



Anxiety And Resilience In Relation To Performance: A Systematic Review

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Abstract:

This systematic review explores the intricate relationship between anxiety and resilience in the context of sports performance. Resilience, the ability to bounce back from adversity, is essential for athletes to overcome challenges and achieve success. Anxiety, a feeling of fear or worry, can both positively and negatively impact sports performance. The study aims to investigate the effects of varying levels of anxiety and resilience on sports performance and to explore the interplay between these factors. A comprehensive literature search was conducted across various electronic databases, including Google Scholar, PubMed, PsycINFO, and more. The inclusion criteria comprised English-language publications within the last 15 years that focused on anxiety and resilience in sports performance. After a rigorous selection process, 10 relevant studies were included for systematic review and meta-analysis. The findings reveal that both low and high anxiety levels can lead to impaired sports performance, while moderate anxiety levels may facilitate optimal performance. Similarly, individuals with low resilience may struggle to handle stressors and perform at their best, whereas those with high resilience tend to cope better and achieve better performance outcomes. Additionally, a strong negative correlation between anxiety and resilience is observed, suggesting that greater resilience can help mitigate the negative impact of anxiety on sports performance. The results highlight the importance of fostering resilience in athletes to improve their ability to manage anxiety and enhance overall performance.

Keywords: Anxiety, Resilience, Sports Performance, Coping Strategies, Psychological Well-Being.

1.0 Introduction:

Resilience refers to the human ability to adapt and bounce back in the face of tragedy, trauma and other adversity (Bonanno, 2004). Resilience is necessary for every sports. Reliance itself gives a player the strength to move forward, resilience helps a player recover from adversity. It is a quality that every sportsperson needs. Over the years, many cricket teams and individuals have displayed incredible tenacity, overcoming multiple difficulties and failures in order to achieve success. The Indian team's historic Test series victory against Australia in 2020–21 serves as one recent example of resiliency in cricket. Numerous difficulties experienced by the Indian team included injuries, quarantine limitations, racial insults, and adverse conditions (India vs Australia: CA Applauds Team India's "Resilience and Skill"; Thanks BCCI for Sacrifices to Make It a Success - Firstcricket News, Firstpost, n.d.). Not only team but also impact on individual players also such as Yuvraj Singh displayed tenacity by overcoming cancer and returning to international cricket in 2012. Anyone who encounters challenges or hardships in life needs resilience, not just cricket players. Resilience enables us to handle stress, get over challenges, learn from mistakes, and accomplish our goals.

A feeling of worry or fear that causes a rise in physiological activity is referred to as Anxiety. (Hamilton John et al., 2016) At all performance levels, Anxiety is a psychological condition that athletes encounter. Sports anxiety can have a detrimental impact on an athlete's performance, underachievement, and burnout. High amounts of Anxiety can make athletes perform below their regular level, whereas low to moderate levels can be uplifting. High levels of Anxiety can lead to impaired performance, including decreased attention, disrupted concentration, reduced decision-making abilities, and altered physiological responses. (Jones & Hardy, 1989) Resilience is associated with positive psychological outcomes, including increased self-confidence, enhanced motivation, improved coping strategies, and better overall well-being. (Fletcher & Sarkar, 2012a) Resilience buffers the negative effects of Anxiety by helping athletes regulate their emotions, maintain focus, and utilize effective coping strategies. (Gucciardi et al., 2008)

1.2 The purpose of the study:

The study aims to conduct Anxiety and resilience concerning performance. The study aims to explore the relationship between Anxiety and resilience in sports performance.

1.3 Objectives

1. To find out the effect of low Anxiety in relation to sports performance.
2. To explore the medium Anxiety, in relation to sports performance.
3. To discover the effect of high Anxiety, in relation to sports performance.
4. To find out the effect of low resilience in relation to sports performance.
5. To find out the effect of high resilience in relation to sports performance.
6. To investigate the relationship between Anxiety and resilience in sports performance.

