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

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### Abstract

The purpose of the present study was to compare the mental toughness among state level players and national players. For the purpose of the study 89 players were selected from IGIPES College under University of Delhi, Delhi in the year of 2021-22. The Subjects age ranges from 17-23 years. The data for the study were collected by using questionnaire technique. The scores on mental toughness were collected by administering Alan Goldberg scale (1998). Which consisted of thirty questions measuring five attributes namely Reboundability, Pressure Handling Ability, Concentration, Confidence and Motivation. This survey was taken by the investigator presence and Necessary instruction was given by him and no motivational techniques were employed. It was clearly explained to the subjects that overall purpose of the study was to compare the mental toughness between state level players and national level players. Statistical technique of 't' ratio was used to compare the mental toughness between selected groups. The results revealed that there was a significant difference found in state level players and national level players.

**Keywords:** Mental toughness: State: National: Reboundability, concentration, confidence, pressure handling ability, motivation, team game, individual game

### Introduction

Physical education is the vital curricular fraction of common education. It is the education all the way through physical activities it means in physical education how much significance goes to physical factor the same significance goes to psychological factors also. The goal of educational institutions is to foster the full growth of humans. 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 or 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 or psychological principles to sport and psychological activity at all levels of skill development.

## Mental toughness

Mental toughness has garnered considerable alert over the past two decades because of the perception that this psychological construct influences an athlete's ability to strive, thrive, and survive in sport. Mental toughness is perhaps the single most valuable psychological characteristic in sports. For instance a mentally tough person is described as the one who is a self-oriented person and who accepts criticism and failure without getting discouraged. Mentally tough people have a high sense of self-belief and an unshakable faith that they control their own destiny, these individuals can remain relatively unaffected by competition and adversity". Many experts propose numerous attributes to clarify the nature of mental toughness, like not letting adverse situations affect performance, rebounding from failures, possessing superior mental skills, having the ability to cope with pressure and being resilient.

Mental attributes such as (a) an unshakeable self-belief, (b) ability to bounce back from set-backs, (c) insatiable desire and intrinsic motivation to be successful, (d) ability to remain focused in the face of distraction or unexpected events, (e) managing physical or emotional pain, (f) coping with anxiety, and (g) thriving during pressure-packed competitions are characteristics of mentally tough athletes. Specific key psychological components that affect performance across many sports codes. These include: Self-confidence, self-motivation, attention control, hardiness, and enjoyment, ability to handle pressure, resilience and quality preparation. Mental toughness is an individual's capacity to deal effectively with stressors, pressures, and obstacles and to perform to the best of their abilities regardless of the conditions in which they find themselves struggling.

**Statement of the problem:** Whether national level players were having more mental toughness than state level players.

**Hypothesis:** The level of mental toughness in national level players were significantly higher than state level players.

**Purpose of the study:** The purpose of this study was to analyze the level of mental toughness between state level players and national level players.

**Limitations:** Non considerable of doping of a sportsman. Can't control the environment or 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 state and national level competition.

This study contains the age of a sportsman between 17-23 years.

This study considered only sportsman who belongs to IGIPSS, University of Delhi.

## 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 state level sportsmen and National level 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 89 sports persons from who participated state and national players were taken equal from all selected games as the subjects.

## Selection of Test

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

**Table 1:** Independent t-test of mental toughness among national and state players

Independent Samples Test									
Levene's test for equality of variances t-test for equality of means									
	F	Sig.	T	DF	Sig. (2-Tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
								Lower	Upper
R1	6.42	0.013	-1.304	89	0.196	-0.135	0.103	-0.34	0.07
R2	6.068	0.016	1.411	89	0.162	0.147	0.104	-0.06	0.355
R3	0.303	0.584	-0.36	89	0.72	-0.038	0.107	-0.251	0.174
R4	1.441	0.233	0.59	89	0.557	0.051	0.087	-0.121	0.224
R5	0.229	0.634	-0.245	89	0.807	-0.026	0.105	-0.234	0.182
R6	24.811	0	2.276	89	0.025	0.212	0.093	0.027	0.396
RTOTAL	2.717	0.103	0.509	89	0.612	0.154	0.302	-0.447	0.754
HP1	2.561	0.113	-0.818	89	0.416	-0.077	0.094	-0.264	0.11
HP2	5.279	0.024	1.229	89	0.222	0.128	0.104	-0.079	0.336
HP3	0.448	0.505	0.421	89	0.675	0.045	0.107	-0.167	0.257
HP4	10.294	0.002	1.511	89	0.134	0.135	0.089	-0.042	0.312
HP5	1.02	0.315	0.498	89	0.62	0.045	0.09	-0.134	0.224
HP6	1.395	0.241	-0.582	89	0.562	-0.045	0.077	-0.198	0.108
HPTOTAL	2.975	0.088	1.292	89	0.2	0.423	0.327	-0.227	1.074

