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## A study on mental toughness and sports competition anxiety for male and female basketball players

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### Abstract

The purpose of the study was to study the mental toughness and sports competition anxiety between male and female basketball players of Haryana. For this purpose, total 60 footballers (30) male and (30) female players with the age group of 19 to 24 years were selected as subjects. All the subjects, after having been informed about the objective and protocol of the study, gave their consent and volunteered to participate in this study. For the study only Sirsa district from Haryana was selected for the study. To assess the level of subjects with regard to their mental toughness, Mental Toughness Inventory (MIT) developed by Middleton *et al.* (2005) was used and to measure competition related anxiety of the players sport competition Anxiety Test (SCAT, developed by Martens *et al.* (1990) was used. To find out the significance of mean differences between male and female football players 't' test was applied. The level of significance was set at 0.05 level. The data obtained after scoring the questionnaires is to be statistically analysed on computer through Statistical Package for Social Science (SPSS) version 16.0.

**Keywords:** Mental toughness, Sports Competition Anxiety, Male, Female, Basketball, Haryana.

### Introduction

During the past two decade sports psychology has emerged as a legitimate field of scientific enquiry and studies has been conducted extensively on why the individual level of performance is increasing day by day. Studies are being conducted on the fluctuation in performance level in practice and in competition. In spite of having the right technique, right exercises, right meals and right equipment, it was felt that psychological factor is one important aspect which helps the player perform better under pressure situations. Players and coaches often described the crucial psychological factor the resulted in a momentum shift during a game or explained an important loss as a function of influential forces of game location. Variations in performance of player when examined scientifically were found related to Mental Toughness.

Mental toughness is more than just mental. It's also physical and emotional. In order to be mentally tough on the field, you must have talent and be in peak physical condition. Your technical skills have to be sharp. It is also important to recognize that the physical, emotional and mental sides of yourself affect each other. Mental Toughness is a characteristic many believe to be important for success in sport; many coaches view mental toughness as a quality that must be considered in the recruitment of athletes as described by Weinberg, Butt, & Culp (2011) [6]. Gould *et al.* (1987) [8]. expressed that in fact, some view mental toughness as the most important psychological attribute in determining success. Analyzed written responses from 131 expert coaches and 160 elite athletes. Their analysis identified twelve components of mental toughness including: motivation level, coping skills, confidence maintenance, cognitive skill, discipline and goal directedness, competitiveness, possession of prerequisite physical and mental requirements, team unity, preparation skills, psychological hardiness and ethics. Jones *et al.* (2002) [10]. Defined mental toughness as the natural or developed psychological edge that enables you to generally cope better than your opponents with the many demands that sport places on a performer. In contrast further work was needed to finalize a working definition of mental toughness. Competitive Anxiety in Sport concludes with a theory of competitive anxiety based on an interaction between uncertainty about the outcome and the importance assigned to that outcome. Anxiety before or during athletic competitions can hinder performance of an athlete. The coordinated movement

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Required by Athletic events becomes increasingly difficult when your body is in a tense state. A certain level of physical arousal is helpful and prepares us for competition. But when the physical symptoms of anxiety are too great, they may seriously interfere with your ability to compete. Similarly, a certain amount of worry about how you perform can be helpful in competition, but severe cognitive symptoms of anxiety such as negative thought patterns and expectations of failure can bring about a self-fulfilling prophecy.

**Objective of the study**

- ❖ To find out the significant difference between male and female basketball players on mental toughness.
- ❖ To study the mental toughness between male and female basketball players.
- ❖ To find out the significant difference between male and

- female basketball players on sports competition anxiety.
- ❖ To study the sports competition anxiety between male and female football players.

**Method and Procedure**

Total 60 basketball players (30) male and (30) female players with the age group of 19 to 24 years were selected as subjects. Only Mental toughness inventory and sports competition anxiety was used to measure through Mental Toughness Inventory (MIT) developed by Middleton *et al.* (2005) and sport competition Anxiety Test (SCAT, developed by Martens *et al.* (1990) was used. To examine the hypothesis of the study descriptive statistics like mean and standard deviation were used. The level of significance was set at 0.05 level.

