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## A comparative study on psychological variables among different players

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### Abstract

The purpose of the study was to compare the Anxiety and Self Confidence between athletes, football and kho-kho players. For the present study total 450 male players (150 from each athletes, football and kho-kho) of Inter College State Competition belonging from various colleges in West Bengal were selected. The age of the subject was ranged between 18-25 years. For the present study selected psychological variables (Anxiety and Self Confidence) were selected as the measuring criteria. To find out the difference between athletes, football and kho-kho players in relation to their Anxiety and Self Confidence the ANOVA test was applied as the statistical treatment. Post Hoc test of Scheffer's is followed to decide significant differentiation between paired means wherever 'f' ratio is important. Significant difference was found between athletes, football and kho-kho players in relation to their Anxiety and Self Confidence where the calculated mean of Anxiety significantly differs in between Athletes and Football players ( $MD = 2.67$ ), Football and Kho -Kho players ( $MD = 4.05$ ) as well as Athletes and Kho-Kho players ( $MD=6.72$ ) because the mean difference values are higher than the value of critical difference 2.41 at confidence level of 0.05. Since the mean of self-confidence significantly differs in between Athletes and Football players ( $MD = 3.20$ ), Athletes and Kho-Kho players ( $MD=3.12$ ) since the result of the differential mean values are higher than the crucial differential value of 1.82 at 0.05 significance. The mean differential value of Football and Kho -Kho players ( $MD = 0.08$ ) is less than the critical difference value of 1.8. from the findings of the study it is concluded that the athletes show high anxiety level followed by football and kho-kho players. Level of self-confidence is higher in athletes than football and kho-kho players.

**Keywords:** Psychological variables, anxiety, self confidence, athletes, kho-kho, football

### Introduction

Sports and games are looked upon as avenues for achieving and establishing supremacy, prestigious social recognition. To achieve this recognition, one requires extraordinary talent, skills, sustained interest, determination, training, and so on.

Understanding demand of every game and sports for optimum performance is a fundamental skill of university-level coach and administrators; it is also vital to know the demanded abilities in terms of structural, functional and motor and psych dimensions. There are many scholarly works to depict the demand of many individual and team games on sportspersons engage them self in those events; this facilitated the professionals to contribute more effectively in terms of team operations. Furthermore; it is necessary to know the status of various performance parameters among different game players and their similarities and difference from each other.

The study of sports psychology, nowadays, has evolved as a promising discipline like study of child psychology, clinical psychology, industrial psychology, and educational psychology etc. Athletes need to keep their body and mind stable and balanced during games. An athlete can never ever perform better in a tensed mood or stressful situations. So he needs to keep himself fit and fine always. Family and sports club should not pressurise him in any way which may hinder his performance in the field. The athlete should only think about giving his best for the country, which he has to represent. In this connection, sports psychologists guide both the athlete and coach. Reading the mental condition of the athlete and keeping him cool is not an easy task. Sports psychologists study the behaviours of athletes. Further, they also provide athlete and coach an opportunity of self-introspection, which is barely necessary for them to judge what is right and wrong.

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Psychology touches each aspect of human lives. It shows right direction and solves many complex issues of human life. It is one of the most important disciplines of behavioural studies in our education system. To add on, for the psychological study of an individual, many psychologists adopted different approaches such as neurobiological approach, behavioural approach, cognitive approach, psychoanalytical approach, humanistic approach etc. Anxiety is described as a physical and mental state in which psychosomatic, behavioural, cognitive and emotional disorder and discomfort felt by the athletes in their bodies. It mostly happens due to unnecessary tension and worries less. Anxiety means vex or problem due to psychological stress, which generates a feeling of discomfort and fright. It is the usual response of a stressed person. The appropriate way to deal with this subject is conflict and stress management sessions or training for athletes or sports persons so that they can cope and overcome this situation in their lives.

A person or player is said to be self-confident when he has trust in his own ability, judgement and quality. A self-confident person always acts smartly and confidently in problematic situations and finds a solution to every problem. A confident person is sociable, mature, and decisive, with a positive bent of mind. Sometimes he also possess leadership qualities and team spirit. He never doubts about his own capability, which is the most important characteristic of his personality.

