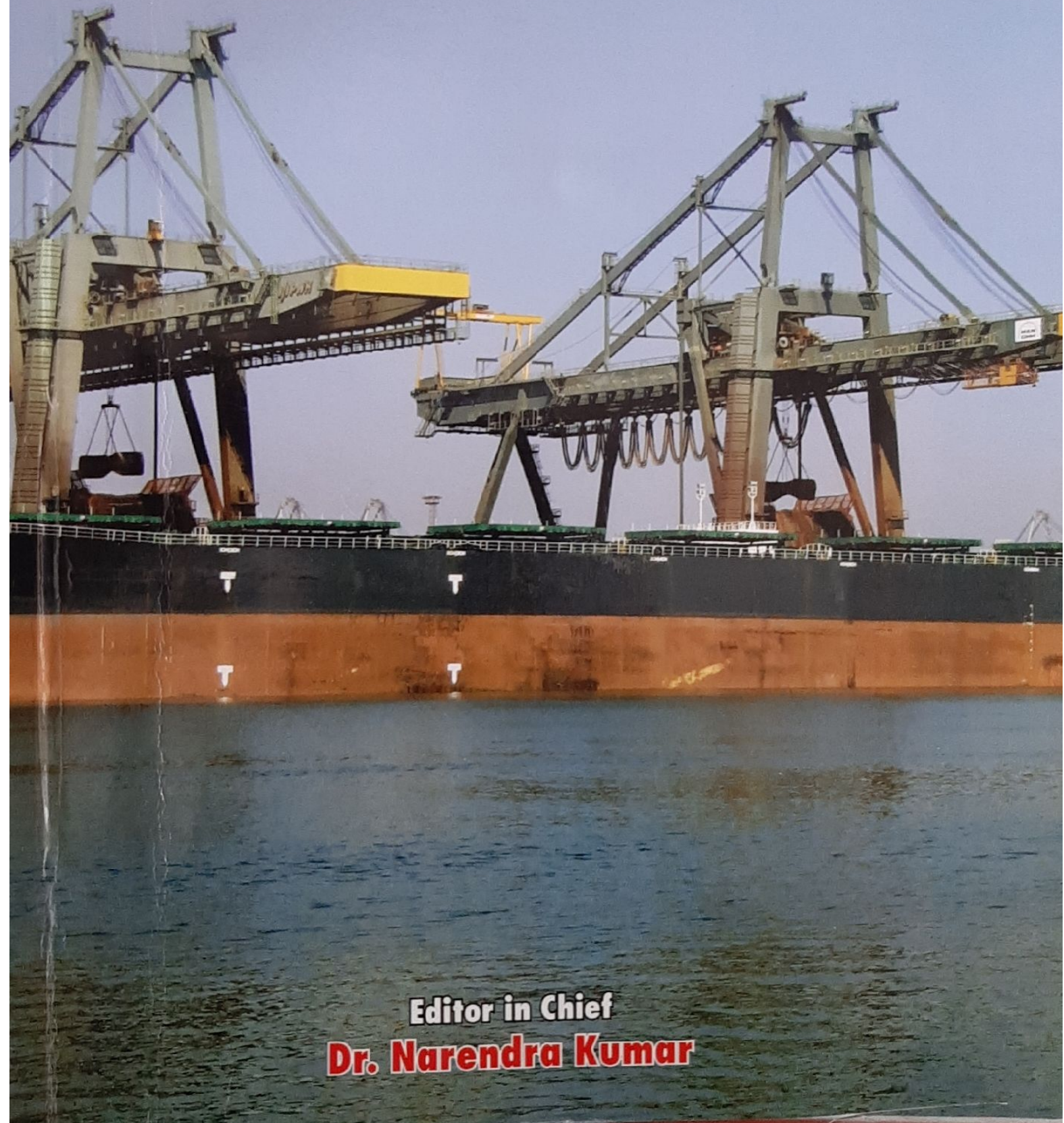


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*Physical Education***Comparison of Mental Toughness on Different Levels of Participation in Cricket Players**✉ *Dr. SK. Md. Attaullah M.K. (Jagirdar)** ✉ *Mr. Kale Udhav Maruti*****Abstract**

