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## COMPARATIVE ANALYSIS OF MENTAL HEALTH AMONG THE PLAYERS OF CRICKET AND **VOLLEYBALL**

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#### Abstract

The pressure to perform well in every game can lead to significant psychological strain. The social dynamics of team sports also impact mental well-being. As a competitive team sport, cricket presents unique mental health challenges for players. Volleyball is an intermittent game where maintaining a high level of performance over time is required. A growing body of research has begun to focus on mental health within professional sports. This study aims to compare the mental health of cricket and volleyball players. 30 cricket and 30 volleyball players participated in the current study, aged 19 to 24. An independent t-test was used to determine whether there is any significant difference between cricket and volleyball players' mental health. Cricket players exhibited poorer Mental health than Volleyball players. Gender-based differences revealed that Male Cricket players had poorer mental health than Male Volleyball players. No significant difference was found between the mental health of female players in both sports.

Keywords: Team Game, Non-contact Sports, Anxiety, Depression, Psychological Wellbeing, Sports Performance

#### INTRODUCTION

As a competitive team sport, cricket presents unique mental health challenges for players. The pressure to perform well in every game can lead to significant psychological strain. Cricketers must develop psychological skills to enhance individual performance and foster teamwork, including managing stress, maintaining focus, and cultivating resilience. The social dynamics of team sports also impact mental well-being, as effective communication and strong relationships are crucial. Addressing these mental health challenges is essential for promoting the overall well-being of cricketers and improving performance on the field.

Volleyball is an intermittent game where maintaining a high level of performance over time is required. Athletes experience repetitive, intense exercise during a volleyball game with brief rest periods. There are different positions on a volleyball court, and players take on various roles requiring different skills. For excellent performance in volleyball, athletes need a well-developed anthropometric, physiological, and psychological profile (Mori et al., 2021; Reeser & Bahr, 2017).

Mental health is not an isolated concept. It is a fundamental and vital part of overall health, which can be understood in at least three ways: as the absence of illness, as a state of the organism that enables the full performance of all its functions, or as a state of harmony within oneself and with one's physical and social surroundings (Bhugra et al., 2013; Sartorius, 2002). Mental health has traditionally been considered to be about the absence of mental illness. However, the contemporary perspective toward conceptualising mental health as a continuously active and changing state across human emotions (Galderisi et al., 2015; Gorczynski et al., 2019; Henriksen et al., 2020; Ogden et al., 2023). Like physical health, mental well-being is an important resource that allows individuals to function, manage stress, perform optimally, and achieve their goals (Gorczynski et al., 2019). Wellbeing is at the opposite end of the mental health continuum and is a crucial aspect of mental health (Keyes, 2002). Galderisi et al. (2015) Suggested defining mental health as "a dynamic state of internal equilibrium that enables individuals to utilise their abilities in harmony with the universal values of society". A growing body of research has begun to focus on mental health within professional sports. It has been revealed that professional athletes have a similar likelihood of experiencing mental health problems as the general population, with an elevated risk of dealing with injury, retirement, or failure in performance (Castaldelli-Maia et al., 2019; Rice et al., 2016). Literature has revealed an overabundance of 640 stressors that affect sports players, including selection, injuries, finances, transitions, and performances that can potentially impact athlete mental health and sports performance (Arnold



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& Fletcher, 2012; Ogden et al., 2023). Researchers identified several risk factors linked to poorer mental health outcomes in elite women athletes, including participation in lower tiers of elite sport, poor general health, conflicts with coaches and management, and a lack of support (Junge & Prinz, 2019; Kuettel & Larsen, 2020; Prinz et al., 2016). Young female athletes might face a higher risk of mental health problems, as they tend to experience bullying more often than their male peers (Slater & Tiggemann, 2011). Suicidal behaviour was the fourth leading cause of death for college athletes; it also found that 6.3% of college athletes met the criteria for clinically significant depression, and another 24.0% had low moods that were considered clinically relevant. Sleep deprivation, academic stress, sports injuries, performance pressure, and overtraining may all play a role in the prevalence of depression and anxiety that affects so much of players' mental health, indicating that 23.7% of athletes had some degree of depression, with 6.3% experiencing severe symptoms (Chahal, 2023).

