

Coma-Bau, J.; Baiget, E.; Segura-Bernal, J. (202x) Analysis of Cohesion and Perceived Behavior in Professional Handball Players. Revista Internacional de Medicina y Ciencias de la Actividad Física y el Deporte vol. X (X) pp. xx. <http://cdeporte.rediris.es/revista/>___*

ORIGINAL

ANALYSIS OF GROUP COHESION AND PERCEIVED BEHAVIOUR IN PROFESSIONAL HANDBALL PLAYERS

ANÁLISIS DE LA COHESIÓN Y LA CONDUCTA PERCIBIDA EN JUGADORES PROFESIONALES BALONMANO

Coma-Bau, J.¹; Baiget, E.²; Segura-Bernal, J.³

¹ Assistant professor of Physical Activity and Sport Sciences in the University of Vic-Universidad Central de Cataluña (UVic-UCC). Member of the Sport Performance Analysis Research Group (SPARG), UVic-UCC (Spain) jordi.coma@uvic.cat

² Associate professor of Physical Activity and Sport Sciences in the University of Vic-Universidad Central de Cataluña (UVic-UCC). Member of the Sport Performance Analysis Research Group (SPARG), UVic-UCC (Spain) ernest.baiget@uvic.cat

³ Associate professor of Physical Activity and Sport Sciences in the Faculty of Psychology, Education and Sport Sciences, Blanquerna (Ramon Llull University) in Barcelona (Spain) jordisb@blanquerna.url.edu

Spanish- English translator: Laura Arranz Bannon, lauban3@hotmail.com

Acknowledgements: To players and coaches who made this study possible.

Código UNESCO / UNESCO Code: 6199. Otras especialidades psicológicas / Other psychological specialities

Clasificación del Consejo de Europa / Council of Europe Classification: 15 Psicología del Deporte / Sport Psychology

Recibido 23 de noviembre de 2020 **Received** November 23, 2020

Aceptado 30 de enero de 2021 **Accepted** January 30, 2021

ABSTRACT

The objective of this study was to analyse the correlation between perceived leadership behaviours of the Multidimensional Model of Sport Leadership (MML) and the categories of Carron's Model of Cohesion in professional handball players. The sample was composed of 112 players who answered the Leadership Scale for Sport questionnaire (LSS2) and the Group Environment Questionnaire (GEQ). The results ($r =$ from 0.307 to 0.634) show a relationship between the variable ATG-T (ATG-T; Individual Attraction to Group-Task) and the perceived behaviours of the (MML). The players show a tendency towards task-cohesion. Autocratic behaviour is more frequent than democratic

behaviour, and training and instruction obtains the highest values. We conclude that task-cohesion is predominant in high performance players and that the high standards demanded by this category require different coach behaviours.

KEY WORDS: Cohesion, perceived behaviour, leadership, player, coach.

RESUMEN

El objetivo del presente estudio fue analizar la correlación entre las conductas del liderazgo percibido del Modelo Multidimensional de Liderazgo (MML) y las categorías de cohesión del Modelo de Cohesión de Carron en jugadores profesionales de balonmano. La muestra estuvo compuesta por un total de 112 jugadores a los cuales se les administró los cuestionarios Leadership Scale for Sport (LSS2) y el Group Environment Questionnaire (GEQ). Los resultados obtenidos ($r =$ de 0.307 - 0.634) muestran una asociación entre la variable de cohesión (ATG-T) y las conductas percibidas del (MML). Se observa una tendencia de cohesión hacia la tarea por parte de los jugadores. La conducta autocrática supera la democrática y la de entrenamiento e instrucción obtiene los valores más elevados. Concluimos que la cohesión hacia la tarea es la predominante en jugadores de alto rendimiento y que la alta exigencia de la categoría demanda de diferentes conductas del entrenador.

PALABRAS CLAVE: Cohesión, conducta preferida, liderazgo, jugador, entrenador.

1 INTRODUCTION

High-performance and physical education coaches of team sports commonly use the concepts of leadership behaviour in sport and team cohesion considering their importance for the satisfaction and performance of the player and the team (Cox, 2009; Weinberg & Gould, 2010a). The importance of team cohesion is reflected in different investigations (Carron & Chelladurai, 1981; Carron & Colman, 2002; Donnelly, Carron, & Chelladurai, 1978; Ronayne, 2004; Westre & Weiss, 1991; Widmeyer & Williams, 1991).

Different variables can influence team cohesion, such as stability and group size, communication, personal satisfaction, and coach-athlete compatibility, among others. It has been observed that achieving a certain stability can improve team cohesion (Donnelly et al., 1978); also, if the group increases in size, cohesion tends to decrease (Widmeyer, Brawley, & Carron, 1990). In another area, effective communication is an important variable for sharing knowledge and ideas and enabling cohesion (codependency) (Eccles & Tenenbaum, 2004; Wickwire, Bloom, & Loughhead, 2004). Besides, the players' personal satisfaction is positioned as one of the most important variables in the prediction of cohesion (Widmeyer & Williams, 1991), and finally, coach-athlete compatibility is also considered a critical factor for the achievement of team objectives and for the perception of cohesion by those involved (AV Carron & Chelladurai, 1981).

