

**173 - COHESION AND HIGH PERFORMANCE SPORT: AN INDOOR SOCCER TEAM ANALYSIS.**

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**INTRODUCTION**

Nowadays it is possible to see sport's influence on society, not only because it promotes health but also because the media take charge in transmitting it as a mercantilist product that moves millions in moneys, seen that a large amount of athletes make their living out of the sport's professional practice. These factors contribute in way that sport become a highlighted phenomena in our century, it's development contributes so that each time more people became interested by it, making it an instrument of union among people.

The pleasure activity practice and sport are important to general population so that every days tension be relieved. The benefits of this practice are various, however it's importance goes beyond men's physical health, integrating the development of socio-affective relations, communicability, sociability, adjusting them to the environment they live. Carron (1998) affirms that the relation between athletes influence directly on the team's cohesion, which is defined as the link that contributes to the athletes become a strong and effective group, making the group firm, integrate and united

At this context working with groups becomes very important since the elite sport's practice impel over the athletes internal and external pressure, such as the money involved; the coach's charges, rooters and even family; and also athletes' own charge about their performance. So, the sport psychologist has the possibility to proportionate to the athlete a better knowledge above the psychological factors that may interfere in his performance and the groups as well. In relation to the sport psychologist's practice, Becker Jr. (2002) points that he:

[...] pode apoiar o indivíduo ou o grupo com o objetivo de que as ações do ser humano possam ser aperfeiçoadas de acordo com a tarefa proposta, melhorando as demandas situacionais, contribuindo para que ele melhore sua habilidade e alcance suas metas e necessidades (p.20).

Franco (2004) relates that it is necessary a work at group dynamics level, because man is a social being, in a way that the inter-relation between people characterizes as its main shaft. Roger (1976) affirms, in matter of the interpersonal relationship's importance, that the quality of the personal meeting is what determines at which point we are in front of an experience that liberates and stimulates development and growth.

Sonoo (2000) also says that the identification between the members of a team becomes a essential factor for its well function. However, this identification doesn't have only a relation with the external characteristics, but also with the collective conscious, that is to share a common identity, create a group of feelings that identify then as a social group, that they are member of a team.

Sport's cohesion and interpersonal relations are some characteristics that may influence at athletes and sport's group quality of life and performance. In this context, Lewin (1977) conceptualize that a group is more than just the add of his members, the author attributes to the group a collective mentality, that is, possess an own structure, own objectives and own relations with the other groups. Besides, the author reinforces that the interdependence between group members is what determines its essence, not their resemblance or difference. One change on any subpart state modifies all subparts states, characterizing the group as a *dynamic whole*.

Carron (1998) describes the group as an active agent, in which exists a gathering of entrance components (*inputs*), which are the individual attributes and group environment's nature; these components are analyzed and processed by the group (*thoughtputs*), it's from this analyses that occur group's process, its structure is formed and team's cohesion appear; and at last the results (*outputs*) which possess' the best results at the efficiency due to individual products, originated through the processing and analyzing of the initial components, which possess higher results at efficiency due to the individual products (such as performance and group adherence) and the collective products (such as team results and its stability). In this context, this research had as main objective investigate a high performance indoor soccer team's cohesion through an analysis of its Interpersonal Relationship and the group environment.

**METHODS**

This research was characterized as descriptive, with case study characteristics; which aimed to interpret and analyze the reality without manipulating it. A total of 20 members from a high performance indoor soccer team participated in this study, being 18 athletes and 02 subjects from the coach's staff, from the city of Maringá-PR. Two instruments were used: The Group Environment Questionnaire (GEQ) from Carron, Widmeyer and Brawley (2002) which analyses the group's environment through members attraction to the group individually or collectively, related to the task or social integration and the Sociometric Test, which, accordingly to Franco (2004), allows to measure relation between people.

The Group Environment Questionnaire (GEQ) developed by Carron et. al (2002) and validated to Portuguese by Costa (2005), is composed of 18 items, constituted by a Likert Scale from 1 to 9, corresponding to the level of agreement of the interviewed with the affirmation. According to the conceptual model proposed by Carron (1998), the Group Environment Questionnaire measures Individual Attractions to the Group-Task (ATG-T), Individual attractions to de Group-Social (ATG-S), Group Integration-Task (GI-T) and Group Integration-Social (GI-S).

