

Investigating the Effects of Stress and Anxiety on Sports Performance

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ABSTRACT

In the sports world, athletes' celebrity status is valued. Coping strategies and tactics are similar to athletic personality. This aids athletes in managing pressures such as anxiety. People employ various coping mechanisms as a result of trait dominance. A coach may need to understand the relative dominance and coping strategies that lead to the development of that quality. The pressure of competition is likely to be tolerated by a competitive athlete. Studying the symptoms of competitive anxiety led to improvements in effort, resistance to opposing behaviors, and overcoming obstacles, including motivational and emotional consequences. Athletes' attentional control and self-confidence may suffer, and other psychological factors may be negatively impacted, so stress management is crucial to preventing anxiety during sporting events. Sports psychologists are consulted primarily due to anxiety. Included is an analysis of anxiety's theoretical underpinnings and how it affects performance. Research on the relationship between anxiety and performance is also discussed. Additionally, cognitive behavioral therapies that have been used in sports to enhance performance and lower anxiety are examined. We will talk about this in this paper. examining how anxiety and stress affect athletic performance.

KEYWORDS: *Stress, Anxiety, Sports Performance, Coping Mechanisms, Stress Control, Self-Confidence, Cognitive-Behavioral Interventions, Athletics, Muscular Relaxation, Visualization.*

INTRODUCTION

For elite athletes in particular, sportsmanship necessitates the ability to manage stress and anxiety. More than half of athlete consultations during the Olympics focused on stress or anxiety, according to study. The relationship between anxiety and athletic performance has been extensively studied. This study will review the relevant research from a cognitive-behavioral perspective. There is also a discussion of the study's findings regarding the relationship between the two ideas. Additionally, a review of the literature examining the efficacy of cognitive-behavioral therapy is given. Despite the large amount of data generated, the results are limited due to problems with the nomenclature used by the researchers. Therefore, it is important to start by considering the conceptualization of anxiety. [1]

You can perform at your best by using sport and performance psychology. Psychologists that focus on athletics and achievement employ therapeutic

standards to help athletes reach their highest potential. This method seeks to maximize human potential and improve sports fitness.

It is believed that an athlete's personality is crucial to their performance. Coping behavior and techniques are another facet of sports performance that is associated with personality. This has to do with an athlete's capacity or methods for handling mental pressures like anxiousness. [2]

Stressors in sport

Athletes encounter a variety of stressful conditions in the sports arena, which can arise from a variety of sources. Stressors are often defined as circumstances that are perceived as difficult, possibly dangerous, or needing a significant investment of resources to handle (coping mechanisms). These could include participation in big tournaments, rivalry with an opponent, media attention, poor officiating, bad weather, or a drop in performance, among other

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environmental elements that are linked to competitive performance.

Effects of stressors in sport

Many athletes find it difficult to apply practical coping mechanisms to deal with the causes and effects of stressful situations, which can have detrimental effects on their health and performance. A number of consequences, such as poor performance, negative thought patterns, negative emotions and depressive symptoms, and injuries, can result from these challenges in controlling high levels of anxiety and stress in sports. Athletes with a wide range of coping mechanisms, on the other hand, manage stressful situations better and attain ideal levels of arousal and anxiety. Performance is improved as a result. [3]

Coping and performance

Performance is the quantifiable outcome of the subject's execution of a number of tasks. Because it can be used to evaluate an athlete's or team's performance, it represents the outcome of a competition and the manner in which it was conducted. The transactional model of stress has thoroughly examined how coping mechanisms affect performance.

Anxiety's Impact on Athletics

Numerous studies have examined how anxiety affects athletic performance. According to research, amateur athletes who play solitary sports feel more nervous during competitive events than those who play team sports. Additionally, players in solo non-contact sports have been found to have lower levels of state anxiety than those in individual contact sports. This section will look at the research from the perspective of the theoretical models that were previously discussed. Performance has been found to be greatly impacted by cognitive distress. This holds true regardless of an individual's level of competence.