Mental toughness has often been cited by researchers, coaches and athletes as an influential psychological factor in sporting success (Connaughton, Hanton, Jones, & Wadey, 2008; Denison, 2007; Gould, Hodge, Peterson & Petlichkoff, 1987; Holland, Woodcock, Cumming, & Duda, 2010), sports psychologists and researchers have collected sizeable literatures pertaining to the conceptualisation, measurement and development of mental toughness. The present study investigated the comparison of mental toughness on different levels of participation in cricket players. The sample of the present study comprised of 100 male university cricket players of India. Keeping the view the purpose of the study they were divided into three groups all India intervarsity (N=100), west zone intervarsity (N=100) and intercollegiate (N=100) man cricket players. The result indicated that insignificance difference between all India, west zone intervarsity and intercollegiate man cricket players in the Mental Toughness level. It is evident that all India intervarsity, west zone intervarsity and intercollegiate man cricket players in Mental Toughness test insignificantly, as we obtained F-value of 1.36 is less than the tabulated value $F_{0.05}(2,297) = 4.71$.

Key words: Social Self-Concept, Cricket, mental toughness, players

Introduction

The importance of mental toughness has been acknowledged by sports psychologists, and athletes. (Goldberg, 1998; Hodge, 1994). The definition given by (Goldberg, 1998) stated that, "Mental toughness is the ability to stand tall in the face of adversity. It's a psychic resilience that allows you to rebound from setbacks and failures time and time again."

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. Middlenton 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.

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They have suggested that challenge, commitment, control and confidence are central to mental toughness. While variability among the definitions exists, mental toughness appears related to the skillful demonstration of collection of psychological skills. All sports participants fall to mistake and mental letdowns. The emotional component always overshadows the technical aspects of performance. The over shadows can be avoided only when sports participants are equally fit in both mind and body. The individual's success and failure determination lies in the individual's practice to both physical and mental skills. Monitoring individual profiles of mental health is also a key to maintaining or increasing mental toughness. High levels of mental toughness can be linked to low levels of negative emotional states; therefore mental toughness can be undone by poor mental health (Gucciardi and Jones, 2012).

Technical, tactical, and physical preparation are important for top class performances but it is often what happens inside a player's mind that is the difference between success and failure. Whether batting, bowling, or fielding, a player's psychological strength has been identified by coaches, players, and commentators as a critical ingredient for winning cricket matches. The Psychology of Cricket teaches individuals to develop mental toughness by using mental skills which can be used in both practice and match situations. Various models and frameworks of mental toughness have been developed, Jones and Moorehouse (2007) provided a useful practical framework based on the attributes of mental toughness research that categorizes the various attributes into the four pillars of mental toughness (i.e., motivation, self-confidence, attentional focus, coping with pressure).

Cricket is the most popular game, which is played in more than 104 countries. Both physical and mental fitness play vital role in performance. The other aspect about cricket is that it is probably one of the fastest evolving sport in the world, constantly adapting itself to the „demands' of a changing global audience. The purpose of the study was to find out the differences in Mental Toughness among Cricket players of different age groups. It was hypothesized that there would be insignificance difference between all India, west zone intervarsity and intercollegiate man cricket players in the Mental Toughness level.

Literature Review

The general dimensions and global themes of mental toughness in cricket identified by Bull et al. (2005) and Gucciardi and Gordon (2009) can readily be compared to the previously-mentioned definition and pillars of mental toughness proposed by Clough and Strycharczyk (2012).

Parnabas et al. (2009) investigates whether varsity collegiate athletes are indeed more "mentally tough" than their non-athlete counterparts and whether there is a correlation between mental toughness in sports and an individual's general ability to cope with anxiety and stressful life events.

Balaji and Jesudass (2011) studied to find out the differences in Mental Toughness among Cricket Players of different age groups. To achieve this purpose, ninety Cricket players at the age group of 10-21 years were selected from Chennai District, who regularly practice the game and participate in various tournaments.





