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**Inter Disciplinary  
International Conference  
Academic Research and  
Innovation In Teaching &  
Arising  
Inclination In  
Professional  
Education**

(AICTE - APE 2019)  
Date : 27 & 28 December 20

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## Comparative Study Of Mental Toughness Of Players Of Various Games

**Dr. Shrikant S. Mahulkar**Director of Physical Education  
Late Dattatraya Pusadkar Arts College  
Nandgaon Peth, Amravati**Abstract**

The Purpose of the study was to compare Mental Toughness of players of various games. For this purpose researcher had collected data from thirty (30) players; 10 players from each game i.e. Kabaddi, Kho-Kho and Atya-Patya from various mandals of Amravati, Maharashtra. Subjects were selected with purposive sampling methods. The age of the subjects were ranged between 20 to 25 years. Subjects did not use any ergogenic aids or supplementations and also they were all free from any injuries during the collection of data. Mental Toughness was measured by (MTQ48) questionnaire developed by Dr. Alan Goldberg was used to measure mental toughness and the score was noted down in number. Statistical analysis was done on the basis of ANOVA comparison of Mental Toughness of players of various games at 0.05 levels. Result shows that there is difference between the mean of Mental Toughness of players of Kabaddi, Kho-Kho & Atya-Patya Games. To see this difference were significant or not One Way Analysis of Variances was implied. Researcher found that there is significant difference in Mental Toughness of amongst players of Kabaddi, Kho-Kho & Atya-Patya Games. As the calculated 'f' value is 7.212 is greater than tab  $F_{0.05}(2, 27) = 3.354$ . Since the 'f' ratio is found to be significant. Since the one-way analysis of variance was found to be significant in related to level of aspiration, the least significant difference (L.S.D.) was applied to assess the paired means difference among the players of Kabaddi, Kho-Kho & Atya-Patya games in reference to Mental Toughness. Concluding we can say that Kabaddi player's shows high level of mental toughness followed by kho-kho and atya-patya players it may be attributer that kabaddi players were found to be more aggressive as compared to kho-kho and atya-patya players because of the nature of the kabaddi game.

**Keyword:** Mental Toughness, Kabaddi, Kho-Kho and Atya-Patys Players.

**Introduction**

In today's competitive arena the values of games and sports is increasing tremendously. Psychological factors are playing a key role to a player for showing their best performance and it is now being recognized that physical talent is not the only component which leads to success in various games and sports but also psychological factors. In the field of sports arena, mental toughness is seen as one of the most significant attributes that lead to a successful athletic performance. To perform at the highest level it is often the mental makeup which separates the elite performers from the best performers. The involvement of psychological principles for improvement of performance in sports has received greater attention in these days. There are certain accepted psychological principles which must have to be applied, so that the athletes and players are able to show their best in performances in competition. Coaches, physical educationists and sports scientists have always eager to know more about those psychological principles, which are helpful in improving the performance of the players. It is important to know about the role of anxiety, aggression, tension, fear, emotional phenomena like competitive anxiety and some personality traits like extroversion and neuroticism of the players during training as well as in competitions.

The players who are alert and relaxed, they take better, quicker decision during a match. An over-anxious player may take incorrect decision. Players can be more motivated when they realize that they can control their inner ability like anxiety, aggression, tension, fear, etc and are then free to play at their top level.

In games and sports there has been almost no consideration centering on mental toughness and this is seen as very surprising considering that the term has been widely used over the last decades. It has been observed that there are few studies were conducted on mental toughness, mental toughness is seen as one of the most overused and least understood term in the area of sport psychology as well as in games and sports.

In games and sport the word mental toughness is utilized by a variety of coaches, performers and sport psychologists, and it is only recently those psychologists have attempted to define and understand the concept of mental toughness. Mental toughness or we can say than any parameters of psychology differ to each other. It is unique to each and everyone. It may be differ according to their age, level, game, etc. Weather it is varied in different games and sports.

Hence the researcher has taken the study of "Comparative study of mental toughness of players of various games"

**Materials and Methods****Subject**

For the present study researcher had collected data from thirty (30) players; 10 players from each game i.e. Kabaddi, Kho-Kho and Atya-Patya from various mandals of Amravati, Maharashtra. Subjects were selected with purposive sampling methods. The age of the subjects were ranged between 20 to 25 years. Subjects did not use any ergogenic aids or supplementations and also they were all free from any injuries during the collection of data.

