

The Role of Competitive Anxiety in Sports Performance

Salmabegum¹ and Dr. Ravi Kumar²

¹Research Scholar, Department of Physical Education

²Research Guide, Department of Physical Education
NIILM University, Kaithal, Haryana, India

Abstract: The purpose of the research was to determine how anxiety affected the athletic performance of Gomal University Deraismail Khan K.P.K. Pakistani athletes. This study's primary goal was to determine how anxiety affected players from a physiological, psychological, and behavioral standpoint. All athletes competing in various sports at Gomal University made up the population of this research study. The directorate of sports at Gomal University provided a comprehensive list of all registered players. The researcher created a closed-ended questionnaire for data collection and personally collected answers from 120 randomly chosen gamers who made up the target group. Following data collection, the researcher used percentages and mean averages as statistical tools to tabulate and evaluate the data. Following data analysis, the researcher concluded that anxiousness had a detrimental impact on a player's overall performance in sports. Additionally, the findings showed that knowledge of anxiety and its detrimental impacts as well as a decrease in

Keywords: Stress, Tension, Fatigue, Nervousness, Pressure, Fear, Focus

I. INTRODUCTION

When someone is psychologically disturbed, they are considered to be in an anxious mood, according to Kumar et al. [1]. Regarding anxiety in the context of physical education and sports, it is believed that competitive sports environments are where anxiety is most prevalent. Robinson et al. [2] claim that there is a close connection between anxiety and athletics. He went on to say that although nervousness isn't necessarily a negative thing, it may assist players stay focused and aware when they're acting. It has been noted that athletes experience anxiety while engaging in different sports. According to a study by Kumar et al. [3], players who are young or inexperienced tend to suffer anxiety, which therefore affects their performance. The author suggested that the player's anxiety level should be neither too high nor too low. Anxiety is not necessarily a bad thing in moderation. Robinson et al. [2] claim that a healthy amount of worry may lead to improved athletic performance. The author also shown that a player must engage with a moderate degree of tension in order to get the greatest results.

The researcher himself plays sports and participates in them at various levels. Being a player, the researcher encountered several challenges throughout his athletic career, including stress, arousal, and anxiety in relation to the sports environment. The researcher wants to highlight how anxiety affects athletic performance in the present study. According to the researcher, the consequences of anxiety should be examined from three angles: behavioral, cognitive, and physiological.

Statement of the problem

There is a connection between anxiety and sports. One of the elements influencing participation in sports at different levels has been anxiety. They should also understand how to handle these types of situations and steer clear of them while participating in sports. The current research aims to assess how athletes perceive the impact of worry on athletic performance. Gomal University Deraismail Khan is the site of this investigation. Using a questionnaire, the researchers investigate how athletes perceive the impact of anxiety on their involvement in sports. Every attempt is taken to arrive at specific research results and conclusions.

Objectives of the study

This research was based on the following objectives

- To find out the perception of players regarding effects of anxiety from physiological perspective.
- To assess the perception of players regarding effects of anxiety from psychological perspective.
- To evaluate the perception of players regarding effects of anxiety from behavioral perspective.

Significance of the study

This research examines how anxiety affects involvement in sports. Readers will be able to learn about the impacts of worry from a variety of angles thanks to this research. The results of this research might be extremely useful in determining how athletes perceive the impact of worry on their involvement in sports. They will be able to deal with situations that cause anxiety in this manner. Coaches, managers, and players will also be able to teach inexperienced players about anxiety in sports thanks to this research. Additionally, the study's suggestions will aid improve athletic performance.

Hypotheses of the study

The following Null Hypothesis were tested

HO1 According to players, worry has no discernible impact on physiological performance.

HO2 According to players, worry has no discernible impact on psychological performance.

HO1 Players' perceptions of their actions are not significantly impacted by anxiety.

Methodology of the study

The following procedures were conducted in order to arrive at some of the study's conclusions.

Population of the study: All athletes participating in various levels of sports made up the study's population.

Sampling: The Directorate of Sports at Gomal University DeraIs mail Khan provided a comprehensive list of the players. Using a straightforward sampling approach, the researcher gathered representative numbers of the sample from both the New Campus and the City Campus.

