discovered that there was no association between dependent and independent variables. It was suggested that the coaches should receive extensive facilitation as a coping mechanism to boost their self-assurance and prevent worry, which would ultimately improve their performance. Additionally, it was suggested that coaches and trainers may provide a peaceful environment to athletes and basketball and volleyball players so that they keep away from cognitive anxiety and enhance their self-confidence.*

**Key Words:** Self-confidence, Cognitive Anxiety, Volleyball, Basketball, Player's Performance

### Introduction

According to Craft et al (2003) Anxiety may be defined as adverse and complicated feelings consisting of psychological, physical and mental symptoms. Varieties of studies have been conducted on anxiety where players and athletes were the populations of investigation. In sporting events, most of the players show low and poor performance by anxiety, whereas self-confidence enhances the player's performance. Players' performance and cognitive anxiety are closely associated with each other's (Edwards and Hardy (1996). According to Aritzeta, et al (2017) cognitive anxiety is comprised of the mental reaction of the body, which may comprise shivering,

breathing and muscle tension. In the modern arena, everyone in every walk of life becomes a victim of anxiety to the same extent, player has the quality to face anxiety situations easily and develop self-confidence to perform better performance (Martens et al., 1990). The psychological trait of cognitive anxiety is very common in sporting events which adverse impact on player performance and players may fail to achieve their desired results (Smith et al, 2001). According to Krane (1992), cognitive anxiety is not always having an adverse effect, sometimes it helps the players and athletes to focus and concentrate on the forthcoming event. Moreover, it was found that in sports some youths while sometimes senior players

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become the victim of cognitive anxiety in sports (Edwards & Hardy, 1996). The widespread usage of the Competitive State Anxiety Inventory-2 (CSAI-2) lends support to the Multidimensional Theory of Anxiety (Craft, Magyar, Becker & Feltz, 2003; Woodman & Hardy, 2003). It was found that there was a negative association between cognitive approach and state anxiety with sports performance in varieties of anxiety with special reference to sports performance (Feltz, 2003). According to Craft, Magyar, Becker, and Feltz (2003) there was a strong association between Self-confidence and sports performance. It was found that there was a strong and positive relationship between cognitive approach, state anxiety and self-confidence with performance in forty-eight meta-analyses. The Competitive State Anxiety Inventory-2 (CSAI-2) was applied for such kind of research study to assess the effectiveness of a two-week stress management program called Mental Skill Training (MST) (Morris, Spittle, and Watt 2005). The CSAI-2 was used to evaluate 38 adolescents between the ages of 12 and 16. Pretest and posttest designs were used in the investigation. The results of the analysis of variance showed that there were significant differences between the Mental Skill Training group and the control groups in terms of somatic state anxiety and state self-confidence (Beedi, Terry & Lane, 2000). According to Hanton and Connaughton (2002), cognitive signs include an increase in unfavourable perceptions, swimmers might be believed to have remote personal control over the resulting decline in sports performance. Top swimmers who think too much about their events had a negative impact on performance (Hanton & Connaughton 2002). The author also came to the conclusion that somatic symptoms, such as feelings of physical tension, affected performance. In a study including athletes from the martial arts and track and field, self-confidence was found to be one of the most crucial performance factors. Additionally, the results showed that the result of the competition winning or losing is produced in varieties of sporting events. It was advised that a peaceful environment for athletes and basketball and volleyball players so that they

keep away from cognitive anxiety and enhance their self-confidence

## Problem Statement

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One of the basic causes of players' lower performance is anxiety. Players' performance is increased and improved by their level of self-confidence. Self-confidence plays pivotal in sporting events. Anxiety is one of the psychological variables which may affect the performance of the players at any stage. Cognitive anxiety and sports performance are interrelated to each other. In the present research article, the researcher examines how cognitive anxiety and self-confidence affected the performance of basketball and volleyball players. This was the reason; the researcher intended to conduct a research study on a Conceptual study regarding the effect of cognitive anxiety and self-confidence on the performance of basketball and volleyball players.

## The Objective of the Study

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To examine the association between self-confidence and anxiety in basketball and volleyball players' performance.

To examine the impact of self-confidence and anxiety on basketball and volleyball players' performance.

