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A comparative study of mental toughness and aggression among forwards and defenders in football

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Abstract

The mind factor of an athlete plays a significant role in sports excellence. There are numerous factors that influence the mental aspect of a sportsman such as mental toughness, anxiety, aggression, self-confidence, motivation, etc. These psychological factors shall influence the performance of athletes. In modern sports, mental fitness has an important role in the technical as well as in the team preparations. Psychological factors have a close relationship to every performance, players at all levels and players at different positions. The mind factors can affect the performance of an individual and the whole team. For the purpose of the study, 32 college-level male football players were selected, which included both forwards and defenders. Mental Toughness was measured using the questionnaire by Tiwari and Aggression was assessed using the Questionnaire of Tiwari and Chauhan's aggression test. The assessment showed that there was no significant difference between forwards and defenders on mental toughness, whereas, there was significant difference in aggression between forwards and defenders.

Keywords: Mental toughness, aggression, forwards, defenders, psychological, performance

Introduction

The mind factor of an athlete plays a significant role in sports excellence. There are numerous factors that influence the mental aspect of a sportsman such as mental toughness, anxiety, aggression, self-confidence, motivation, etc. These psychological factors shall influence the performance of athletes. In modern sports, mental fitness has an important role in the technical as well as in the team preparations. Psychological factors have a close relationship to every performance, players at all levels and players at different positions. The mind factors can affect the performance of an individual and the whole team.

At all levels of development, sports competition provides opportunities for participants to feel comfortable and in control of their feelings in acceptable ways. Apart from all hard work, they have to stress a lot on the psychological factors too as it is equally significant in training the overall performance at a higher level. It is in this context that mental skill of the player has to be analyzed and examined.

Statement of the problem

The purpose of the study was to make a comparative analysis of selected psychological variables between forwards and defenders among male football players in Kerala.

Delimitations

- Thirty-two collegiate football players (N = 32) were selected as subjects for the study.
- The subjects were selected such that 16 of them were forwards and the other 16 defenders.
- The study was further delimited to only male players.
- The age group of the subjects ranged from 18-22 years.
- The psychological variables were delimited to Mental Toughness and Aggression.
- The study was delimited to Tiwari's questionnaire for mental toughness and standardized questionnaire of Tiwari and Chauhan's for aggression.

Limitations

- Questionnaire research has its own limitations, and any biasness that may have been shown by the subject may be considered as a limitation of this study.
- Factors beyond the control of the investigator, like lifestyle, habits etc. may have its effect on the responses and can be considered as a limitation of the study.

Hypothesis

On the basis of relevant literature and expert discussion the following hypotheses were framed:

H₁: There will be significant difference between forwards and defenders on mental toughness.

H₂: There will be significant difference between forwards and defenders on aggression.

Significance of the study

- To understand the difference in the factors mental toughness and aggression between forwards and defenders in football.
- It would facilitate the trainer or coach to design a proper psychological program for the football players according to their positions.
- To create awareness about the importance of mental health of the players.
- To assist the players in better understanding of mental toughness and aggression required as per the positions in football.

Methodology

The procedure adopted in the selection of the subjects, selection of the variables, selection of the test items, administration of the questionnaires, and application of statistical techniques is explained below.

Selection of the subjects

For the purpose of the current study, thirty-two (N = 32) male collegiate football players in the age group 18-22 years from Thiruvananthapuram District were selected. They were chosen as per the playing positions with sixteen players each playing as forwards and defenders respectively.

Selection of the variables

Considering the objectives and purpose of the study, the following psychological variables were selected:

- Mental Toughness
- Aggression

Selection of the test items

1. Assessment of Mental Toughness

Questionnaire by Tiwari – Consisting of 48 items and a maximum score of 240.

2. Assessment of Aggression

Tiwari and Chauhan's aggression test – One dimension was selected consisting of ten statements and each item with six options for answers.

Test Administration

A lecture hall was used to assemble all the subjects and give them clear instructions, both in English and Malayalam, about the study, its objectives and how to fill up the questionnaires. They were asked to read each statement carefully and respond to it by making a tick mark on any one of the responses given. The total scores were considered for statistical treatment.

Scoring

The questionnaire for Mental Toughness encompasses consists of 48 items which measures overall mental toughness and sub variables i.e. self-confidence, motivation, 41 attention control, goal setting, visual and imagery control and attitude control. The minimum score of 48 and maximum score of 240 can be obtained in this questionnaire. Higher the score, better the mental toughness is the direction of the study. This test is highly reliable and valid.

