

Team cohesion and anxiety on netball team athletes

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Abstract:

The aim of this study was to examine the task cohesiveness dimensions' influence on competitive anxiety in universities netball teams. For which, data were collected from different universities netball players. Our results indicate that all the dimensions of team cohesion namely Group Integration-Task (GI-T), Group Integration-Social (GI-S), Individual Attractions to Group-Task (ATG-T), and Individual Attractions to Group-Social (ATG-S) influenced the success of the team negatively. Further research with different categories of respondents is recommended.

Key words: Team cohesion, anxiety, netball team athletes.

Introduction

Netball is an exciting, fast and skillful game for fair contest. This game is derived from the game basketball and is played in more than 60 countries worldwide. Netball competitions exist at all levels from junior to international, including a semiprofessional league across Australia and New Zealand (Treagus M., 2005) (Steele JR., 1990) (Young et al., 2016). In recent days, this netball competitions comes in to limelight at all the levels in India. Netball team composite of 7 players in ground and 5 players on bench. Matches are played between 2 teams for four 15-minute quarters. Netballers play in 7 court positions (center [C], wing attack [WA], wing defense [WD], goal attack [GA], goal shooter [GS], goal defense [GD], and goal keeper [GK]), each of which are restricted to specific regions of the court (Davidson A, 2008) (Crouch H, 1992) However, Ramsbury et al., (2000) found that the significant number of athletes were suffering from anxiety, before and during competitions. No exemption was made for netball players from the findings of Ramsbury et al., (2000).

Mozhi, A. A., & Vinu, W. (2019) explained Anxiety is a complex emotional state characterized by a general fear or fore binding, usually accompanied by tension. It is related to apprehension and fear and is frequently associated with failure, real an anticipated. It must do inter-personal relations and social situations. Feelings of rejection and insecurity are usually a part of anxiety. Competitive anxiety is the anxiety generated in a sport, competitive situation. It is a specific term of anxiety that occurs as function of the competitive situation Anxiety is a negative emotion that affects perceptions in sport competitions, and this leads the majority of athletes to consider anxiety as debilitating towards performance, which may result in a decrease in performance (Raglin JS., 2000). Martens et al., (1990) developed the multidimensional model of anxiety where a distinction on reactions of anxiety in sport is presented, “cognitive anxiety is usually defined as the mental component of anxiety and is caused by negative expectations” while somatic anxiety “refers to the physiological and affective elements of the anxiety experience that develop directly from autonomic arousal”. A third dimension related with the above two is an individual difference factor, which is self-confidence, understood as the conviction of the athlete about the possibility of performing the tasks undertaken. Cognitive anxiety and self-confidence represent the opposite ends of a continuous cognitive assessment. Martens et al. (1990) propose a negative linear relationship between cognitive anxiety and performance, and a positive linear relationship between self-confidence and performance. Somatic anxiety and performance have a curvilinear relationship, where both lower and higher values are prejudicial to performance.

Prapavessis and Carron's (1996) stated that improving the dynamics of the team could enhance the psychological state of the individual. Further, their findings revealed the association between anxiety and cohesion. Particularly, athletes that perceived higher levels of task cohesion reported a state of less cognitive anxiety. Results also evidence that psychological costs associated with membership on cohesive teams, mediates the cohesion - state anxiety relationship.

Cohesion was first formally defined by Festinger, Schachter, and Back (1950) as “the total field of forces which act on members to keep them on working in the group.” Carron, Brawley and Widmeyer (1998) describe the concept as `a dynamic process that is reflected in the tendency of a group to stick

together and remain united in the pursuit of its instrumental objectives and/or for the satisfaction of member adjective needs'. Jackson (2014) definition of cohesion "The art of transforming a group of young, ambitious individuals into an integrated championship team" witnessed the importance of cohesion. "Team unity" and "team chemistry" are both used to replace the term "cohesion" that is the main group variable (Carron, Burke ve Shapcott, 2009). Many researchers found that the team cohesion is a key factor in the group's performance (Carron et al., 1985; Robbins, 2002; Wagner, 2006; and Machado, 2006).

