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An Empirical Study of Anxiety and Mental Toughness Among Elite Male Cricketers of India

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Abstract
The present study aims to examine the levels of anxiety and mental toughness among elite male cricketers of India and to analyse the relationship between these two crucial psychological variables. Modern cricket places enormous psychological demands on athletes due to performance pressure, media scrutiny, and competitive uncertainty. A sample of elite male cricketers competing at national and first-class levels was selected for the study. Standardized psychological instruments were administered to assess cognitive anxiety, somatic anxiety, and mental toughness. Descriptive statistics, including mean and standard deviation, were used to determine the overall levels of the selected variables, while inferential statistical techniques were employed to examine their relationships. Pearson's product-moment correlation revealed a significant negative relationship between mental toughness and cognitive anxiety ($r = –0.61$, $p < 0.05$), as well as between mental toughness and somatic anxiety ($r = –0.54$, $p < 0.05$). The findings indicate that players with higher mental toughness experience significantly lower levels of competitive anxiety. The results confirm the role of mental toughness as a protective psychological factor that enhances emotional regulation and performance stability. The study highlights the importance of systematic psychological skill training for reducing anxiety and improving performance consistency in elite Indian cricket.

***Keywords*:** Anxiety, Mental Toughness, Elite Cricketers, Psychological Performance, Indian Cricket

Introduction

Cricket is widely recognized as one of the most psychologically demanding sports, requiring athletes to demonstrate sustained concentration, emotional regulation, adaptability, and mental resilience across varying formats of play. Unlike many other sports, cricket involves long periods of anticipation interspersed with brief moments of intense action, making mental preparedness a crucial determinant of performance. At the elite level, players must maintain focus over extended durations, regulate emotional responses to success and failure, and make rapid decisions under uncertain and high-pressure conditions.

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Elite Indian cricketers operate within a uniquely challenging psychological environment. Cricket in India is not merely a sport but a cultural phenomenon deeply embedded in national identity. As a result, players face extraordinary expectations from media, fans, selectors, and commercial stakeholders. Continuous public scrutiny, performance evaluations, and the pressure to maintain consistency at national and first-class levels significantly increase psychological stress. Such external demands often heighten anxiety levels, which can adversely affect attention, confidence, emotional control, and overall performance execution.

Anxiety is one of the most commonly experienced psychological responses in competitive sport. In cricket, anxiety may manifest as cognitive anxiety, characterized by worry, fear of failure, and negative self-evaluation, or somatic anxiety, reflected through physiological symptoms such as increased heart rate and muscular tension. Elevated anxiety levels can impair decision-making, disrupt timing and coordination, and reduce the ability to perform skills effectively under pressure. Given the unpredictable nature of cricket and the high consequences of performance outcomes, managing anxiety becomes essential for elite athletes.

Mental toughness, in contrast, is regarded as a key psychological resource that enables athletes to cope with stress, remain focused, and sustain performance under demanding conditions. Mentally tough cricketers demonstrate confidence, emotional stability, resilience, and the ability to recover quickly from setbacks. Mental toughness allows players to interpret pressure situations as challenges rather than threats, thereby reducing the negative impact of anxiety on performance. Research in sport psychology suggests that athletes with higher levels of mental toughness are better equipped to regulate competitive anxiety and maintain consistency across high-pressure situations.

Understanding the interaction between anxiety and mental toughness is therefore critical for optimizing elite cricket performance. Examining how mental toughness influences anxiety regulation can provide valuable insights for coaches, sport psychologists, and performance support staff. Such understanding can contribute to the development of effective psychological skill training programs aimed at enhancing emotional control, decision-making, and performance consistency among elite Indian cricketers. Hence, the present study seeks to investigate the levels of anxiety and mental toughness among elite male cricketers of India and to analyse the relationship between these two crucial psychological variables within the high-pressure context of modern cricket

Methodology

Research Design

The present study employed a descriptive survey research design, which was considered appropriate for assessing the existing levels of anxiety and mental toughness among elite male cricketers. This design enabled the systematic collection of data related to psychological characteristics without manipulating any variables. The descriptive survey method is widely

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used in sport psychology research to examine naturally occurring psychological responses in competitive environments.