2.0 Methodology

A comprehensive literature search was carried out to conduct this review study on the relationship between Anxiety and sports performance. Different electronic databases were searched included: Google scholar, Research Gate, Academia, Psycinfo, PubMed. MDPI (Multidisciplinary Digital Publishing Institute) Sage Journal PLOS ONE, Taylor & Francis Online, Frontiers, Scientific Journal Of Sports and Performance. The search terms used included “Anxiety AND Sports performance” “Resilience AND sports performance” “Anxiety AND Resilience”.

2.1 Inclusion criteria:

1. English-language publications that have been made.
2. Studies concentrating on Anxiety and resilience.
3. Studies specially investigating the Anxiety and resilience in sports performance and relationship between Anxiety and resilience
4. Studies selected last 15 years, i.e 2008-2023

2.2 Exclusion criteria:

1. Studies that weren't written in English.
2. Did not use human subjects, and studies based on grey literature were not included.
3. Studies of these variables have been excluded because clinical illnesses and demographic characteristics are not viewed by resilience frameworks as potential resilience factors.
4. Studies in which participants exclusively pictured failure scenarios were excluded.



The study selection process and reasons for excluding particular studies are shown in Figure 1.

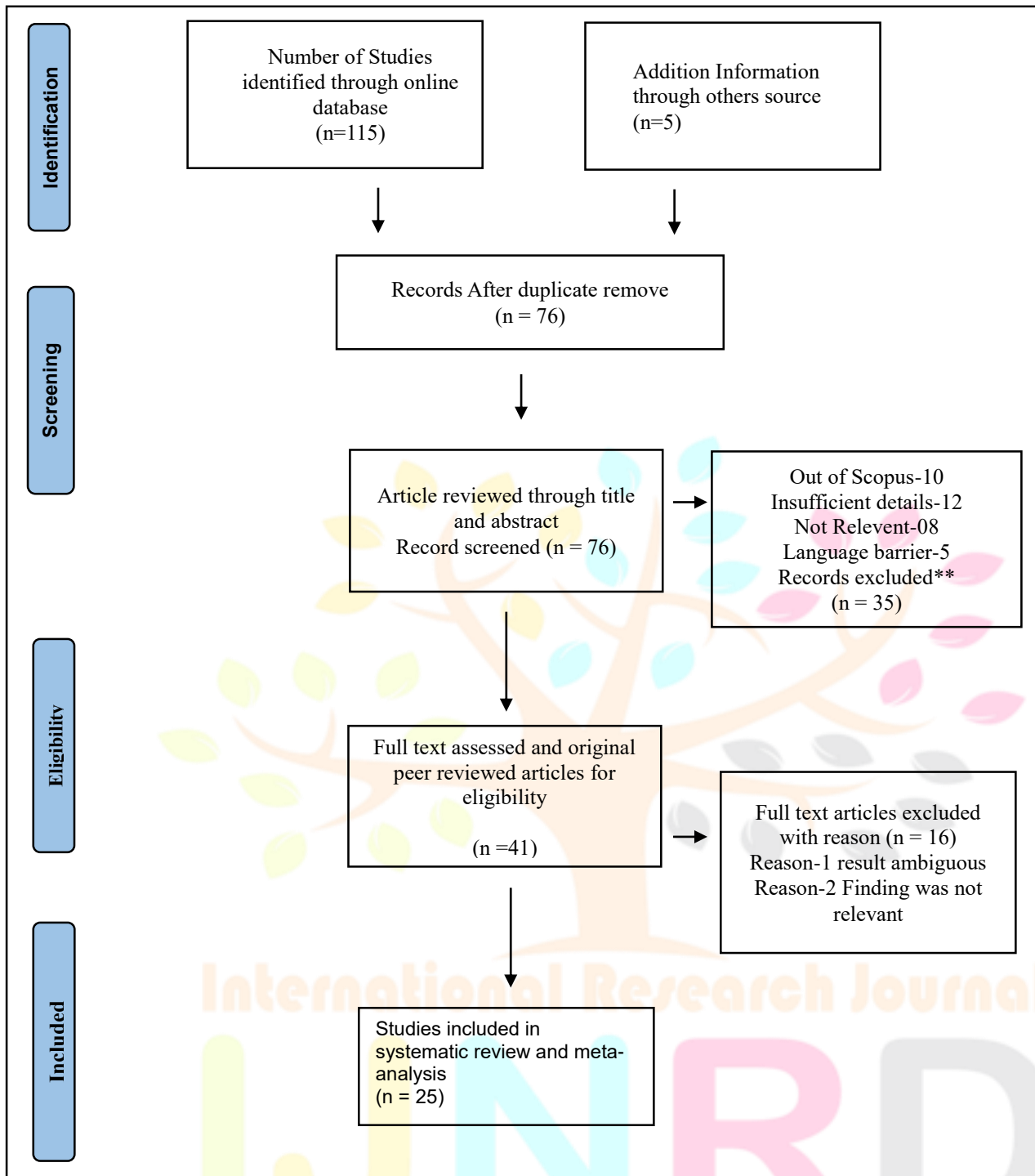


Fig 1. PRISMA flow chart. :

Flow chart explaining the search process for the systematic review.

Duplicate articles were eliminated following the initial search, and the titles and abstracts of the remaining articles were checked for relevancy and included on the basis of title and abstract. After that excluded on the basis out of Scopus, insufficient details, not relevant to the study, and language barrier. Included full text then excluded based on result ambiguous and the finding was not relevant. Finally, 10 kinds of literature were included for systematic review and meta-analysis.

Then, full-text articles were acquired for additional evaluation. To learn more about Anxiety and resilience, their performance, and their relationships, the chosen publications underwent critical analysis.

