



# International Journal of Physical Education, Sports and Health

P-ISSN: 2394-1685  
E-ISSN: 2394-1693  
Impact Factor (ISRA): 4.69  
IJPESH 2016; 3(2): 248-250  
© 2016 IJPESH  
[www.kheljournal.com](http://www.kheljournal.com)  
Received: 17-01-2016  
Accepted: 19-02-2016

Sukashant S Patil  
Research Scholar-LNCPE  
Trivandrum- University of  
Kerala, India.

## A comparative analysis of mental toughness in different level sportsmen

**Sukashant S Patil**

### Abstract

The purpose of the present study was to compare the mental toughness among inter collegiate sportsmen and inter university sportsmen. To achieve the purpose of the study 50 sportsmen and 50 non sportsmen were selected from different colleges under Karnataka University, Dharwad In the year of 2014-15. The Subjects age ranges from 18-23 years. The data for the study were collected by using questionnaire technique. The scores on mental toughness were collected by administrating Alan Goldberg scale. This survey was taken by the investigator presence and Necessary instruction was given by him and there was no use of any motivational technique. It was clearly explained to the subjects that overall purpose of the study was to compare the mental toughness between inter collegiate sportsmen and inter university sportsmen. However the subjects were made to respond as quickly as possible without any confusion. Statistical technique 't' ratio was used to compare the mental toughness between selected groups. The results revealed that there was a significant difference found in sportsmen and non-sportsmen.

**Keywords:** mental toughness, inter collegiate and inter university sportsmen.

### Introduction

Physical education is the most important factor of common education. It is the education through physical activities it means in physical education how much importance goes to physical factor; the same importance goes to psychological factors also. The aim of the education is overall development of human. The aim of the physical education is not out of common education it helps to overall development of child through physical activities.

In older days more people were spent their time by involving in physical activities, also that people are involved in sports only for happiness not for competition or something else. [As the leisure time increased participation in sports activities were also increased. Then physical activities shaped as competition purpose] or but gradually human got his increased leisure time and also increase in no of participants so it turn as a competitive from that day sports has become professional. Now a day's in sports the competition is very much high so the person only by having physical activities, motor abilities and other type of physical abilities are not help to reach his goal, without having psychological factors. The training of psychological factors is very much important for the success of sports.

Psychology is the study of human behavior and human relationship. Sports psychology means applying psychological theories and concepts to aspects of sports such as coaching and teaching. Sports psychology is concerned with analyzing human behavior in various types of sport settings. It is individuals' behavior acting individually and acting in a group. This sport psychologist uses psychological in assessment techniques and intervention strategies are on effort to help individuals to achieve their optimal performance. According to M.L. Kamlesh sports psychology is the application of psychological principles to sport and psychological activity at all levels of skill development.

### Mental toughness

It is a term people use that will allow a person to become a better athlete. (Such as difficult training or difficult competitive situations in games) and emerge without losing confidence. In recent decades, the term has been commonly used by coaches, sport psychologists, sport commentators, and business leaders.

**Correspondence**  
**Sukashant S Patil**  
Research Scholar-LNCPE  
Trivandrum- University of  
Kerala, India.

Mental toughness is a controversial term, in that many people use the term liberally to refer to any set of positive attributes that helps a person to cope with difficult situations. Coaches and sport commentators freely use the term mental toughness to describe the mental state of athletes who persevere through difficult sport circumstances to succeed. For example, it is often simply applied as a default explanation for any victory, which is highly problematic as an attribution. Only within the past ten years has scientific research attempted a formal definition of mental toughness as a psychological construct and criticisms about the lack of specificity of this umbrella term abound. For example, Moran (2012) states that considerable caution is required in attempting to draw conclusions about the nature, characteristics, determinants and development of mental toughness in sport because of the theoretical nature of the definitions, which owe more to anecdotal plausibility than to empirical research.

Mental toughness having the natural or developed psychological edge that enables you to generally, cope better than your opponents with the many demands that sports places on a performer. Specifically be more consistent and better than your opponents in remaining determined, focused, confident, and in control under pressure.

