

Analysis of mood levels in cricket athletes during the training phase based on gender

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ABSTRACT

Problems: Mood significantly influences athletic performance, particularly in cricket, where monotonous and repetitive training can negatively affect athletes' moods, reduce motivation, and ultimately impair on-field performance. Negative moods are not only detrimental to individual athletes but can also spread among teammates, amplifying their impact. **Purpose:** This study aimed to examine differences in mood levels between male and female cricket athletes during training, focusing on how gender may influence emotional responses in this context. **Methods:** This research utilized the Brunel Mood States (BRUMS) questionnaire, which was administered to the sample participants just once. Data analysis for the study was conducted using a t-test in SPSS version 25. **Results:** The results indicated significant differences in mood levels between male and female cricket athletes. Specifically, there were considerable disparities in negative mood states, such as tension, depression, anger, fatigue, and confusion, between the two groups during the training phase. Despite these differences, both male and female athletes exhibited an "iceberg personality" pattern, with vigor being the dominant mood indicator. **Conclusion:** The study concludes that the mood levels of male and female cricket athletes vary during training, highlighting the importance of a holistic approach that takes into account competitive pressures on male and female team to enhance performance through better management of mood states.

Keywords: mood states, cricket athletes, training phase, gender

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Introduction

The success of a sports team is influenced not only by physical abilities and well-executed strategies but also by the mental and emotional well-being of its members (Musyarofah et al., 2024). A key factor in sports psychology is mood, which refers to an emotional state that can significantly impact an athlete's mindset, behaviour, and outlook on life (Ika Puji Rahayu et al., 2024). A positive mood can enhance focus and motivation, ultimately improving athletic performance. On the other hand, a negative mood can hinder an athlete's abilities and lead to prolonged stress (Providência & Margolis Ribeiro, 2021). Additionally, mood can affect overall team performance, especially in team sports like cricket, where emotions can be contagious (Rahman et al., 2019). A negative mood from one team member can impact the morale and performance of the entire team. Therefore, maintaining a positive mood within the team is crucial for achieving success.

Understanding the mood of athletes during the training phase is crucial for predicting their performance in competitions. (Selmi et al., 2023). In the case of cricket players, their training sessions often lack variety and can become monotonous, providing limited opportunities to compete and test their skills in real matches. This lack of variety can negatively affect their mood. (Thurlow et al., 2024). Additionally, repetitive training routines without new challenges can lead to boredom and decreased motivation among athletes. Another significant issue is the difference in habits and responses between male and female cricket teams, which can also influence their mood. (Grewal et al., 2024) If athletes' moods are not properly addressed,

it may result in excessive mental and physical fatigue. (Veness, 2016).

Numerous studies have demonstrated that mood disturbances tend to increase during periods of intensive training. Research focusing on how mood states affect athletic performance has become a significant area of interest in sports psychology. A study by (Selmi et al., 2023) Found that a positive mood is strongly linked to improved athletic performance, as it boosts motivation and concentration during competitions. Other research indicates that athletes who can effectively manage their emotions typically exhibit more consistent performance, particularly in high-pressure situations (Rios-Garit et al., 2024). Additionally, studies highlight the importance of understanding athletes' mood profiles to predict their performance during both training and competition (Do Bonfim et al., 2023). Research also reveals that lower-level cricket athletes tend to experience more negative moods compared to their higher-level counterparts during competitive periods (Terry & Parsons-Smith, 2021). Therefore, gaining deeper insights into mood changes can provide valuable guidance for coaches and athletes in developing strategies to enhance performance on the field.

While existing studies have explored mood and sports performance broadly, there remains a need to analyze mood differences between male and female cricket athletes during the training phase. Cricket's unique characteristics—such as extended match durations (Scanlan et al., 2016), high physical and mental demands (Mondal, 2019), and situational factors like weather conditions and spectator pressure—may influence athletes' moods differently compared to other sports (Haq & Kumaat, 2024). Therefore, targeted research is essential to understand gender-based mood variations in cricket training phases. Such insights will provide valuable information to evaluate the effectiveness of current training programs and optimize athlete development strategies.

This study specifically examines the differences in mood states between male and female cricket athletes in Bandung during their training phase. A quantitative approach will be used, utilizing the Brunel Mood Scale (BRUMS) to assess various dimensions of mood among athletes (Parsons-Smith et al., 2022). This study will also account for cricket-specific factors, such as match duration, environmental conditions, and team dynamics, which uniquely influence athlete psychology. Mood monitoring serves as a critical tool to ensure training regimens are not only physically effective but also supportive of athletes' mental and emotional well-being (Terry & Parsons-Smith, 2021). The findings are anticipated to greatly enhance cricket-specific sports psychology and inform strategies to improve athlete development standards in Indonesia, particularly through customized interventions that address observed gender-based mood variations from previous studies.