Different studies confirm the significant relationship between team cohesion and individual and / or collective sports performance (Anshel, 2003; Carron & Colman, 2002; Grieve, Whelan, & Meyers, 2000; Mullen & Cooper, 1994). This relationship seems stronger when related to task-cohesion instead of social cohesion, although social cohesion seems to require a greater effort from those involved, and this, in turn, can improve performance (Bray & Whaley, 2001). A positive causal relationship appears between team cohesion and sports performance; the difficulty lies in determining the preferred direction of this relationship. It seems that when the team wins, it is much easier to generate and perceive an increase in cohesion than the opposite (Boone, Beitel, & Kuhlman, 1997; Matheson, Mathes, & Murray, 1997).

Carron (1982) and Carron & Hausenblas (1998), based on traditional research by Festinger (1950) and Lewin (1935), develop the Conceptual Model of Group Cohesion in Team Sports that includes its particular Group Environment Questionnaire (GEQ). The authors propose four characteristics to define cohesion in sport: multidimensional, dynamic, instrumental (clear purpose) and affective (social relationship of the group regarding task and / or socially). Delving into the model, three parts can be distinguished: the antecedents (personal background, environment-situation, leadership and the group's operating structure), the moment (type of group cohesion: task and social cohesion) and the consequences of cohesion both individually and as a group. The interaction between the different antecedents generates a moment of cohesion which can be interpreted under two dimensions (Mikalachki, 1969): (a) towards the task, representing the level of organisation and commitment of the group to the common goals and tasks; and / or (b) towards the social, representing the attraction to the group, interpersonal relationships, team spirit and good atmosphere. Carron, Widmeyer, & Brawley (1985) also distinguish between individual and group. Two different categories arise from this distinction: the perception of the members of the group as a whole (group integration) and individual perceptions of attraction to the group (individual attraction to the group). In conclusion, these authors identify 4 categories: Group Integration Task and / or Group Integration Social (GI-T / GI-S) and Individual Attraction Group-Task and / or Individual Attraction Group Social (ATG-T / ATG-S).

The coach's behaviour and style are fundamental in order to understand team cohesion. Most of the research carried out in the last four decades on the effectiveness of the coach's behaviour tries to identify the most effective features, styles, knowledge, skills, strategies and behaviours. Two of the main theories created to study leadership in sport are the Cognitive Mediation Model by Smoll & Smith (1989) and the Multidimensional Model of Sport Leadership (MML) by Chelladurai & Saleh (1980). Both maintain that for delving into leadership it is necessary to consider different factors: situational, players and coach's individual differences, and behaviour of the members of the group. The MML theory focuses on the influence of the leader's behaviour on the performance and satisfaction of the players. Two blocks of variables are distinguished: the antecedents (situational, leader, and players characteristics) and the behaviour (actual leader behaviour, preferred leader behaviour by the

players, and required leader behaviour). The model postulates that a high level of coherence between the three behaviours results in the players' greater satisfaction and performance, understanding satisfaction as the players' contentment with the style and the coach's leadership behaviours (Chelladurai, 1984; Weiss & Friedrichs, 1986).

Different studies related to non-professional sports examine the relationship between the players' perception of the coach's behaviour and team cohesion (Gardner, Shields, Bredemeier, & Bostrom, 1996a; Pease, DG & Kozub, 1994; Turman, 2003; Westre & Weiss, 1991) concluding that those players who perceive their coaches' behaviour as predominantly democratic and having a high level of training and instruction, social support and positive feedback behaviours, also perceive high levels of task cohesion in the team. At the same time, this shows that the coach's behaviour has a positive or negative effect on the athletes and, simultaneously, on team cohesion. Only two studies present the relationship between leadership (perceived behaviour) and cohesion in a high-performance environment with professional players. On the one hand, a study on football, in which the coaches were perceived as having a significant level of training and instruction behaviour and a low level of democratic behaviour. In the same study, a relationship was observed between high levels of task and social cohesion, and high levels of training and instruction, democratic behaviour, social support and positive feedback (Ramzaninezhad, Keshtan, & Journal, 2009).

On the other hand, a study on indoor football. This study found a positive influence of the coach's leadership style on task cohesion and to a lesser extent on social cohesion. It also revealed that the players did not include the autocratic behaviour as one of the coach's significant features (Nascimento et al., 2018).

Given the importance of group cohesion in a team and how the coach's behaviour and style influence the players (satisfaction - performance) and team cohesion, the objective of this study is to analyse the correlation between the different perceived leadership behaviours in the model (MML), and the different categories of team cohesion in Carron's Model of Cohesion for professional handball players.

2. MATERIAL AND METHODS

This study has a descriptive correlational design and presents the results obtained from the same sample and circumstances as the study published by (Coma-Bau, Baiget, & Segura, 2020).

