

# Comparative Study of Mental Toughness between National Female Volleyball and Kabaddi Players

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## Abstract

**Background:** Early research on mental toughness indicated that 82% of wrestling coaches identified mental toughness as the most important prerequisite to comparative success. In support of this research, athletes, media personal and coaches regular characterize successful performance as being mentally tough.

**Purpose:** This study explored the comparative study of mental toughness between national female volleyball and kabaddi players of Uttar Pradesh teams.

**Methods:** Female national volleyball ( $n = 12$ ) and kabaddi ( $n = 12$ ) players of Uttar Pradesh team selected as a subjects. For collection of data mental toughness questionnaire prepared by Allan Goldberg (1995) was administered.

**Result:** Table 1 reveals that there was significant difference in mental toughness between national volleyball and kabaddi female players of Uttar Pradesh team since the calculated 't' value 3.16 was found to be greater than tabulated value 2.074 at 0.05 level of significance. Thus data provides significant evidence to ensure that the mental toughness of national female volleyball players of Uttar Pradesh team was found significantly higher than the mean of mental toughness of the national female kabaddi players of Uttar Pradesh team.

**Conclusion:** Findings suggested that there was significant difference in mental toughness between national female volleyball and kabaddi players of Uttar Pradesh team. It could happen because volleyball players involved themselves more to prepare mentally and confidence to participate in various tactical moves in different situation and team coordination during the game.

**Keywords:** Mental toughness, Female players, Volleyball, Kabaddi.

## 1. Introduction

Among the issues in forming a solid construct are theoretical basis, definitions and conceptualization, and measurement. A social-cognitive theoretical approach has been suggested when investigating the topic of mental toughness. A focus and precise definition of mental toughness has been a topic of much debate among researchers.

Jones et al. defined mental toughness as a psychological quality that helps in coping with sports pressures and allows athletes to be consistently resolute in demonstrating psychological skills such as focus, motivation, confidence and control. Middleton et al. interviewed athletes from a variety of sports and proposed that the mental toughness is strong determination in the face of adversity. Clough et al. used four C's to describe mental toughness. They have suggested that challenge, commitment, control and confidence are central to mental toughness. While variability among the definitions exists, mental toughness appears to be related to the skillful demonstration of collection of psychological skills.

Bull et al. have suggested that the characteristics of mental toughness in a global sense might be distinct from how it is understood in a particular sport. Similarly, it is possible that constituents of mental toughness differ in particular sports. Both Bull et al and Thelwell et al. in studying mental toughness in cricket and soccer respectively, found that the sports-specific definition proposed by coaches and athletes were in line with the global definition of mental toughness created by Jones and colleagues. According to Gucciardi et al. mental toughness encompasses one's collectively beliefs (encompassing attitudes, values, behavior and emotions) which help in overcoming barriers to success. Jones et al. as well as the work of Gucciardi et al who added specificity in relation to psychological attributes of mental toughness.

Aforementioned performance findings have suggested an association between skill level and mental toughness. It may be that relative skill level moderates the relationship of mental toughness to performance. In other words, the skill level of an athlete, relative to their level of competition, may influence mental toughness but not account for it. In a very basic way the skill level of athletes on teams are classified by the term starter and non-starter. Starters typically receive more playing time than non-starters and are assumed to have more skill and to be better performers than non-starters.

## 2. Materials and Methods

### 2.1. Participants

Participated were recruited from women's volleyball and kabaddi teams of Uttar Pradesh, who was participated

in State Championship, which was organized by Uttar Pradesh Khel Mantralaya in Chandagi Ram Sports Stadium, Saifai (Etawah) December, 2012. Their age ranged between 18-25 years. For the purpose of the study volleyball ( $n = 12$ ) and kabaddi ( $n = 12$ ) national female players of Uttar Pradesh teams were included in the analysis.

### 2.2. Data collection

After obtaining approval for the human subjects protocol from the tournament organizer, prospective team coaches were contact by phone about the taken the data. Data collected occurred at coaches' convenience at a team meeting or practice session.

### 2.3. Measures

For the collection of data mental toughness questionnaire prepared by Allan Goldberg (1995) was administered. The questionnaire comprised of 60 questions/statements based on Handling Pressure (20 questions), Concentration (17 questions), Mental Rebounding (14 questions) and Winning attitudes (09 questions). Every statement had two possible responses i.e. true or false.

