



## A STUDY OF COMPARISON OF MENTAL TOUGHNESS OF ARMY AND NCC SPORTSMEN OF JAMSHEDPUR

**Dr. Sambhu Prasad**

Assistant Professor  
Department of Physical Education  
Rajiv Gandhi University, Arunachal Pradesh



### ABSTRACT

Mental toughness is often referred to as one of the most important psychological attributes underpinning the success of athletes. Although selected studies have examined this common supposition, research in this area has yet to be synthesized. The present study was planned with the objective to compare mean score of mental toughness of army and NCC sportsmen of Jamshedpur City. A survey study was carried out on sixty (n=60), male national or interuniversity level sportsmen, viz thirty from Army and thirty from NCC sportsperson studying in different colleges of Jamshedpur city and the age ranged 20 to 25 years. To compare mean score of mental toughness of army and NCC sportsmen of Jamshedpur city the data were analyzed with the help of t-test, level of significance was chosen at 0.05. The result shows mean scores of mental toughness of army and NCC sportsmen differ significantly. It can be concluded that the mental toughness was found to be significantly higher in army sportsmen then those of NCC sportsmen. The mental toughness is an important component of psychological skills that should be included in training session in order to achieve excellent performance in competitions.

**Keywords:** Mental toughness, Army sportsmen and NCC sportsmen

### INTRODUCTION

Pivotal to athletic performance is the ability to more maintain desired athletic performance levels during particularly critical periods of competition. According to Silva and Weinberg during the past two decades, sports psychology has emerged as a legitimate field of scientific enquiry. As with all scientific endeavors sports psychology show the same basic goal of science. Researchers are awarded with ample opportunities to observe, describe and explain the various psychological factors that influence diverse aspects of sports and physical activity.

A key question for sports and exercise psychologist is whether champions have simply inherited the dominant psychological traits necessary for success or whether mental toughness can be acquired through training & experience. Recent research has attempted to explore the concept of mental toughness in sports more thoroughly, and it appear that, will some people are naturally more tough minded, other people can be "Toughened-up" with the correct approach to training. Therefore, in the present study an attempt has been made to observe to compare mean score of mental toughness of army and NCC sportsmen of Jamshedpur City.

### METHODOLOGY

The population of this study was the male National or Inter-University level sportsperson of different games & sports belong to Sonari army camp, Jamshedpur and 37th Battalion of NCC sportsmen of Jamshedpur city. In reality, since this population in Jamshedpur was very large, the study was delimited to sixty male players (n=60). Viz thirty from Army and thirty from NCC sportsperson of different colleges of Jamshedpur city and the age ranged 20 to 25 years. Hence purposive sampling technique was employed for the selection of subject.



TABLE 1  
 CRITERION MEASURES

Variable	Tool used	Author	Criterion Measures
Mental toughness	Mental toughness questionnaire	Allan Goldberg (1995)	Point

### Administration of the Questionnaires

The questionnaire was administered by the researcher to group of 20 subjects. The subjects were seated comfortably and as far as possible should not have a chance to talk other students or glance at their answers. By explaining the purpose of the test the researchers try to get a full co-operation from the students. The questionnaire is self administering. All the instructions are printed on the front cover page of the questionnaire. The researchers read these out to the students and explain to them what-ever necessary. The subjects were exhorted to give their own and true opinion and the researcher assured to the respondents that the information given by them would be kept confidential with him and utilized for the purpose of the study only. After the test is over the test material of every subject was collected. The questionnaire comprised of 60 questions/statements based on Handling Pressure (20 questions), Concentration (17 questions), Mental Rebounding (14 questions) and Winning attitudes (09 questions). Every statement had two possible responses i.e. yes or no. The subject has to choose any one as applicable to him. A score of 26-30 indicate strength in overall mental toughness. Score of 23-25 indicate average to moderate skill in mental toughness. Score of 22 below means that individual need to start putting more time into the mental training area. Scoring is done with the help of scoring key given at the manual.