2.1 Participants

The participants were 112 male players in the highest Spanish male category of the Association of Spanish Handball Clubs (ASOBAL), 40% of the total number of players in the league. The average age of the players was 26.1 years \pm 6.6 (range 18 - 43 years old). Regarding the competitive experience in the category,

for 21.4% of the players it was their first year, for 19.6% their second year and for 58.9% it was at least their third year in the category. All the players were given information about the objectives of the research, the confidentiality of the data and the voluntary nature of their participation.

2.2 Procedure

All the coaches in the ASOBAL league were contacted the season before the registration, the project was presented to them and they were invited to collaborate in it as intermediaries with the players. Their role was to introduce the research to them, encourage them to participate, and facilitate the process of answering the Leadership Scale for Sport (LSS2) and (GEQ) questionnaires. The questionnaires were administered online, using the platform Google Drive, they could be answered by using any instrument connected to the internet (mobile phone, tablet or computer) facilitating this way the answer. They were administered two weeks before the beginning of the competition, so that when the players answered they would have already worked with the team for a minimum of four weeks.

The requisite for being part of the sample was that the players had responded to both questionnaires (LSS2 and GEQ) within the established period. Leaving any of the two questionnaires unanswered meant that the player was excluded from the sample. The decision was taken to administer the questionnaires during the preseason so the largest number of players could participate. The preseason is usually a suitable period for performing tasks and dynamics aimed at team development and training without the tension-anxiety generated by the competition. It was considered that high-performance players, once the competitive period has started, can be more difficult to access and to get their attention to answer the questionnaires, since the competition is their priority and they can disregard minor issues such as these.

2.3 Instruments

The Spanish translation of the Leadership Scale for Sport by Chelladurai and Saleh (1980) was used. Specifically, the LSS2 version (perceived leadership; scale of the players' evaluation of the coach's leadership style), adapted to handball (Mayo, 1997). The questionnaire is made up of 40 items that must be answered on a 5-option Likert scale [always (5), often (4), occasionally (3), rarely (2) and never (1)]. The scale measures 5 different dimensions or factors of the leader's behaviour: two measure the coach's decision making style (democratic and autocratic // leadership styles), two measure the coach's motivational tendencies (social support and positive feedback // motivational factors) and the last one measures the coach's instructional behaviour (training and instruction // task orientation).

This version evaluates 5 dimensions that define the coach's behaviour (Chelladurai, P & Saleh, S, 1980; Crespo, Balaguer, & Atienza, 1994; Weinberg & Gould, 2010b):

1. Training and instruction: This dimension is related to the behaviour aimed at improving the athlete's performance through training and instruction of a technical, tactical and physical nature.
2. Democratic behaviour: Democratic behaviour refers to the coach allowing athletes to be involved in the decision making process.
3. Autocratic behaviour: Behaviour referred to the tendency to make unilateral and independent decisions basically based on personal authority.
4. Social support: This dimension is related to the concern for the welfare of the athletes, seeking harmony and a positive work environment, through the development of good interpersonal relationships among group members.
5. Positive Feedback: Positive Feedback refers to reinforcing athletes and recognising and rewarding good performances.

The LSS is considered a valid instrument with an adequate internal consistency (Cronbach's alpha α) in all behaviours in a variety of studies; Training and instruction (0.74 - 0.86) (Coma, 2019; Dwyer & Fisher, 1988; Crespo et al., 1994; Marcos, 2013); Democratic Behaviour (0.48 - 0.78) (Ruiz-Barquín & de la Vega-Marcos, 2015; Salminen, S.; Liukkonen, 1996; Coma, Baiget & Segura, 2019; Marcos, 2013); Autocratic Behaviour (0.04 - 0.68) (Dwyer & Fisher, 1988; Ruiz, 2007; Marcos, 2013); Social Support (0.57 - 0.84) (Dwyer & Fisher, 1990; Ruiz, 2007; Coma, Baiget & Segura, 2019; Marcos, 2013); Positive feedback (0.45 - 0.85) (Crespo, et al., 1994; Salminen & Liukonen, 1994; Coma, Baiget & Segura, 2019; Marcos 2013).

The second instrument administered was the Spanish adaptation of the Group Environment Questionnaire (GEQ) (Iurbide, Elosua & Yanes, 2010). It is made up of 18 items that must be answered on a 9-point scale, ranging from "totally disagree" to "totally agree". The 18 items are grouped into two dimensions: Group Integration (GI), understood as individual perceptions of similarity, proximity and the group as a whole; and Individual Attraction (AT), understood as individual perceptions of personal motivations that make the group attractive to the player. At the same time, two different orientations are considered: Social orientation (interpersonal attraction that brings the group closer) or Task orientation (it reflects the degree of team work to achieve common goals). This way, 4 dimensions of cohesion are obtained according to Carron's Model of Cohesion (Carron et al., 1985), which are:

1. Group integration-task (GI-T, e.g.: The team works together to reach the proposed performance objectives.) (5 items).
2. Group integration-social (GI-S, e.g.: The members of the team rarely go out together.) (4 items).
3. Individual attraction to the group-task (ATG-T, e.g.: In this team I can reach my full potential) (4 items).

