

# A Comparative Study on Selected Psychological Variables between Male and Female Shooters

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**Abstract – A major component of success in shooting is psychological parameter, compounded with physical and physiological factors. The purpose of the study was to compare the selected psychological variables between male and female shooters. For the purpose of the study, 30 Shooters were selected, 15 Males and 15 Females, age between 15 to 21, with state level participation. Two psychological variables were chosen of the study, Stress and Anxiety. For Anxiety, Sports Competition Anxiety Test (SCAT), was used and for Stress Perceived Stress Scale (PSS) was used. Independent t Test was applied for the study; the level of significance was set at 0.05. The result shows that there was no significant difference found between male and female shooters for stress and anxiety.**

**Keywords – Sports Competition Anxiety Test (SCAT), Perceived Stress Scale (PSS)**

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## INTRODUCTION

A traditional sport, shooting has come a long way in India, from just being confined to the maharajas of the erstwhile princely states of the country, to a sport that has gained immense popularity amongst the young sports enthusiasts. A major component of success in shooting is psychological parameter, compounded with physical and physiological factors. Shooting belongs to sensomotoric type with a specific set of psychological requirements. Shooting is a static sports in which the anxiety is different from the rest of the sports.

The study of the effect of anxiety on sports performance has become a major topic of interest to sports psychologists in recent years. Ford (1968) found that some competitors did better when their anxiety levels were high and that moderate levels of anxiety seemed to elicit increases in performance. Now it is widely accepted that anxiety both trait and particularly state, plays an influential role in the sports performance of athletes. Hence, it is generally considered that performance is optimal at intermediate levels of anxiety.

In the fast changing world today, no individual is free from stress and no profession is stress free. Modern life is full of stress. In many job situations, high levels of stress are an integral and largely unavoidable component of the work. The need to cope with complexity, ambiguity, conflict and competing

demands is a part of professional life among individuals occupying different positions.

Selye (1974) wrote that stress is essentially reflected by the rate of all the wear and tear caused by life. The consequences of high levels of job stress, personal frustration and inadequate coping skills have major personal, organizational and social costs-and these are increasing day by day. Stress has become an inevitable part of human life in recent times. It makes life more challenging and charming, however if it is there within limits.

When stress is beyond the coping ability of a person, it causes disturbances in the person's life. Stress can be due to organizational demands on a person or the demands of personal life. When all the psychological processes of an individual like attention, perception, remembering, thinking, reasoning and creativity etc, functions in a normal way, the person is able to adjust and cope with his environment, he meets the various demands of life on his own quite successfully, he is said to be of sound mental health. When the demand on a person from the environment is more and his capability to meet such demands is less, then this incapability might lead to anxiety and stress.

It is observed there are lack in researches related to the shooting, especially in relation with the field of psychological intervention and analysis. Hence, the researcher felt it necessary to attempt to investigate

a comparative study on selected psychological variables between male and female shooters.

**METHODOLOGY**

This study was designed to ascertain the level of comprehensive anxiety and stress among the state level shooters, further to study the psychological variables and also their relationship with Comprehensive Anxiety and Stress of state level shooters. To achieve this purpose, total 30 state level shooters (15 male and 15 female) who had participated at state level shooting competition of 10 meters range shooting event were selected as subjects. The age of the subjects ranged between 15 to 21 years. Sport Competitive Anxiety Test by Rainer Martens and Perceived Stress Scale by Sheldon Cohen were selected as criterion measures. By using e – sources the soft copy of questionnaire was sent to the subjects and their responses were administrated and scored accordingly to the norms of the respective questionnaires. The anxiety level of subjects was taken by Sports Competition Anxiety Test (Martens, 1977). The questionnaire consists of 15 statements. The athletes responded to 15 statements by using 3 options i.e. rarely, sometimes, often. And scores were administered accordingly. The stress level of the subjects was taken by Perceived Stress Scale given by Sheldon Cohen. The questionnaire consists of 10 statements. The shooters gave their responses to all statements with five categories never, almost never, sometimes, fairly often and very often. Further the scores were administered accordingly with respect to the norms of the questionnaire. To find out the significant difference on psychological variables between male and female shooters, t test was employed, the level of significance was set at 0.05

**RESULTS**

**Table 1**

**Group Statistics (Anxiety)**

Gender	N	Mean	Std. Deviation	Std. Error Mean
Male Anxiety	15	19.3333	2.82000	.72812
Female	15	20.0000	3.54562	.91548

In the above Table-1 It is clear from table 1 that mean score of anxiety of male is 19.33 + 2.82 and mean value of anxiety of female is 20.00 + 3.54

**Table 2**

**T Test for Anxiety**

		T	df	Sig (2-tailed)	Mean Difference
Anxiety	Equal variances assumed	-.570	28	0.573	0.66667

Insignificance at 0.05 level of significance

**Table 3**

**Group Statistics (Stress)**

Gender	N	Mean	Std. Deviation	Std. Error Mean
Male Stress	15	16.6667	6.78935	1.75300
Female	15	17.0667	4.81763	1.24391

In Table- 3 Descriptive statistics of Stress male and female shooter Group Minimum Maximum Mean Standard Error (Mean) Standard Deviation.

**Table 4**

**T Test for Stress**

		T	df	Sig (2-tailed)	Mean Difference
Stress	Equal variances assumed	-0.186	28	0.854	0.40000

Table -4 reveals that calculated t value is -0.186 at 28 degree of freedom. Hence it is clear from the table 4 that no significant difference is there in between male and female stress score at 0.05 level of significance.

Study revealed that there was no significant difference among males and females sports stress. Thus it may be concluded that the stress of male and female shooters no difference because male and female are both psychologically strong they show significant drop in tension, criticism, fatigue and confusion while they participate in any tournament or sports activities.

**CONCLUSION**

On the basis of analysis of results and discussion of findings the conclusions have been drawn as under:

1. There was insignificant difference in Anxiety between male and female shooters.
2. There was insignificant difference in stress between male and female shooters.

Through independent t-test it was found that no any significant difference was there in between stress

scores of male and female and also no any significant difference was found in between anxiety scores of male and female. The findings were may be because releasing of cortisol is not a gender dependent process. It is totally situational aspect and in this condition both the gender are facing similar situation hence no any significant difference is found in between them. Hence it can be said that male and females performance is not fluctuating because of psychological factors.

#### **Conflict of interest statement**

The authors declare no conflicts of interest.

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