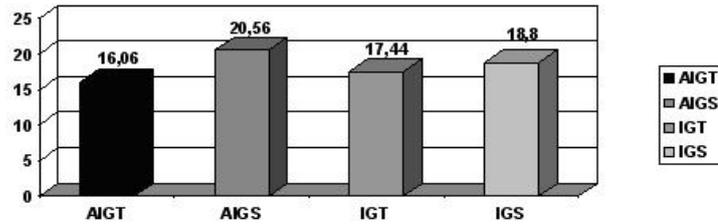
The Sociometry allows to measure groups dynamics, social relations, and also inside and between group dynamics. Accordingly to Barreto (2003), its main metod is the Sociometric Test from which results the group's Sociograma. "O Teste Sociométrico tem a finalidade de verificar a rede de vínculos que constituem a estrutura dos grupos. O Sociograma é a expressão gráfica que objetiva a rede de relações de um grupo" (p. 63).

The data were collected at the first semester of 2004, at the training place. The athletes answered to the questionnaire individually some minutes before the beginning of the train. Descriptive interpretative analysis and the Man-Whitney test for means difference, were used for the data analyses.

**RESULTS AND DISCUSSION**

Initially will be exposed and discusses the group environment results, and later the Sociograma maps, in a way to obtain bigger knowledge about the situation and/or the group's environment. In the Graphic 1 are presented the mean values

obtained through the application of the Group



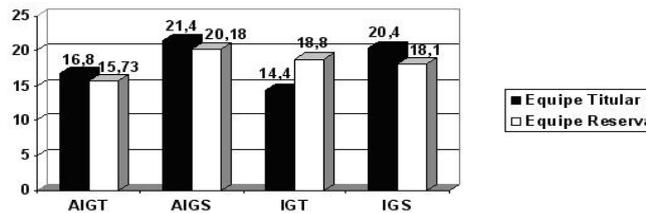
**Graphic 1:** Group Environment Mean Values from a indoor soccer team from Maringá-Paraná.

It can be noticed in the Graphic 1 that the athletes demonstrated to be more individually directed to social than to task since the Social Scales (Individual Attractions to the Group-Social and Group Integration-Social) obtained bigger levels, 20,56 and 18,80 respectively. Meanwhile the Individual Attraction to the Group-Task and the Group Integration-Task showed lower levels (16,06 and 17,44, respectively). The Individual Attractions to the Group-Task and the Group Integration-Social have a score that varies from 4 to 36, and the Individual Attractions to the Group-Social and Group Integration-Task have a varying score from 5 to 45. It can be verified that this group showed a group environment with low attraction even to the task as to social affairs.

Seen that the bigger score demonstrated, or be, the aspect in which the team showed to be more united was the Individual Attraction to the Group-Social, and the lower score to Individual Attraction to the Group-Task, demonstrating that the athletes see themselves more attracted to the group through the social aspect, the relations turned to activities of social interactions. Carron (1998) relates that an team where the members are socially well related and possess a great interaction, may, however, not be winner, in case it is not cohesive in relation to the task.

However, Heuzé, Raimbault and Fontayne (2006) affirm that a good social integration by the group is associated with the adhesion of individual behaviors that promote the team stability and steady teams are more capable of developing a high levels of collective efficacy than unsteady teams. From the individual point of view, many authors mention the importance and describe the benefits of making part of a cohesive group, this benefits include an improved humor (Terry, Carron, Pink et al, 2002), raise of self-esteem (Julian, Bishop and Fielder, 1966), and still, an increase on the believe ate the group abilities to support negative circumstances or group disunion (CARRON, et al, 2003).

To a more detailed analysis of the team group environment the Graphic 2 was elaborated, which evidences the comparison of the mean values obtained by the indoor soccer team's headline and reserve athletes.