4. Individual attraction to the group- social (ATG-S, e.g: Some of my best friends are in the team) (5 items).

2.4 Statistical analysis

The descriptive analysis includes the results of the arithmetic mean (M), the standard deviation (SD) and the maximum and minimum values for each variable. The normality tests used the Kolgomorov-Smirnov test and revealed an abnormal distribution, using non-parametric tests. Spearman's linear correlation test (*r*) was used for the analysis of the correlation between pairs of variables, whereas the coefficient of determination was used to explain the common variance between the variables. The correlations were classified as trivial (0–0.1), weak (0.1–0.3), moderate (0.3–0.5), strong (0.5–0.7), very strong (0.7–0.9), almost perfect (0.9), and perfect (1.0) (Hopkins, Marshall, Batterham, & Hanin, 2009). The significance level of the tests was predetermined with a confidence interval $p < 0.05$. The analyses were carried out using the software SPSS Statistics (v. 23.0).

3.RESULTS

Table 1. Results of behaviour perceived by players

Variables Behaviours	LSS2		
	M ± SD	Min.	Max.
Training and Instruction	4.1 ± 0.6	2.6	5
Democratic	3.2 ± 0.7	1.4	5
Autocratic	3.5 ± 0.5	1.2	5
Social Support	3.1 ± 0.9	1.2	5
Positive Feedback	3.6 ± 0.9	1.9	5

LSS2: Leadership Scale for Sport, M: Mean; SD: Standard Deviation; Min: Minimum; Max: Maximum

The results show how training and instruction (4.1 ± 0.6) yields the highest values, above those of positive feedback (3.6 ± 0.9). At the same time we can see how autocratic behaviour (3.5 ± 0.5) prevails over a democratic approach (3.2 ± 0.7). Finally, social support (3.1 ± 0.9) gets the lowest score.

Table 2. Results of group cohesion.

Variables Behaviours	GEQ		
	M ± SD	Min.	Max.
ATG-S	3.5 ± 1.3	1.4	7.4
ATG-T	3.5 ± 0.5	2.3	5.3
GI-T	4.6 ± 1.5	1.6	7.8
GI-S	2.9 ± 1.1	1.2	6.2

GEQ: Group Environment Questionnaire, M: Mean; SD: Standard Deviation; Min: Minimum; Max: Maximum

The results show the players' tendency towards Group-Integration Task (4.6 ± 1.5). At the same time we can see that individual attraction to the group-task (3.5 ± 0.5) and to the social (3.5 ± 1.3) have very similar values. Group integration-social gets the lowest score (2.9 ± 1.1).

Table 3. Linear correlation coefficient (r) between perceived behaviours and level of cohesion (n = 112).

Perceived Behaviours	Level of cohesion							
	ATGS		ATGT		GIT		GIS	
	r	r ²	r	r ²	r	r ²	r	r ²
Training	-0.180	-0.032	0.307**	0.136	0.084	0.007	-0.114	-0.012
Democratic	-0.149	-0.022	0.424**	0.179	0.122	0.014	0.218*	0.047
Support	0.205*	0.042	0.412**	0.169	0.067	0.004	0.129	0.016
Feedback	-0.178	-0.031	0.634**	0.401	0.118	0.013	-0.009	0
Autocratic	0.228*	0.051	0.573**	0.328	-0.108	-0.011	0.048	0.002

ATGS = Individual Attraction to the group- social; ATGT = Individual attraction to the group-task, GIT = Group Integration-task, GIS = Group Integration-social, r = Spearman's correlation coefficient de; r² = determination coefficient. ** p<.01, * p<.05.

The results show a positive linear correlation between all perceived behaviours and individual attraction to the group-task (ATG-T). A significant correlation is found with positive feedback (r = 0.634; r² = 0.401) and autocratic behaviour (r = 0.573; r² = 0.328) and a moderate correlation with democratic behaviour (r = 0.424; r² = 0.179), social support (r = 0.412; r² = 0.169) and training and instruction (r = 0.307; r² = 0.136). Regarding the correlation between behaviours

and individual attraction to the group-social (ATG-S), a small correlation is found with social support ($r = 0.205$; $r^2 = 0.042$) and autocratic behaviour ($r = 0.228$; $r^2 = 0.051$). With respect to the correlation between the behaviours and group integration-social (GI-S) a small correlation is found with the democratic behaviour ($r = 0.218$; $r^2 = 0.047$). In the rest of the cases no significant correlations are found.

4 DISCUSSION

This research study analyses the correlation between the coach's behaviour perceived by the players and the team cohesion in professional handball players of the Spanish League (ASOBAL). At the same time, the behaviour perceived by the players in the MML model, and team cohesion following Carron's Model of Cohesion are analysed.

