

# A Comparative Study of Mental Toughness in Different Level of Soccer Players

## Mukesh Kumar Verma

Assistant Professor  
Deptt. of Physical Education  
Dr. RML Avadh University  
Faizabad, U.P., India

## Mohd. Tariq

Assistant Professor  
Deptt. of Physical Education  
University of Lucknow  
Lucknow, U.P., India

## Pardeep Kumar Yadav

Research Scholar  
CMJ University,  
Jorabat, Meghalaya,  
India

### Abstract

#### Background

The purpose of this study was to analyze the Mental Toughness of Inter University, State, National, and International men soccer players of India.

#### Material and Methods

The soccer players between the age group of 18-33 years, participating at International, National, Inter University and State Levels of competition were the universe for this study. The International and National Level Soccer Player were selected from International & National Tournaments, and the Inter University Level Soccer Player was selected from North Zone Inter University Championship, State Level Soccer Player was selected from State Soccer Championship in Uttar Pradesh by using the method of Random Sampling. The final sample consists of twenty five soccer players of International Level, fifty soccer players of National Level, seventy five soccer player of Inter University Level, and seventy five players of State Level competitions, making total of two hundred twenty five soccer players as a sample of this study. Researchers using Mental Toughness Questionnaire by Alan Goldberg (2004) The questionnaire consisting of 30 questions, measures various aspects of mental toughness such as: "Rebound ability", "To deal with the ability to handle pressure", "To deal with your concentration ability", "To deal with your level of confidence and the factors that affect confidence", and "To deal with motivation".

#### Statistical Technique

In the processing of the data mean, sum of squares, degree of freedom, and mean squares were computed in order to estimate the differences among the groups using 'F' test and in order to locate the pairs where significant differences exist the Scheffe test was employed and the level of significance was set at 0.05.

#### Result

The results revealed that the significant differences are found between the different levels of soccer player of India in mental toughness.

**Keywords:** Mental Toughness, Mental Toughness Questionnaire, Soccer players.

#### Introduction

Today performance in sports not only demands systematic training to develop physical, mental, physiological variable and technical aspect of sports but also demands training and consideration of psychological toughness of success in this field.

The application of psychological principles to the improvement of performance in the sports has received greater attention in these days. There are certain accepted psychological principles which have to be applied so that the athletes and players are able to show their best in their performance. It is important to know about the role of emotional phenomenon like incentive motivation, mental toughness, achievement motivation, stress and anxiety of the players during training as well as competitive situations.

"Mental toughness" is ability to communicate with yourself- especially when you are under pressure. Everyone has some degree of mental toughness. We all have a point at which we falter-when a situation begins to negatively affect your performance. This is the first indicator that mental toughness is being challenged. Anyone can train to improve his or her current level of mental toughness. The most common techniques include visualization, relaxation, energization, self-talk and goal setting. Mental preparation is very essential to any competitive sports continually urge players to 'think' out to concentrate. Games are said to have been

won as a result of mental preparation or lost of for the lack of it.

Psychological fitness is almost important because it a player cannot be in the right time. It is of little use to have superstitious work and footwork without fitness, because a player will never have the stamina to carry out his skills having run half the length of field. Performance of soccer players depends upon the morphological and psychological parameters where the knowledge and application of exercise physiology is important.

The principles based on the knowledge of these disciplines are of great importance right from the very early phase of initial selection of players for advanced training and they can prove to be the limiting factors in performance.

The soccer player must concentrate on the development of the psychological abilities along with other qualities. Psychological component have a very important association with the playing ability of the soccer player. The important component like mental toughness has a vital role in achieving high level of performance in soccer. The soccer player not having adequate qualities like mental toughness can never be on the top level because the players deprived on only of their quality or quantity can't play, According to the demand of the games. Hence the success of the psychological factor in soccer game is build up collectively with time.

Many Studies have been conducted in the field of mental toughness and its effect on Sports performance. Studies suggest that mental toughness is most significant predictor of performance and essential to participate in deferent level of game or competition (M, Sheard, 2009), Gucciardi DF, et al. (2009), Gucciardi DF. (2010, 2012),

#### **Aim of the Study**

The aim of the study was to analyze the mental toughness of Inter University, State, National, and International men soccer players of India.

#### **Methodology**

##### **Selection of Subjects**

The purpose of this study was to assess the mental toughness of Inter University, State, National and International male soccer players of India.

All the soccer players between the age group of 18-33 years, participating at International, National, Inter University and State Levels of competition were the universe for this study. The International and National Level soccer player were selected from International / National Tournaments, and the Inter University Level soccer player were selected from North Zone Inter University Championship, State Level soccer player were selected from State Soccer Championship in Uttar Pradesh by using the method of Random Sampling.

The final sample consists of twenty five soccer players of International Level, fifty soccer players of National Level, seventy five soccer player of Inter University Level, and seventy five players of State Level Competitions, making total of two hundred twenty five soccer players as a sample of this study.

#### **Instrument for Collection of Data**

In order to insure the full cooperation from the subjects the Researchers had a meeting with them in presence of their Coach/Managers. The purpose of this study was made clear by giving a detailed explanation in order to ascertain that there was no ambiguity among the subjects regarding the efforts, which there had to put the successful investigation. Researchers using Mental Toughness Questionnaire by Alan Goldberg (2004) The questionnaire consisting of 30 questions, measures various aspects of mental toughness such as: "Rebound ability", "To deal with the ability to handle pressure", "To deal with your concentration ability", "To deal with your level of confidence and the factors that affect confidence", and "To deal with motivation".