In general, the methods used in this review study were to compile and analyze relevant writings to investigate the link between Anxiety and resilience in athletes. The results of this review will help us comprehend Anxiety, resilience and how these factors affect athletic performance.

3.0 Findings:

3.1 How does a low anxiety affect

- i. The "Inverted-U" graph created by Robert Yerkes and John Dodson in 1908, low levels of stress or Anxiety can lead to suboptimal sports performance. This means that too little Anxiety can negatively affect an athlete's performance. Low Anxiety can lead to a lack of motivation, focus, and energy, which can all negatively impact an athlete's performance.(Bali et al., 2015a)
- ii. Lower levels of athletic performance are linked to lower levels of Anxiety. Athletic performance can be facilitated by moderate degrees of Anxiety.(Kanniyan Abdussalam, 2015)
- iii. This study found that track low performers had lower Anxiety and self-efficacy.(Ibrahim & Almoslim, 2016)
- iv. low anxiety level can have positive impact on sports performance.(Carriço & Almeida, n.d.)

3.2 How does a medium anxiety affect

- i. For some athletes, even medium Anxiety might be advantageous since they may view it as a challenge that will help them perform better.(Sancho & Ruiz-Juan, 2013)
- ii. The study contends that neither a complete lack of Anxiety nor a high level of Anxiety improve athletic performance.(Mercader-Rubio & Ángel, 2023)
- iii. Athletes with medium Anxiety may experience a slight decrease in their performance. However, it is important to note that this is just one of the many factors that can affect sports performance, and there are various psychological techniques that can be used to improve performance.(Lochbaum et al., 2022)
- iv. "Inverted-U" graph created by Robert Yerkes and John Dodson in 1908, moderate levels of stress or Anxiety can lead to optimal performance in sports(Bali et al., 2015a)
- v. Moderate levels of arousal can facilitate athletic performance. However, high and low levels of arousal are associated with lower levels of performance.(Kanniyan Abdussalam, 2015)