**Result and Interpretation**

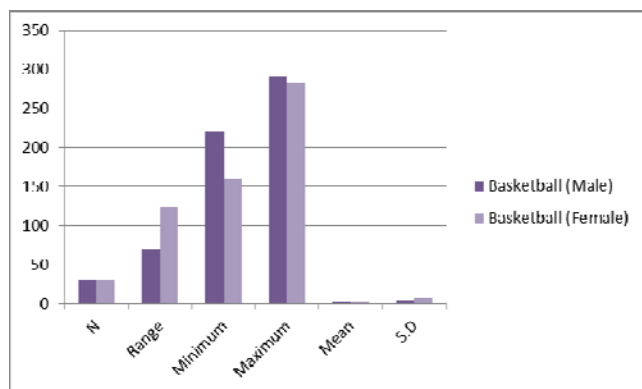
**Table 1:** Descriptive analysis of mental toughness between male and female Basketball players

Game	N	Range	Minimum	Maximum	Mean	S.D
Basketball (Male)	30	70.00	220.00	290.00	2.55	3.34
Basketball (Female)	30	124.00	160.00	284.00	2.33	6.87

Significant at 0.05 levels

**Table-1** appears that mental toughness comparison between basketball male and female players of Haryana. Mean squares, Standard deviation, minimum, maximum and range are described in details. For basketball male players mean squares, standard deviation, minimum, maximum and range is 2.55, 3.34, 220.00, 290.00 and 70.00 respectively. For basketball female male player’s mean squares, sum of squares, standard deviation, minimum, maximum and range is 2.33, 6.87, 160.00, 284.00 and 124.00 respectively.

The table depicts that the mean and S.D. for male basketball players were 2.55 and 3.34 whereas the female basketball players were having the mean and S.D. value 2.33 and 6.87, respectively. The male basketball players were found to have comparatively high mean score as compare to the female basketball players which indicate that male basketball players is mentally tough as compare to female basketball players.



**Graph 4.1:** Graphical representation of mental toughness between male and female basketball players

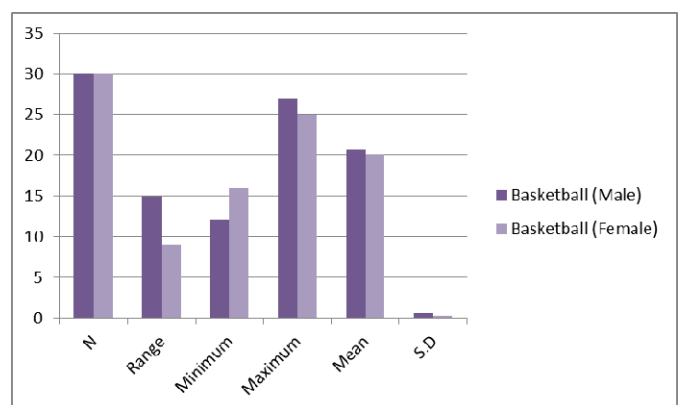
**Table 2:** Descriptive analysis of sports competition anxiety between male and female Basketball players

Game	N	Range	Minimum	Maximum	Mean	S.D
Basketball (Male)	30	15.00	12.00	27.00	20.79	0.64
Basketball (Female)	30	9.00	16.00	25.00	20.10	0.33

Significant at 0.05 levels

**Table-2** appears that sports competition anxiety comparison between basketball male and female players of Haryana. Mean squares, Standard deviation, minimum, maximum and range are described in details. For basketball male players mean squares, standard deviation, minimum, maximum and range are 20.79, 0.64, 12.00, 27.00 and 15.00 respectively. For basketball female male players mean squares, standard deviation, minimum, maximum and range is 20.10, 0.33, 16.00, 25.00 and 9.00 respectively.

The table depicts that the mean and S.D. for male basketball players were 20.79 and 0.64, whereas the female basketball players were having the mean and S.D. value 20.10 and 0.33, respectively. The male basketball players were found to have comparatively high mean score as compare to the female basketball players which indicate that male basketball players is sports competition anxiety as compare to female basketball players.



**Graph 4.1:** Graphical representation of sports competition anxiety between male and female basketball

**Discussion on hypothesis**

- ✓ First hypothesis stated that there would be no significant differences between male and female basketball players high in their mental toughness level and sports competition anxiety level. These results show that no significant difference; therefore the hypothesis has been partially accepted.

### Conclusion of the study

- ✓ The male basketball players were found to have comparatively high mean score as compare to the female basketball players which indicate that male basketball players is mentally tough as compare to female basketball players.
- ✓ There is no significant difference observed between male and female basketball players on the variable of mental toughness and sports competition anxiety level.

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