Method

This research adopts a descriptive quantitative approach and utilizes the Brunel Mood Scale (BRUMS) as its main measurement tool. The study involved 23 members of the UPI cricket team, comprising 12 male and 11 female athletes aged between 19 and 22 years. Participants were selected through purposive sampling, with inclusion criteria requiring them to be active team members and to regularly participate in training sessions. Prior to data collection, the researcher obtained permission from the head coach and provided players with an explanation of the assessment process. The BRUMS is a modified version of the Profile of Mood States – Adolescents (POMS A). It consists of 24 items divided into six subscales, using a five-point Likert scale that ranges from 0 (Not at all) to 4 (Extremely) (Hasan & Khan, 2022). Athletes were asked to self-report their emotional states during the training phase across six dimensions: anger, confusion, depression, fatigue, tension, and vigor. Responses were based on the athletes' subjective experiences of these emotions (Providência & Margolis Ribeiro, 2021). Data analysis in this study was conducted using the Shapiro-Wilk test to assess normality, Levene's test to check homogeneity of variance, and an independent t-test in SPSS version 25 to compare mood states between male and female cricket athletes.

Results

The author presents the results of data processing and analysis in the form of tables and figures. The mean and standard deviation of mood levels among cricket athletes during the training phase based on gender are shown in Table 1.

Table 1. Mean and Standard Deviation of Mood Levels Among Cricket Athletes During the Training Phase Based on Gender

Gender	Indicator	Mean $\pm$ Standard Deviation
Male	Tension	6 ± 3.303
	Anger	7.42 ± 2.968
	Depression	5.83 ± 2.758
	Fatigue	8.42 ± 2.644
	Vigor	9.42 ± 2.875
	Confussion	7.92 ± 2.151
	Overall	45 ± 8.718
Female	Tension	4.27 ± 3.580
	Anger	4.82 ± 2.442
	Depression	4.73 ± 3.101
	Fatigue	7.64 ± 2.501
	Vigor	9.27 ± 1.902
	Confussion	6.36 ± 2.501
	Overall	37.09 ± 8.549

Table 1 highlights significant differences in the mean and standard deviation scores for mood indicators between male and female cricket athletes. For the Tension indicator, male athletes scored higher with a difference of $(1.73 \pm .277)$ compared to female athletes. In the Anger indicator, a more pronounced difference is observed, with male athletes scoring higher by $(2.60 \pm .526)$ compared to females. For Depression, male athletes also showed higher scores with a difference of $(1.10 \pm .343)$ compared to females. Regarding Fatigue, although the difference is not substantial, male athletes still scored higher $(.78 \pm .143)$ compared to female athletes. The Vigor indicator showed a relatively small difference, with male athletes scoring slightly higher $(.15 \pm .973)$ compared to females. Lastly, for Confusion, male cricket athletes again demonstrated higher scores with a difference of $(1.56 \pm .350)$ compared to female athletes. Overall, this data indicates that male cricket athletes tend to experience higher levels of negative mood states compared to female athletes across nearly all indicators during the training phase. The author further presents the results of normality, homogeneity, and difference tests in Table 2, which will be discussed in subsequent sections of the study analysis.

Table 2. Results of Normality, Homogeneity, and Difference Tests for Mood Levels Between Male and Female Cricket Athletes During the Training Phase

Gender	Shapiro-Wilk Test			Levene's Test		t-test		
	Statistic	df	Sig.	F	Sig.	t	df	Sig. (2-tailed)
Male	.204	12	.178	.001	.978	2.193	21	.040
Female	.185	11	.200					

The statistical analysis results presented in Table 2 indicate that the Shapiro-Wilk test produced significance values of .178 for the male team and .200 for the female team, both of which exceed the 0.05 threshold. This suggests that the data follows a normal distribution. Additionally, Levene's Test for homogeneity of variance yielded a significance value of .978, greater than .05, confirming that the variances between the two groups are homogeneous. Moreover, the independent t-test revealed a significant difference in mood levels between male and female cricket athletes, with a t-value of 2.193, degrees of freedom (df) = 21, and a significance level of .040, which is less than .05. This result led to the rejection of the null hypothesis (H_0), indicating a statistically significant difference in mood states between male and female cricket athletes during the training phase. Following this analysis, the author presents the percentage distribution of mood levels among male cricket athletes for each indicator, as illustrated in Figure 1.