**Mental Toughness** –Mental Toughness was measured by (MTQ48) questionnaire developed by Dr. Alan Goldberg was used to measure mental toughness and the score was noted down in number.

**Analysis**

Statistical analysis was done on the basis of ANOVA comparison of Mental Toughness of players of various games at 0.05 levels.

**Table -1**  
**Comparison of Mental Toughness of Players of Kabaddi, Kho-Kho & Atya-Patya Games**

Variables	SV	SS	DF	MS	F
Mental Toughness	between	38.2236	2	19.1118	7.212*
	error	71.55	27	2.65	

\*Significant at 0.05 level  $F_{0.05(2,27)} = 3.354$

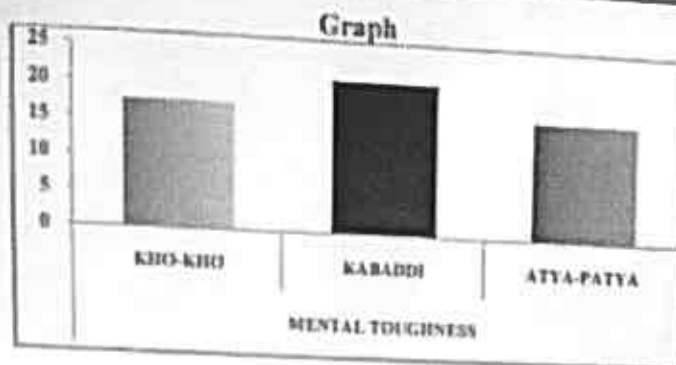
Above table shows that there is difference between the mean of Mental Toughness of players of Kabaddi, Kho-Kho & Atya-Patya Games. To see this difference were significant or not One Way Analysis of Variances was implied. Researcher found that there is significant difference in Mental Toughness of amongst players of Kabaddi, Kho-Kho & Atya-Patya Games. As the calculated 'F' value is 7.212 is greater than tab  $F_{0.05(2,27)} = 3.354$ . Since the 'F' ratio is found to be significant. Since the one-way analysis of variance was found to be significant in related to level of aspiration, the least significant difference (L.S.D.) was applied to assess the paired means difference among the players of Kabaddi, Kho-Kho & Atya-Patya games in reference to Mental Toughness.

**Table-2**  
**Least Significant Difference for Means of Mental Toughness of players of Kabaddi, Kho-Kho & Atya-Patya Games**

MENTAL TOUGHNESS				
Kho-Kho	Kabaddi	Atya-Patya	M.D.	C.D.
17.5	21.3		3.8*	2.441
17.5		16.7	0.8	
	21.3	16.7	4.6*	

\*Significant at .05 levels.

From the above table it was clearly revealed that significant difference was found between the means difference of Kabaddi and Kho-Kho players as well as Kabaddi and Atya-Patya players as the mean difference of mental toughness was greater than the critical difference, whereas mean difference of kho-kho and atya-patya players shows insignificant difference as the mean difference is lesser than the critical difference.



### Conclusion

Concluding we can say that there is difference between the mean of Mental Toughness of players amongst kabaddi, kho-kho and atya-patya game. To see this difference were significant or not One Way Analysis of Variances was implied. Researcher found that there is significant difference in Mental Toughness of players of various games as the calculated 'f' value is greater than tab F value. Since the 'f' ratio is found to be significant. From the Mean table it also revealed that Kabaddi player's shows high level of mental toughness followed by kho-kho and atya-patya players it may be attributer that kabaddi players were found to be more aggressive as compared to kho-kho and atya-patya players because of the nature of the game.

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**27<sup>th</sup> & 28<sup>th</sup> December 2019**

This is to certify that Shri. / Smt. / Ku. / Dr. / Prof. Dr. Chaitrali S. Mahalkar has actively participated in the two days International Conference organized by College Of Management And Computer Science, Yavatmal In Collaboration with Smt. Nankibai Wadhvani Kala Mahavidyalaya, Yavatmal on "Academic Research and Innovation in Teaching & Arising Inclination in Professional Education." He/She has presented / published a paper on Research on

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