Participants in a collegiate softball competition had to meet two requirements: high and low scenario criticality. While the athletes' bodily anxiety was the same in both conditions, their cognitive-anxiety levels were considerably higher in the high urgency condition. It is clear that a person's cognitive appraisal of a situation affects it. Research indicates that arousal is viewed as a facilitator by successful athletes. Researchers found that individuals who viewed their anxiety as debilitating had higher anxiety severity levels than those who considered it as a facilitator. The study involved a specific sample of swimmers. It has been found that both basketball players are affected by this.

Cognitive-Behavioral Interventions in Athletics

The research that has been discussed in this study thus far indicates that athletes need to be able to control their anxiety in order to perform at their peak during critical times. An athlete may be overstimulated or having trouble achieving the right level of arousal if their performance significantly differs between training and competition. Advances in the field of anxiety reduction in general have been beneficial to athletics. Goal-setting, cognitive restructuring, diaphragmatic breathing, progressive muscular relaxation, visualization, and positive thinking are some of the anxiety-control strategies used by high achievers and researchers. This section will cover the research on useful methods for lowering anxiety in the context of sports. Specific therapies and therapeutic issues will also be covered in this section. In order to determine whether cognitive behavioral therapies are helpful, researchers have previously examined a variety of sports. There has been a wide range in the content and approach of the therapeutic approaches that have been used. Interventions for lowering anxiety in therapeutic settings were the basis of early research in the discipline. [4-5]

Review of Literature:

A common psychological sensation for athletes, especially during competition, is anxiety. Sports performance can be greatly impacted by the physiological and psychological reactions linked to anxiety, which can have an impact on a number of factors, including attention, confidence, and concentration. Before and during tournaments, athletes frequently report feeling anxious or stressed, which can affect how well they perform (Jones & Hanton, 2001). It has been demonstrated that anxiety, particularly performance anxiety, impairs focus by causing intrusive thoughts, self-doubt, and a decline in confidence. An athlete's capacity to perform at their best may be hampered by these emotional and mental disturbances. [6]

According to Seligman, Walker, and Rosenhan (2001), anxiety is a psychological and physiological condition with cognitive, physical, affective, and behavioral components. Anxiety is characterized by elevated physiological arousal and a subjective sense of unease. Some may argue that anxiety is a natural human propensity and mistake it for fear. While anxiety pushes a person to improve their performance, which advances or develops them, fear can have disastrous results. Since anxiety is a person's concern, excitement, and drive to succeed, it is dynamic and, as such, productive. [7]

According to Zeidner and Matthews (2005), athletes may experience stress in a variety of ways, including behavioral, emotional, sensory, interpersonal, imaginable, biological/physical, and cognitive. Feelings of self-pity, shame, melancholy, guilt, wrath, and anxiety are a few examples of affective signs and symptoms. Drug and alcohol misuse, violent behavior, restlessness, sleep difficulties, sulkiness, sobbing, absenteeism, and poor performance are a few examples of behavioral indications and symptoms (Thapa et al. 2017). Increased heart rates, tense muscles, stomach spasms, headaches, and pain are a few physiologic indicators. Cognitive signs and symptoms include self-handicapping, self-defeating remarks, worrying, impatience, exaggeration, and irrational performance expectations. [8]

Objectives:

- To determine the effects of stress and anxiety on sports performance.
- Investigating the effects of stress and anxiety on Exercise performance
- To explain Cognitive-Behavioral Interventions in Athletics

Research Methodology:

The impact of stress and anxiety on certain sport-related success situations is examined in this study's findings. This study lays the groundwork for future investigations and the creation of stress-reduction techniques in the context of sports, which could significantly affect athletic performance at all competitive levels. It is crucial to look at sport-specific stresses that have an impact on individual athletes because of the intricacy and individual heterogeneity in stress perception. This study's overall design was exploratory.

Result and Discussion:

Stress in Sport:

Athletes' reactions to competition can be better understood with an awareness of stress. The best way to think of stress is as a process rather than an event or result (see McGrath, 1970). Although there are numerous process perspectives on stress, stress generally refers to a person's assessment of a difficult environmental situation and their capacity to handle it. The article's accompanying image provides a visual depiction of the stress process.

