

## **A Comparative Study of Selected Psychological Variables of Long Distance Runners and Long Jumpers of Nagpur District of Maharashtra**

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### **1.0 Introduction**

The study of human behaviour and human relationship has influenced many fields and sports field is one of the most notable amongst them. Sports psychology means applying psychological theories and concept to aspects of sports much as coaching and teaching, it is concerned with analyzing human behavior in various types of sports settings. It is the study of individual behaviour acting individually and acting in a group. Sports psychology also focuses on learning these aspects and utilizing this knowledge in improving the performance of sportspersons. Emotional factors like tension, anxiety, stress and motivations play an important role in sports psychology. Though certain amount of tension and anxiety are necessary to put forward best performance, excess of it can affect the performance in a negative way. The physique and body composition including its size and shape are known to play a significant role whereas the performance of a sportsman in any game or event depends on skill training motivation and various others compounds of physiological and psychological nature.

Success in competitive sports places high psychological demands on the athletes. The athletes have to be physically fit, technically sound and practically prepared to have a firm grip over the competitive situations to excel in the concerned sports events in order to achieve peak performance. Moreover, their physical, physiological and psychological preparation to face the situations has been found to be of paramount importance. High-level performance depends upon various factors such as genetic factors, training status, physical structure, nutritional factors, psychological factors, physiological factors, socio-economic factors and techniques. Though the requirement of above factors will vary from individual to individual, the knowledge of the psychological aspects is critical for improving the performance of the players. In view of the above this study has been carried out to selected psychological factors of long distance runners and long jumpers of the Nagpur District of Maharashtra.

### **2.0 Methodology**

In this study, 50 male long distance runners and 50 male long jumpers from senior secondary school of Nagpur District of Maharashtra were selected as subjects and their age ranged from 16 to 18 years.

#### **2.1 Design of the Study**

In the present study a random group design was followed.

#### **2.2 Collection of Data**

The necessary data related with the study was collected by adopting survey method.

#### **2.3 Criterion measures**

In this study the Anxiety and Achievement Motivation of the long distance runners and long jumpers was studied.

##### **2.3.1 Anxiety Test**

- **Purpose:** To measure the Anxiety level of the long distance runners and long jumpers.
- **Equipment and supplies:** Renier Martin's Sports Competition Anxiety (SCAT) Questionnaire.

### 2.3.2 Achievement Motivation Test

- **Purpose:** To measure the Achievement motivation of the subject by measuring the need for success or the attainment of excellence.
- **Equipment and Supplies:** Achievement Motivation test developed by V.P. Bhargava.

### 2.4 Statistical Technique Employed

The data characteristics (descriptive statistics) such as Frequency, Percentage, Mean, Standard deviation, etc. were determined using SPSS 18.0 Statistical package. To compare the Anxiety and Achievement Motivation of long distance runners and long jumpers, paired 't' test was employed. The significance level was chosen to be 0.05 (or equivalently, 5%).

## 3.0 Results of the Study

### 3.1 Anxiety level of the players

**Table 1: Comparative assessment of Anxiety level of players**

Anxiety Level	Players			
	Long Distance Runners		Long Jumpers	
	Nos.	Percentage	Nos.	Percentage
Very High or Saturated	2	4	6	12
High	6	12	29	58
Average (Normal)	24	48	9	18
Low	13	26	4	8
Very Low	5	10	2	4
Total	50	100	50	100

Above **Table 1** presents results pertaining to the level of anxiety among the Long Distance Runners and Long Jumpers from Senior Secondary School Boys in Nagpur District of Maharashtra. The results indicate that 4% long distance runners and 12% long jumpers have high anxiety, while 12% long distance runners and 58% long jumpers have above average level of anxiety. In addition to above, 48% long distance runners and 18% long jumpers have average anxiety level. Furthermore 26% long distance runners and 8% long jumpers have below average level of anxiety, however, 10.0% long distance runners and 4% long jumpers have low level of anxiety.