In cricket, a higher level of cognitive anxiety appears because of negative expectations of success with team performance and higher expectations of coaches and parents, including subsequent negative self-evaluation (Duda, 1998). Cricket players exhibited moderate to higher levels of somatic anxiety. This suggests that cricket players may experience physical symptoms such as sweating, trembling, and increased heart rate during high-pressure situations. Players experience more worry and negative thoughts about their performance than other sports athletes (Thander, 2023). Female volleyball players focus more on relationships with teammates and enhancing team cohesion but struggle more than males with self-efficacy strategies and achieving their goals. It appears that male players manage cognitive and somatic anxiety better and display more self-confidence than female players (Patsiaouras et al., 2022).

Mental well-being is important for improving athletes' performance and encouraging targeted support for athletes in sports and personal life, so this study aims to compare the mental health of cricket and volleyball players.

#### **MATERIALS AND METHODS**

#### Sample

30 cricket and 30 volleyball players participated in the current study, a total of 60 participants. Among them, 36 were male players, and 24 were female players; 18 male from cricket, 18 male from volleyball, 12 female from cricket and 12 from volleyball. The age range was 19 to 24. Players who have participated in state-level tournaments have been selected for this study.

#### Measurers

The Mental Health Checklist (MHCL) by Dr. Pramod Kumar was used to measure the mental health of cricket and volleyball players. The MHCL consists of 11 items, 5 Mental and 6 Somatic, presented in a 4-point rating format. The higher the final score, the poorer the mental health; the lower the final score, the better mental health.

#### Study Design

All 60 participants were instructed about this study. Then, the researcher gave them a Mental Health checklist and instructed them to complete it according to their reaction to a particular statement. After completion, players submitted their responses to the researcher, and scoring was done according to the scoring manual of a Mental Health Checklist. A written consent form was taken from all participants before conducting the study.

#### Statistical Analysis

The study involved 60 male and female participants. To determine whether there is any significant difference between Cricket and Volleyball players' Mental health, an Independent t-test was used, and the significance level was set to 0.05.

#### RESULTS

Table 1 Mean, SD and t value of Mental health differences between Cricket and Volleyball players

| Game       | N  | Mean  | SD   | t     | Level of Significance |
|------------|----|-------|------|-------|-----------------------|
| Cricket    | 30 | 20.10 | 2.28 | 2.566 | 0.05                  |
| Volleyball | 30 | 18.70 | 1.93 | 2.566 |                       |

Table 1 shows the Mean for Cricket (20.10) and Volleyball (18.70) and the Standard Deviation (SD) for Cricket (2.28) and Volleyball (1.93). The calculated t-value is 2.566, which is significant at 0.05.

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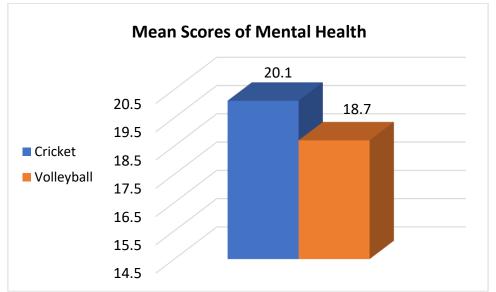


