



A Comparative Study of Team Dynamics among Different Level of Football Players

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Abstract: Team dynamics are the unconscious, psychological forces that influence the direction of a team's behaviour and performance (Myers, 2013). The purpose of the present study was to compare the team dynamics among male football players of U-15, U-17 and senior level. The Team Dynamics of 90 male state and national level football players were collected through the Group Environment Questionnaire (GEQ). To determine the difference of Team Dynamics level among players One-Way ANOVA was used for determining the differences across groups and was tested at 0.05 level. The results revealed that there was a significant difference found in the sub factors of team dynamics such as Attraction to Group Social, Attraction to Group Task, Group Integration Social among the levels but significant difference was not seen in the sub-factor of Group Integration Task. Also, results showed that the U-17 football players had significantly high scores on all the sub-factors of team dynamics as compared to the other two levels or groups.

Keywords: team dynamics, football players, U-15, U-17, senior level, Group Environment Questionnaire, One-Way ANOVA, attraction to group, group integration, sub-factors

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INTRODUCTION

“Talent wins games, but teamwork wins championships” (Jordan, 1994). Team dynamics expresses the chemistry and solidarity among the team members which can affect the team's performance in sports competitions. The synergy among the team members despite their distinct personalities, the attitude and behaviour towards team goals and the overall team environment can be class as team dynamics. In any team sport, the success and failure of a team usually depends on team effort rather than individual skill.

Many research has demonstrated how this dynamical synchronization process can operate predicated on information to produce coordinated timing of interpersonal interactions (Richardson, et.al. 2007). An important feature of a team synergy is the capacity of one individual (e.g., a player in a team) to influence behaviour of others (Riley, et.al 2011). Decisions and actions of players forming a synergy should not be viewed as independent, explaining how multiple players synchronize activities in accordance with dynamic performance environments in fractions of a second (Silva, et.al 2016).

The aim of this study was to compare the team dynamics among different level of football players mainly the Under-15, Under-17 and senior level players. After reviewing related literature, it showed the lack of

research done on team dynamics especially regarding the comparison of team dynamics among teams. Thus, due to the importance of team dynamics for the successful performance of a team, the present study focuses on the comparison of team dynamics between different level of football players.

METHODOLOGY

Selection of Subjects

A total of 90 male State and National level male football players were selected from three categories that is under-15, under-17 and Senior level with their age ranging between 13-32 years. The total samples were further classified into 30 subjects each in the designated categories. For the U-15 category, the data was collected from players who participated in the Subroto Cup competition; the data for the U-17 category was collected from the U-18 Youth I-league team and for the senior category and the data was collected from players who participated in the Santosh Trophy competition. All participants were fully informed about the aim of the study, the procedures, and gave their voluntary consent before being part of this study.

Selection of Variables

The variable of 'Team Cohesion' was selected for this study. This questionnaire was developed by Albert V. Carron (1985) designed to measure individual group member's perception of team cohesiveness. The questionnaire is made up of 18 items. The total 18 items are grouped into 4 items in individual attraction to group - task; 5 items in individual attraction to group – social; 5 items in group integration - task; and 4 items in group integration – social. Team members are required to respond to the 18 statements about their team on a 9-point scale which is anchored at two extremes by "strongly disagree" to "strongly agree". The score on any specific scale is computed by obtaining the mean response for a subject from the pertinent items.

Statistical Procedures

Data was presented as quantitative data, descriptive statistics such as mean and standard deviation and comparative statistics such as one-way analysis of variance (ANOVA) was employed to assess the result of the comparison among the different levels of football players and tested at 0.05 level of significance.

RESULTS

In this section, both descriptive and inferential statistics results are presented on ninety male football players of different age categories (U15, U17 and Senior) who participated in this study. The descriptive statistics (mean & SD) team dynamics of different levels of football players is explained in Table 1 below.

Table 1

Descriptive Statistics of Team Dynamics of the Different Levels of Football Players

		N	Mean	Std. Deviation
Attraction to Group Social	under15	30	35.76	4.52
	under16	30	36.56	4.15
	senior	30	31.90	6.05
	Total	90	34.74	5.33
Attraction to Group Task	under15	30	23.26	2.75
	under16	30	28.76	4.08
	senior	30	24.70	6.73
	Total	90	25.57	5.30
Group Integration Social	under15	30	18.33	2.94
	under16	30	24.10	5.14
	senior	30	18.40	5.20
	Total	90	20.27	5.25
Group Integration Task	under15	30	30.10	4.64
	under16	30	33.53	4.19
	senior	30	31.20	5.67
	Total	90	31.61	5.03