Some psychologists have argued that separate sport-specific definitions of mental toughness should be developed. They have highlighted that the attributes of a mentally tough athlete in one sport may differ greatly from the attributes of a mentally tough athlete in a different sport. Differences have been hypothesized between male and female athletes, as well as between "team sport" and "individual sport" athletes,

**Purpose of the study:** The main purpose of this study was to analyze the level of Mental toughness between inter collegiate sportsmen and inter university sportsmen.

**Statement of the problem:** "Whether inter university sportsmen were having more mental toughness than inter collegiate sportsmen".

**Hypothesis:** "The level of Mental toughness in inter university sportsmen were significantly higher than inter collegiate sportsmen".

#### Limitations

- Non considerable of doping of a sportsman.
- Can't control the environment/surrounding of the sportsman.
- Non consideration of daily routine activities, training, and food habits of the sportsman.
- Can't control of the psychological Status / condition of sportsman.
- Family background of the subject was not considered.
- The response of the subject to the questionnaire might not be honest in all cases and this was recognized as a limitation.

#### Delimitation

- In this study I selected the sportsman's from who participated in the level of inter collegiate and inter university competition.
- This study contains the age of a sportsman between 18-23 years.
- The study considered only male sportsmen.
- This study considered only sportsman who belongs to Karnataka University Dharwad.

#### Significance of the study

- It's possible to know mental toughness of sportsmen.
- It would very helpful to coaches, physical education teachers and trainees to prepare the reports and training plans.
- This study would help to develop the interest of participation in sports and creates awareness to how much important this psychological characteristic in sports.
- It's possible to understand the necessity of this component in the sportsmen preparations.
- This study helps the sportsmen to achieve the great achievement.

#### Methodology

As discussed earlier the main purpose of the study was investigating the varying level of mental toughness between inter collegiate sportsmen and inter university sportsmen. For this purposes the standardized "Mental Toughness" Questionnaire was administered. The selection of the subject and procedure followed by the collection of data and analysis used in this study are described in the following sections.

#### Subjects

For this study 100 sportsman's from who participated inter collegiate and inter university tournaments in handball, basketball, football and hockey players were chosen equal in number from all selected games as the subjects.

#### Selection of Test

For this study Alan Goldberg's mental toughness questionnaire was used.

#### Administration of Test

This questionnaire consisting of 30 questions and divided in to five main factors given bellow:

S. No	Factor	Questions
1	Rebound ability	1-6
2	Handling Pressure	7-12
3	Concentration	13-18
4	Confidence	19-24
5	Motivation	25-30

#### Scoring System

S. No	Marks	Indications
1	26 and above	Good
2	23-25	Average
3	22 and below	Poor

To measure sports related mental toughness of the sportsman's to mental toughness Questionnaire test (That is developed by Alan Goldberg in 2002) was introduced. Then each sportsman composite score was found. Then that scores was analyzed according to scale. All 100 sportsmen were first of all provided to following mental toughness questionnaire and they were asked to give their opinion strictly independent manner. It contains 30 items.

This questionnaire was administered to the sportsmen for the study directly by investigator. After the explained objective of this study subjects were responds truly as possible and immediately completion respondent sheets were collected.

### Statistical Techniques

The data that was collected from the subjects was treated statistically. To test the hypotheses data was analysed to independent sample t- test which will locate significant difference between pair of means. The level of significance was fixed at 0.05.

### Analysis of the Data

The significance of the difference among the means of experimental group was found out by pre and post-test. The date were analysed and dependent t test was used with 0.05 levels of confidence.

**Table 1:** Analysis of ‘T’- Ratio for the Mental Toughness among Inter Collegiate Players And Inter University Players.