3.3 How does a high anxiety affect

- i. Moderate levels of arousal can facilitate athletic performance. However, high and low levels of arousal are associated with lower levels of performance(Kanniyan Abdussalam, 2015)
- ii. High levels of Anxiety can impact physiological arousal and cognitive Anxiety, which can impair performance.(Lundqvist et al., 2006)

- iii. High Anxiety can lead to feelings of stress and insecurity, which can significantly decrease an athlete's performance in competition.(Sancho & Ruiz-Juan, 2013)
- iv. High athletic performance may be affected by high level of somatic Anxiety.(Parnabas et al., n.d.)
- v. High levels of somatic state anxiety can have a negative impact on athletic performance.(Smith & Smoll, n.d.)
- vi. The "Inverted-U" graph created by Robert Yerkes and John Dodson in 1908, high levels of stress or Anxiety can lead to a decline in sports performance(Bali et al., 2015b)

3.4 How does a low level of resilience affect

- i. The study found that lower levels of resilience were associated with poorer sports performance in adverse situations.(Chacón Cuberos et al., 2015)
- ii. Sports failure can cause physiological stress, emotional stress, negative emotional reactions, and poor performance in athletes with insufficient resilience.(Patrick Gonzalez, 2013)
- iii. Athletes with low resilience ratings could feel more stress and less recovery, which could eventually affect how well they perform in sports.(Garcia Secades, 2017)
- iv. Athletes with low resilience may struggle to cope with pressure and may not be able to perform at their best.(Secades et al., 2016)
- v. Low resilience may make it difficult to deal with stressors and may make it difficult to evaluate problems properly, which can result in poor outcomes.(Fletcher & Sarkar, 2012b)

3.5 How does a high level of resilience affect

- i. A high level of resilience can help improve sports performance in adverse situations.(Chacón Cuberos et al., 2015)
- ii. Theoretically, athletes with high resilience show signs of positive adaptation through reduced cortisol levels, positive emotional reactions, and effective performance.(Patrick Gonzalez, 2013)
- iii. High-resilience athletes typically have more effective stress-recovery mechanisms. They achieve greater scores in elements related to recovery and lower scores in components related to stress, which can improve their performance in sports.(Garcia Secades, 2017)
- iv. Athletes with high levels of resilience may be better able to cope with challenges and failures in competitive sports.(Secades et al., 2016)
- v. Athletes with a high level of psychological resilience are better able to avoid the negative effects of stressors and to perform at their best. Positive personality traits, motivation, self-confidence, focus, and a

sense of social support are among the psychological factors that influence athletes' resilience.(Fletcher & Sarkar, 2012b)

vi. Athletes with higher levels of resilience qualities experienced less pre-competition Anxiety, which in turn led to better performance.(Zhang et al., 2023)

3.6 Relationship between Anxiety and resilience in sports performance

i. Volleyball players can cope better with perceived Anxiety and exhibit higher self-confidence revealed a significant connection between Anxiety and resilience.(Patsiaouras et al., 2022)

ii. Resilience has the potential to assist people deal with despair and Anxiety.Anxiety and depression were less prevalent in people with higher levels of resiliency.(Lyu et al., 2022)

iii. Resilience qualities predicted lower levels of pre-competition cognitive Anxiety, and pre-competition cognitive Anxiety mediated the relationship between resilience qualities and performance.(Zhang et al., 2023)

iv. Higher levels of resilience may make people better able to handle stressful events and have a more positive view, which can help lower Anxiety.(González-Hernández et al., 2020)

v. low levels of attachment anxiety and the ability to use problem-focused coping strategies may be associated with greater resilience.(Kural & Kovacs, 2021)

vi. Resilience, which is the capacity to adjust to stress and cope with psychological skill and adversity, can help people control their anxiety levels.(Tassi et al., 2023)

vii. People with higher degrees of resilience may have more resources and coping mechanisms to deal with stress and adversity, which in turn may lessen their Anxiety.(Li & Miller, 2017)

viii. People with more psychological resiliency are less prone to exhibit feelings of Anxiety and burnout in response to organizational pressures found in sporting environments.(Wu et al., 2022)

ix. resilience include self-esteem, personal competence and tenacity, tolerance of negative affect, control, and spirituality. These factors can help individuals cope with stress and adversity, which in turn can reduce anxiety levels.(Haddadi & Ali Besharat, 2010)

