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Relative study on team cohesion between cricket players

Dr. NR. Ramkumar

Director of Physical Education - AMET Deemed to be University Chennai, India
Email: ram.sportive@gmail.com

Dr. R. Suresh

Asst. Director of Physical Education - AMET Deemed to be University Chennai, India
Email: sureshugc@gmail.com

Abstract---The aim of this study was to find out the relative study on team cohesion between crickets players were participated in the 2018 Buck Cricket Tournament was conducted by YMCA College of physical education, Chennai. The study was administered on 10 batsmen, 10 fast bowlers, 10 spin bowlers and 10 wicketkeepers in the age group of 18 to 25 and completed the Group environment questionnaire (Carron, A.V et., al. 1985). The obtained F ratio value on the scores of ATGS 0.36 was lesser than the required table value of 2.87, which proved that there was no significant difference on ATGS between cricket players. The obtained F ratio value on the scores of ATGT 0.22 was lesser than the required table value of 2.87, which proved that there was no significant difference on ATGT between cricket players. The obtained F ratio value on the scores of GIS 3.74 was greater than the required table value of 2.87, which proved that there was a significant difference on GIS between cricket players. The obtained F ratio value on the scores of GIT 1.35 was lesser than the required table value of 2.87, which proved that there was no significant difference on GIT between cricket players. The overall the team cohesion were the wicketkeepers have more dominating then the batsmen, fast bowlers and spin bowlers.

Keywords---3-10 keywords separated by commas.

Introduction

Sport psychology has played a significant role in the understanding, training and ultimately the use of mental skills for peak performance. According to Smith R

(1994), a former English Cricketer, "Cricket is played in the mind, more than any other game". Carron, A.V et., al. (1985) developed the Group Environment

Questionnaire (GEQ), which is based on a conceptual model in which cohesion is considered to be a result of four primary constructs: Individual Attractions to the Group-Task, which reflects a member's feelings about his or her personal involvement with the group's task; Individual Attractions to the Group-Social, a member's feelings about his or her personal social interactions with the group; Group Integration-Task, a member's perceptions of the similarity and unification of the group as a whole around its tasks and objectives; and Group Integration-Social, a member's perception of the similarity and unification of the group as a social unit.

Method

Selection of the subjects:

The purpose of the study was to find out the relative study on team cohesion between cricket players. To achieve the purpose of the study 10 batsmen, 10 fast bowlers, 10 spin bowlers and 10 wicketkeepers (age 18 to 25) were selected from the 2018 Buck Cricket Tournament was conducted by YMCA College of physical education, Chennai. More specifically, the matches according to the Inter College level Cricket tournament. The cricketers completed the questionnaire voluntarily.

Questionnaire:

The Group Environment Questionnaire (Carron et., al. 1985) was used to assess cohesion. This is a self-report questionnaire that contains 18 items. Four aspects of cohesion are assessed: Individual Attractions to the Group-Task (4 items), Individual Attractions to the Group-Social (5 items), Group Integration-Task (5 items) and Group Integration-Social (4 items). Responses are provided on a 9-point Likert scale anchored at the extremes by 'strongly disagree' (1) and 'strongly agree' (9). Thus, higher scores reflect stronger perceptions of cohesiveness.

Statistical Analysis

The data analysed and compared with the help of statistical procedure in which arithmetic mean, standard deviation and F-test used to compare the data.

Results

The value of calculated t-test was compared with the tabulated significant value at 0.05 level of confidence with 95 degree of freedom. The details for comparative mean value and SD values on team cohesion were tabulated and presented below:

Table I
Mean, SD, SE on Team Cohesion between Cricket Players

S.No.	GEQ	Group	N	Mean	Std. Deviation	Std. Error Mean
1	ATGS	Batsmen	10	33.20	6.83	2.16
		Fast Bowlers	10	33.70	5.54	1.75

		Spin Bowlers	10	31.00	6.09	1.93
		Wicketkeepers	10	33.70	8.34	2.64
2	ATGT	Batsmen	10	28.20	3.65	1.15
		Fast Bowlers	10	28.10	4.20	1.33
		Spin Bowlers	10	29.50	5.54	1.75
		Wicketkeepers	10	28.40	3.92	1.24
3	GIS	Batsmen	10	20.00	3.59	1.14
		Fast Bowlers	10	19.00	2.45	0.77
		Spin Bowlers	10	22.20	2.57	0.81
		Wicketkeepers	10	22.40	2.07	0.65
4	GIT	Batsmen	10	33.50	5.30	1.67
		Fast Bowlers	10	30.30	2.11	0.67
		Spin Bowlers	10	32.30	4.50	1.42
		Wicketkeepers	10	31.10	2.33	0.74

Table I reveals that the mean values of individual attractions to the group-social (ATGS) of the batsmen were 33.20, fast bowlers were 33.70, spin bowlers were 31.00 and wicketkeepers were 33.70. The mean values of individual attractions to the group-task (ATGT) of the batsmen were 28.20, fast bowlers were 28.10, spin bowlers were 29.50 and wicketkeepers were 28.40. The mean values of group-integration social (GIS) of the batsmen were 20.00, fast bowlers were 19.00, spin bowlers were 22.20 and wicketkeepers were 22.40.

The mean values of group-integration task (GIT) of the batsmen were 33.50, fast bowlers were 30.30, spin bowlers were 32.30 and wicketkeepers were 31.10.