Sima Teymori et al. (2014) in their similar study in Iran found that there exist a relationship between cohesion and anxiety. Eys et al., (2003) found that the relationship between group cohesion and competitive state anxiety appears to be a dynamic one in which both variables influence each other. Prapavessis and Carron's (1996) findings revealed that cohesion and anxiety were associated. Particularly, athletes that perceived higher levels of task cohesion reported a state of less cognitive anxiety. Results also evidence that psychological costs associated with membership on cohesive teams, mediates the cohesion – state anxiety relationship. However, benefits of group cohesion go beyond the degree of competitive state-anxiety. Additionally, Craft et al., (2003) found that the individuals who participate in a group sport are less likely to experience competitive state-anxiety in general. Borrego et al (2012) indicate that only cognitive anxiety relates in a significantly negative way with the perception of cohesion (GI-T e ATG-T) in the total number of participants and in male athletes. Relatively to the somatic anxiety, it only relates negatively with the perception of the integration of the group in the total number of participants and in the male gender. Even though, some researchers examined the relationship between team cohesion and anxiety, the studies investigated the team cohesion among netball players were limited and studies concentrated on university level players were also very limited. Among the studies related to cohesion and anxiety, most of the researchers were taken task cohesion only in to cognizance. Interestingly, Sima Teymori et al. (2014) conducted the similar study among sport athletes in general and that too in Iran. Hence, the current research question is whether the dimensions of team cohesion influence the anxiety of Indian netball?

Methodology

The purpose of the study is to investigate the effect of team cohesion dimensions on anxiety. For which, the data were collected in All India inter university women netball competition held at Annamalai University, Tamilnadu. In this competition 51 women teams were participated. Irrespective of the team, the data were collected from 300 players using convenience sampling technique. The data was collected using well-structured questionnaire. In the questionnaire, Team cohesiveness data were collected using the Group Environmental Questionnaire (GEQ) by Carron et al., (1985) and Competition Anxiety was measured using Sport Competition Anxiety Test (SCAT) by Martens R (1990). The collected data were analyzed using multiple regression analysis.

The, GEQ contains 18- items measuring four components of cohesion: Group Integration-Task (GI-T) (5 items), Group Integration-Social (GI-S) (4 items), Individual Attractions to Group-Task (ATG-T) (4 items), and Individual Attractions to Group-Social (ATG-S) (5 items). The mean scores of each scale are derived independently, but in all cases, higher scores indicate perceptions of higher cohesiveness. The respondents rates their level of agreement or disagreement on nine ordered response level from strongly disagree to strongly agree for the 18 items.

The SCAT contains 15 items, 10 of which measure symptoms associated with anxiety. The remaining five items that are not scored are included in the inventory to reduce the likelihood of an internal response-set bias. The standard instructions of the SCAT ask the respondents to indicate their feeling in sports and games competition on a 3-point scale (1 = rarely, 2 = sometimes, 3 = often). Based on their experience, the respondents indicated the frequency of their feeling for 10 anxiety-related symptoms. The scores for the 10 items are summed to provide an overall measure of competitive anxiety. The high composite score reflecting a greater tendency to experience competitive anxiety.

The total scores of competitive anxiety was taken as dependent variable and the total scores of dimensions of team cohesion were taken individually as the independent variables, the multiple logistic regression approach was adopted to measure the influence of independent variables on dependent variable.

3. Analysis and interpretation

Since the anxiety depends on the influencing dimensions of team cohesion, the total scores of competitive anxiety was taken as dependent variable and the total scores of dimensions of team cohesion were taken individually as the independent variables. Over and above, in order to measure the influence of independent variables on dependent variable and to explicate which dimension of team cohesion influences the competitive anxiety more, the multiple logistic regression approach was adopted. The below stated hypothesis was formulated and the multiple regression analysis was carried out to test the formulated hypothesis.

H₀: Dimensions of team cohesion does not influence competitive anxiety.