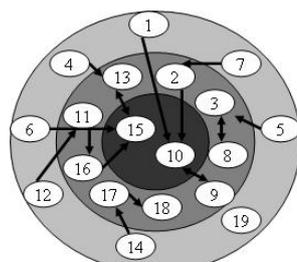


**Graphic 2:** Comparison of group environment means between headline and reserve athletes.

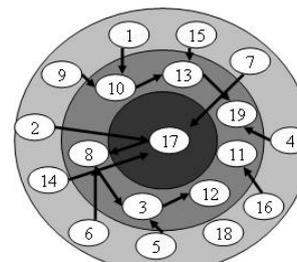
The Graphic 2 shows that the headline team presented a group environment score with superior means than the ones from the reserves, thus this difference was not significant ( $p < 0,05$ ). The p-value to the Individual Attractions to the Group-Task factor was 0,355, while for the Individual Attractions to the Group-Social the p-value was 0,716. The Group Integration-Task and Group Integration-Social factors accused the same p-value (0,841).

The fact that the headline team presented a better level of group environment can be considered a positive point, however, the Group Integration-Task (GI-T), which would mean the collective work to the objective and not only interaction itself wasn't emphasized with the due importance by this sports group's athletes, seen that the headline team showed a score of 14,4 and the reserve team of 18,8 to Group Integration-Task. This way, it can be noticed that the team still needs to work its cohesion aspects to obtain better group environment conditions and consequently better results.

With the objective of obtaining better information about the team's cohesion, the Sociometric test was also realized, where through it, was possible to elaborate some of the group's sociograma, or be it, the graphic expression that objectives the network of relations from a group. At this context, searching a better understanding about the thematic, it is shown the figures 1, 2, 3 and 4, the Sociograma maps related to the members' preferences in the team, related to the attraction and rejection to social and task.

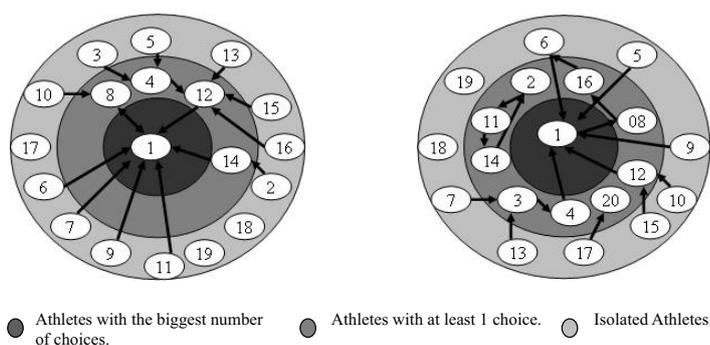


**Figure 1:** Team's Social Attraction Sociograma.



**Figure 2:** Team's Task Attraction Sociograma.

- Athletes with the biggest number of choices.
- Athletes with at least 1 choice.
- Isolated Athletes.



It was noticed from the results' analysis of the Sociogramas 1 and 2 a possible distortion in the interpersonal relations and it is perceived that the subjects 18 and 19, in spite of being mentioned, were not present in the Sociometric application. In the Sociograma data analyses, the group presented cohesion difficulties even for social as for the task, because through the maps it's perceived that a range of athletes didn't receive any choices from the others group members, what shows the isolation inside the team. Although the group's lack of cohesion indicative, the athletes demonstrated a preference to play with those that possess better tactic performance. At this sense, it can be said that the group's structure shows a lack of connection between the athletes, what weakens the sportive team's structure.

Analyzing the Group Environment results it is possible to perceive that the team presented a low cohesion task and social oriented, as seen in the Graphic 1. This can be confirmed in the Sociogramas, because even for the task attraction sociograma as for the social attraction sociograma didn't show themselves well distributed, or be it, some athletes has more mentions than the others leaving the figure with an irregular aspect for a high performance team. The subgroup formation between athletes, since some of the mentions were reciprocal, demonstrates that the team is no cohesive, and still, in the rejection sociogramas some of the athletes were mentioned many times possessing a task and social oriented rejection.

A comparative study realized by Carron et al (2003) with high school athletes showed the importance of individual and group integration to the athletes when related with anxiety (cognitive and somatic symptoms). The athletes who perceived the cognitive symptoms as facilitative also had more positive perception for the Individual Attractions to the Group-Task and for the Group Integration-Task. Besides, athletes that perceived their somatic symptoms as facilitative had more positive perception of Group Integration-Task. Through this analysis, it can be said that, in spite of being important, the studied team did not demonstrate an ideal cohesion for a high performance team, allowing it to interfere in the search of positive results in the competitions they participate.