## 3. Statistical Method

In order to find out the significance differences in mental toughness between national volleyball and kabaddi female players of Uttar Pradesh independent 't' test was employed at 0.05 level of significance.

## 4. Findings

The above table reveals that there is significant difference between female player of volleyball and kabaddi on mental toughness as the calculated 't' value 3.16 is greater than the table 't' value 2.07.

## 5. Results

Table 1 reveals that there was significant difference in mental toughness between national volleyball and kabaddi female players of Uttar Pradesh team since the calculated 't' value 3.16 was found to be greater than tabulated value 2.074 at 0.05 level of significance. Thus data provides significant evidence to ensure that the mental toughness of national female volleyball players of Uttar Pradesh team was found significantly higher than the mean of mental toughness of the national female kabaddi players of Uttar Pradesh team.

## 6. Discussion of Findings

It was clear indicated by the table 1 that there was significant difference in mental toughness between national female volleyball and kabaddi players of Uttar Pradesh team. In this tournament the volleyball team secured first position in final defeated to Himanchal Pradesh and kabaddi team was out of tournament in second round. It could happen because volleyball players involved themselves more to prepare mentally and confidence to participate in various tactical moves in different situation and team coordination during the game. Therefore necessary care needs to be taken in training to enhance or cope up challenge, commitment, control and confidence of national volleyball and kabaddi female players of Uttar Pradesh team in specific and team game in general. As yet, few studies have examined gender difference in mental toughness. Nicholls et al reported that male were more mentally tough than females based on the use of the MTQ48.

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**Table 1**  
**MEAN COMPARISON BETWEEN THE NATIONAL FEMALE VOLLEYBALL AND KABADDI PLAYERS OF UTTAR PRADESH**

Groups	Mean	S.D	Difference between Mean (DM)	't'
Kabaddi Players	34.63	5.04	9.18	3.16*
Volleyball Players	43.81	9.23		

$t'_{0.05} (22) = 2.074$

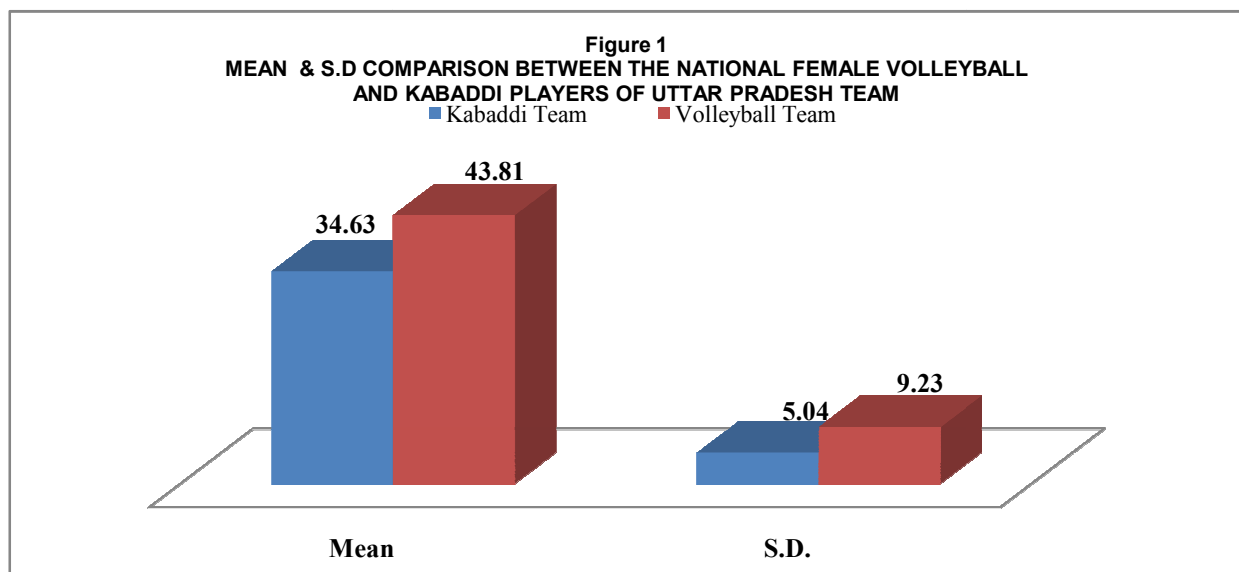


Figure 1 Graphical representation of Mean and SD of Female Volleyball and Kabaddi Players .

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