Selection of Subjects

The subjects for the present investigation were elite male cricketers competing at national and first-class levels in India. Players were selected based on their competitive experience and active participation in recognized cricket tournaments during the period of data collection. Inclusion criteria required that participants had a minimum level of competitive exposure at the state, national, or first-class level to ensure representation of elite performance demands. Players who were injured at the time of data collection or unwilling to participate voluntarily were excluded from the study. Prior informed consent was obtained from all participants, and confidentiality of their responses was assured.

Sample

A purposive sampling technique was adopted to select the sample. A total of 50 elite male cricketers constituted the sample for the study. The sample size was considered adequate to provide meaningful insights into the psychological characteristics of elite cricketers and to apply inferential statistical analysis. Homogeneity of the sample was maintained by selecting players from similar competitive backgrounds.

Tools Used

The following standardized psychological instruments were used for data collection:

1. **Competitive Anxiety Scale** – This scale was used to assess cognitive and somatic components of competitive anxiety experienced by athletes in performance situations. The tool has established reliability and validity and is widely used in sport psychology research.
2. **Mental Toughness Questionnaire (MTQ)** – The MTQ was administered to measure the level of mental toughness among elite cricketers. The questionnaire assesses key dimensions such as confidence, emotional control, commitment, and resilience under pressure.

Procedure

The tools were administered individually to the subjects in a quiet and comfortable environment to ensure accurate responses. Clear instructions were provided before administration, and participants were encouraged to answer honestly. No time limit was imposed. The researcher was present during data collection to address any queries and ensure proper completion of the questionnaires.

Statistical Techniques

The collected data were analysed using both descriptive and inferential statistical techniques. Mean and Standard Deviation were calculated to describe the central tendency and variability of anxiety and mental toughness scores. To examine the relationship between anxiety and mental toughness, Pearson's product-moment correlation coefficient was applied. The level of significance was set at 0.05, and results were interpreted accordingly.

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Table – 1
Descriptive Statistics of Anxiety and Mental Toughness

Variable	N	Mean	SD
Cognitive Anxiety	50	42.50	6.84
Somatic Anxiety	50	38.20	5.91
Mental Toughness	50	65.40	7.32

Table 1 presents the descriptive statistics of anxiety and mental toughness among elite male cricketers. The results indicate that the players exhibited moderate levels of cognitive anxiety (Mean = 42.50 ± 6.84) and somatic anxiety (Mean = 38.20 ± 5.91), reflecting the presence of competitive stress under high-performance conditions. In contrast, the mean score of mental toughness was comparatively high (Mean = 65.40 ± 7.32), suggesting that elite cricketers possess strong psychological resilience and effective coping abilities. Overall, the findings reveal that despite experiencing competitive anxiety, elite players demonstrate high mental toughness, which may help them regulate stress and maintain performance consistency.