According to the bibliographic review carried out, this is the first study that analyses these variables in professional handball. Regarding the proposed objective, the results show a significant positive linear correlation, to different degrees, between all the behaviours of the (MML) and the individual attraction to the group-task subscale (ATG-T). This pattern could indicate a possible tendency for the player to focus his attention on two aspects; agree and establish individual and / or collective objectives, and create synergies with the coach in relation to the tasks. A positive influence of the coach's style tending towards task is deduced (Chelladurai, 2007; Nascimento et al., 2018; Ramzaninezhad et al., 2009), which could also encourage the player to value and analyse whether the group he belongs to can meet his individual needs (Jorwett & Chaundy, 2004). Apparently the prevalence of task cohesion is common during the group formation stage (Carron & Brawley, 2000).

Different studies focus on the relationship between amateur teams' perceived behaviour and cohesion (Gardner, Shields, Bredemeier, & Bostrom, 1996; Pease, DG & Kozub, 1994; Westre & Weiss, 1991). They conclude that coaches which are perceived by the players as having high values in training and instruction, positive feedback, social support and democratic behaviours, are associated with teams with a high task cohesion. In these studies, the autocratic behaviour does not correlate positively with cohesion. This could possibly be due to the fact that the different studies are carried out with amateur players instead of professional players. The study by Ramzaninezhad et al. (2009), similar to the previous ones but carried out with professional football players, finds low levels of democratic behaviour and high levels of autocratic behaviour. The results obtained in the present study show a significant positive correlation between autocratic behaviour and ATG-T ($r = 0.573$; $r^2 = 0.328$) and ATG-S ($r = 0.228$; $r^2 = 0.051$); furthermore, in both ATG-T and ATG-S, the correlation with the autocratic behaviour is higher than with the democratic behaviour, thus showing that the autocratic style in professional teams can be positively related to cohesion. Kim & Cruz (2016), in their meta-analysis of the influence of leadership styles on cohesion and athlete satisfaction, conclude that the autocratic behaviour in competitive environments (elite) can be related to the players' positive satisfaction, since they consider the sport as highly demanding. Possibly, in professional sports which prioritise the achievement of

pre-established objectives (e.g.: remain in the category, reach play-offs, improve individual performances, etc.); the combination and management of the different behaviours by the coach, including autocratic behaviour, will be understandable and surely required (Turman, 2003).

On the other hand, we observe that positive feedback has the highest correlation ($r = 0.634$; $r^2 = 0.401$). This information is considered relevant due to its magnitude and its implications on the coach's style. Research demonstrates that players who have coaches with a positive orientation tend to have a better relationship with their teammates and with the coach, besides sensing a higher level of group cohesion (Weinberg & Gould, 2010a). In the different studies reviewed, both in amateur and professional environments, positive feedback correlates positively with team cohesion towards task (Murray, 2006; Nascimento et al., 2018; Ramzaninezhad et al., 2009; Shields, Lyle, Gardner, & et al., 1997; Westre & Weiss, 1991). Possibly, the relationship established between positive feedback and the increase in the players' feelings related to rivalry and intrinsic motivation (Jowett & Chaundy, 2004; Mas & Palou, 2010; Vallerand, 1983), might attract their attention towards the task. If this were the case, a relationship-link would be developed of continuous improvement feeding back on the need for interdependent improvement (coach - player).

Focusing on the analysis of the descriptive results of the perceived behaviour, we observe that training and instruction behaviour (4.1 ± 0.6) obtains the highest values, followed by positive feedback (3.5 ± 0.8). These values coincide with those obtained in other studies, from which it can be deduced that training and instruction and positive feedback are basic for the training of sports teams (Urrea, 2015; Chelladurai & Saleh, 1980; Mayo, 1998; Surujlal & Dhurup, 2012; Terry & Howe, 1984). Different studies suggest that coaches have the self-perception of using training and instruction and positive feedback behaviours preferentially over the rest (Coma, 2019; Crespo, Balaguer & Atienza, 1994; Horne & Carron, 1985; Ruiz, 2007; Salminen, S.; Liukkonen, 1996). Surely, the large number of hours of work (workouts on the court) and the high standards demanded by professional sport, orient the coach's behaviour towards factors related to work/training specific to the court and which prevail over the others (Ruiz-Barquín & de la Vega-Marcos, 2015).

The results show that the autocratic behaviour values (3.5 ± 0.5) are higher than those of the democratic behaviour (3.2 ± 0.7). The need for the coach to manage the player and the team by means of setting goals, rules, habits, etc. with the intention of achieving the highest level of performance, will lead him to act autocratically or democratically depending on the different needs. Coaches constantly make decisions based on their knowledge and experience. The establishment of criteria based on their values, and a high success rate in their decisions, will add credibility among the players (Tichy & Bennis, 2007, 2010). Still, in high performance contexts, winning or losing is important and / or decisive, and in many cases it influences the professional future of those involved.

