



A COMPARATIVE STUDY OF MENTAL TOUGHNESS BETWEEN BASKETBALL AND HANDBALL MALE UNIVERSITY PLAYERS

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ABSTRACT :

Mental Toughness is the psychological variable that requires in every sportive activity including the games like basketball and handball. Therefore the researcher is more interested to find out the mental toughness level among basketball and handball players of different universities, Karnataka India. For this purpose, seventy two (72) male university players were selected randomly from three universities (Bangalore University Bengaluru, Davanagere University, Davanagere, and Gulbarga University, Kalaburgi) who had their credit in participating



in South Zone Interuniversity Tournaments during the academic year 2017-18 in their respective games. The age of the subjects were ranged from 18 to 28 years. Among the selected 72 subjects, 36 subjects were Basketball game players and remaining 36 were Handball game players. The Mental Toughness Questionnaire developed by Alan Goldberg (1995) was used to assess the level of mental toughness of the players. The collected data was analyzed by using independent 't' test to find out the significant difference between basketball and handball players on mental toughness. The statistical software like Statistical Package for Social Science (Version 20) was utilized for knows the significant difference between groups by applying 't' test as analytical tool. The results concluded that there was significant difference found in rebound ability, concentration ability and overall mental ability between Basketball and Handball players. The basketball players have superior mental toughness in rebound ability, concentration ability and overall mental toughness when compared with Handball players. The use of thinking skills, imagery, confidence building and other skills can be powerful techniques in reaching a high level of mental toughness among the players.

KEYWORDS : Basketball, Handball, Male University Players, Mental Toughness.

1. INTRODUCTION

Mental toughness is an important psychological quality for better performance in any sport. Now a day, mental toughness is recognized as one of the most important determinant of crest performance in any sport. One possible trouble with developing mental toughness programme lies in the fact that the elements of mental toughness can potentially vary from one game to other game. The concept of mental toughness has recently attracted more from sport psychology researchers attempting to understand on individual psychological factors and their influence on performance in sport (Gucciardi, Gordon, & Dimmock, 2008; Jones, Hanton, & Connaughton, 2007). According to Loehr (1986), mental toughness is the ability to perform at the upper range of one's ability regardless of the

circumstances. According to his framework for mental toughness consisted of self-confidence, negative energy control, attention control, visualization and imagery control, motivation, positive energy, and attitude control. Mental toughness has been identified to improve performance of any field of sport. It is important for the players by their coaches, coaches teach the players through various methods to become mentally tough. It can be measured through different measurement scales and questionnaires targeted at assessing the level of mental toughness among players belonging to various sports.

Statement of the Problem

Mental Toughness is the psychological variable that requires in every sportive activity including the games like basketball and handball. Therefore the researcher is more interested to find out the mental toughness level among basketball and handball players and the problem stated for the present paper as "A Comparative Study of Mental Toughness between Basketball and Handball Male University Players".

Objective of the Study

The objective of the study is to compare the mental toughness between the basketball and handball university male players.

Limitation of the Study

The hereditary, potential of players were not under the control of researcher. Socio-economic status and food habits are not taken into consideration. This study was not limited to climatic conditions, diet habit, and style of day to day of living of the players. The mental toughness was assessed only through questionnaire.

Significance of the Study

The study may help to assess the status of mental toughness of university level male basketball and handball players and it may help to the coaches and physical education teachers to prepare individual training schedule to improve the mental toughness level among basketball and handball players.

Hypothesis

It was hypothesized that there is no significance difference in the Mental Toughness between handball and basketball players.

2. REVIEW OF RELATED LITERATURE

Ekmekçi and Miçoğullar (2018) compared mental toughness of American football players and handball players. The results showed that there were significant differences in the total mental toughness (including its sub-dimensions; confidence, constancy and control). The American football team players' confidence, control, and total mental toughness levels were higher than that of handball players and they had lower level scores for constancy and anxiety levels. Sajjan (2018) assessed the mental toughness between the athletes of football and gymnastics skill sports and results revealed significant differences between the athletes of football and gymnastics on categories of ability to handle pressure, concentration, confidence, motivation and overall mental toughness. Cowden (2017) reviewed the quantitative literature on Mental Toughness (MT), competitive standard, achievement level, and performance (competitive and non-competitive) in sport and point to mentally tougher athletes' superior levels of success. Bahari, Biyabani, and Zandi (2016) found relationship between Mental Toughness and behavioral regulation among University student-athletes and the results indicated that there was a significant positive relationship between mental toughness and behavioral regulation in the student-athletes. Charly and Manoj (2016) assessed the level of mental toughness among intercollegiate female volleyball player from four universities of Kerala state. The results of the study found that the different universities are different in developing the sports mental toughness of players. Singh (2014)