Figure 1: Mean difference between Cricket and Volleyball Player's Mental health

Table 2 Mean, SD and t value of Mental health differences between Male and Female Players of Cricket and Volleyball

| Gender   | Game       | N  | Mean  | SD   | t     | Level of Significance |
|----------|------------|----|-------|------|-------|-----------------------|
| Male     | Cricket    | 18 | 19.72 | 2.32 | 2.450 | 0.05                  |
|          | Volleyball | 18 | 18.11 | 1.53 | 2.459 |                       |
| Female – | Cricket    | 12 | 20.67 | 2.19 | 1.211 | No Significance       |
|          | Volleyball | 12 | 19.58 | 2.19 | 1.211 |                       |

Table 2 represents the Mean and SD of Male Cricket (19.72±2.32) and Volleyball (18.11±1.53) players. Mean and SD of Female Cricket (20.67±2.19) and Volleyball (19.58±2.19) players. Calculated t for Cricket and Volleyball Male players is 2.459, which is significant at 0.05. The calculated t for Cricket and Volleyball Female players is 1.211, which is statistically insignificant.

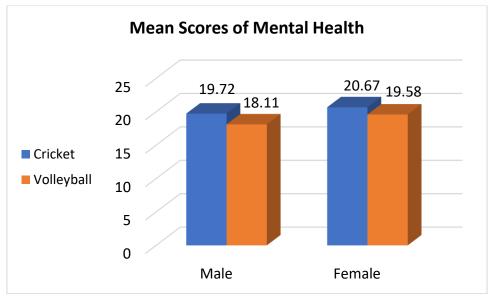


Figure 2: Mean differences in Mental health between Male and Female Players of Cricket and Volleyball

#### DISCUSSION

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The purpose of this study was to compare the mental health of Cricket and Volleyball players. The calculated t is 2.566 for cricket and volleyball players, which can be seen in Table 1 and is greater than the tabulated value of t. Hence, there is a significant difference in the Mental health of cricket and volleyball players; t is significant at the 0.05 significance

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level. The Mean difference between cricket and volleyball players can be seen in Figure 1. The higher the mean value, the poorer the mental health and the lesser the mean value, the better the mental health. According to this, the researcher found that Cricket players have poorer mental health than Volleyball players. The researcher also separately compared the gender-based differences in cricket and volleyball players' Mental health. The calculated t for Male cricket and Male volleyball players is 2.459, which is greater than the tabulated t value. Hence, there is a significant difference between the Mental health of male cricket and male volleyball players; t is significant at the 0.05 significance level. The mental health of Male Cricket players is poorer than that of Male Volleyball players. The calculated t for Female cricket and Female volleyball players is 1.211, which is smaller than the tabulated t value. Therefore, there is no significant difference between the mental health of Female Cricket and Female volleyball players, which means female players have the same level of mental health regardless of the game they play. The mean differences between Male and Female Cricket and Volleyball players can be seen in Figure 2.

According to Singh (2019), Volleyball players are more self-confident, more motivated, and have less negative energy than cricket and football players. Football players scored high in attention control; Cricket players scored higher in attitude control. These findings indicate that Volleyball players had better mental toughness than Cricket and Football players. That means Volleyball players have better mental health compared to Cricket and Football players, which resonates with the results of the current study. Stress is one of the main reasons for poor mental health in sports players. In a study by Chahal, (2023), 160 participants were from four different sports: cricket, football, hockey, and volleyball. The study used one-way analysis and found no statistically significant difference in stress levels of all four game players. This result contradicts the result of the current study.

#### **CONCLUSION**

This study compared the Mental health of Cricket and Volleyball players, indicating a significant difference in Mental health between the Cricket and Volleyball players at the 0.05 significance level. Cricket players exhibited poorer Mental health than Volleyball players. Further analysis of gender-based differences revealed that Male Cricket players had poorer mental health than Male Volleyball players. Opposite to that, the calculated t value for differences between female players of both games is not significant at 0.05 level; it means that Female Cricket and Female Volleyball players have similar levels of Mental health. Overall, both cricket and volleyball players displayed poor mental health. Regardless of comparison, both game players must improve their mental health for better performance and combat the challenges on and off the field, so a holistic approach is needed.

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