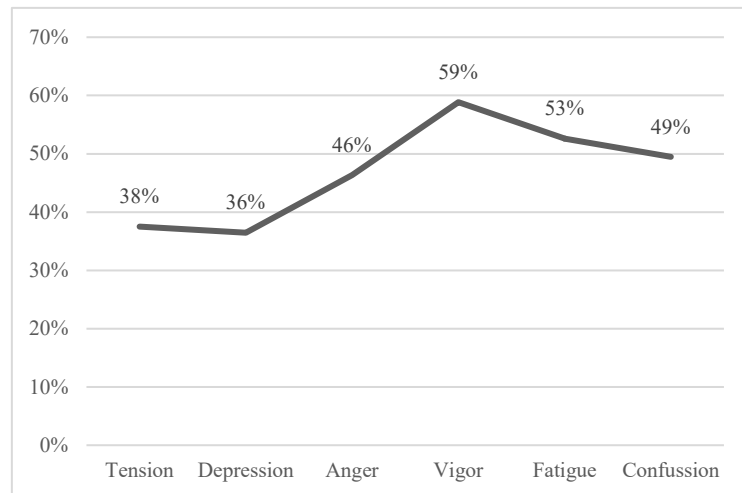


Figure 1. Mood Levels of Male Cricket Athletes During the Training Phase Based on Each Indicator

Figure 1 illustrates the mood profile of male cricket athletes during the training phase, consistent with the "iceberg profile" criteria. The graph shows that vigor (59%) represents the highest percentage, significantly exceeding the negative indicators: fatigue (53%), confusion (49%), anger (46%), tension (38%), and depression (36%). In this arrangement, vigor forms the "iceberg peak," while the negative mood indicators remain below it, creating a structure that reflects the classic iceberg profile seen in athletes with optimal mental and emotional states. This pattern aligns with Morgan's mental health model, which posits that high vigor and low negative moods correlate with athletic success. The dominance of vigor indicates that male athletes maintain strong motivation and energy during training, despite moderate levels of fatigue and confusion. However, the relatively high fatigue score (53%) may suggest the physical and mental strain associated with cricket's prolonged training demands. Figure 2 subsequently presents the percentage distribution of mood states among female cricket athletes for comparison.

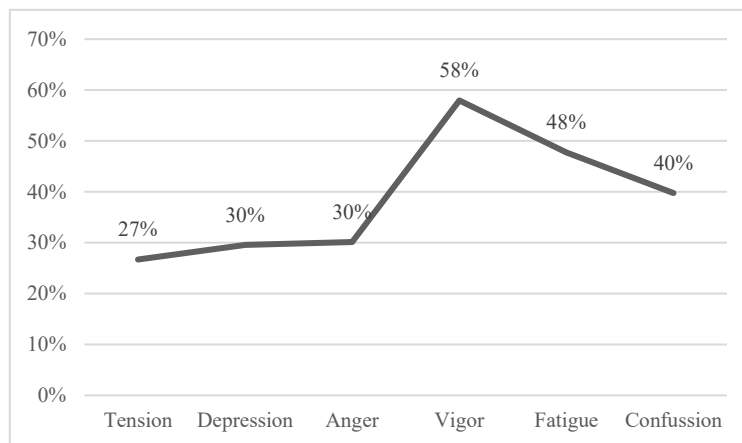


Figure 2. Mood Levels of Female Cricket Athletes During the Training Phase Based on Each Indicator

Figure 2 illustrates the mood profile of female cricket athletes, which also aligns with the "iceberg profile" criteria. The graph highlights the dominance of vigor (58%) as the highest percentage, while negative indicators fall below it: fatigue (48%), confusion (40%), depression (30%), anger (30%), and tension (27%). This pattern is consistent with the characteristics of the iceberg profile in sports psychology, where vigor represents the "tip of the iceberg," while negative emotional dynamics remain beneath the surface.

Discussion

This study revealed significant differences in mood levels between male and female cricket athletes. Overall, the results showed that the average mood scores of male athletes were higher than those of female

athletes across all measured indicators. This is evident from the average score of male athletes, which reached 45 ± 8.718 , compared to female athletes, who scored 37.09 ± 8.549 . These findings indicate that male cricket athletes tend to experience more intense negative moods compared to their female counterparts, even though positive mood levels did not show significant differences during the training phase.