A player should not lose his self-confidence during crucial games. When the outcome of the game is not known, everyone is anxious to know about the results; extra pressure is built on the mind of the players. For example, in cricket, even the most senior and experienced players are seen out of the game due to their lack of patience and understanding of the significance of the game. Whereas young players seem to maintain their cool, balance and self-confidence by giving the team a winning performance. Self-confidence refers to a player or person's perception of efficiency, stability and maturity of mind, trust and belief in himself.

### The problem of the Statement

The purpose of the study was to compare the selected psychological variables among different players at the state level.

### Delimitations

1. The present research is delimited to 150 numbers of male player each from athletics (sprinters), Football and Kho-Kho disciplines.
2. The study is further delimited to the state level male players who participate in the Inter College State Athletics (sprints), Football and Kho-Kho championships held in 2017, at Salt Lake (Kolkata) in West Bengal.
3. The study is delimited to the following variables:
  - A. Psychological Variables:
    - Anxiety
    - Self Confidence
4. The study is delimited only state-level player's age group ranging from 18-25 years.

### Limitations

The present research has drawn its inferences from sports and its various subjects including psychological and physical conditions of sports players, however, their different socio-economic conditions may also be studied and how it affect the

performance level of the players too. The study may also be conducted on other sports events players apart from athletics. The living styles, food habits, including daily routines and various other factors, their effects on various athletic activities also may be studied. The study may also be conducted exclusively on women athletic players and other sports.

### Hypothesis

Keeping view of the objectives of present research, the following hypothesis are drawn, and the researcher has tried to justify based on the findings of the research.

- **H03:** There is no significant difference in anxiety level seen among athletes, kho-kho and football players.
- **H04:** There is not any significant difference in self-confidence of athletes, kho-kho and football players.

### Methodology

To achieve the purpose of the study the investigator were selected randomly 150 athletes, 150 football players and 150 kho-kho state level players, who participate in the Inter College State Athletics (sprints), Football and Kho-Kho championships held in 2017, at Salt Lake (Kolkata) in West Bengal. To compare the Sports comprehensive anxiety test and Self-confidence test between the athletes, football and kho-kho state level players. The data were collected by using sports comprehensive anxiety questionnaires prepared by Sinha and Self-confidence inventory test formulated by Dr R. Gupta. To compare the data of selected psychological variables among athletes, players of football and kho-kho, ANOVA test was applied. Post Hoc test of Scheffer's is followed to decide significant differentiation between paired means wherever 'f' ratio is important. Simple effect tests were done to know the differential value wherever the integration is significant at 0.05 level.

### Result of the study

The Study of significant mean differences among different variables such as Sports comprehensive anxiety and Self Confidence of players are also done with utmost genuineness. Various statistical tools and techniques like one way ANOVA, t-test, f test, Post Hoc test with LSD were conducted for analysis of the significant differences among the values of paired means of Athletes, Football and Kho-Kho players. Various norms and grades are also developed to categorize the selected subjects.

**Table 1:** Summary of Anova of the data on level of anxiety seen among athletes, football and Kho-Kho players

Sources of Variance	Degrees of Freedom	Sum total of Squares	Mean Sum total of Squares	F ratio	P-Value
Between group	2	3441.213	1720.607	15.16*	4.25 E-07
Within-group	447	50725.27	113.479		

\*Significant at 00.05 level

Tabulated  $F_{00.05}(2, 447) = 3.016$

Table-1 shows that there is a significant difference in the variable of anxiety among athletes, football and kho-kho players because the calculated F-value of 15.16 is greater than F-value of 3.016 given in the table at 0.05 significant level for 2/447 degrees of freedom. Since F test is significant through one-way ANOVA, LSD PostHoc test is done to assess significance of paired mean differences between groups for anxiety is shown in Table 2 below.