Instrument and mode data collection: To get information on the impact of anxiety on sports, the researcher created and used a questionnaire with three choices. Under the direction of the study supervisor and a review of the literature, the questionnaire was created. The questionnaire was created by the researcher, who also personally delivered it and collected it after the respondents had completed it.

Data analysis: Using the proper statistical methods, the gathered data was examined.

Anxiety and Sports

Anxiety is a normal human emotion that affects both the body and the psyche. It is an alarm system that sounds anytime someone thinks there is a threat or danger. An individual experiences physical symptoms of anxiety when their body and mind respond to danger or threat. As a negative feeling, anxiety influences how athletes see themselves during sporting events. Most athletes believe that anxiety impairs their performance, which may lead to performance declines [4,5]. Numerous studies have shown that an athlete's ability to manage their anxiety level is crucial to their success in a competition [6]. Cognitive and somatic anxiety are the two subcomponents of anxiety that affect performance [7, 8]. Negative expectations for success or self-evaluation, negative self-talk, performance anxiety, failure imagery, difficulty focusing, and attentional disruption are all characteristics of the cognitive, or mental, component [6,7]. The somatic, on the other hand, is the physiological component that is linked to autonomic arousals and adverse symptoms including anxiety, elevated blood pressure, dry throat, tense muscles, fast heartbeat, sweaty palms, and butterflies in the stomach [7, 8].

The most extensively explored psychological factor influencing athletic performance is anxiety, a concept that has been continuously examined in the area of sport psychology [9]. Since sports are competitive in nature and include victory and loss, there is a stronger correlation between anxiety and sports. When one's perceived skill falls short of the requirements of the activity, anxiety may arise during any sports event or competition. The impact of anxiety on athletic performance has been

extensively studied. According to research, amateur athletes participating in solo sports have greater levels of competitive state anxiety than those participating in team sports [10].

Anxiety is a major factor in sports. Anxiety is brought on by the difficulty of participating in sports. An athlete's success is determined on how he manages his anxiousness. A variety of distinct circumstances can affect the level of anxiety. Since players in competitive sports are under pressure to achieve and are expected to win, anxiety levels are likely to be higher in these activities than in more non-competitive ones. Both individual and team athletes may exhibit signs of anxiousness. Everyone has anxiousness while playing games and sports. This crucial element influences how well athletes accomplish in their comprehensions and difficulties in sports. Sports psychologists have long held the view that excessive anxiety during competition is detrimental, impairing performance and perhaps resulting in dropout, according to Hann [11]. Depending on the situation, anxiety might either rise or decrease. Techniques including cognitive behavior therapy, hypnosis, relaxation, and positive thinking may help athletes deal with their anxiety.

Effect of Anxiety on Sports Performance

The following are some ways that anxiety impacts performance overall:

Psychological effects

Any external danger causes the human body to instantly and instinctively focus. According to Ampofo-Boateng [12], worry interfered with focus and caused concerns about performance in competitive settings. A person's thoughts may be affected in a variety of ways, from little anxiety to intense fear. Anxiety was regarded as one of the primary psychological factors influencing athletic performance in another study [13].

Effect on central nervous system (CNS)

The brain and spinal cord make up the central nervous system (CNS), which is a component of the nervous system. Because it integrates information, coordinates, and affects the activity of every portion of the body, the central nervous system gets its name.

Anxiety has a direct impact on the sympathetic nervous system and the connection between the body and central nervous system. As a result, a person's ability to carry out mental tasks effectively and efficiently is compromised, which has a direct impact on athletes' athletic performance. Researchers have shown that anxiety has an impact on an athlete's mental state and alters performance via symptoms like anxiety, elevated blood pressure, and other issues that are directly linked to the central nervous system [7]. In other words, stress and anxiety increase the synthesis of catecholamines, which are also known as dopamine and adrenaline. Both the afflicted person's short-term and long-term memory are negatively impacted by these drugs. A person may get agitated and forgetful, lose focus, feel afraid, or have trouble sleeping or having their sleep patterns interrupted.