## Review of Literature

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According to Anshel (2003), when anxiety is high, arousal levels are impacted and mean performance suffers. Unusual levels of competence are another factor, as great athletes have superior anxiety and arousal regulation than beginners. Elite swimmers' performance suffered as a result of cognitive anxiety symptoms, according to research by Hanton and Connaughton (2002) swimmers who had negative thoughts about the competition performed poorly. Their study's findings also indicated that somatic symptoms, such as body tension, appeared to restrict swimming techniques, which in turn affected performance (Hanton & Connaughton, 2002). Players can maintain their ideal state of calm

before and during the competition using relaxation techniques (Thelwell & Greenless, 2003). Two specific techniques are employed: progressive relaxation and Benson's relaxation technique (Benson, 1975), (Jacobson, 1931). According to Benson (1975), a relaxation response consists of four different parts. These make up a tranquil environment to lessen outside disturbances. It could involve repeating a syllable or adopting a relaxed body position to relieve muscle tension. Benson argued that his method of stress relief should be modelled after meditation. Progressive Muscle Relaxation (PMR), described by Jacobson in 1938, contends that muscular tension is linked to both motor and cognitive activity. This could result in a decrease in intellectual activity. One of the most well-liked and frequent strategies utilized by players is the usage of images (Morris, Spittle & Perry, 2004). An imaging application, according to Morris, Spittle, and Wat (2005), it was suggested that the one and only factor that reduce anxiety level is the utilization of available resources which may improve performance. It was noted by Morris, Spittle, and Watt (2005) that a variety of terminologies were employed for imaging. These terms include visual motor behaviour rehearsal, symbolic rehearsal, mental rehearsal, mental practise, visualising imagines rehearsal, and ideo-motor training. Maron (2004) used a qualitative research approach to identify anxiety and sports performance in elite sports athletes. It was too identified that regular practice improves the level of self-confidence and arousal in novice rock climbers.

According to Jones and Hanton (2001), the improvement of cognitive, behavioural, and affective problems is suggested to improve overall performance when using positive self-talk. Moreover, Thelwell and Greenless (2003) found that positive and significance self-thought can also help in the elimination of anxiety levels and sports performance. This mental strategy involves completely considering all aspects of the competition, from preparation to the activity itself to the performance outcome (Peden, 2007). Despite the fact that there is a growing body of research on anxiety, arousal and sports performance in

different walks of life. There was a strong association between sports anxiety and athlete performance (Woodman & Hardy, 2003). Moreover, it was found that there was a negative impact of cognitive anxiety on female athlete performance. The variation in performance that the anxiety components can account for has stayed rather minimal. Hanton and Connaughton (2002) found that somatic symptoms, such as feelings of physical tension, affected performance. In a study including athletes from the martial arts and track and field, self-confidence was found to be one of the most crucial performance factors, it was also found that result of the competition winning or losing which is produced in verities of sporting g events. It was advised that researchers examine the cognitive anxiety of female basketball and volleyball players to provide coaches and athletes so may eliminate their cognitive anxiety and improve self-confidence. Woodman and Hardy (2003) found that self-confidence positive significant impact on athlete performance while cognitive anxiety negative impact on players' performance. It was advised that researchers examine the cognitive anxiety of female basketball and volleyball players to provide coaches and athletes so may eliminate their cognitive anxiety and improve self-confidence. It was observed that anxiety occurred prior to the game. It was suggested by the author that players may develop their self-confidence. According to Craft, et al., (2003) regular practice and self-confidence is the best tool for players to eliminate anxiety and improve performance. The study of Weinberg and Gould (2007) observed that self-confidence and anxiety may be viewed as state or same-time quality while the symptoms of low self-confidence are sweating, dehydration and nail biting which negatively affect sports performance. A research study conducted by Khan (2014) examine the impact of anxiety and self-thoughts on athlete performance at the university level study and found that students may improve and enhance their performance in a sporting event by avoiding anxiety and developing their self-thoughts. In sports and athlete events players and athletes are failed to focus or concentrate due to anxiety. It was