The descriptive results of team cohesion confirm a greater tendency of the players towards task cohesion instead of social cohesion (GI-T: 4.6 ± 1.5 ; ATG-

T: 3.5 ± 0.5 vs. GI-S: 2.9 ± 1.1 ; ATG-S: 3.5 ± 1.3). It is possible that the moment chosen to administer the questionnaires, the preseason, was propitious for generating feelings of proximity, bonding, belonging, commitment and / or individual and collective involvement on both the coach and the players. High-performance sports are always in search of excellence, in this sense, all the actions carried out are focused on creating a favourable environment which enables the improvement of individual and collective performance in order to be able to achieve the objectives (Carless & De Paola, 2000; Carron & Brawley, 2000).

5 CONCLUSION

This study presents the relationship between perceived behaviour and team cohesion in professional handball players. An association between the cohesion variable (ATG-T) and the different perceived behaviours of the Model (MML) is found. The values obtained by positive feedback and autocratic behaviour stand out due to their significance and degree, although there is no cause-effect relationship between the variables. In relation to the coaches' behaviours perceived by the players, the importance of the training and instruction behaviour over the rest is confirmed, thus revealing the relevance of workouts on the court and, at the same time, that the players perceive the coach as more autocratic than democratic. Surely, the high standards demanded by the competition will lead to the use of different behaviours - styles in order to achieve the objectives.

Finally, the analysis of team cohesion shows how the variables related to task prevail over those related to social, inferring that in high-performance teams the relevance of task cohesion is essential if the aim is to achieve the highest level of performance.

REFERENCES

- Anshel, M. (2003). *Sport Psychology: From Theory to Practice*. San Francisco.
- Boone, K. S., Beitel, P., & Kuhlman, J. (1997). The effects of win/loss record on cohesion. *Journal of Sport Behavior*, 20, 125-134.
- Bray, C. D., & Whaley, D. E. (2001). Team cohesion, effort, and objective individual performance of high school basketball players. *The Sport Psychologist*, 15, 260-275.
- Carless, S. A., & De Paola, C. (2000). The Measurement of Cohesion in Work Teams. *Small Group Research*, 31(1), 71-88. <https://doi.org/10.1177/104649640003100104>
- Carron, A. V. (1982). Cohesiveness in Sport Groups: Interpretations and Considerations. *Journal of Sport Psychology*, 4, 123-138.
- Carron, A. V., & Chelladurai, P. (1981). The dynamics of group cohesion in sport. *Journal of Sport Psychology*, 3(2), 123-139. <https://doi.org/10.1123/jsp.3.2.123>
- Carron, A. V., & Hausenblas, H. A. (1998). *Group dynamics in sport* (2a ed.). Morgantown.
- Carron, A. V., Widmeyer, W. N., & Brawley, L. R. (1985). The Development of an

- Instrument to Assess Cohesion in Sport Teams: The Group Environment Questionnaire. *Journal of Sport Psychology*, 7(3), 244-266. <https://doi.org/10.1123/jsp.7.3.244>
- Carron, A. V., & Colman, M. (2002). Cohesion and performance in sport. A Meta analysis. *Journal of sport & Exercise Psychology*, 24, 168-188.
- Carron, A. V., & Brawley, L. R. (2000). Cohesion: Conceptual and Measurement Issues. *Small Group Research*, 31(1), 89-106. <https://doi.org/10.1177/104649640003100105>
- Chelladurai, P., & Saleh, S. D. (1980). http://www.humankinetics.com_eJournalMedia_pdfs_8585.pdf. *Journal of sport Psychology*, 2, 34-45.
- Chelladurai, P. (1984). Discrepancy Between Preferences and Perceptions of Leadership Behavior and Satisfaction of Athletes in Varying Sports. *Journal of Sport Psychology*, 6(1), 27-41. <https://doi.org/10.1123/jsp.6.1.27>
- Chelladurai, P. (2007). Leadership in Sport. En G. Tenenbaum & R. C. Eklund (Eds.), *Handbook of Sport Psychology* (3th ed., pp. 113-135). Hoboken: Wiley.
- Chelladurai, P., & Saleh, S. D. (1980a). Dimensions of Leader Behavior in Sports: Development of a Leadership Scale. *Journal of Sport Psychology*, 2(1), 34-45. <https://doi.org/10.1123/jsp.2.1.34>
- Chelladurai, P., & Saleh, S. D. (1980b). Dimensions of Leader Behavior in Sports: Development of a Leadership Scale. *Journal of Sport Psychology*, 2(1), 34-45. <https://doi.org/10.1123/jsp.2.1.34>
- Coma-Bau, J., Baiget, E., & Segura-Bernal, J. (2020). Analysis Leadership Behaviours in Professional Handball Players. *Revista Internacional de Medicina y Ciencias de la Actividad física y el Deporte*, 10. Recuperado de <http://cdeporte.rediris.es/revista/inpress/artdiferencias1366.pdf>
- Coma, J. (2019). Efectos de la competición en las autopercepciones conductuales de entrenadores de balonmano de alto nivel. *Revista Iberoamericana de Psicología del Ejercicio y el Deporte*, 15(1), 1.
- Cox, R. H. (2009). *Psicología del deporte : conceptos y sus aplicaciones*. Buenos Aires [etc.] : Médica Panamericana.
- Crespo, M., Balaguer, I., & Atienza, F. (1994). Analisis psicométrico de la versión española de la escalade liderazgo para deportes de Chelladurai y Saleh. *Psicología Social aplicada*, 4(1), 5-23.
- Donnelly, P., Carron, A. V., & Chelladurai, P. (1978). Group cohesion and sport.
- Eccles, D. W., & Tenenbaum, G. (2004). Why an expert team is more than a team of experts: A social-cognitive conceptualition of team coordination and communication in sport. *The journal of sport and exercise psychology*, 26, 542-560.
- Festinger, L., Schachter, S., & Back, K. (1950). *Social Pressure in informal groups*. New York: Harper & Row.
- Gardner, D. E., Shields, D. L. L., Bredemeier, B. J. L., & Bostrom, A. (1996a). The Relationship between Perceived Coaching Behaviors and Team Cohesion among Baseball and Softball Players. *The Sport Psychologist*, 10(4), 367-381. <https://doi.org/10.1123/tsp.10.4.367>
- Gardner, D. E., Shields, D. L. L., Bredemeier, B. J. L., & Bostrom, A. (1996b). The Relationship between Perceived Coaching Behaviors and Team Cohesion among Baseball and Softball Players. *The Sport Psychologist*,