compared mental toughness between handball and volleyball players and showed significant difference on their mental toughness, though handball players showed higher mean on mental toughness than volleyball Players. Kumar (2016) compared mental toughness between male and female basketball players of Sirsa District of Haryana. The outcomes revealed that there was no significant difference observed in mental toughness between male and female basketball players. Tomar, Hamdan and Tiwari (2015) compared mental toughness between basketball, handball and water polo teams. Results revealed no significant difference on mental toughness viz; self-confidence; motivation; goal setting; and visual imagery; in basketball, handball and water polo teams. Significant difference was seen on sub scales of mental toughness viz; attention control; attitude control and on overall mental toughness in basketball, handball and water polo teams.

3. METHODOLOGY

Subjects

The purpose of the study was to compare the mental toughness of basketball and handball players of different universities, Karnataka India. For this purpose, seventy two (72) male university players were selected randomly from three universities (Bangalore University Bengaluru, Davanagere University, Davanagere, and Gulbarga University, Kalaburgi) who had their credit in participating in South Zone Interuniversity Tournaments during the academic year 2017-18 in their respective games. The age of the subjects were ranged from 18 to 28 years. Among the selected 72 subjects, 36 subjects were Basketball game players and remaining 36 were Handball game players.

Variable of the Study

The mental toughness considered as criterion variable to assess the mental toughness between Basketball and Handball players. The Mental Toughness Questionnaire developed by Alan Goldberg (1995) was used to assess the level of mental toughness of the players. The test retest reliability of the questionnaire was reported to be 0.79. It contains sixty items, which has four categories namely: handling pressure, concentration, mental rebounding, and winning attitude. Every statement has two possible responses i.e. True or False. One point is awarded to correct answer for each of the question and the total number of scores obtained by the subject in numerical numbers. A total score of 60 was possible on this questionnaire.

Data Collection

Subjects are made on sit on the ground. The researcher explained about the mental toughness questionnaire and the meaning of each question. The subjects had to write 'True' or 'False' each question inside the bracket mark after assessing themselves. Where ever assistance requires for athlete to answer the research made them to clear and finally collected the answer questionnaire. Responses obtained from the subjects on each statement of mental toughness questionnaire were recorded.

Statistics

To obtain the mean performance of the subject's descriptive statistics and to determine the significant differences in the mental toughness and its categories between the group means of the criterion measures t-test was employed.

4. RESULTS

The data for the investigation was collected, interpretation and statistical analysis of the data was done by using descriptive statistics and independent 't' test for each variable separately and given in the following table-1.

Table-1: Comparison of Mental Toughness between Basketball and Handball Male University players

Variable	Game	N	Mean	Standard Deviation	Std. Error Mean	Obtained 't' Value	Level of Sig.
Rebound Ability	Basketball	36	3.861	1.437	0.239	3.49	Significant @ 0.01 level
	Handball	36	2.833	1.028	0.171		
Ability to Handle Pressure	Basketball	36	3.667	1.264	0.210	0.21	Not Significant
	Handball	36	3.722	0.974	0.162		
Concentration Ability	Basketball	36	3.666	1.242	0.207	2.26	Significant @ 0.05 level
	Handball	36	3.000	1.264	0.210		
Level of Confidence	Basketball	36	4.361	0.990	0.165	0.88	Not Significant
	Handball	36	4.166	0.878	0.146		
Motivation	Basketball	36	4.527	0.940	0.156	0.55	Not Significant
	Handball	36	4.388	1.201	0.200		
Mental Toughness (Overall)	Basketball	36	20.083	3.879	0.646	2.49	Significant @ 0.05 level
	Handball	36	18.111	2.733	0.455		

The above table explores the significant differences in the mean scores of mental toughness and its categories between basketball and handball players. The Basketball players mean scores of rebound ability is 3.861 is greater than the mean scores of Handball players which is shown to be 2.833 followed by their standard deviation are 1.437 and 1.028 respectively. The obtained 't' value is 3.49 is greater than table value of 't' which is 2.65 at 0.01 level of significance. Hence it is found significant difference in the rebound ability between the players. This indicates that there is a significance difference in the rebound ability between the Basketball and Handball players. The basketball players have superior mental toughness in rebound ability when compared with handball players.