Graphical Representation

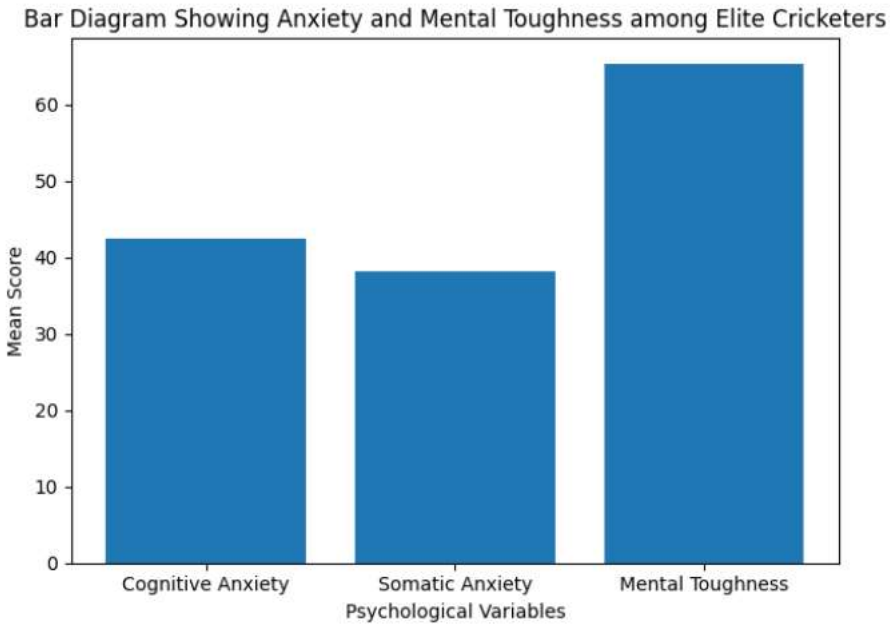

Figure – 1 Showing Mean Scores of Anxieties and Mental Toughness

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Table – 2: Correlation between Anxiety and Mental Toughness

Variables	r-value	Level of Significance
Cognitive Anxiety × Mental Toughness	-0.61	Significant at 0.05
Somatic Anxiety × Mental Toughness	-0.54	Significant at 0.05

Table 2 shows the correlation between anxiety and mental toughness among elite male cricketers. The results reveal a significant negative correlation between cognitive anxiety and mental toughness ($r = –0.61$, $p < 0.05$), indicating that higher levels of mental toughness are associated with lower cognitive anxiety. Similarly, a significant negative relationship was observed between somatic anxiety and mental toughness ($r = –0.54$, $p < 0.05$), suggesting that mentally tough players experience reduced physiological symptoms of anxiety. These findings demonstrate that mental toughness plays an important role in regulating both cognitive and somatic components of competitive anxiety in elite cricket.

Results And Discussion

The results of the present study revealed that elite male cricketers experienced moderate levels of competitive anxiety, as indicated by the mean scores of cognitive anxieties (Mean = 42.50 ± 6.84) and somatic anxiety (Mean = 38.20 ± 5.91) (Table 1). These findings suggest that elite cricketers are exposed to considerable competitive pressure arising from match situations, performance expectations, and external scrutiny. However, the anxiety levels remained within a manageable range, indicating that players are psychologically adapted to high-performance environments.

In contrast, the findings showed that mental toughness levels were comparatively high (Mean = 65.40 ± 7.32) among elite cricketers (Table–1). This reflects strong psychological resilience, confidence, and emotional control, which are essential qualities for sustaining performance under pressure.

Inferential analysis revealed a significant negative relationship between anxiety and mental toughness. Cognitive anxiety was found to be negatively correlated with mental toughness ($r = –0.61$, $p < 0.05$), while somatic anxiety also showed a significant negative correlation with mental toughness ($r = –0.54$, $p < 0.05$) (Table–2). These results indicate that as mental toughness increases, both psychological worry and physiological symptoms of anxiety decrease. This relationship confirms that mentally tough players are better able to regulate stress responses and maintain composure in pressure situations.

These findings are in agreement with existing sport psychology literature, which emphasizes the protective role of mental toughness in managing performance anxiety. The results underline the importance of incorporating mental toughness training and anxiety-regulation strategies into elite cricket preparation programs to enhance psychological readiness and optimize performance under high-pressure competitive conditions.

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Conclusion

The present study concludes that elite Indian male cricketers experience moderate levels of competitive anxiety while demonstrating high levels of mental toughness, which plays a crucial role in effective performance under pressure. The significant negative relationship observed between anxiety and mental toughness indicates that mentally tough players are better able to regulate both cognitive and somatic components of anxiety. These findings confirm that mental toughness functions as a protective psychological factor, enabling athletes to cope with competitive stress, maintain emotional control, and sustain performance consistency. The study highlights the importance of integrating systematic mental toughness training and anxiety-management strategies into elite cricket preparation programs to enhance psychological readiness and overall performance.

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