### FINAL CONSIDERATIONS

The results evidences that the team demonstrated a low level of cohesion, even for social as for task. Being able to observe also differences between the means obtained by the headline and reserve team, being this different bigger for the Group Integration-Task, thus this difference was not significant ( $p < 0,05$ ).

Another aspect that needs to be highlighted is that in a team with a low level of group interaction becomes clear the difficulty of relation between the group members and an incoherence between the way he perceives as an integrant of the group and his real place inside the team.

Finishing, this team demonstrated a low level of interaction and attraction to task and to social presenting a low level of cohesion. It's suggested that new studies that concern the relation between cohesion and performance should be made, and also more detailed studies of the psychological aspects that influence high performance teams in an attempt to reach a better understanding of their dynamics and still proportionate an improve of this aspects and consequently an improve of the motor performance.

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### **COHESION AND HIGH PERFORMANCE SPORT: AN INDOOR SOCCER TEAM ANALYSIS.**

#### **ABSTRACT**

Cohesion is one of the elements that are determinant for a sports team performance, it is a dynamic process that reflects at the tendency of a group to unite and remain united towards their aims and goals. The objective of the present study was to investigate sport cohesion through an analysis of a professional team's group environment. Twenty subjects from a High performance indoor soccer team from the city of Maringá-PR, between athletes and coach staff, were analyzed. AS measurers instruments were used the Group Environment Questionnaire (Carron et al. 1985) and the Sociometry. The data were collected individually at the training. Descriptive statistics (mean and percent), Man-Whitney test for means difference and sociogramas were used for the data analyses and interpretation. Trough the results was verified: The individual task attraction to the group showed 16 points and the group task integration 17,4 points; the individual social attraction to the obtained 20,6 points and social integration 18,8. The titular team showed higher levels for the group social integration and for the individual attraction to the group (task and social) than the reserve team. But the reserve team showed higher levels for the group task integration. The data demonstrated that the group showed deficiency in the matter of cohesion, for both social and task cohesion; however, in spite of the indicators for lack of group cohesion, the athletes demonstrated preference to play with those who possessed better technical performance. So it is concluded: cohesion represents an essential element for a high performance team, showing the influence of grou integration-social and group integration-task.

**Keywords:** Sport cohesion, social relations and motor performance.

### **COHÉSION ET SPORTIF DU HAUTE PERFORMANCE: UNE ANALYSE D'UNE ÉQUIPE DE FUTSAL**

#### **RÉSUMÉ**

La cohésion est un des éléments déterminants pour la performance d'un groupe sportif, c'est-à-dire, un processus dynamique qui se refléchit dans la tendance d'un groupe se joindre et permettre joint dans la quête de ses finalités et de ses buts. Le but, du present travail, a été rechercher la cohésion sportif à travers d'un étude d' environnement de groupe d'une équipe de haute performance. Vingt sujets ont été analysés, entre athlètes et commission technique d'une équipe de « futsal » de la ville de Maringá-PR. Comme instrument de mesure s'est utilisé le protocole d' environnement de groupe (Carron et al. 1985) et la Sociométrie. Les données ont été recueilli au le local de formation, de façon individuelle. Pour l'analyse et l'interprétation des données s'est utilisé la statistique descriptive (moyenne et pourcentage), le test Man-Whitney pour la différence du moyenne et sociogramas. À traves des résultats s'est constaté: l'attraction individuel du groupe pour la tâche a montré 16 points et l'integration du groupe pour elle, 17,4 points; l'attraction individuel du groupe a obtenu 20,6 et l'integration sociale 18,8 points. L'équipe titulaire a montré des indices supérieurs en relation à de l'équipe réserve dans l'integration sociale et dans l'attraction individuel sociale pour la tâche; l'équipe réserve a montré des indices supérieurs dans l'integration du groupe pour la tâche; les données ont démontré que le groupe a montré difficulté de cohésion tant sociale, comme pour la tâche; cependant, malgré de l'indicatif de la manque de cohésion du groupe, les athlètes ont démontré la préférence pour jouer avec celui-là qui ont meilleur performance technique. Il s'est conclu : la cohésion sportif se montre un élément essentiel pour la performance d'une équipe de sport de haute performance démontre l'importance de l'integration sociale et l'intégration du groupe pour la tâche.