Table 1, indicated the mean and SD of Team dynamics of different levels of football players. The mean and SD in sub-factor of attraction to group- social of under- 15, under-17 and senior level was 35.76 ± 4.52 , 36.56 ± 4.15 & 31.90 ± 6.05 respectively. The mean and SD in sub-factor of attraction to group-task of under-15, under- 17 and senior level was 23.26 ± 2.75 , 28.76 ± 4.08 & 24.70 ± 6.73 respectively. The mean and SD in sub-factor of group integration social of under-15, under- 17 and senior level was 18.33 ± 2.94 , 24.10 ± 5.14 & 18.40 ± 5.20 respectively. The mean and SD in sub-factor of group integration task of under-15, under-17 and senior level was 30.10 ± 4.64 , 33.53 ± 4.19 & 31.20 ± 5.67 respectively.

The graphical representation of mean scores of the sub factors of group dynamics is presented in figure 1.

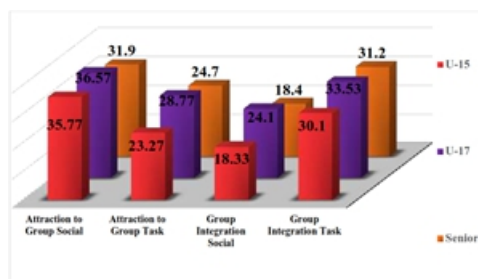


Figure 1. Mean Scores of Team Dynamics of Different Levels of Football Players

Table 2

Analysis of Variance of Team Dynamics of Different Levels of Football Players

		Sum of Squares	df	Mean Square	F	Sig.
Attraction to Group Social	Between Groups	373.689	2	186.844	7.535*	.001
	Within Groups	2157.433	87	24.798		
	Total	2531.122	89			
Attraction to Group Task	Between Groups	488.422	2	244.211	10.531*	.000
	Within Groups	2017.533	87	23.190		
	Total	2505.956	89			
Group Integration Social	Between Groups	657.489	2	328.744	15.867*	.000
	Within Groups	1802.567	87	20.719		
	Total	2460.056	89			
Group Integration Task	Between Groups	184.422	2	92.211	3.870	.025
	Within Groups	2072.967	87	23.827		
	Total	2257.389	89			

Table 2, revealed that the calculated F- value in the sub-factors Attraction to Group Social, Attraction to

Group Task and Group Integration Social was 7.535, 10.531 and 15.867 respectively, which was higher than the tabulated F-value 3.95 with df 2, 87 tested at a significant level of 0.05. Therefore, since calculated F- value was found more than the tabulated F- value, there was significant difference seen in the attraction to group social, attraction to group task and group integration social among the levels or groups.

Also, it was evident that the calculated F- value in sub factor Group Integration Task was 3.870 was lower than the tabulated F- value 3.95 with df 2, 87 tested at a significant level of 0.05. Therefore, since calculated F- value was less than the tabulated F-value, there was no significant difference seen in the Group Integration Task among the levels or groups.

Further pairwise comparison was done for the factors of mental toughness among the different groups of football players which revealed:

Statistically significant result was found in attraction to group social between under 15 and senior & under 16 and senior (MD= 3.86; $p= 0.003$ & MD= 4.66; $p= 0.000$) respectively. Statistically significant result was found in attraction to group task between under 16 and under 15 & under 16 and senior (MD= 5.50; $p= 0.000$ & MD= 4.06; $p= 0.002$) respectively. Statistically significant result was found in group integration social between 16 and under 15 & under 16 and senior (MD= 5.76; $p= 0.000$ & MD= 5.70; $p= 0.002$) respectively. Statistically significant result was found in group integration task between 16 and under 15 (MD= 3.43; $p= 0.008$) respectively.

DISCUSSION

In the factors of team dynamics there was significant result seen while only in one factor insignificant result was seen in the team dynamics among different levels of football players.

In the same way, previous studies have showed that on comparing the team dynamics of players there was a significant difference in team dynamics while in some studies there was no significant differences seen (Thakur et.al., 2015; Wang et.al.,2011). This was also due to the behavioural and social aspects of the players.

The primary reason behind obtaining a significant result in team dynamics was because in order to play any team games especially in case of football there needs to be a bonding between the team members for getting the best outcomes. Team dynamics is the bond that pulls team mates toward membership in a particular group and resists separation from that group. The interpersonal attraction based on social or task reasons revealed that they had the preference or want to interact with each other. Group members enjoyed this interaction and seek it out. The matter of group pride may be another reason of getting the result as significant as members viewed their membership to the group with fondness. They felt proud of their group membership, and staying in the group felt valuable. The major reason of getting significant result was the team member's commitment to the work of the group as they value the work of the group and believe in its goals. They were willing to work together to complete tasks which were assigned with these group goals, even through adversity.

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