The data obtained from the given responses in the questionnaire rated according to the key was analyzed by employing independent 't' test for each item and the level of significance was set at 0.05.

### RESULTS AND FINDINGS

The objective was to compare mean scores of mental toughness of army and NCC sportsmen. The data were analyzed with the help of 't' test and the result has been presented as follows:-

TABLE NO.2  
 GROUP WISE COMPARISON ON MENTAL TOUGHNESS

Group	Mean	SD	df	MD	SE	t-value
Army Sportsmen	33.12	3.72	58	2.04	0.931	2.19*
NCC Sportsmen	31.08	2.81				

\*Tab t .05 (58) = 2.042

From Table 2 it can be seen that the t value is 2.19 which is significant at 0.05 level with df=58. It reflects that the mean scores of mental toughness of army and NCC sportsmen differ significantly. Further, the mean score of mental toughness of army sportsmen is 33.12 which are significantly higher than those of NCC sportsmen whose mean score is 31.08. It may therefore, be said that the mental toughness was found to be significantly higher in army sportsmen then those of NCC sportsmen. Graphically representation of above table is made in figure no. 1.

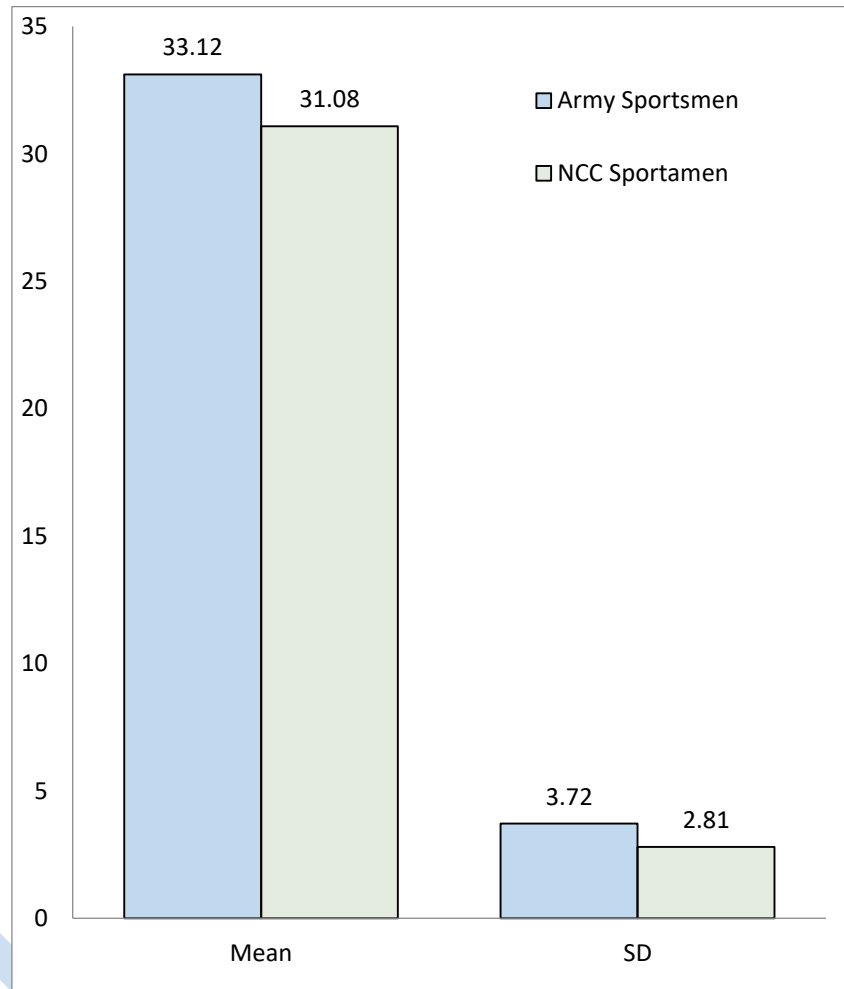


Fig. no. 1: Mean and Standard Deviation vales of Army Sportsmen and NCC Sportsmen.

