

A Comparative Study of Mental Toughness between Male, Female and Urban, Rural AIIU Gymnasts

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Abstract: The purpose of the study was to compare the mental toughness level between male, female and urban, rural AIIU gymnasts. A total of gymnasts were studied, of which 30 were male and 35 were female. The data was collected in AIIU gymnastics championship held at Panjab University from 1 to 5 feb, 2017. The results showed a significant difference between mental toughness of male and female gymnasts. Male gymnasts showed significantly higher scores than their female counterparts. Similar were the result for urban and rural AIIU gymnasts, in which, the rural area gymnasts showed the higher scores as compared to urban area AIIU gymnasts. The results were calculated through SPSS with $p < 0.5$.

Keywords: mental toughness, gymnast, AIIU, urban, rural.

I. INTRODUCTION

The situation is a familiar one. Fans, coaches, and competitors have all experienced it. It's marked by feelings of frustration at underachieving. Stacking up to the competition physically, the teams are fairly equal. On paper there is no difference between the competitors. Time after time your team falls short of its goal. So often in a competition between equally skilled opponents, one is able to consistently conquer while the other seems to cower at any sign of pressure. If it's not just the physical ability of an athlete that determines his/her success, to what can it be attributed? Those who triumph seem to have an extra supply of focus, resilience, and determination. Those who are defeated seem to magnify mistakes, lack confidence, and become victims to their anxiety. Coaches and athletes alike have struggled to name the mental component that distinguishes the good from the best. The term mental toughness is often credited for success, but what is it?

Tiger Woods, one of the world's most successful golfers, suggests mental toughness is gaining control over your mind:

I think your mind will carry you. The mind controls the body. So if the mind tells the body what to do, it'll do it. It's just a matter of getting the mind under control to make your body respond (Ziegler, 2001).

Despite all the questions surrounding mental toughness, one thing is certain. Coaches and athletes agreed that the mental element of competition is crucial to success. The psychological characteristics of athletes can mean the difference between good performance and excellent performance. Athletes with similar skill sets are often differentiated solely on the basis of their mental control in

difficult situations - their ability to focus, control their anxiety, and maintain self-confidence in all contexts.

Despite the increasing interest in mental toughness, no connections have been made between these measures of mental toughness and sport performance. Assumptions have consistently been made that athletes who perform better are more mentally tough than those who don't perform as well. Given the qualitative data available, it seems that athletes' mental toughness plays a large role in their performance. A participant in Jones et al. (2002) research with successful international performers said.

There have been cases where people have set world records and people have gone out 5 or 6 minutes later, and improved the world record again. The mentally tough performer uses others' good performances as a spur rather than say "I can't go that fast." They say "well, he is no better than me, so I'm going to go out there and beat that." (p. 212)

Another relationship worth more examination is the possibility of gender differences in mental toughness. Research on mental toughness between genders is lacking. Very few studies have dealt with the implications gender might have on mental toughness. Some investigations show that male and female athletes display minor but statistically significant differences on self-confidence factors (Mahoney, Gabriel, & Perkins, 1987). Males tend to rate themselves higher in self-confidence than females. Another study found differences in anxiety management between genders (Meyers et al., 1999), with men showing higher scores in self-confidence. These results used a variety of measures that were focused on psychological characteristics rather than mental toughness specifically. Although these gender differences have been explored in some studies, many questions exist

about the consistency of gender differences in specific sports and the measurement used to determine those differences.

In spite of obvious connections between mental toughness and sport performance, research on this topic is lacking. The implication between the variables appears prominent and is intuitively appealing, but the relationship needs specific inquiry. No quantitative research specifically linking mental toughness and sport performance has been found in the existing published literature. In addition, an obvious issue that contributes to a deficiency in the mental toughness research is the lack of a worthy measure of mental toughness that possesses solid psychometric qualities. More research is needed which examines the psychometric properties of measurements of mental toughness measurements.

II. STATEMENT OF THE PROBLEM

A Comparative Study of Mental Toughness between Male, Female and Urban, Rural AIIU Gymnasts.

III. OBJECTIVES

To find out the significant difference between mental toughness of male and female AIIU gymnasts.

To find out the significant difference between mental toughness of rural and urban AIIU gymnasts.

IV. HYPOTHESIS

- There would be a significant difference the mental toughness of male and female AIIU gymnasts.
- There would be a significant difference between mental toughness of rural and urban AIIU gymnasts.