The observed differences between male and female athletes can be attributed to the greater pressure faced by male athletes, who tend to have a higher competitive drive (Olayiwola et al., 2024). In contrast, female athletes are generally more inclined to develop supportive habits during training sessions (Kemarati et al., 2022). This difference likely contributes to the more positive mood often seen among female athletes (Poucher et al., 2018). These gender-based differences in team dynamics and coping strategies highlight the importance of coaches considering these factors when developing training strategies and stress management techniques for each group. For instance, male athletes may benefit from structured stress-reduction methods to help mitigate competitive pressures, while creating collaborative environments could enhance resilience among female teams. Addressing these disparities comprehensively can optimize both performance and psychological well-being for athletes of all genders.

The data presented reveals significant differences in negative mood profiles between male and female cricket athletes across five indicators: tension, depression, anger, fatigue, and confusion (Providência & Margolis Ribeiro, 2021). Male athletes consistently scored higher on all indicators compared to their female counterparts. In terms of tension, male athletes reported experiencing greater mental strain during training and competition, likely due to higher perceived performance pressures. Although the gender gap in depression was narrower, male athletes still exhibited elevated levels, which may be linked to competitive stressors or inadequate recovery. The difference in anger was the most pronounced, with males showing increased irritability or frustration, potentially due to the high-stakes demands of cricket and internalized expectations. Fatigue emerged as a significant concern for both groups, but male athletes scored higher, reflecting the prolonged physical and cognitive demands of the sport. Additionally, confusion was more frequently experienced by male athletes, indicating greater challenges in decision-making under pressure, an essential skill in strategy-driven sports like cricket. These findings highlight gender-specific stress responses in sports, suggesting that male athletes may internalize competitive pressures differently than females, who might rely more on adaptive coping strategies, such as seeking social support. The results underscore the importance of gender-tailored interventions to address these psychological disparities and optimize performance outcomes.

These findings indicate that male cricket athletes experience more intense negative mood states across various measured indicators compared to their female counterparts. This difference may arise from factors such as varying competitive pressures, societal expectations, and gender-specific emotion regulation strategies (Musyarofah et al., 2024). The results are consistent with previous studies that highlight distinct psychological responses to stress and pressure between male and female athletes (Singh & Singh, 2019). For example, male athletes often internalize performance-related stress, while female athletes may utilize collaborative coping mechanisms. As a result, it is essential to develop gender-specific psychological interventions and stress management strategies to enhance both performance and mental well-being (Amalia et al., 2023).

The analysis shows that both male and female cricket teams have similar Iceberg Personality profiles when it comes to their mood patterns. Although there are quantitative differences in the intensity of negative mood indicators, both groups display a consistent pattern where all five negative indicators, tension, depression, anger, fatigue, and confusion, remain at levels lower than that of vigor. This finding aligns with the psychological "iceberg" concept in sports, where vigor represents the visible "tip," while negative emotions are kept subdued (Parsons-Smith et al., 2017). Both genders maintained vigor as the dominant mood indicator, with male athletes scoring slightly higher than female athletes. However, male athletes consistently reported higher scores across all negative mood indicators, such as anger and fatigue, even though these negative indicators remained below their vigor levels. Despite the differences in the intensity of negative moods based on gender, the underlying psychological structure of cricket athletes follows a universal pattern when under competitive pressure. These findings emphasize the importance of a holistic training approach that not only focuses on physical performance but also addresses emotional dynamics to maintain athletes' mental stability (Aquino et al., 2024). Coaches should implement strategies to enhance vigor while also considering gender-specific vulnerabilities in negative mood states to promote psychological resilience alongside physical preparedness.

Conclusion

This study concludes that mood levels differ between male and female cricket athletes during the training phase. Male athletes display more intense negative moods across five indicators: tension, depression, anger, fatigue, and confusion compared to their female counterparts. However, both groups share a similar iceberg personality profile, with vigor being the dominant mood indicator. These differences

may stem from the higher competitive pressures experienced by male athletes, while female teams often benefit from more supportive interpersonal dynamics. The findings emphasize the need for a holistic training approach that addresses gender-specific psychological demands. For instance, interventions for male athletes could focus on stress management to reduce negative moods, while female athletes may thrive in environments that reinforce collaboration. By addressing these factors, training programs can enhance not only physical performance but also mental resilience and emotional balance. This alignment between psychological well-being and athletic preparation is crucial for optimizing long-term success in cricket.

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