The test item selected for this study was "Mental Toughness Questionnaire" by Alan Goldberg (2004) All subjects voluntarily agreed to extend full cooperation and the Coaches/Managers insure that the subject were made available for collection of data. The time taken for data collection of per test for took 45 minutes.

#### **Analysis and Interpretations of the Data**

In order to arrive at certain conclusion and to achieve the objectives of the investigation, a systematic treatment of data is needed which consists of three stages namely: tabulation of data, testing of the hypotheses using appropriate statistical techniques and discussion of the results. The statistical analysis of the data consists of the scores made by the samples on various variables. In the processing of the data mean, sum of squares, degree of freedom, and mean squares were computed in order to estimate the differences among the groups using 'F' test. In order to locate the pairs where significant differences exist the Scheffe test has been applied. The level of significance was set at 0.05.

#### **Findings**

Findings of this study were made in sequence of Mental Toughness. In order to locate the differences among different groups the 'F' test and Scheffe test has been applied. For all of them separate statistical analysis was done and the results are presented from table-1.

#### **Mental Toughness Table – 1**

Analysis of variance of the scores of Inter University, State, National, and International Players in Mental Toughness

Source of Variation	Sum of Squares	Degree of Freedom	Mean Squares	F
Between	2699	3	899.7	68.20*
Error	2916	221	13.1	
Total	5615	224		

\*Significant at 0.05 level of confidence  
 $F_{.05}(3, 222) = 2.65$

An observation of the table - 1 reveals that obtained 'F' value is 68.20, which is statistically significant as it is more than tabular value of 2.65 at 0.05 level. Thus, the hypothesis is accepted.

In order to locate the pairs where significant differences exist Scheffe test has been applied. The results are presented in table-2

**'Scheffe Test' (Post Hoc) analysis of Mental Toughness Table – 2**

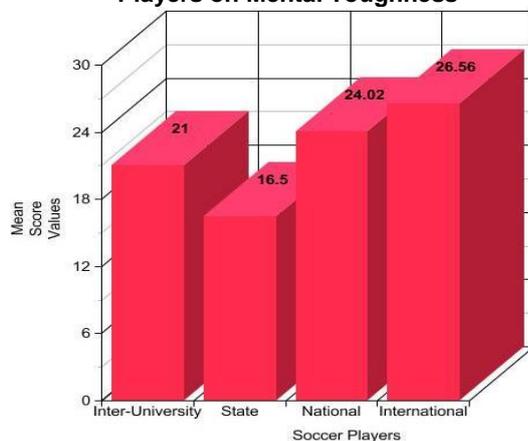
Soccer Players (Mean)				Mean Difference	CD at 0.05 level (Scheffe test)
Inter-University	State	National	International		
21.0	16.56			4.44*	2.17
21.0		24.02		3.02*	2.29
21.0			26.56	5.56*	2.58
	16.56	24.02		7.52*	2.30
	16.56		26.56	10.06*	2.56
		24.02	26.56	2.54	2.66

It is evident from the table - 2 that the difference between the paired means for the Inter University Players-State Players (4.44), Inter University Players-National Players (3.02), Inter University Players-International Players (5.56), State Players-National Players (7.52), and State Players-International Players (10.06) were found to be significant as the critical difference value of 2.17, 2.29, 2.58, 2.30, and 2.56 respectively is less than these value. Whereas differences between the paired means for the National Players – International Players (2.54) were not found to be significant as the critical value of 2.66 were more than these values.

This indicate that the Inter University Players - State Players, Inter University Players - National Players, Inter University Players - International Players, State Players - National Players, and State Players - International Players differ significantly between them, whereas National Player and International Players did not differ significantly between them.

The group wise comparisons of the mean scores of the Inter University Players, State Players, National Players, and International Players are also presented graphically in figure

**Comparisons of the Mean Scores of Inter University, State, National, and International Players on Mental Toughness**



## Observation and Discussion

The hypothesis states that there will be significant difference in the Mental Toughness Variables of the Inter University, State, National, and International soccer players of India selected for the study.

The result of the study showed significant difference in Mental Toughness Variables hence the hypothesis is accepted.

The Mental Toughness was found from the analysis of data that four category of groups selected for the study differ significantly in Mental Toughness as calculated 'F' value 68.20 were more than the tabular value of 2.65. In the dimension of Mental Toughness, significant difference exist between Inter University Players - State Players, Inter University Players – National Players, Inter University Players – International Players, State Players – National Players, and State Players – International Players.

It is evident from the data that International Players have better Mental Toughness followed by National Players, Inter University Players and State Players. The reason for this may be attributed to the fact that International Players get the more opportunities, facilities and better environment to play.

## Conclusion

Mental Toughness is a very important factor for the performance of a Game. The findings of the study revealed that statistically significant differences between Inter University Players - State Players, Inter University Players-National Players, Inter-University Players - International Players, State Players-National Players, and State Players-International Players on the variable of Mental Toughness.

In this light of the findings, it was concluded that data the International Players have better Mental Toughness followed by National Players, Inter University Players and State Players. The reason for this may be attributed to the fact that International Players get the more opportunities, facilities and better environment to play. This study helps coaches to coach more effectively and athletes (Soccer Players) to perform more proficiently. This psychological aspect of sports is gaining much attention among sports administrators.

It is recommended that such type of study may be conducted on larger sample or on different games and sports.

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