S. No	Variable	Group	N	Mean	SD	Df	‘t’
1	Rebound ability	Inter collegiate	50	3.98	1.45	98	3.83*
		Inter university	50	4.89	0.98		
2	Handling Pressure	Inter collegiate	50	3.67	1.23	98	2.65*
		Inter university	50	4.06	1.57		
3	Concentration	Inter collegiate	50	3.37	1.43	98	4.46*
		Inter university	50	3.87	1.31		
4	Confidence	Inter collegiate	50	2.23	1.00	98	5.75*
		Inter university	50	4.22	0.88		
5	Motivation	Inter collegiate	50	3.40	1.11	98	3.96*
		Inter university	50	4.62	1.66		
6	Total Mental Toughness	Inter collegiate	50	16.65	2.98	98	3.98*
		Inter university	50	21.66	3.32		

Level of Significance 0.05 (df of 98 Is 1.98)

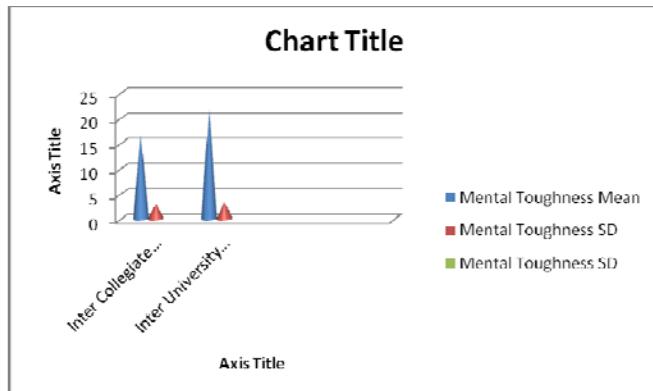
The table 1 shows that the mean values of inter collegiate players and inter university players on total mental toughness were 16.65 and 21.66 respectively. The obtained ‘t’ ratio was 3.98\* since the obtained calculated value was greater than table value of 1.98 for significance at 0.05 level with 98 degrees of freedom it was found to be statistically significant.. The results of the study showed that there was a significant difference between inter collegiate players and inter university players in total mental toughness.

### Conclusion

Mental Toughness is the ability to consistently sustain one’s ideal performance state during adversities in competition. Performing to one’s potential requires good technique and mental skills. From the study it may be concluded that inter-university players were more Mentally Tough compare to inter-collegiate players. According to literature contact in the game, small playing arena may increase the anxiety level and sports achievement motivation in indigenous game players.

### References

1. Cohn PJ. An exploratory study on peak performance in golf. The Sport Psychologist. 1991; 5:1-4.
2. Daniels Alice Diane. Pain Tolerance and Cardiac Responses to Pain of Low and High Anxious Subjects Before and After Exercise Dissertation Abstracts International 1972; 33(5):2147-A.
3. Fourie S, Potgieter JR. The Nature of Mental Toughness in Sport South African Journal for Research in Sports, Physical Education and Recreation. 2001.
4. Goldberg AS. Sports slump busting: 10 steps to mental toughness and peak performance. Champaign, IL: Human Kinetics, 1998.
5. Golby J, Sheard M, Lavalle D. A Cognitive Behavioural Analysis of Mental Toughness in National Rugby League Football Team Percept of Motor Skills, 2003.
6. Gould D, Dieffenbach K, Moffett A. Psychological Characteristic and Their Development of Olympic Champions. Journal of Applied Sport Psychology. 2002; 14:172-204.
7. Bird Anne Marie, Cripe Bernette K. Psychological and sport behaviour, St. Louis; Time Mirror / Mosby, 1986.
8. Hardman JM, Johnson WR. The emotional readings of college athletes, Res. Quart 1952; 23:391-397.
9. Kamlesh ML. Athletic personality: A Psychological probe, Delhi; Surjit, 1990.
10. Alderfer C. Existence, relatedness, & growth, New York: Free Press, 1972.
11. Kamlesh ML. Indian athletes: A diagnosis of their incentive motivation. Proceedings of the world Congress of Sport Psychology, Singapore, 1989; 35-37.



**Fig:** A graphical representation shows the mean and SD of “mental toughness” between inter-collegiate players and inter-university players.

### Results

From the statistical analysis it was concluded that the inter-university players were having higher Mental Toughness level than non-inter-collegiate players.

### Discussion

As anticipated players who are participating in inter-university competition were having significantly higher Mental Toughness level than inter-collegiate competition. So it can be predicted that the Different environments, Tough compete teams, High level physical and psychological training, Expert training group, good Facilities and food etc may be effect on this psychological factor.