

Analysis of aggression and stress vulnerability among players of different field in cricket

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Abstract

The present study has been designed to investigate the aggression and stress vulnerability among players of different field in cricket who participated at college, university, district, state and national level tournament. For accomplish the study total 75 cricket players (25 batsman, 25 fast bowler and 25 spin bowler were randomly selected as sample. All samples were selected from the Cricket Academy of Rohtak District. The age of the subjects was ranged from 15-25 years. One-way ANOVA method was applied for analyzing the data obtained from the present study if there were significant difference than the LSD post-hoc test was use to analyze the mean differences and their significance. For testing the hypothesis the level of significance was set at 0.05. We find out that there would be a significant difference in aggression and stress vulnerability among players of different field in cricket in aggression spin bowlers have less aggression in comparison of fast bowlers and batsman and in stress batsman take less stress in comparison of fast bowlers and spin bowlers.

Keywords: aggression, stress vulnerability, cricket players

Introduction

Cricket, or the Gentleman's game is a very old, widespread and uncomplicated pastime game. In the late 16th century, the sport of cricket has originated in the southeast England. It became the country's national sport in the 18th century and has developed globally in the 19th and 20th centuries and yet the most popular game of the today's world. Cricket is a bat and ball game played between two teams of eleven players each on a cricket field. Cricket works precious for the individual development in man as well as unity of country, but to gain this objective and for the development of the cricket, sportsman must fit in physically, mentally and socially. To maintain the competitive pressure or to reach the international competitive sports standards one has to be well prepared in all aspects of a particular game. Such athletes therefore have to be physically, physiologically and technically fit. Athlete for highest performance in any sports is selected on the basis of his physical structure and body size, which has proved to be proper for high performance in the given sports. With considering this views there is need to study about the psychological factors which make effect on the performance and behavior of the players. But it is also not possible to select all the psychological factors for the study with considering the time limit, the researcher has selected few of them for the study, i.e. aggression, and tress vulnerability. With considering the process of research, the researcher thinks that it is essential to give the detail information about the factors which are selected for the study.

Aggression has been considered as the most important aspect in sports field. Wann *et al* (2003) recommended that presently in sports violence both off and on the field has existed to be understood as a social issue. Aggression is referred as the imposition of a negative verbal, gestural or physical by one

individual upon another. Aggression is behavior, not an attitude. It is reflected in actions consigned with the purpose to harm. This aggression definition involves a vast number of actions employed by coaches, spectators and/or athletes as hitting another verbal abuse and individual physically. There are two types in aggressive behavior. They are instrumental and hostile aggression. Hostile aggression has the major purpose or reward, is to cause upon another for its own sake. But instrumental aggression is where the primary reinforcement is the accomplishment of a consequent target. In this situation an athlete may target to harm the opponent but the most essential target to be accomplished by aggression action is to get success in the competition.

Stress is an adaptive response to noxious stimulus causing imbalance or disturbance in normal functioning. Cricketers can distinguish two kinds of stress such as distress and stress when determining what is good for their health. If an athlete makes them so nervous then they become nauseated, get headaches or they cannot focus on other things and they will experience some symptoms such as essentially unhealthy and chronic stress. There are several techniques that can be useful in reducing or preventing stress induced by sports. Meditation, relaxation training, breath control, hypnosis, prayer, Yoga and biofeedback are all technologies that support to reduce stress. Stress is unavoidable and in sports it is essential to manage things in perspective.

Aggression: Aggression is considered as the imposition of a negative oral, gestural or physical by one individual on another. Aggression is behavior, not an attitude. It is reflected in actions entrusted with the objective to harm.

Stress Vulnerability: The quality or state of being exposed to

the possibility of being attacked or harmed, either physically or emotionally.

Problem Statement

The purpose of the study was to compare the aggression and stress vulnerability among players of different field in cricket.

Hypothesis

There would be no significance difference in aggression and stress vulnerability among players of different field in cricket.

Methodology

For this study 75 cricket players (25 Batsman, 25 Fast Bowler and 25 Spinner) were selected from cricket academy of Rohtak district who participated at college, university, District, State and national level tournament were randomly selected. The age of the subjects were ranged from 15-25

Result of the Study

years.