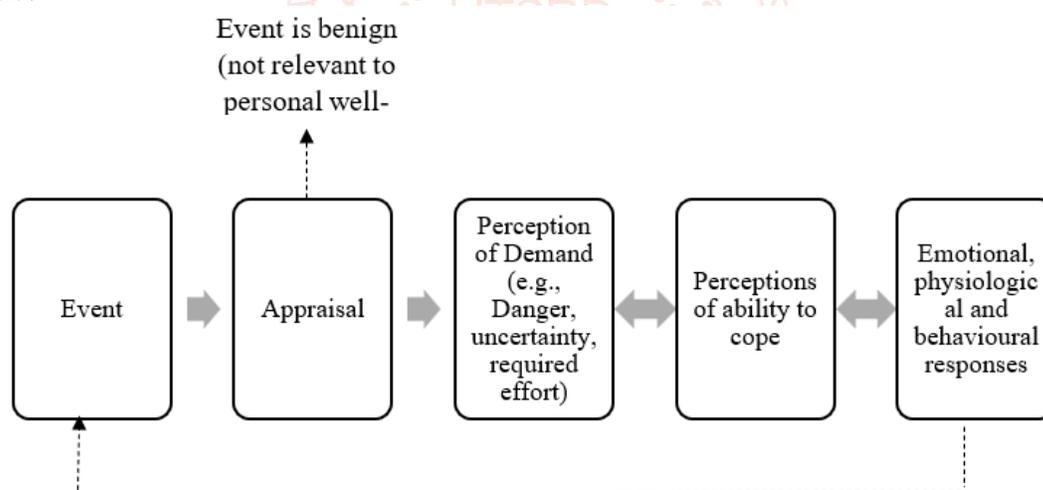


Figure 1: Illustration of Stress as a Process

An intriguing and perfect setting for researching stress is sports. The classic picture of an athlete choking—snatching defeat from the jaws of victory—is frequently used to highlight the importance that stress and emotions play in sports. However, emotions and stress can also improve an athlete's performance. Understanding stress and emotion is obviously beneficial for psychologists who want to help athletes overcome the difficulties of competitive sport and reach their full potential. While assisting athletes in realizing their potential is a commendable endeavor in and of itself, the study of emotion in sports is also significant because it can offer insights that are relevant to other performance contexts, such as education, the performing arts, and business, where tasks are equally challenging and individual success is crucial. [9]