### 3.2 Anxiety level of the players

**Table 2: Comparative assessment of Anxiety level of long distance runners and long jumpers**

Group	Mean	S.D.	Min	Max	MD	't'	P
Long Distance Runners	32.5	±4.9	23	42	16.4	4.526	<0.05
Long Jumpers	48.9	±6.8	32	60			

**SD:** Standard deviation; **Min:** Minimum; **Max:** Maximum; **MD:** Mean Difference; **'t':** 't' ratio; **P:** Probability

Above **Table 2** presents results of comparative assessment of anxiety of long distance runners and long jumpers. The mean anxiety test score of long distance runners was 32.5±4.9 and that of long jumpers was 48.9±6.8. The comparative analysis showed that there is significant ( $P < 0.05$ ) difference in the anxiety level of players (long distance runners and long jumpers). In general, the anxiety is significantly higher in the Long Jumpers than that observed in the Long Distance Runners.

### 3.3 Achievement Motivation level of the players

**Table 3:** Comparative assessment of Achievement Motivation level of players

Achievement Motivation	Players			
	Long Distance Runners		Long Jumpers	
	Nos.	Percentage	Nos.	Percentage
Very High	9	18	4	8
High	21	42	8	16
Moderate	11	22	23	46
Low	6	12	9	18
Very Low	3	6	6	12
Total	50	100	50	100

Above **Table 3** presents results pertaining to the level of achievement motivation among the Long Distance Runners and Long Jumpers from Senior Secondary School Boys in Nagpur District of Maharashtra. The results indicate that 18% long distance runners and 8% long jumpers have high anxiety, while 42% long distance runners and 16% long jumpers have above average level of achievement motivation. In addition to above, 22% long distance runners and 46% long jumpers have average achievement motivation level. Furthermore 12% long distance runners and 18% long jumpers have below average level of achievement motivation, however, 6% long distance runners and 12% long jumpers have low level of anxiety.

### 3.4 Achievement Motivation level of the players

**Table 4: Comparative assessment of Achievement Motivation level of long distance runners and long jumpers**

Group	Mean	S.D.	Min	Max	MD	't'	P
Long Distance Runners	24.9	±2.6	19	28	4.2	2.009	<0.05
Long Jumpers	20.7	±3.1	16	24			

**SD:** Standard deviation; **Min:** Minimum; **Max:** Maximum; **MD:** Mean Difference; **'t':** 't' ratio; **P:** Probability

Above **Table 4** presents results of comparative assessment of achievement motivation of long distance runners and long jumpers. The mean achievement motivation test score of long distance runners was  $24.9 \pm 2.6$  and that of long jumpers was  $20.7 \pm 3.1$ . The comparative analysis showed that there is significant ( $P < 0.05$ ) difference in the achievement motivation level of players (long distance runners and long jumpers). In general, the achievement motivation is significantly higher in the Long Distance Runners than that observed in the Long Jumpers.

## 4.0 Conclusions

### 4.1 Anxiety level of the players

- From the study results, it is concluded that high percentage of long distance runners have average anxiety level, while long jumpers of senior secondary school of Nagpur district have high anxiety.

### 4.2 Anxiety level of the players

- On the basis of study results it is concluded that there is significant ( $P < 0.05$ ) difference in the anxiety level of players (long distance runners and long jumpers). In general, the anxiety is significantly higher in the Long Jumpers than the Long Distance Runners.



**4.3 Achievement Motivation level of the players**

- From the study results, it is concluded that high percentage of long distance runners have high achievement motivation, while long jumpers of senior secondary school of Nagpur district have moderate level of achievement motivation.

**4.4 Achievement Motivation level of the players**

- On the basis of the study results, it is concluded that there is significant ( $P < 0.05$ ) difference in the achievement motivation level of players (long distance runners and long jumpers). In general, the achievement motivation is significantly higher in the Long Distance Runners than that observed in the Long Jumpers.

**5.0 Bibliography**

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