"Mental Toughness Questionnaire" a standardized sports psychological inventory designed by Dr. Goldberg, was responded by all the subjects. The collected data was analyzed using simple analysis of variance (ANOVA). The results of the study showed that there was a significant difference in Mental Toughness among Cricket Players group 18-21 years showed significantly greater mental toughness than the other two age groups. This may be due to their experience in the game.

Methodology

The questionnaire on mental toughness prepared by Alan Goldberg (1995) has sixty items, which has four categories namely: handling pressure (20 questions), concentration (17 questions), mental rebounding (14 questions), and winning attitude (9 questions). A sample statement under handling pressure category read "I think about my opponent's size, previous performance or reputation before I play a match".

The subjects were instructed to respond to each item according to how they generally felt in competitive sport situations.

Every statement has two possible responses i.e. True or False.

The present study was conducted on three hundred (300) man cricket players of India. The data were categorized into three main groups: inter collegiate (100), west zone intervarsity (100), and all India intervarsity (100) man cricket players. The sample representing the intercollegiate man cricket players who participated in the inter collegiate man cricket tournament, 2015 held at Arts Science and Commerce College, Ashti, Beed (M.S.) from 07/12/2015 to 09/12/2015. The sample representing the west zone intervarsity man cricket players who participated in the west zone intervarsity man cricket tournament, 2015 held at Dr. Hari Singh Gaur University, Sagar (M.P.) from 05/01/2016 to 22/01/2016. And all India intervarsity man cricket tournament, 2015 held at Saveetha University, Chennai from 04/02/2016 to 6/02/2016.

Statistical Analysis

An Analysis of variance (ANOVA) was applied to find out the significance of mean difference in the variable. This was followed by Least Significance Difference Test (L.S.D.) of Post-hoc comparison to determine the significance of difference between ordered paired means at 0.05 level.

Analysis of Data and Result of the Study

There are at least three levels at which data are categorized, presented and analyzed statistically in this study. The psychological status of all India intervarsity players (N=100) has been compared with west zone intervarsity (N=100) and intercollegiate (N=100) man cricket players.

Mean Score And Standard Deviations of All India Intersivity, West Zone Intersivity And Intercollegiate Man Cricket Players on Mental Toughness Variable

Table - 1

Variable	All India Intersivity (n = 100)		West zone Intersivity (n = 100)		Inter collegiate (n = 100)	
	Mean	S.D.	Mean	S.D.	Mean	S.D.
Mental Toughness	37.02	6.52	35.69	6.25	32.85	4.98



One-way analysis of variance (F-ratio) was applied to find out the significance of mean difference among all India intervarsity, west zone intervarsity and intercollegiate man cricket players on Mental Toughness variable. Least Significant Difference test of Post-Hoc comparison was used to determine the significance of difference between ordered paired means at 0.05 levels. One-way analysis of variance and L.S.D of Mental Toughness variable are given from Table – 2.

Comparison of Mental Toughness of Intercollegiate, West Zone Intersarsity and All India Intersarsity Man Cricket Players

One-way analysis of variance of Mental Toughness is given in Table-2 and graphically portrayed in Figure-1