Effects of stress on Sports and Exercise performance

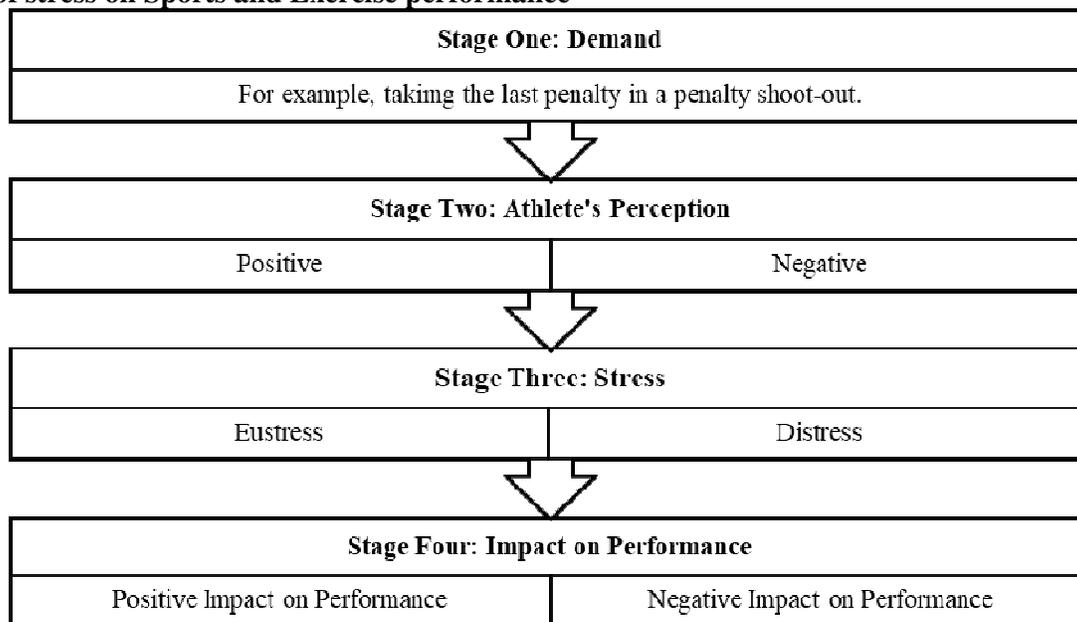


Figure 2: Effects of stress on Sports and Exercise performance

Table 1: Effects of stress on Sports and Exercise performance

Eustress	Distress
<ul style="list-style-type: none"> • Increased excitement and enjoyment. • Increased motivation. • Increased energy levels. • Increased heart rate so that more oxygen is going to working muscles. • Increased focus. 	<ul style="list-style-type: none"> • Leads to severe worry and anxiety. • Feelings of unpleasantness. • Decreases focus and concentration. • Lack of confidence. • Muscle tension. • Poor execution of skills.

Stress can have both positive and negative impacts on performance, depending on whether a performer experiences eustress or distress. Eustress is where a performer rises to the challenge of the stressful situation and consequently experiences an improvement in performance. Eustress can lead the performer to feel excited, more energized and more motivated whilst one of the symptoms of stress, an increased heart rate, means that more blood is flowing to working muscles which can benefit performance. For example, a cricket player who needs to score twenty runs off the last over to win the match is placed in a stressful situation but because of these positive effects, may rise to the challenge and score the runs needed.

There are 3 types of stress:

- Acute Stress – Described as a short-term event, but if traumatic can have a lasting impact.
- Episodic Stress – Described as a short-term event but an individual usually finds him/herself in these events regularly.
- Chronic Stress – Described as ongoing stress such as relationship and illness.

When an athlete struggles to perform consistently on the field, court, or diamond, it's common to look at their general skill level as a potential reason. How frequently is it mentioned that a family member's illness, interactions with a significant other, or success in the classroom could be the cause of a decline in athletic performance?

Stress can lead to:

- Fatigue
- Sleep disturbances
- Constant illness
- Poor eating habits
- Agitation
- Anxiety
- Depression
- Impaired performance – athletic & academic

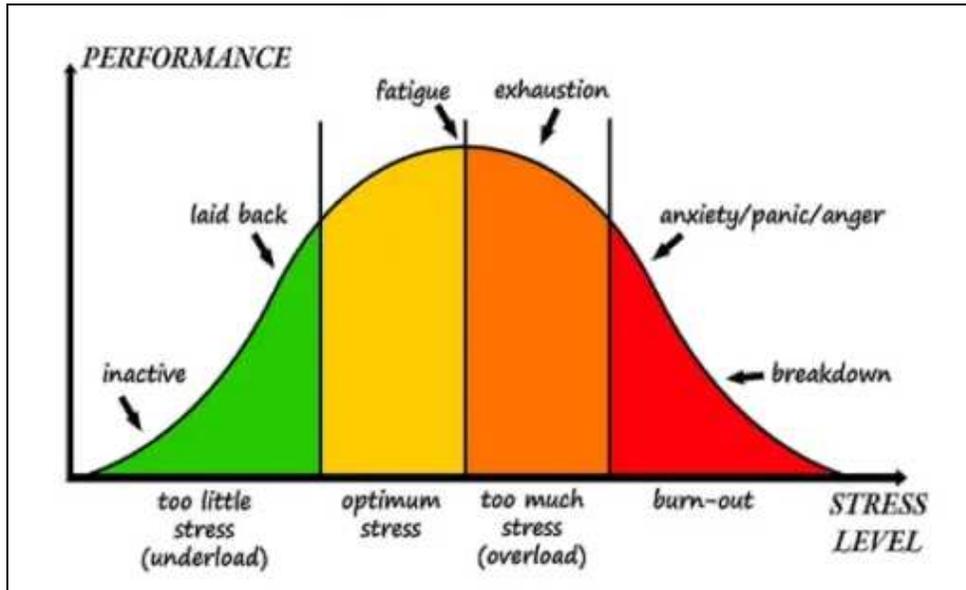


Figure 3: The Stress- Performance Curve

Everybody will experience stress at some point in their lives. Like any other kind of adversity, stress may be managed in a number of ways to reduce its negative effects and even learn how to take benefit of it, particularly in the context of athletics. Before addressing stress, one of the first things to ascertain is if the source is the sport or something external to the athletic setting.