suggested that players may develop their level of confidence which aim to get their desired result (Sagar et al, 2009). Anxiety, pre-competition anxiety and arousal make the players conscious of the situation while the fears develop the situation of uneasiness, once the anxiety overcomes the players they cannot their best results and performance (Grossbard et al, 2009). Heart rate, deep breathing, and sweating more during the game are symptoms of anxiety which lead to poor performance. Cognitive and somatic are the parts of anxiety, cognitive anxiety deal with the mental process when a player or person feels fear, and negative thoughts it becomes the victim of cognitive anxiety while the appearance of physical symptoms such as fast heart bit, sweating, and fast breathing is somatic anxiety. Somatic anxiety is also related to behavioural and psychological dimensions (Ree et al, 2008). A high level of anxiety may affect the flexibility, agility and strength of the players and athletes which leads to poor performance. Wilson et al (2006) observed and suggested that trainers and coaches help and assist them in managing and controlling anxiety situations.

### Hypotheses of the Study

There is a significant association between self-confidence and anxiety in basketball and volleyball players' performance.

There is a significant impact of self-confidence and anxiety on basketball and volleyball players' performance.

### Method and Material

The aim and goal of the current study were to find out how cognitive anxiety and self-confidence affected the performance of basketball and volleyball players. Female intercollegiate volleyball and basketball players made up the study's sample. For this investigation, a stratified sampling strategy was employed. Each segment's sample of 150,150 female players was restricted to those between the ages of 16 and 21 (M=18.5, SD=1.87). All The females of district Sargodha (Pakistan Army Sports Base Achievement Network) were the population of the existing study. The aim of the study was to analyze the impact predictor on the criterion. Adopted questionnaires were utilized. The data was tabulated and then subjected to regression and inferential statistics. Results showed that anxiety has a significant negative impact on the performance of basketball and volleyball players. Additionally, it was discovered that there was no relationship between the independent and dependent variables. It was suggested that the coaches should receive extensive support as a coping mechanism to boost their self-assurance, which will ultimately improve their performance. Additionally, it was suggested that coaches and athletes be provided with a comprehensive overview of the multifaceted concept of competitive sport anxiety and a comparison of the cognitive and somatic anxiety levels of female basketball and volleyball players.

### Data Analyses

**Table 1.** Correlations

		Anxiety	Self Confidence
Anxiety	Pearson Correlation	1	-.479**
	Sig. (2-tailed)		.000
	N	300	300
Self Confidence	Pearson Correlation	-.479**	1
	Sig. (2-tailed)	.000	
	N	300	300

\*\* . Correlation is significant at the 0.01 level (2-tailed).

The aforementioned data demonstrates that there is no correlation between a player's

performance in intercollegiate competition and their level of confidence. The relationship

between independent, mediating factors, and dependent variables are hypothesised to exist. R (Correlation values) and p significant values

indicated that the (R -.479 p =.000 -.01) Therefore, the hypothesis is rejected.

**Table 2.** Correlations

		Self Confidence	Players
Self Confidence	Correlation	1	-.415**
	Sig,		.000
	Number	300	300
Players	Correlation	-.415**	1
	Sig.	.000	
	Number	300	300

The above mention table depicts a negative correlation between intercollegiate female players' performance and their level of confidence. The relationship between independent, mediating factors and dependent

variables is hypothesized to exist. R (Correlation values) and p significant values revealed that the (R -.415 p =.000 -.01) As a result, the hypothesis is rejected.

**Table 3.** Correlations

		Sports Experience	Anxiety
Sports Experience	Correlation	1	-.683**
	Sig,		.000
	Number	300	300
Anxiety	Correlation	-.683**	1
	Sig,	.000	
	Number	300	300

The above mention table depicts a negative correlation between intercollegiate female players' performance and their level of confidence. The relationship between independent, mediating factors and dependent

variables is hypothesized to exist. R (Correlation values) and p significant values indicated that the (R -.683 p =.000 -.01) Therefore, the hypothesis is rejected.

**Table 4.** Correlations

		Sports Experience	Self Confidence
Sports Experience	Correlation	1	.494**
	Sig,		.000
	Number	300	300
Self Confidence	Correlation	.494**	1
	Sig,	.000	
	Number	300	300

The above-mentioned table shows that there is no correlation between intercollegiate female players' performance and their level of confidence. The relationship between independent, mediating factors and dependent

variables is hypothesized to exist. R (Correlation values) and p significant values indicated that the (R -.494 p =.000 -.01) Therefore, the hypothesis is rejected.