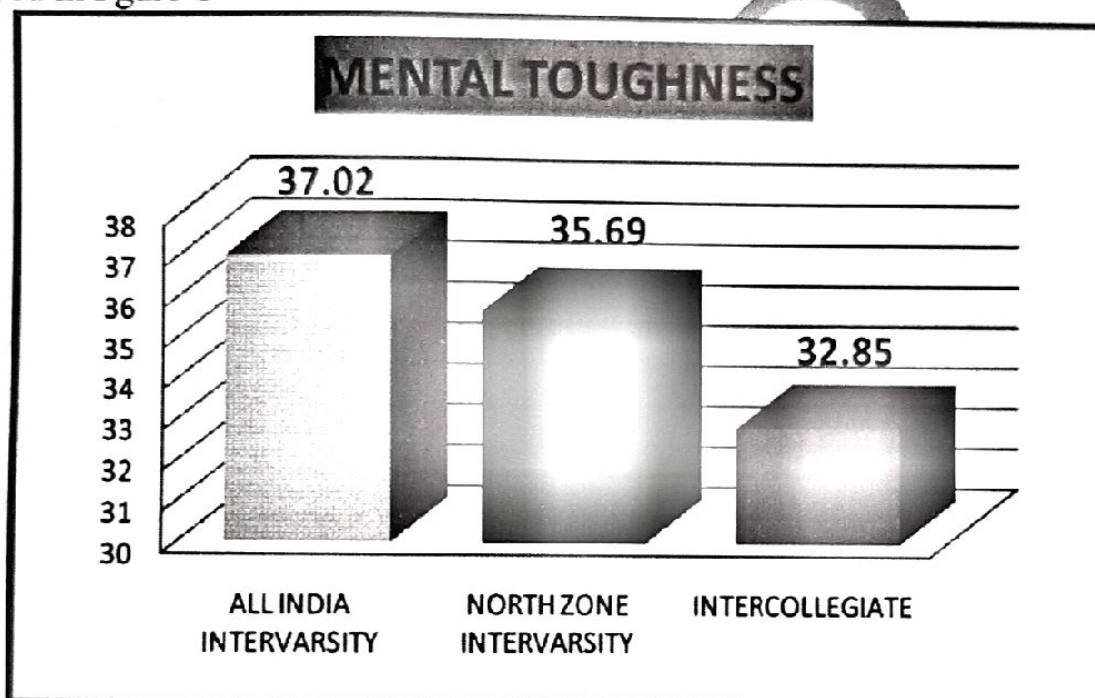


Fig.1: Comparison of Mental Toughness of Intercollegiate, West Zone Intersarsity and All India Intersarsity Man Cricket Players

Table – 2

Analysis of Variance of Intercollegiate, West Zone Intersarsity and All India Intersarsity Man Cricket Players on Mental Toughness Level

Source of variance	Degree of freedom	Sum of squares	Mean square	F value
Between Group	(r-1) = 2	690.10	345.05	8.46*
With in Group	(N-r) = 297	12109.35	40.77	
Total	299	12454.4		

*Significant at .05 level

Tab f .05 (2,297) = 4.71

It is evident from Table-2 that all India intersarsity, west zone intersarsity and intercollegiate cricket players significantly differed on mental toughness as the obtained F value of 8.46 is much more than the tabulated F 0.05 (2,297) = 4.71.



As the F-ratio was found to be significant, Least Significant Difference (L.S.D.) test of Post-Hoc comparison was applied to study the significance of difference between the all India intervarsity, west zone intervarsity and intercollegiate cricket players and the data is presented in Table – 3.

TABLE – 3

SIGNIFICANCE OF DIFFERENCE BETWEEN THE ORDERED PAIRED MEANS OF ALL INDIA INTERVARSITY, WEST ZONE INTERVARSITY AND INTERCOLLEGIATE MAN CRICKET PLAYERS ON MENTAL TOUGHNESS LEVEL

ALL INDIA INTERVARSITY	WEST ZONE INTERVARSITY	INTER COLLEGIATE	MEAN DIFFERENCE	CRITICAL DIFFERENCE
37.02	35.69		1.33	
37.02		32.85	4.17*	1.58
	35.69	32.85	2.84*	

*Significant at 0.05 level

It is obvious from Table-10 that there is significant difference among all India intervarsity and intercollegiate; west zone intervarsity and intercollegiate player on mental toughness at 0.05 level as the mean difference values of 4.17 and 2.84 are higher than the critical difference of 1.58. But the mean difference of 1.33 between all India intervarsity and west zone intervarsity players is insignificant at 0.05 level as critical difference of 1.58 is higher than the mean difference of 1.33.

Result

From the analysis of data it is found result indicated that all India intervarsity, west zone intervarsity and intercollegiate cricket players significantly differed on mental toughness as the obtained F value of 8.46 is much more than the tabulated F 0.05 (2,297) = 4.71.

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