V. METHODOLOGY AND PROCEDURE

A total sample of 65 subjects was randomly selected from AIIU gymnastics championship held at Panjab University, Chandigarh from 1 to 5 Feb, 2017. Out of which 30 were male and 35 were female.

Mental toughness is an important factor in gymnastics, therefore was selected as the variable of the study.

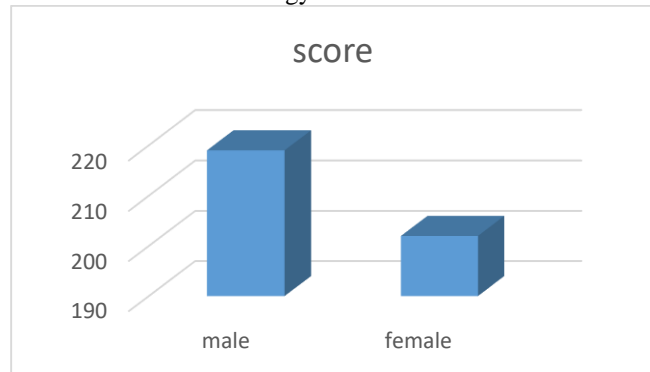
An independent t test was applied to compare the mean scores of mental toughness of:

- Male and female AIIU gymnasts.
- Urban and rural AIIU gymnasts.

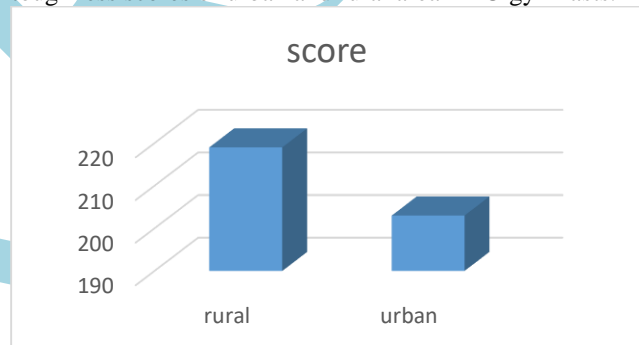
VI. RESULTS, FINDINGS AND DISCUSSION

The present study shows a significant difference in the mental toughness level of male and female gymnasts at AIIU level. The graph below shows the mean values of the mental toughness scores between male and female AIIU gymnasts. The higher bar shows the mental toughness score of male AIIU gymnasts and the lower bar manifests the mental toughness score of female AIIU

gymnasts. It is even clear from the graph that there is a significant difference between the mental toughness level of male and female AIIU gymnasts.



When compared on the basis of the residential area of the AIIU gymnasts, the two categories namely urban and rural again shows a significant difference in mental toughness. The gymnasts from rural area shows higher mental toughness scores as compared to the urban area gymnasts. The following graph depicts the mean mental toughness scores of urban and rural area AIIU gymnasts.



The present study falls in line with the study of Valiollah et al. (2011). They compared the mental toughness level between male and female athletes in contact and non-contact sports and found out a significant difference in their mental toughness. They further stated that the mental toughness scores of male were higher than that of female. The findings of this study are absolutely in line with the present study.

Sunil Kumar et.al. (2016) conducted a similar study on the volleyball players. They found no significant difference in the mental toughness of male and female players. A probable reason for the no significant may be the level of their performance. Players from South Asian Games were selected for this study while the subjects for the present study were AIIU participants.

VII. CONCLUSION

On the basis of the present study, it can be concluded that there is a significant difference in:

- The level of mental toughness between male and female AIIU gymnasts.

- The level of mental toughness between urban and rural gymnasts.

On the basis of aforementioned observations, it can be fairly concluded that male AIU gymnasts possess more mental toughness than their female counterparts. Similarly, the rural AIU gymnasts possess higher levels of the mental toughness in comparison to their urban counterparts.

VIII. SIGNIFICANCE

As it is already mentioned earlier that mental toughness plays a key role in the overall performance of a sportsperson. Hence, mental toughness is essential to take the performance to the summit.

The present study is significant as it points out the mental toughness levels of AIU gymnasts and therefore provides a basis to react to the mental toughness levels of the players. The coaches and players themselves could help them in enhancing the mental toughness levels once they would know who lacks mental toughness.

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