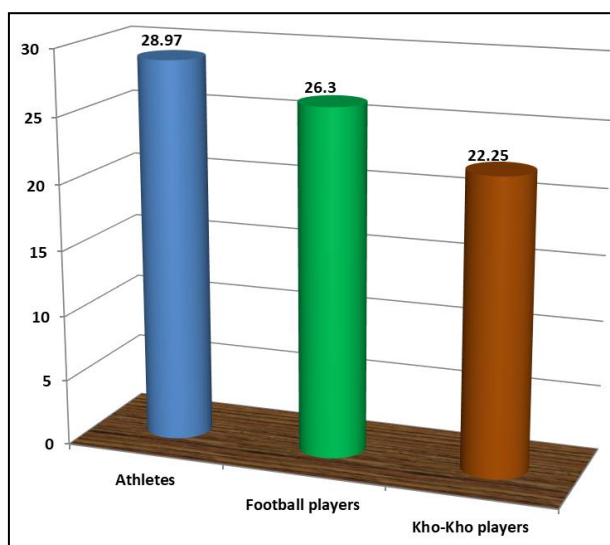
**Table 2:** Difference in significance amid the paired means of anxiety seen between athletes, football and Kho-Kho players

Mean of			Mean Difference (MD)	Critical Difference (CD)
Athletes	Football players	Kho-Kho players		
28.97	26.30		2.67*	2.41
	26.30	22.25	4.05*	2.41
28.97		22.25	6.72*	2.41

\*significance at 0.05

The findings of the above table 2 shows calculated mean of Anxiety significantly differs in between Athletes and Football players (MD = 2.67), Football and Kho –Kho players (MD = 4.05) as well as Athletes and Kho-Kho players (MD=6.72) because the mean difference values are higher than the value of critical difference 2.41 at confidence level of 0.05.

The differences in mean are shown graphically in Fig. 1

**Fig 1:** Comparison of mean among the athletes, football and kho-kho players in anxiety**Table 3:** Summary of one- way Anova for the data on self-confidence of athletes, football and kho-kho players

Sources of Variance	Degrees of Freedom	Sum total of Square	Mean Sum total of Squares	F- ratio	P- value
Between-group	2	996.86	498.43	7.77*	0.000481
Within group	447	28670.54	64.14		

\*Significant at 0.05 level

Tabulated  $F_{0.05}(2, 447) = 3.016$ 

Table-3 reveals that there is significant difference in the variable of self-confidence among athletes, football and kho-kho players because the calculated F-value of 7.77 is higher than the tabulated F-value of 3.016 at 0.05 level for 2/447 degrees of freedom. Since the F-test was found to be significant through one-way analysis of variance, the LSD Post- hoc test was applied to assess the significance of paired mean difference between the groups for anxiety is shown in Table-4.

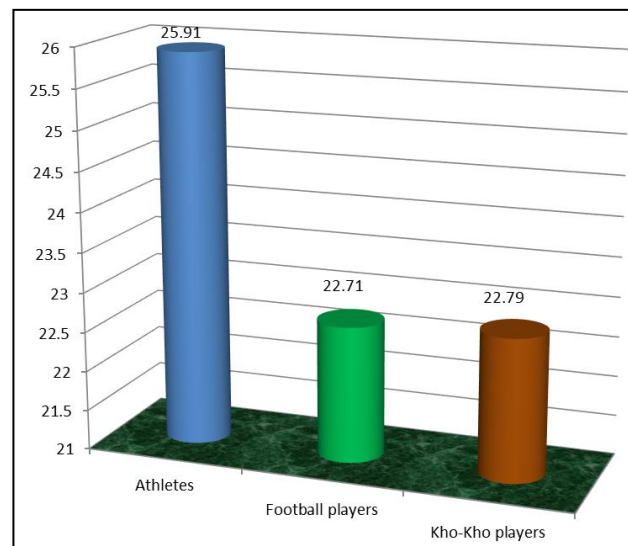
**Table 4:** significant difference amid the paired means of Level of self-confidence among athletes, Football and kho-kho players

Mean of			Mean Difference (MD)	Critical Difference (CD)
Athletes	Football players	Kho-Kho players		
25.91	22.71		3.20*	1.82
	22.71	22.79	0.08	1.82
25.91		22.79	3.12*	1.82

\* Level of significance at 0.05

Findings of above table-4 points that mean of self-confidence significantly differs in between Athletes and Football players (MD = 3.20), Athletes and Kho-Kho players (MD=3.12) since the result of the differential mean values are higher than the crucial differential value of 1.82 at 0.05 significance.