### DISCUSSION OF FINDINGS

According to the results the questionnaires distributed to the sportsperson which were calculated by the statistical methods, comparisons of the standard deviation and mean by the tabulated value which is t-test and the indication of graphs of army sportsmen and NCC sportsmen is significant in all aspects. The mental toughness was found to be significantly higher in army sportsmen then those of NCC sportsmen. Most of them are aware of the importance of mental toughness for players not only in match but also during training. Mental toughness among armed force sportsmen is considered significant enabling them to achieve their goals and develop the mastery of winning. Mental toughness has high significance in sports because it enables the players to deal with various situations arising in the competition.



## CONCLUSION

Before arriving into meaning full conclusions, researcher critically examined the statistical findings, interpretation of statistical findings their-off, reviewed extensively related literatures of sports psychological aspects of sportsperson. Based on understanding after deliberate discussion with experts and also light of above understanding. It was observed that mental toughness is an important traits possessed by the army and NCC sportsman. Army sportsmen have increased understanding of mental toughness, attribute to their ability for its implication in the competition and various life events requiring level of psychological rigidity.

The mental toughness is an important component of psychological skills that should be included in training session in order to achieve excellent performance in competitions.

## REFERENCES

- Anizu, M., Kumaraswamy, N., Singh, R., & Rusli, M. (2006). Mental toughness profile as one of psychological predictors of injuries among Malaysian professional football players. *Journal of International Studies*, 12, 128–138.
- Bhambri, E., Dhillon, P. K., & Sahni, S. P. (2005). Effects of psychological intervention in enhancing mental toughness dimensions of sport persons. *Journal of the Indian Academy of Applied Psychology*, 31, 65–70.
- Bull, S. J., Shambrook, C. J., James, W., & Brooks, J. E. (2005). Towards understanding of mental toughness in elite English cricketers. *Journal of Applied Sport Psychology*, 17, 209–227.
- Crust, L. (2008). A review and conceptual re-examination of mental toughness: Implication for future researchers. *Personality and Individual Difference*, 45, 576–583.
- Golby, J., & Sheard, M. (2004). Mental toughness and hardiness a different levels of rugby league. *Journal of Personality and Individual Differences*, 37, 933–942.
- Jones, G., Hanton, S., & Connaughthon, D. (2007). A framework of mental toughness in the world's best performers. *Journal of the Sport Psychologist*, 21, 243–264.
- Krejcie, R. V., & Morgan, D. W. (1970). Determining sample size for research activities. *Educational and Psychological Measurements*, 30, 607–610.
- Kuan, G., & Roy, J. (2007). Goal profiles, mental toughness and its influence on performance outcomes among Wushu athletes. *Journal of Sports Science and Medicine*, 6, 28–33.
- Loehr, J. E. (1986). *Mental toughness training for sports: achieving athletic excellence*. Lexington, MA: Stephen Greene Press.
- Mohamad Nizam, A., Omar Fauzee, M. S., & Abu Samah, B. (2009). The affects of higher score of mental toughness in the early stage of the league towards winning among Malaysian football players. *Journal of International Studies*, 12, 67–78.
- Newland, A., Newton, M., Finch, L., Harbke, C.R., & Podlog, L. (2012). Moderating variables in the relationship between mental toughness and performance in basketball. *Journal of Sport and Health Science*, 1–9.
- Nicholls, A.R., Polman, R.C.J., Levy, A.R., & Backhouse. S.H. (2009). Mental toughness in sport: achievement level, gender, age, experience and sport type's differences. *Personality and Individual Differences*, 47, 73–75.
- Sohrabi, F., Atashak, S., & Aliloo, M. M. (2011). Psychological profile of athletes in contact and non-contact sports. *Journal of Scientific Research*, 50, 638–644.