Tools

- Aggression questionnaire which contain 25 items devised by Anand Kumar Shukla and Prem Anand.
- Stress Vulnerability Scale which contain 20 items devised by L.H. Miller and A.D. Smith.

The both questionnaire selected for this study to measure the aggression and stress vulnerability of batsman, fast bowler and spin bowler.

Statistical Analysis

One-way Anova method was applied for analyzing the data obtained from the present study if there were significant difference than the LSD post-hoc test was use to analyze the mean differences and their significance. For testing the hypothesis the level of significance was set at 0.05.

Table 1

ANOVA						
		Sum Of Squares	DF	Mean Square	F	Sig.
Aggression	Between Groups	1097.387	2	548.693	92.528	.000
	Within Groups	426.960	72	5.930		
	Total	1524.347	74			

An analysis of Table -1 reveals that there is a significant difference in aggression among batsman, fast bowler and spin bowler in cricket. Because significant value is less than level of significance which is 0.05 since the calculated significance

value is found significant, therefore to determine the pair mean difference among the selected different levels LSD post hoc test was computed and its shows in Table no 2.

Table 2: Mean Difference of Aggression among Players of Different Field in Cricket

Dependent variable	Grouping variable		Mean difference	Std. Error	Sig.
Aggression	Batsman	Fast bowler	-5.76000*	.68877	.000
		Spin bowler	3.52000*	.68877	.000
	Fast bowler	Batsman	5.76000*	.68877	.000
		Spin bowler	9.28000*	.68877	.000
	Spin bowler	Batsman	-3.52000*	.68877	.000
		Fast bowler	-9.28000*	.68877	.000

The post-hoc test result revealed that there is significant difference in aggression among different field in cricket. Significant difference was found between the batsman and fast bowler, fast bowler and spin bowler and batsman and spin bowler players in their aggression. The mean values clearly

shows that fast bowler and batsman players having more aggression in comparison to spin bowler. The estimated mean value of the players aggression is illustrated below in Figure no 1.

Table 3

ANOVA						
		Sum Of Square	DF	Mean Square	F	Sig.
Stress	Between Groups	18480.560	2	9240.280	339.245	.000
	Within Groups	1961.120	72	27.238		
	Total	20441.680	74			

An analysis of Table no - 3 reveals that there is significant difference in stress among batsman, fast bowler and spin bowler in cricket. Because significant value is less than level of significance which is 0.05 since the calculated significance

value is found significant, therefore to determine the pair mean difference among the selected different levels LSD post hoc test was computed and its shows in Table no 4.

Table 4: Mean Difference of Stress among Players of Different Field in Cricket

Dependent Variable	Grouping Variable		Mean Difference	Std. Error	Sig.
Stress	Batsman	Fast bowler	-35.36000*	1.47615	.000
		Spin bowler	-4.60000*	1.47615	.003
	Fast bowler	Batsman	35.36000*	1.47615	.000
		Spin bowler	30.76000*	1.47615	.000
	Spin bowler	Batsman	4.60000*	1.47615	.003
		Fast bowler	-30.76000*	1.47615	.000

The post-hoc test result revealed that there is significant difference in stress among different field in cricket. Significant difference was found between the batsman and fast bowler, fast bowler and spin bowler and batsman and spin

bowler players in their stress. The mean values clearly shows that fast bowler and spin bowler having more stress in comparison to batsman. The estimated mean value of the players stress is illustrated below in figure no 1.