Performance Anxiety in Sport:

Anxiety, often known as nerves, is a common human reaction to stressful situations and helps people deal with challenging situations. Moderate anxiety can help some people get motivated or take action. It may even be a component of their performance attitude. Research indicates that anxiety boosts performance up to a certain point, after which it starts to fall.

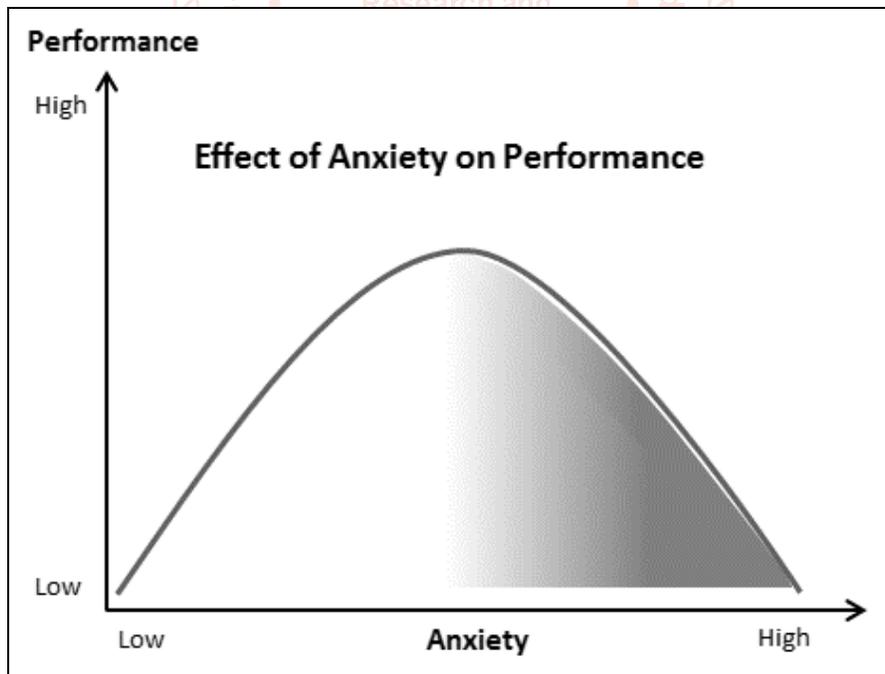


Figure 4: Effects of anxiety on Sports and Exercise performance

So, where on this curve are you? In addition to affecting your performance, being over the top can also negatively impact your relationships, happiness, and even your health. Even more worrisome, excessive anxiety exposure can result in General Anxiety Disorder, which is characterized by unjustified fear, anxiety, and even panic brought on by ordinary occurrences. This means that receiving therapy for anxiety as soon as possible is vital. Continue reading to learn how to get over performance anxiety and competitive nervousness if you or someone you know is experiencing them. [10]

Table 2: Effects of anxiety on Sports and Exercise performance

Symptom of Anxiety	Effect on Performance
1. Increased production of adrenaline, increased heart rate and increased sweat production.	Physiologically should have a positive effect on performance but if the athlete is feeling anxious, then they would only make the athlete feel even worse as it adds to the feeling of panic or worry.
2. Increased muscle tension.	Can lead to issues with movement and the execution of skills through the body "freezing" or feeling tense.
3. Loss of concentration or focus.	Leads to mistakes or inaccuracies in performance, especially in sports that require high levels of concentration or focus such as golf or snooker.
4. Indecision.	This can lead to making incorrect choices which can negatively impact on performance by leading to mistakes.
5. Loss of confidence.	Makes the athlete more likely to think that failure is inevitable which only increases the chance of failure.

Conclusion:

This study investigated how various forms of stress affect athletes' physical, mental, and emotional functioning in order to look at how stress affects sports performance. The results show that stress is a complicated phenomenon that, depending on personal traits, stress perception, and coping mechanisms, can have both positive and negative impacts on athletes, including improved or decreased performance. In order to reduce the detrimental effects of stress on sports performance, the significance of effective stress management is highlighted, especially through mental resilience training, relaxation techniques, and team support.

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