**Mots-clés:** sportif cohésion, relation sociale et performance moteur.

### **COHESIÓN Y DEPORTE DEL RENDIMIENTO : UNA ANALISIS DE UN EQUIPO DE FUTSAL.**

#### **RESUMEN**

Cohesión es uno de los elementos determinantes para el desempeño de un equipo deportivo, o sea, un proceso dinámico que se refleja en la tendencia de un grupo se unir y seguir unido en la búsqueda de sus metas y objetivos. El objetivo de este estudio fue investigar la cohesión deportiva a través de análisis de ambiente de grupo de un equipo de alto rendimiento. Fueron analizados 20 sujetos entre atletas y comisión técnica de un equipo de futsal de la ciudad de Maringá-Pr. Como instrumento de medición se utilizó el protocolo de ambiente de grupo (Carron et al.1985) y la Sociometría. Los datos fueron tomados en el local de entrenamiento individual. Para análisis e interpretación de los datos se utilizó de la estadística descriptiva (promedio y porcentual), el teste Man-Whitney para diferencia de promedio e sociogramas. A través de los resultados se verificó: la atracción individual del grupo para la tarea presentó 16 puntos y la integración del grupo para la tarea 17,4 puntos; la atracción individual del grupo obtuvo 20,6 puntos y la integración social 18,8 puntos. El equipo principal presentó índices superiores al equipo reserva en la integración social y en la atracción individual social para la tarea; el equipo reserva presentó índices superiores en la integración del grupo para la tarea; entretanto, a pesar del indicativo de la falta de cohesión del grupo, los atletas presentaron la preferencia por jugar con aquellos que poseen mejor desempeño técnico. Se concluye: la cohesión deportiva se presenta como un elemento esencial para el desempeño de un equipo de rendimiento, demostrando la importancia de la integración social y de la integración del grupo para la tarea.

**Palabras Claves:** cohesión deportiva, integración social y desempeño motor.

### **COESÃO E ESPORTE DE RENDIMENTO: UMA ANALISE DE UMA EQUIPE DE FUTSAL.**

#### **RESUMO**

Coessão é um dos elementos determinantes para o desempenho de uma equipe esportiva, ou seja, um processo dinâmico que se reflete na tendência de um grupo unir-se e permanecer unido na busca de suas metas e objetivos. O objetivo do presente trabalho foi de investigar a coessão esportiva através da análise do ambiente de grupo de uma equipe de alto rendimento. Foram analisados 20 sujeitos entre atletas e comissão técnica de uma equipe de futsal da cidade de Maringá-PR. Como instrumento de medida utilizou-se o protocolo de ambiente de grupo (Carron et al. 2002) e a Sociometria. Os dados foram coletados no local de treinamento de forma individual. Para análise e interpretação dos dados utilizou-se da estatística descritiva (média e porcentual), teste Man-Whitney para diferença de médias e sociogramas. Através dos resultados verificou-se: a atração individual do grupo para a tarefa apresentou 16 pontos e a integração do grupo para a tarefa 17,4 pontos; a atração individual do grupo obteve 20,6 e a integração social 18,8 pontos. A equipe titular apresentou índices superiores à equipe reserva na integração social e na atração individual social e para a tarefa; já a equipe reserva apresentou índices superiores na integração do grupo para a tarefa; os dados demonstraram que o grupo apresentou dificuldade de coessão tanto social, como para a tarefa; entretanto, apesar do indicativo de falta de coessão do grupo, os atletas demonstraram a preferência por jogar com aqueles que possuem melhor desempenho técnico. Assim conclui-se: a coessão esportiva apresentou-se como um elemento essencial para o desempenho de uma equipe de rendimento, demonstrando a influência tanto da integração grupo-tarefa quanto a integração grupo-social.

**Palavras-Chave :** Coesao esportiva, relação social e desempenho motor.