Some general mental impacts of anxiety include the following:

Difficulty concentrating, racing thoughts

Trouble learning new information

Forgetfulness, disorganization, confusion

Difficulty in making decisions

Physiological effects

Changes that occur in the motions of various bodily organs are referred to as physiological consequences. Anxiety may have a direct or indirect impact on a number of bodily processes, such as trembling muscles, a rapid pulse, perspiration, and rapid breathing [14]. Below is a discussion of some of the physiological impacts of anxiety.

Gastrointestinal effects

A person's performance as an athlete may suffer from gastrointestinal distress while experiencing worry or an anxiety episode. He may need to use the restroom more often than usual due to diarrhea or frequent urination. A person may have dizziness in addition to gastrointestinal distress [15].

Muscular effects

According to the National Institutes of Health (NIH), people's muscles may be impacted by worry. For instance, a nervous player may have tremors, which are uncontrollable shaking movements. These twitches or tremors might happen when the person is holding something, moving, or remaining still. Anxiety may also cause muscle tension, which is characterized by tense muscles that can sometimes hurt [15].

Breathing effects and glandular effects

Hyperventilating is the term for rapid breathing. In times of anxiety, hyperventilation may be a typical reaction. According to the NIH, perspiration is a frequent sign of worry; when anxiety is present, the sweat glands generate more perspiration than usual. Additionally, the gamer may suffer respiratory disturbances, such as fast or shortness of breath. The patient may feel as if she is choking and grabbing for air while experiencing shortness of breath [16].

Other effects on the body

Other bodily components might also be impacted by anxiety. For instance, the heart may be impacted, causing an erratic pulse or a beating heart. In addition, the player may experience exhaustion, headaches, and sleeplessness. Dry mouth or trouble swallowing are examples of mouth and throat issues that might occur.

Effect on cardiovascular system

Anxiety may cause palpitations, elevated blood pressure, and an accelerated heartbeat. The body produces more stress hormones including cortisol, noradrenalin, and adrenalin, which causes all of these changes.

Effect of anxiety on skin and hair

Anxiety may negatively impact the skin by causing acne, a loss of radiance, and other issues. Anxiety has been linked to the development of several skin conditions, including psoriasis and eczema. People who are continually nervous also often experience hair loss. Long-term anxiety may result in hypothyroidism or an underactive thyroid, which may cause a variety of symptoms, including hair loss and a loss of skin radiance.

Behavioral effects

Anxiety also affects a person's conduct since its usual side effects include anger, annoyance, communication difficulties, and unfriendliness.

Personality changes

The constant unique thinking, emotion, and behavior patterns that define each person throughout time and in many contexts are referred to as personality. It is believed that each person's personality is shaped by their interactions with their surroundings as well as an inherent "genetic" component, sometimes referred to as temperament. Stress hormones, which are a component of the internal environment, might cause personality changes in some persons. People that are nervous often exhibit the following personality changes:

displeasure

unfriendliness

Frustration

Anger

Aggressive feelings and behavior

Decreased interest in appearance

Decreased concern with punctuality

Obsessive/compulsive behavior (trying to cope with unwanted repeated thoughts or obsessions, by engaging in compulsive behavior rituals such as counting, checking, washing, etc.)

Reduced work efficiency or productivity

Lying or making excuses to cover up poor work

Excessive defensiveness or suspiciousness

Problems in communication

Social withdrawal and isolation

Impulsivity (expressed as impulse buying, gambling, sexual behavior, or similar)

Treatment of Anxiety

Anxiety disorders are legitimate conditions that need medical attention. It takes more than just willpower and self-control to recover. Thankfully, there has been significant advancement in the treatment of mental diseases throughout the last 20 years. For the majority of anxiety disorders, one or a combination of the following treatments may be utilized, while the precise treatment strategy varies depending on the condition type:

Medication

Antidepressants and anxiety-reducing drugs are among the drugs used to lessen the symptoms of anxiety disorders.

Psychotherapy

Counseling that focuses on the emotional reaction to mental disease is called psychotherapy. It is a procedure wherein qualified mental health specialists assist individuals by discussing methods for comprehending and managing their illness.