The Basketball players mean scores of concentration ability is 3.666 is greater than the mean scores of Handball players which is shown to be 3.000 followed by their standard deviation are 1.242 and 1.264 respectively. The obtained 't' value is 2.26 is greater than table value of 't' which is 2.00 at 0.05 level of significance. Hence it is found significant difference in the concentration ability between the players. This indicates that there is a significance difference in the concentration ability between the Basketball and Handball players. The basketball players have superior mental toughness in concentration ability when compared with handball players.

The Basketball players mean scores of overall mental toughness is 20.083 is greater than the mean scores of Handball players which is shown to be 18.111 followed by their standard deviation are 3.879 and 2.733 respectively. The obtained 't' value is 2.49 is greater than table value of 't' which is 2.00 at 0.05 level of significance. Hence it is found significant difference in the concentration ability between the players. This indicates that there is a significance difference in the overall mental toughness between the Basketball and Handball players. The basketball players have superior mental toughness (overall) when compared with handball players.

The table also shows that the obtained 't' values of 0.21, 0.88 and 0.55 are less than table value of 't' which is 2.00 at 0.05 level of significance. Hence it is not found any significant differences in ability to handle pressure, level of confidence and motivation respectively between the players. This indicates that there is no significant difference in the ability to handle pressure, level of confidence and motivation as categories of mental toughness between the Basketball and Handball players. Both basketball and handball players have similar type of ability to handle pressure, confidence level and motivation.

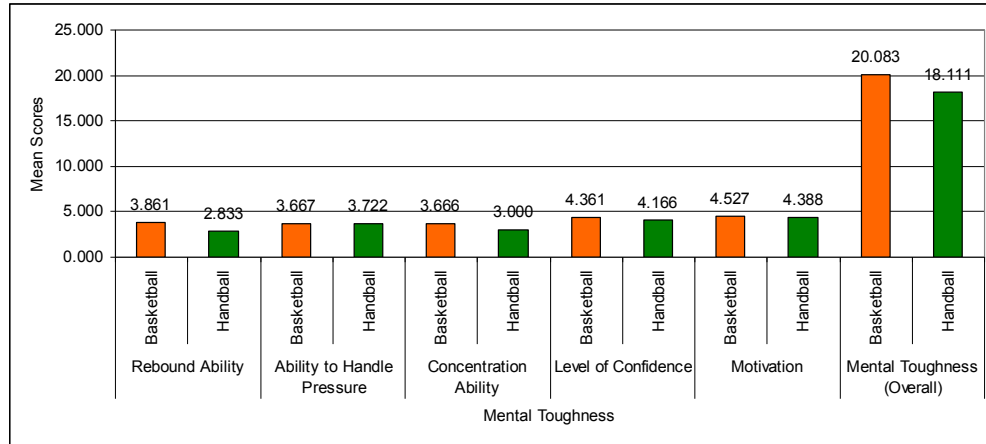


Fig 1: Comparison of Mean Scores of Mental Toughness between Basketball and Handball Players

5. DISCUSSION OF FINDINGS

The finding of the study clearly stated that there were significant differences in the rebound ability, concentration ability and overall mental toughness between basketball and handball university level players. This may be due to mental toughness is a personality trait that does not vary from situation to situation. These games certainly offer different situation demand on athletes, especially handball. The similar results supported with the finding of Ekmekçi and Miçooğullar (2018) found significant differences in the total mental toughness (including its sub-dimensions; confidence, constancy and control). Sajjan (2018) revealed significant differences between the athletes of football and gymnastics on categories of ability to handle pressure, concentration, confidence, motivation and overall mental toughness. Singh (2014) observed significant difference on their mental toughness, though handball players showed higher mean on mental toughness than volleyball Players. The findings also stated that there was no significant difference found in the ability to handle pressure, confidence level and motivation as the categories of mental toughness between Basketball and Handball male university players. The similar results supported with the finding of Kumar (2016) found insignificant difference in the mental toughness between male and female basketball players. Tomar, Hamdan and Tiwari (2015) found no significant difference on mental toughness viz; self-confidence; motivation; goal setting; and visual imagery; in basketball, handball and water polo teams.

5. CONCLUSION

It was concluded that there was significant difference found in rebound ability, concentration ability and overall mental ability between Basketball and Handball players and no significant difference found in other categories of mental toughness that is ability to handle pressure, level of confidence and motivation. The basketball players have superior mental toughness in rebound ability, concentration ability and overall mental toughness when compared with Handball players. By being mentally tough, player can bring all their talent and skill to life consistently. Being able to use their emotional life effectively will help them perform at their prime more consistently. The use of thinking skills, imagery, confidence building and other skills can be powerful techniques in reaching a high level of mental toughness among the players.

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