C1	30.756	0	-2.848	89	0.005	-0.25	0.088	-0.424	-0.076
C2	5.635	0.02	-1.189	89	0.238	-0.096	0.081	-0.257	0.065
C3	3.625	0.06	-0.962	89	0.339	-0.083	0.087	-0.255	0.089
C4	0.6	0.441	0.382	89	0.703	0.038	0.101	-0.161	0.238
C5	3.157	0.079	-0.891	89	0.375	-0.071	0.079	-0.228	0.087
C6	2.906	0.092	1.162	89	0.248	0.122	0.105	-0.087	0.33
CTOTAL	0.095	0.759	-1.277	89	0.205	-0.34	0.266	-0.868	0.189
LOC1	2.093	0.152	0.71	89	0.48	0.051	0.072	-0.092	0.195
LOC2	0.015	0.904	0.06	89	0.952	0.006	0.106	-0.205	0.218
LOC3	0.025	0.876	-0.079	89	0.938	-0.006	0.082	-0.168	0.156
LOC4	2.093	0.152	0.71	89	0.48	0.051	0.072	-0.092	0.195
LOC5	0.09	0.765	-0.15	89	0.881	-0.013	0.085	-0.182	0.157
LOC6	0.386	0.536	-0.316	89	0.753	-0.032	0.101	-0.234	0.17
LOCTOTAL	0.006	0.939	0.217	89	0.829	0.058	0.266	-0.47	0.586
M1	4.849	0.03	1.064	89	0.29	0.064	0.06	-0.056	0.184
M2	0.016	0.899	-0.064	89	0.949	-0.006	0.101	-0.206	0.194
M3	11.735	0.001	1.595	89	0.114	0.09	0.056	-0.022	0.202
M4	3.385	0.069	0.926	89	0.357	0.077	0.083	-0.088	0.242
M5	16.157	0	1.83	89	0.071	0.109	0.06	-0.009	0.227
M6	5.352	0.023	1.112	89	0.269	0.096	0.086	-0.076	0.268
MTOTAL	0.279	0.598	2.043	89	0.044	0.429	0.21	0.012	0.847
ALLTOTAL	0.556	0.458	0.791	89	0.431	0.718	0.908	-1.086	2.521

### Results

The first question of the Reboundability, was found to be significant  $T(89)=-1.304, p<0.05$ .

The Second question of the Reboundability, was found to be significant  $T(89)=1.411, p<0.05$ .

The sixth question of the Reboundability, was found to be significant  $T(89)=2.276, p<0.05$

The second question of the Pressure Handling Ability, was found to be significant  $T(89)=1.229, p<0.05$

The fourth question of the Pressure Handling Ability, was found to be significant  $T(89)=1.511, p<0.05$

The first question of the Concentration, was found to be significant  $T(89)=-2.848, p<0.05$ .

The second question of the Concentration, was found to be significant  $T(89)= -1.189, p<0.05$ .

The first question of the Motivation, was found to be significant  $T(89)=1.064, p<0.05$ .

The fifth question of the Motivation, was found to be significant  $T(89)=-1.83, p<0.05$

### Conclusion

The study highlights a significant disparity in mental toughness between state-level and national-level players. The findings underscore the crucial role of psychological factors in sports success, emphasizing the need for targeted interventions to enhance mental toughness among athletes at different levels. This comparative analysis contributes valuable insights to the intersection of sports and psychology, paving the way for tailored training programs aimed at optimizing athletes' overall performance.

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