- 10(4), 367-381. <https://doi.org/10.1123/tsp.10.4.367>
- Grieve, F. G., Whelan, J. P., & Meyers, A. W. (2000). An experimental examination of the cohesion-performance relationship in an interactive team. *Journal of Applied Sport Psychology*, 12, 219-235.
- Hopkins, W. G., Marshall, S. W., Batterham, A. M., & Hanin, J. (2009). Progressive statistics for studies in sports medicine and exercise science. *Medicine and Science in Sports and Exercise*. <https://doi.org/10.1249/MSS.0b013e31818cb278>
- Horne, T., & Carron, A. V. (1985). Compatibility in Coach-Athlete Relationships. *Journal of Sport Psychology*, 7(2), 137-149. <https://doi.org/10.1123/jsp.7.2.137>
- Iturbide, Elosua, L., & P.Yanes, F. (2010). Medida de la cohesión en equipos deportivos. Adaptación al español del Group Environment Questionnaire (GEQ). *Psicothema*, 22(3), 482-488.
- Jowett, S., & Chaundy, V. (2004). An Investigation Into the Impact of Coach Leadership and Coach-Athlete Relationship on Group Cohesion. *American Psychological association*, 8(4), 302-311. <https://doi.org/10.1037/1089-2699.8.4.302>
- Kim, H. D., & Cruz, A. B. (2016). The influence of coaches' leadership styles on athletes' satisfaction and team cohesion: A meta-analytic approach. *International Journal of Sports Science & Coaching*, 11(6), 900-909. <https://doi.org/10.1177/1747954116676417>
- Lewin, K. (1935). *A Dynamic Theory of Personality*. New York: Read Books Ltd.
- Marcos, L. (2013). El liderazgo y el clima motivacional del entrenador como antecedentes de la cohesión y el rol percibido en futbolistas semiprofesionales. *Revista de Psicología del Deporte*, 22(2), 361-370.
- Mas, A. M., & Palou, P. (2010). Commitment, Enjoyment and Motivation on Young Soccer Competitive players. *The Spanish Journal of Psychology*, 13(2), 609-616.
- Matheson, H., Mathes, S., & Murray, M. (1997). The effect of winning and losing on female interactive and coercive team cohesion. *Journal of Sport Behavior*, 20, 284-298.
- Mayo Santamaría, C. (1997). *El liderazgo en los deportes de equipo: balonmano femenino*. Universitat de Valencia.
- Mikalachki, A. (1969). *Group cohesion reconsidered*. London. Ontario: School of Business Administration, University of Western Ontario.
- Mullen, E., & Cooper, C. (1994). The relationship between group cohesiveness and performance: An integration. *Psychological Bulletin*, 115, 210-227.
- Murray, N. P. (2006). The Differential Effect of Team Cohesion and Leadership Behavior in High School Sports. *Individual Differences Research*, 4(4), 216-225.
- Nascimento, J. R. A., EBSCO, J. R. N., Codonhato, R., Fortes, L. de S., Oliveira, D. V. de, Oliveira, L. P., ... Fiorese, L. (2018). Cuadernos de psicología del deporte. *Cuadernos de Psicología del Deporte*, 18(3), 252-267.
- Pease, D.G & Kozub, S. (1994). Perceived coaching behaviors and team cohesion in high school girls basketball teams. *Journal of sport & Exercise Psychology*, 16.
- Ramzaninezhad, B., Keshtan, H., & Journal, B. (2009). The relationship between coach's leadership styles and team cohesion in Iran football clubs