Cognitive-behavioral therapy

People with anxiety disorders often engage in this kind of treatment, which teaches them to identify and alter the thinking and behavior patterns that cause them to experience distressing emotions.

Presentation and Analysis of Data

H₀₁

According to athletes, anxiety has no discernible impact on physiological performance. Since the mean of Agree is 29.25, the mean of Undecided is 4.75, and the mean of Disagree is 06 (29.25>4.75 & 06), Table 1 indicates that players perceive a significant impact of anxiety on their physiological performance. In contrast, the null hypothesis states that there is no significant impact of anxiety on the player's physiological performance, hence hypothesis No. 1 is rejected.

H₀₂

According to players, worry has no discernible impact on psychological performance. In contrast to the null hypothesis, which states that there is no significant effect of anxiety on psychological performance as perceived by players, Table 2 demonstrates that anxiety has a significant impact on psychological performance as perceived by players, with the mean of agreeing being 30.25, being undecided being 4.25, and disagreeing being 5.50 (30.25>4.25 & 5.50). Thus, hypothesis No. 2 is disproved.

H₀₃

According to players, worry has no discernible impact on their behavioral viewpoint. Since the mean of agree is 29.16, the mean of undecided is 5.16, and the mean of disagree is 5.66 (29.16>5.16 & 5.66), Table 3 indicates that anxiety has a significant impact on players' perceptions of their behavioral performance. In contrast, the null hypothesis states that anxiety has no discernible impact on players' perceptions of their behavioral performance. Thus, hypothesis No. 3 is disproved.

H₀₄

Anxiety has no discernible impact on athletes' perceived performance in sports. Table 4 indicates that anxiety has a significant impact on athletes' perceptions of their performance in sports, as evidenced by the mean scores of 29.55 for agree, 4.72 for undecided, and 5.72 for disagree (29.55>4.72 & 5.72). The null hypothesis, on the other hand, states that anxiety has no significant impact on athletes' perceptions of their performance in sports. Thus, hypothesis No. 4 is disproved.

Findings

The study's conclusions based on data analysis are as follows:

1. The players perceive that anxiety has a significant impact on physiological performance, as evidenced by the mean scores of 29.25 for agree, 4.75 for undecided, and 06 for disagree (29.25>4.75 & 06), whereas the null hypothesis states that anxiety has no discernible impact on physiological performance. Accordingly, hypothesis No. 1 is disproved (Table 1).

Table 1: Showing the effect of anxiety upon physiological performance.

S. No	Physiological Effects of Anxiety	Agree	Undecided	Disagree
1	Anxiety increases the circulation of blood in body	34	5	1

2	Chest pain and rapid respiration is the result of anxiety	31	3	6
3	Due to anxiety an athlete frequently feel urination and sweating	34	4	2
4	Loss of appetite is the cause of anxiety	18	7	15
Mean:		29.25	4.75	6

1. The players perceive a significant impact of anxiety on psychological performance, as evidenced by the mean scores of 30.25 for agree, 4.25 for undecided, and 5.50 for disagree ($30.25 > 4.25$ & 5.50), whereas the null hypothesis states that anxiety has no discernible impact on psychological performance. Accordingly, hypothesis No. 2 is disproved (Table 2).

Table 2: Mean showing the effect of anxiety upon psychological performance.

S. No	Psychological Effects of Anxiety	Agree	Undecided	Disagree
1	Anxiety directly effects on the mental function of an athlete	33	3	4
2	Excessive, ongoing worry and tension is the effect of anxiety	32	3	5
3	Mentally disturbed sportsmen feel difficulty in concentrating on the desired targets	28	7	5
4	Sympathetic nervous system directly affected by anxiety	28	4	8
Mean:		30.25	4.25	5.5

1. According to the players, there is a significant impact of anxiety on behavioral performance, as evidenced by the mean scores of 29.16 for agree, 5.16 for undecided, and 5.66 for disagree ($29.16 > 5.16$ & 5.66), whereas the null hypothesis states that there is no significant impact of anxiety on behavioral performance. Thus, hypothesis number three is disproved (Table 3 & 4).

Table 3: Mean showing the effect of anxiety upon behavioral performance.