Table II
Computations of analysis of variance on team cohesion between cricket players

Team Cohesion GEQ	Sources of Variance	Sum of Squares	df	Mean Square	F
ATGS	Between	49.80	3	16.60	0.36
	Within	1655.80	36	45.99	
ATGT	Between	12.50	3	4.17	0.22
	Within	693.40	36	19.26	
GIS	Between	83.60	3	27.87	3.74*
	Within	268.00	36	7.44	
GIT	Between	58.80	3	19.60	1.35
	Within	523.60	36	14.54	

Significant at 3,36 df at 0.05 level 2.87

As shown in Table II, the obtained F ratio value on the scores of Individual attractions to the Group-Social 0.36 was lesser than the required table value of 2.87, which proved that there was no significant difference on Individual attractions to the Group-Social between cricket players. The obtained F ratio value on the scores of Individual attractions to the Group-Task 0.22 was lesser than the required table value of 2.87, which proved that there was no significant

difference on Individual attractions to the Group-Task between cricket players. The obtained F ratio value on the scores of the Group Integration -Social 3.74 was greater than the required table value of 2.87, which proved that there was a significant difference on Group Integration -Social between cricket players. The obtained F ratio value on the scores of the Group Integration -Task 1.35 was lesser than the required table value of 2.87, which proved that there was no significant difference on Group Integration -Task between cricket players.

Fig 1. Showing the mean values of Team Cohesion between Cricket Players

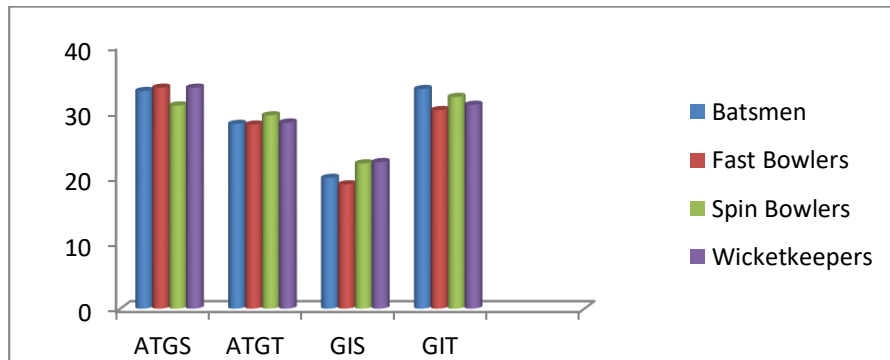


Fig 2. Showing the Analysis of Variance on Team Cohesion between Cricket Players

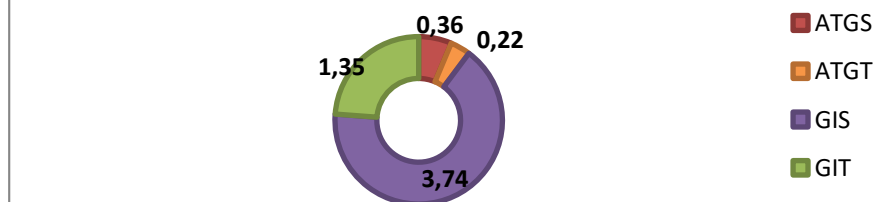


Table III
Scheffe's post hoc test analysis on Group Integration – Social (score) between Cricket Players

Groups	Mean Difference of				Reqd C.I.
	Batsmen	Fast Bowlers	Spin Bowlers	Wicketkeepers	
Batsmen	-	1.00	-	2.40*	1.96
Fast Bowlers	-	-	3.20*	-	
Spin Bowlers	2.20*	-	-	0.20	
Wicketkeepers	-	3.40*	-	-	

Table III shows that the mean differences between batsmen and wicketkeepers were 2.40, fast bowlers and spin bowlers were 3.20, spin bowlers and batsmen

were 2.20, wicketkeepers and fast bowlers were 3.40 which was greater than the required Schaffer's confidence interval value of 1.96. Hence, the difference between the groups was significant at 0.05 level of confidence. Hence the null hypothesis was rejected at 0.05 level of confidence.

The mean differences between batsmen and fast bowlers were 1.00, spin bowlers and wicketkeepers were 0.20 which was lesser than required Scheffe's confidence interval value of 1.96. Hence, there was no evidence to reject the null hypothesis.

Discussion on finding

In the case of team cohesion wicketkeepers and fast bowlers have more Individual attractions to the Group-Social (ATGS) than the batsmen and spin bowlers. Spin bowlers have more Individual attractions to the Group-Task (ATGT) than the batsmen, fast bowlers and wicketkeepers. Wicketkeepers have more Group Integration -Social (GIS) than the batsmen, fast bowlers and spin bowlers. Batsmen have more Group Integration -Task (GIT) than the fast bowlers, spin bowlers and wicketkeepers. But the Table I showed that the wicketkeepers have more team cohesion than the batsmen, fast bowlers and spin bowlers.

The result of the study is also in accordance with the findings of Olivia Nolan et.,al. (2000) found within the sub-scales of social and positive reinforcement on the relationship between team cohesion and the level of cricket played.

Conclusion

The findings reveal that the team cohesion of ATGS, ATGT and GIT has shown no significant difference between cricket players. GIS has shown the significant difference between cricket players.

- There was no significant difference on Individual attractions to the Group-Social between cricket players.
- There was no significant difference on Individual attractions to the Group-Task between cricket players
- There was a significant difference on Group Integration -Social between cricket players.
- There was no significant difference on Group Integration -Task between cricket players.

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