- professional league. *Brazilian Journal of Biomotricity*, 3(2), 111-120.
- Ronayne, L. S. (2004). Effects of coaching behaviors on team dynamics: how coaching behaviors influence team cohesion and collective efficacy over the course of a season. UM:miami1091747956
- Ruiz-Barquín, R., & de la Vega-Marcos, R. (2015). Adaptación de la escala de liderazgo LSS-3 al fútbol / LSS-3 Leadership Scale Adaptation in Soccer. *Revista Internacional de Medicina y Ciencias de la Actividad Física y del Deporte*, 60(2015), 677-700. <https://doi.org/10.15366/rimcafd2015.60.005>
- Ruiz, R. (2007). Características de liderazgo en el deporte del judo. *Revista de Psicología del Deporte*, 16(1), 9-24.
- Salminen, S.; Liukkonen, J. (1996). *International journal of sport psychology: official journal of the International Society of Sports Psychology. International Journal of Sport Psychology* (Vol. 27). Helsinki: Pozzi.
- Shields, L., Lyle, D., Gardner, E., & et al. (1997). The Relationship Between Leadership Behaviors and Group Cohesion in Team Sports. *The Journal of Psychology*, 131(2), 196-210. <https://doi.org/10.1080/00223989709601964>
- Smoll, F. L., & Smith, R. E. (1989). Leadership Behaviors in Sport: A Theoretical Model and Research Paradigm1. *Journal of Applied Social Psychology*, 19(18), 1522-1551. <https://doi.org/10.1111/j.1559-1816.1989.tb01462.x>
- Surujlal, J., & Dhurup, M. (2012). Athlete preference of coach's leadership style: sport management. *African journal for physical health education*, 18(1), 111-121.
- Terry, P., & Howe, B. . (1984). Coaching preferences of athletes. *The Canadian Journal of Applied Sport Sciences*, 24, 188-193.
- Tichy, N. M., & Bennis, W. G. (2007). *Making Judgment Calls The ultimate act of leadership*.
- Tichy, N. M., & Bennis, W. G. (2010). *Criterio :cómo los auténticos líderes toman decisiones excelentes*. Barcelona etc.: Paidós.
- Turman, P. D. (2003). Coaches and cohesion. The impact of coaching techniques on team cohesion in the small group setting. *Journal of Sport Behavior*, 26, 86-106.
- Urra, A. (2015). Análisis del liderazgo preferido, percibido y observado por técnicos y deportistas en fútbol formativo: un estudio de caso. *Cuadernos de Psicología del Deporte*, 15(1), 197-210. <https://doi.org/10.4321/S1578-84232015000100019>
- Vallerand, R. J. (1983). The Effect of Differential Amounts of Positive Verbal Feedback on the Intrinsic Motivation of Male Hockey Players. *Journal of Sport Psychology*, 5(1), 100-107. <https://doi.org/10.1123/jsp.5.1.100>
- Weinberg, R. S., & Gould, D. (2010a). *Fundamentos de psicología del deporte y del ejercicio físico*. Madrid: Editorial Médica Panamericana. SWeinberg y gould 2010__Orightresult__U__X1?lang=cat
- Weinberg, R. S., & Gould, D. (2010b). *Fundamentos de psicología del deporte y del ejercicio físico* (Vol. 4a). Madrid: Panamericana.
- Weiss, M. R., & Friedrichs, W. D. (1986). The Influence of Leader Behaviors, Coach Attributes, and Institutional Variables on Performance and Satisfaction of Collegiate Basketball Teams. *Journal of Sport Psychology*, 8(4), 332-346. <https://doi.org/10.1123/jsp.8.4.332>
- Westre, K. R., & Weiss, M. R. (1991). The Relationship between Perceived Coaching Behaviors and Group Cohesion in High School Football Teams.

- The Sport Psychologist*, 5(1), 41-54. <https://doi.org/10.1123/tsp.5.1.41>
- Wickwire, T. L., Bloom, G. A., & Loughhead, T.. (2004). The environmental structure and interaction process of elite sarrie-sex dyadic sport teams. *The Sport Psychologist*, 18, 381-396.
- Widmeyer, W. N., Brawley, L. R., & Carron, A. V. (1990). The Effects of Group Size in Sport. *Journal of Sport and Exercise Psychology*, 12(2), 177-190. <https://doi.org/10.1123/jsep.12.2.177>
- Widmeyer, W. N., & Williams, J. M. (1991). Predicting Cohesion in a Coacting Sport. *Small Group Research*, 22(4), 548-570. <https://doi.org/10.1177/1046496491224007>

Número de citas totales / Total references: 61

Número de citas propias de la revista /Journal's own references: 3

PENDIENTE DE PUBLICACIÓN / IN PRESS