The aggression test has ten statements each and each of the 10 items has five answers from "very much" to "not at all". A score of 5 was given to the response very much, 4 for much, 3 for ordinary, 2 for less, 1 or very less, and 0 for not at all. The high scores indicate that the score presents of more aggression and the lowest score indicated no aggression. The scores obtained for aggression were added together and considered for statistical treatment.

Statistical technique

The data which were collected from the subjects were tested statistically. A Dependent 't' test was used to find out the differences in anxiety and aggression between Forwards and Defenders. The level of confidence to test the significance was kept at 0.05. SPSS 16 version was used for calculation.

Analysis of data and results of the study

The statistical analysis of the data, results of the study, and discussions of the findings have been presented below. The aim of the study was to analyze mental toughness and aggression between forwards and defenders among male football players at collegiate level in Kerala. In order to find out the differences between mental toughness and aggression of forwards and defenders, the independent 't' ratio was computed by using the SPSS 16 Version and tested for significance at a 0.05 level of confidence.

The descriptive scores on Mental Toughness of forwards and defenders of Thiruvananthapuram district football players have been presented in Table 1.

Table 1: Descriptive statistics – mental toughness

Sl. No.	Group	N	Mean	SD	MD	Obtained 'T' value	Tabulated 'T' value
1.	Forwards	16	212.36	8.76	2.06	0.73	2.03
2.	Defenders	16	215.81	9.12			

*Significant at 0.05 level DF = 32, 2

Table 1 shows that the means of forwards and defenders were 212.36 and 215.81 respectively. The standard deviation of mental toughness among forwards and defenders was 8.76 and 9.12 respectively. The obtained 't' ratio of 0.73 is less

than the table value of 2.03 at 0.05 level of significance and this indicates that there has been no significant difference of mental toughness among forwards and defenders. The descriptive scores on Aggression of forwards and

defenders of Thiruvananthapuram district football players have been presented in Table 2.

Table 2: Descriptive statistics – aggression

Sl. No.	Group	N	Mean	SD	MD	Obtained 'T' value	Tabulated 'T' value
1.	Forwards	16	26.84	2.96	2.98	2.135*	2.005
2.	Defenders	16	28.12	3.02			

*Significant at 0.05 level DF = 32, 2

Table 2 shows that the means of forwards and defenders were 26.84 and 28.12 respectively. The standard deviation of aggression among forwards and defenders was 2.96 and 3.02 respectively. The obtained 't' ratio of 2.135 is greater than the table value of 2.005 at 0.05 level of significance and this indicates that there is significant difference of aggression among forwards and defenders.

Discussion of hypothesis

The first hypothesis (H1) stated that there would be significant difference between forwards and defenders in mental toughness. However, the result of the study indicates that there is no significant difference between forwards and defenders on anxiety. Hence the hypothesis is rejected at a 0.05 level of confidence.

The second hypothesis (H2) stated that there would be a significant difference between forwards and defenders in aggression. The result of the study indicates that there is a significant difference between forwards and defenders on aggression. Hence the hypothesis is accepted at a 0.05 level of confidence.

Conclusion

Given the present conditions and the limitations of the study, the analysis of data obtained has resulted in the following conclusions:

1. It can be concluded that there is no significant difference in mental toughness among forwards and defenders in collegiate level footballers in Kerala.
2. It can be concluded that there is significant difference in aggression among forwards and defenders in collegiate level footballers in Kerala. And defenders are found to be more aggressive than forwards.

References

1. Boyle M. New Functional Training for Sports. 2nd ed. Champaign, IL: Human Kinetics; c2016.
2. Goldberg AS. Sports slump busting: 10 steps to mental toughness and peak performance. Champaign, IL: Human Kinetics; c1998.
3. Hodge K. Mental toughness in sport: Lessons for life. The pursuit of personal excellence. J Phys. Educ. NZ. 1994;27:12-16.
4. Tomar R, Tiwari S, Hashem M. Mental toughness: A comparative study on KFUPM University teams. Sci. Mov. Health, 2012, 12(2).
5. Weinberg RS, Gouta D. Foundation of Sports and Exercise Psychology. 3rd ed. VSA: Edward Brothers Publications; c2003.
6. Tunney J. Thoughts on the line. Mental toughness: Biceps for the mind. Soccer J. 1987;32:49-50.
7. Teng Z, Liu Y, Guo C. A meta-analysis of the relationship between self-esteem and aggression among Chinese students. Aggress Violent Behav. 2015;21:45-54.
8. Thing LF. The Female Warrior Meanings of Play-

Aggressive Emotions in Sport. Int. Rev. Sociol. Sport. 2001;36(3):275-288.

9. Warden KB, Grasso SC, Luyben PD. Comparisons of rates and forms of aggression among members of men's and women's collegiate recreational flag football teams. J Prev. Interv. Community. 2009;37(3):209-215.