**Table 5.** Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.619 <sup>a</sup>	.384	.379	.39454

a. independent: (Constant), Anxiety, Self Confidence

**Table 6.** The coefficients of regression

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	28.769	2	14.384	92.408	.000 <sup>b</sup>
	Residual	46.231	297	.156		
	Total	75.000	299			

a. criterion Variable: Players

b. Predictors: (Constant), Anxiety, Self Confidence

The table displays the findings of the hypothesis assessing the predictability of the criterion (player performance) by predictors and the considerable negative impact of anxiety and self-confidence on the criterion (player performance) (anxiety and self-confidence) The multiple regression test was used to get at data regarding the anxiety's predictive ability. According to the R square (coefficient of determination),  $R^2 = .384$ , there was a 38% variation, which is corroborated by the predictors' p-values. The results of multiple regressions demonstrate that predictors have no discernible influence on player performance.

### Study Discussion

The aim and goal of the current study were to find out the impact of cognitive anxiety and self-confidence on the performance of basketball and volleyball players. It was observed that the performance of basketball and volleyball players did not correlate with either cognitive anxiety or self-confidence. Maron (2004) provided evidence in support of the claim that there is no connection between anxiety and athletic performance. In this context, Hanton and Connaughton (2002) discovered that top swimmers performed poorly as a result of cognitive symptoms of anxiousness. Furthermore, Hanton and Connaughton (2002) found that swimmers who had negative thoughts about the competition performed poorly. The current

study's findings also show that there was a 38% variation, as indicated by the R square (coefficient of determination), which shows as  $R^2 = .384$  and is confirmed by the p-values of the predictors. The results of multiple regression demonstrate that predictors have no discernible influence on player performance. According to Weinberg and Gould (2007), anxiety is a condition that focuses in particular on the competitive anxiety experienced during a private competition (Tilon, 2008). Additionally, it was found that there was no positive association of predictors on the criterion. It was suggested that the coaches should receive extensive support as a coping mechanism to boost their self-assurance, which will ultimately improve their performance. In this regard, the findings of the hypothesis assessing the predictability of the criterion (player performance) by predictors and the considerable negative impact of anxiety and self-confidence on the criterion (player performance) (anxiety and self-confidence) The multiple regression tests were used to get at data regarding the anxiety's predictive ability. According to the R square (coefficient of determination),  $R^2 = .384$ , there was a 38% variation, which is corroborated by the predictors' p-values. The results of multiple regressions demonstrate that predictors have no discernible influence on player performance. Additionally, it was suggested that coaches and athletes be provided with a comprehensive overview of the multifaceted

concept of competitive sport anxiety and a comparison of the cognitive and somatic anxiety levels of female basketball and volleyball players.

### Conclusion of the Study

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The aim of the study was to investigate the impact of self-confidence and anxiety on basketball and volleyball players' performance. It was found that players' performance depends upon belief in self-confidence and avoiding anxiety. The current study also found that there is no connection between intercollegiate female players' performance and their level of confidence. It was also found that self-confidence has a positive impact on players' performance while anxiety has a negative impact on player's performance. It was discovered that the results of the hypothesis the predictors of anxiety and self-confidence significantly negative impact the criterion (player's performance). According to the R square (coefficient of determination),  $R^2 = .384$ , there was a 38% variation, which is corroborated by the predictors' p-values. The results of multiple regressions demonstrate that predictors have no discernible influence on player performance.

### Suggestions and Future Direction

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In the future, the study may be conducted on the same phenomenon using some different data collection tools, such as observation, literature reviews, and interviews, since the adopted questionnaires used in this study did not allow the respondents to give in-depth information about the phenomena.

The female intercollegiate players were the only ones included in the current study. Future research could help advance understanding of the phenomenon at a broad level, including that of female athletes competing at the collegiate and school levels.

The current analysis was done in Punjab; future researchers may take the same approach while also resetting the provinces of Pakistan (Sindh, Kp, and Baluchistan) for greater comprehension.

The current analysis was done in Punjab; future researchers may take the same approach while also resetting the provinces of Pakistan (Sindh, KP, and Baluchistan) for greater comprehension.

It was necessary to perform a comparative study on this subject in Pakistan to examine the differences between male and female athletes and individual versus team sports.

Future studies need to focus on how athletes cope with anxiety-provoking situations.

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