Table 1 Multiple Regressions Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	F	p value
1	.462	.213	.201	5.3220	18.322 *	.000

a. Predictors: (Constant), Integration-Task (GI-T), Group Integration-Social (GI-S), Individual Attractions to Group-Task (ATG-T), and Individual Attractions to Group-Social (ATG-S)

Table 2 Influence of Pushers on Meaningful work of Teachers

Model	Unstandardized Coefficients		Standardized Coefficients	T	p value
	B	Std. Error	Beta		
(Constant)	-17.610	3.675		-4.791	0.000
Group Integration-Task (GI-T)	-0.265	0.058	0.373	-4.556	0.000
Group Integration-Social (GI-S)	-0.455	0.167	-0.183	-2.727	0.008
Individual Attractions to Group-Task(ATG-T)	-0.134	0.181	0.049	-0.743	0.460
Individual Attractions to Group-Social(ATG-S)	-0.226	0.057	0.259	-3.929	0.000

a. Dependent Variable: competitive anxiety

The assessment of the overall F-Value 18.322 and p-Value (0.000) clearly indicated the greater level of model fit for the data. Coefficient of determination denoted by R^2 value is the measure of the intensity of association in the regression analysis. Higher value of R^2 (0.213) indicated the higher proportion of the variation in competitive anxiety was explained by the dimensions of team cohesiveness taken up for study. The adjusted R^2 was the modified version of R^2 that was adjusted for the number of predictors in the model. Here adjusted R^2 value was found to be 0.201 which indicates the 20.1% of competitive anxiety was explained by four dimensions of team cohesion namely Group Integration-Task (GI-T), Group Integration-Social (GI-S), Individual Attractions to Group-Task (ATG-T), and Individual Attractions to Group-Social (ATG-S). In addition, all the p values in the table are less than 0.05 which clearly indicated that all the independent variables influenced the competitive anxiety and hence the null hypothesis H_0 was rejected. Further, it was noted that Group Integration-Task (GI-T), Group Integration-Social (GI-S), Individual Attractions to Group-Task (ATG-T), and Individual Attractions to Group-Social (ATG-S) influenced the competitive anxiety negatively. B-Values represented the Beta co-efficient, which clearly indicated the relative importance of the predictors on competitive anxiety. Therefore,

$$\text{Competitive anxiety} = -0.265(\text{Group Integration-Task}) - 0.455(\text{Group Integration-Social}) - 0.134(\text{Individual Attractions to Group-Task}) - 0.226(\text{Individual Attractions to Group-Social}).$$

The regression equation formed clearly indicates that the 1 unit increase in Group Integration-social would decrease the competitive anxiety by 0.265 unit when all other factors in the model remain constant. In the same way, 1 unit increase in Group Integration-task, Individual Attractions to Group-social, and Individual Attractions to Group-task would decrease the competitive anxiety by 0.455 unit, by 0.134 unit, and by 0.226 unit correspondingly when other factors remain constant.

From the table, it is found that the Group Integration-Social influenced the competitive anxiety the most followed by Group Integration-Task, Individual Attractions to Group-social, and Individual Attractions to Group-Task. Further it is found that group integration influences more than the individual attraction to group.

4. Discussion

The main aim of this study was to examine the influence of team cohesiveness on competitive anxiety in universities net ball teams (women) in India. The results of this study indicated that all the dimensions of team cohesion significantly influence competitive anxiety. All the dimensions of team cohesion negatively influence competitive anxiety. The Group Integration-social influenced the team success the most followed by Group Integration-Task, Individual Attractions to Group- social, and Individual Attractions to Group-Task. Further it is found that group integration influences more than the individual attraction to group.

Among the studies related to team cohesion and competitive anxiety, most of the studies found out the negative relationship between cohesion and success. Interestingly, the study of Sima Teymori et al. (2014) is one of the few to report a positive relationship between cohesion and competitive anxiety. Prapavessis and Carron's (1996) & Eys et al. (2003) findings revealed that cohesion and anxiety were associated. Particularly, athletes that perceived higher levels of task cohesion reported a state of less cognitive anxiety. Results also evidence that psychological costs associated with membership on cohesive teams, mediate the cohesion – state anxiety relationship. However, benefits of group cohesion go beyond the degree of competitive state-anxiety. Additionally, Craft et al., (2003) found that the individuals who participate in a group sport are less likely to experience competitive state-anxiety in general. Borrego et al (2012) indicate that only cognitive anxiety relates in a significantly negative way with the perception of cohesion (GI-T e ATG-T) in the total number of participants.

5. Conclusion

The results of the present study witnessed the negative influence of cohesion on anxiety which contradicts the findings of Sima Teymori et al. (2014). Similarly, the present study findings indicated that the Group Integration-social influenced the anxiety more. However, future research on investigating the influence of team cohesion dimensions on team success with different categories of respondents may provide some comparative results.

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