S. No	Behavioral Effects of Anxiety	Agree	Undecided	Disagree
1	Social isolation may cause of anxiety	26	5	9
2	Anxiety hurt relationships with friends, family and colleagues	32	5	3
3	Anxiety makes a person Angry	36	2	2
4	An anxious athlete performs Aggressively	27	8	5

5	Conflict takes place due to anxiety	28	3	9
6	Lose of performance is the result of anxiety	26	8	6
Mean:		29.16	5.16	5.66

Table 4: Mean showing the effect of anxiety upon sports performance.

S. No	Variables	Agree	Undecided	Disagree
1	Physiological effect of anxiety	29.25	4.75	6
2	Psychological effect of anxiety	30.25	4.25	5.5
3	Behavioral effect of anxiety	29.16	5.16	5.66
Mean:		29.55	4.72	5.72

II. CONCLUSION

The study concluded that anxiety significantly affects a sportsman's total physiological, psychological, and behavioral performance based on the data. It indicates that anxiety has a major impact on an athlete's overall performance.

Recommendation of the Study

- On the basis of findings and conclusion the researcher recommended that
- Different awareness program may be conducted about anxiety and its effects on performance
- Athlete may be kept aware about different psychological factors effecting their performance
- Athlete may be kept aware about different physiological factors effecting their performance
- Athlete may be kept aware about different behavioral factors affecting their performance.

REFERENCES

- [1]. [Feldman G, Hayes A, Greeson J, Kumar S, Laurenceau JP \(2007\) Mindfulness and emotion regulation: The development and initial validation of the Cognitive and Affective Mindfulness Scale-Revised \(CAMS-R\). Journal of Psychopathology and Behavioral Assessment 29: 177-190.](#)
- [2]. Robinson E, Smith E (2015) Biblical Researches in Palestine and the adjacent regions (Vol 2). Cambridge University Press, New York, USA.
- [3]. [Kumar MS, Woo J \(2015\) Public debt and growth. Economica 82\(328\): 705-739.](#)
- [4]. Weinberg RS, Gould D (2011) Foundations of Sport and Exercise Psychology. (2nd edn), Champaign, Human Kinetics Illinois, USA.
- [5]. Raglin JS, Hanin YL (2000) Competitive anxiety. In: Yuri LH (Ed.), Emotions in Sport. Champaign, Human Kinetics, Illinois, USA.
- [6]. Humara M (2001) The relationship between anxiety and performance: A Cognitive behavioral perspective. The Online Journal of Sport Psychology.
- [7]. Jarvis M (2002) Sport Psychology. Routledge, New York, USA.
- [8]. Martens R, Vealey RS, Burton D (1990) Competitive Anxiety in Sport. Champaign, Human Kinetics, Illinois, USA.
- [9]. Cox RH (2007) Sport psychology: Concepts and applications. McGraw- Hill Companies Inc., New York, USA.
- [10]. Simon JA, Martens R (1977) S.C.A.T. as a predictor of A-states in varying competitive situations. In: Landers DM, Christina RW (Eds.), Psychology of Motor Behaviour and Sport (Vol 2) Human Kinetics, Champaign, Illinois, USA, pp. 146-156.
- [11]. Hann YL (2000) Emotions in sports. Champaign, Human Kinetics, Illinois, USA.

- [12]. Ampofo-Boateng K (2009) Understanding sport psychology. In: Shah Alam, Selangor (Eds.), UPENA, Malaysia.
- [13]. Raglin JS, Hanin YL (2000) Competitive anxiety. In: Yuri LH (Eds.),
- [14]. Emotions in Sport Campaign, Human Kinetics, Illinois, USA, pp. 93- 111.
- [15]. Arlington (2013) Diagnostic and Statistical Manual of Mental Disorders. American Psychiatric Association (5th edn), American Psychiatric Publishing, USA, pp. 189-195.
- [16]. Stannard L (2013) Effects of Anxiety on the Body.
- [17]. Bouras N, Holt G (2007) Psychiatric and Behavioral Disorders in Intellectual and Developmental Disabilities (2nd edn), Cambridge University Press, New York, USA