The mean differential value of Football and Kho –Kho players (MD = 0.08) is less than the critical difference value of 1.82. Hence this difference is not statistically significant. The mean differences are shown graphically in Fig. 2.

**Fig 2:** Comparison of mean among the athletes, football and kho-kho players in self confidence

### Findings and Discussion

It is evident from Table 2 and Fig. 1 which provides the findings of significant difference amid the paired means of anxiety seen Athletes, Football and Kho-Kho players.

The findings of the above table 6 shows calculated mean of Anxiety significantly differs in between Athletes and Football players (MD = 2.67), Football and Kho –Kho players (MD = 4.05) as well as Athletes and Kho-Kho players (MD=6.72) because the mean difference values are higher than the value of critical difference 2.41 at confidence level of 0.05.

The anxiety level of sprinter was found more than other two because the competition was solo, where a faulty step could lead the player to lose the competition as the events needed a very short time to be completed. Further, it was revealed from the analysis that the anxiety level was more among sprinters. In the case of football and kho-kho players, the anxiety level was low because they had to compete in groups. Support and assistance from teammates lower their anxiety level.

It is evident from Table 4 and Fig. 2, which provides the findings of significant difference amid the paired means of level of self-confidence among Athletes, Football and Kho-Kho players.

Findings of above table-4 points that mean of self-confidence significantly differs in between Athletes and Football players (MD = 3.20), Athletes and Kho-Kho players (MD=3.12) since the result of the differential mean values are higher than the crucial differential value of 1.82 at 0.05 significance.

The mean differential value of Football and Kho –Kho players (MD = 0.08) is less than the critical difference value of 1.82. Hence this difference is not statistically significant.

Self-confidence was very high among athletes (sprinters) as per the analysis score because they had to compete alone. They were responsible for their win or defeat. Hence they had to raise their self-confidence level. Sometimes the self-

confidence of players in football and kho-kho players became low as each player had to depend on their other teammates.

### Testing of hypothesis

1. There is significant difference in stress and anxiety of athletes, football & Kho Kho players. However, the results showed significant difference exists on anxiety of Athletes, Football and Kho-Kho Players. Hence, this hypothesis is accepted.
2. There is no significant difference in self-confidence of Athletes, football, & Kho-Kho players. The findings showed significant differences exist in self-confidence of athletes, football and Kho Kho Players. So this hypothesis is also accepted.

### Conclusions

The present research draws the following conclusions

- The athletes show high anxiety level followed by football and kho-kho players.
- Level of self-confidence is higher in athletes than football and kho-kho players.
- However, while analyzing the psychological variables, following data or findings are observed:

### Recommendations

The following recommendations may be made for improved psychomotor performance among players.

- The coaches and instructors should thoroughly examine the physical and mental state of the players during the selection process.
- During selection and training programmes of athletes, football and kho-kho players', emphasis must be laid on kinesthetic perception and reaction ability of the players.
- A longitudinal study may be conducted to see if the high score on selected psychomotor variables by a player will predict their performance as seen among various international and national players.
- Organising more and more competitions periods at the Inter-College and University level, which will help in improvement of physical and psychological ability.
- Sports topics/classes should be included in academic courses so that students will be interested to take it as their professional career.
- A same research can be undertaken among female athletes, football and kho-kho players.
- Psycho motor abilities of different age groups and other sports events players may be studied for better understanding on the subject and its relation with various psychological variables.
- The findings of this study would work as an User Manual for sports players, physical education teachers and instructors, sports analysts/scientists for further research on the subject.

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