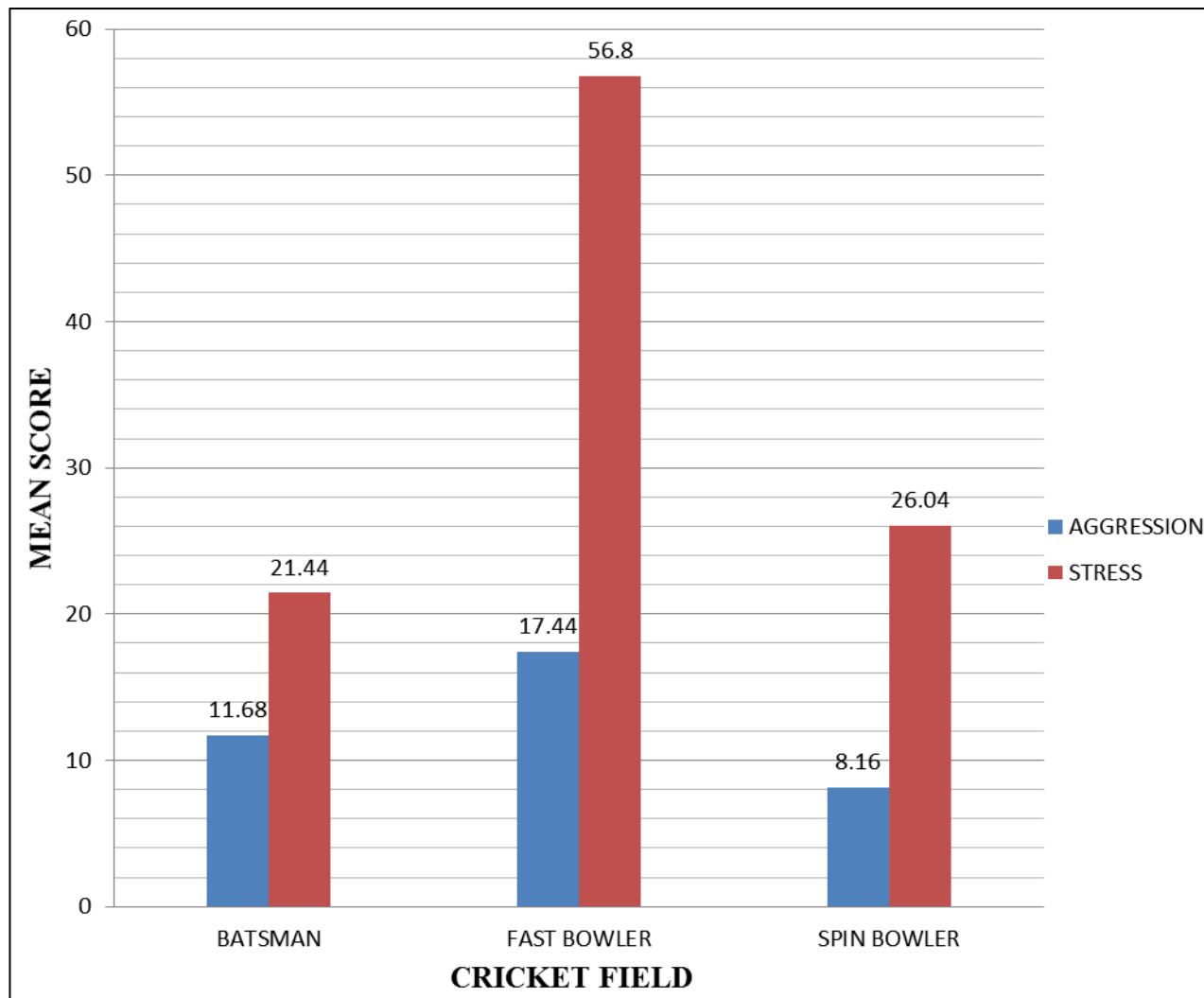


Fig 1: Mean Difference of Aggression and Stress Vulnerability among Players of Different Field in Cricket

Discussion

The findings of the study that there were significant difference in the obtained value of aggression and stress vulnerability among players of different field in cricket. Spin bowler aggression less than fast bowler and batsman and stress of batsman less than fast bowler and spin bowler. So the hypothesis of our study is rejected that there would be no significant difference of aggression and stress vulnerability among players of different field in cricket.

Conclusion

On the basis of result obtained from the study, following conclusions are drawing:-
 The data showed that significant difference observed in aggression and stress vulnerability of different field in cricket players who participated at college, university, district, state and national level tournaments. Significant difference was found between the batsman and fast bowler, fast bowler and spin bowler and batsman and spin bowler in their aggression

and stress vulnerability. We can say that in aggression spin bowlers have less aggression in comparison of fast bowlers and batsman and in stress batsman take less stress in comparison of fast bowlers and spin bowlers.

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