4.0 Discussion:

The results of this systematic review provide fruitful insight into the relationship of sports performance with Anxiety and resilience of sportspersons.

The author have reviewed relation to anxiety levels and sports performance in athlete. studies show positive correlation to low anxiety.low levels of stress or Anxiety can lead to suboptimal sports performance.(Bali et al., 2015b) Lower levels of athletic performance are linked to lower levels of

Anxiety(Kanniyan Abdussalam, 2015) low performers had lower Anxiety and self-efficacy(Ibrahim & Almoslim, 2016) low anxiety level can have positive impact on sports performance(Carriço & Almeida, n.d.) studies show that the best sports performance achieved through medium anxiety level. Medium anxiety tends to better performance(Sancho & Ruiz-Juan, 2013)Medium anxiety improve athletic performance(Mercader-Rubio & Ángel, 2023)moderate level can lead to optimum performance.(Bali et al., 2015c). Moderate levels of arousal can facilitate athletic performance.(Kanniyan Abdussalam, 2015). studies showed negative correlation to sports performance. high levels of arousal are associated with lower levels of performance.(Kanniyan Abdussalam, 2015)high levels of Anxiety can impact physiological arousal which leads to poor performance.(Lundqvist et al., 2006) High Anxiety can lead to feelings of stress and insecurity that leads to decrease performance.(Sancho & Ruiz-Juan, 2013) high levels of stress or Anxiety can lead to a decline in sports performance(Bali et al., 2015b) studies showed low level of resilience leads to poor. lower levels of resilience were associated with poorer sports performance(Chacón Cuberos et al., 2015) Athletes with low resilience may not cope with pressure that tends to decrease performance.(Secades et al., 2016) Low resilience may make it difficult to deal with stressors which can result in poor outcome(Fletcher & Sarkar, 2012b).

Athlete with high level of resilience that tends to cope with stress and protect stressor and many psychological negative factor get better performance. high resilience show signs of positive adaptation through reduced cortisol levels, positive emotional reactions, and effective performance(Patrick Gonzalez, 2013) Athletes with high levels of resilience may be better able to cope with challenges and failures in competitive sports.(Secades et al., 2016) Athletes with higher levels of resilience qualities experienced less pre-competition Anxiety, which in turn led to better performance.(Zhang et al., 2023)

Resilience is a dynamic process which protection from stressors, encompasses positive adaptation. resilience is interrelated to anxiety by negative correlation. Volleyball players can cope better with perceived Anxiety and exhibit higher self-confidence revealed a significant connection between Anxiety and resilience.(Patsiaouras et al., 2022)resilience include self-esteem, personal competence and tenacity, tolerance of negative affect, control, and spirituality. These factors can help individuals cope with stress and adversity, which in turn can reduce anxiety levels.(Haddadi & Ali Besharat, 2010) People with more psychological resiliency are less prone to exhibit feelings of Anxiety and burnout in response to organizational pressures found in sporting environments.(Wu et al., 2022)

5.0 Conclusion:

A systematic review showed a relationship between resilience, and anxiety.Perhaps the most useful finding was that across both male and female athletes, individuals with greater levels of resiliency experienced lower levels of anxiety. The effect of resiliency on anxiety may be linked to success in future athletic, educational, or occupational pursuits. The field of positive psychology asserts that positive thinking may help people tremendously to improve their resilience and overall well-being

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