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## **ORIGINAL**

# GENDER-BASED ANALYSIS OF PLAYERS' PERCEPTIONS OF THEIR COACH

# ANÁLISIS EN FUNCION DEL GENERO DE LOS JUGADORES SOBRE LA PERCEPCION QUE TIENEN DE SU ENTRENADOR

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#### **ABSTRACT**

This study aimed to analyze gender differences in athletes' perception of their coaches' authentic leadership style, perceived justice, competence, and attention to basic psychological needs. A total of 217 soccer and handball players (147 men and 70 women) participated. In contrast to male athletes, female athletes showed higher levels in the selected variables. This study should be helpful for coaches to identify their athletes' different perceptions depending on gender. Consequently, coaches may use a different approach depending on their team's gender.

**KEY WORDS:** sport psychology; coach performance; leadership; gender; basic psychological needs

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#### **RESUMEN**

El objetivo de este estudio fue analizar en función del género de los jugadores la percepción que tienen de sus entrenadores respecto a su estilo de liderazgo auténtico, justicia percibida, competencia y atención a las necesidades psicológicas básicas. Participaron en el estudio 217 jugadores de fútbol y balonmano (147 hombres y 70 mujeres). Las deportistas de género femenino a diferencias de los de género masculino, mostraron niveles más altos en las variables psicológicas seleccionadas. Este estudio debería ser útil a los entrenadores para reconocer cuales son las percepciones de sus deportistas, y de este modo, poder matizar su intervención en función del género del equipo al cual se entrene.

PALABRAS CLAVE: liderazgo; justicia; competencia; necesidades psicológicas básicas

#### 1 INTRODUCTION

Sports training can be considered a social process since coaches and athletes constantly interact in a specific training context, leading to an intricate group of objectives, demands, and outcomes. Coaches provide quality training to athletes to develop their technical-tactical and physical abilities and encourage them to achieve greater athletic performance. The results achieved depend on the coach's priorities, strategies, the created environment, and general competence as a coach. For example, Çağlar et al. (2017), in research performed with young team sports athletes, found that the environment created by the coach was a significant predictor of commitment. Therefore, leadership is a complex process that includes a wide set of skills, including understanding the dynamics of sports groups. Thus, knowing the possible differences in gender of athletes in their perception of their coach could be considered meaningful. The study of variables such as (authentic) leadership style, perceived justice, competence, and attention to basic psychological needs can provide the coach with essential information to optimize the performance of their sports teams.

Much research has focused on determining which leadership style could fit the needs of athletes. Weinberg and Gould (2003) indicate that athletes prefer more democratic and participative leadership behaviors that allow them to make decisions. In recent years, authentic leadership has emerged and been defined as "a pattern of leader behavior that draws upon and promotes both positive psychological capacities and a positive ethical climate, to foster greater self-awareness, an internalized moral perspective, balanced processing of information, and relational transparency on the part of leaders working with followers, fostering positive self-development." (Walumbwa et al., 2008, p. 94). Different research associate this leadership style with the development of a positive environment (Rego et al., 2014) and emotional, physical, and cognitive commitment in the positive development of followers (Avolio & Gardner, 2005; Gardner et al., 2011; Leroy et al., 2015). Followers with good relationships with leaders trust them more (Burke et al., 2007; Caza et al., 2015), and when this relationship is reinforced, the followers try harder and better (Colquitt et al.,

2007; Whitener et al., 1998). It has been demonstrated that authentic leadership increases confidence in followers, promotes a positive psychological environment, and increases commitment because authentic leaders are coherent in their values, transparent with their followers, and objective in decision-making (Banks et al., 2016; Giallonardo et al., 2010; Gill & Caza, 2015). Authentic leadership is positively related to success, team commitment, and athlete satisfaction (Garza, 2016; Kim, Kang & Lee, 2013; Tracey, 2016), coach competence (Soto et al., 2021), and perceived justice (González-Ponce, 2018). Generating a positive team climate seems to be an aspect that maintains strong relationships with authentic leadership, psychological capital, and athlete commitment. This relationship should be considered moderated by athlete and coach gender (Macdowell et al., 2017).

Likewise, the decisions that coaches make and how the athletes perceive these have been analyzed in different studies (Kim & Andrew, 2013, 2015; Martínez & Cervelló, 2016). Perceived justice is a predictor of performance and is related to athlete satisfaction, commitment, and effort (Nikbin et al., 2014) and team cohesion (Leo et al., 2011; Leo et al., 2010). Colquitt (2001), in the field of team sports, identified four dimensions of justice: procedural, distributive, interpersonal, and informational. Apparently, the positive effects of a greater perception of justice by the athlete promoted by their coach will be important for the team's performance; therefore, knowing if there are differences in perception depending on the male and female gender of the athletes could provide important information in the sports environment.

Another variable that directly relates to the efficacy of coach competence has been defined as an assessment of the coach's ability to affect player learning and performance. Myers et al. (2010) consider the perception of competence as a multidimensional measure and identify the following dimensions: competence to motivate, to lead, to teach skills, and develop character. The perception of coach competence by the athletes will, according to different authors (García-Calvo et al., 2014b; Conzález-Ponce et al., 2018; Myers et al., 2011), be a variable of weight in the relationship between both and will determine the coach's effectiveness (Villalon & Martin, 2019) and modulates the effects of communication (Sánchez et al., in press). The more justice and competence the players perceive from their coaches, the better their relationships. Coaches can strongly influence athletes' performance, behavior, psychology, and emotional well-being (Horn, 2008). Self Determination Theory studies the degree to which human behavior is voluntary or self-determined and considers the needs of autonomy, competence, social relationships, and basic psychological needs and their satisfaction for developing self-determined motivation (Deci & Ryan, 1985) and psychological well-being (Deci & Ryan, 2000). Other research has examined the interpersonal styles of coaches in sports contexts (Aguirre-Gurrola et al., 2016; Ng et al., 2012), focusing especially on how they affect the perception of autonomy support (Adie et al., 2012; Stenling et al., 2015). On the other hand, supporting the athlete's sense of competence is related to the coach providing clear and understandable guidelines and expectations through appropriate athlete feedback (Reeve & Su, 2014). The importance of the climate created by the coach to facilitate social relationships between team members and how the coach's attention to this need is perceived according to

gender has evoked interest in the scientific field with mixed results (Gómez-Rijo et al., 2014; Parra-Plaza et al., 2018; Wilson et al., 2006) and between the level of self-determination and the satisfaction of basic psychological needs according to gender and its incidence on the perception of the usefulness of sport (Amado et al., 2015).

Therefore, after analyzing the variables involved in our research, the main objective of this study is to know the differences in gender regarding the perception of the authentic leadership style, perceived justice, competence, and the attention to basic psychological needs.

#### 2 METHOD

#### 2.1 SAMPLE

A total of 217 soccer and handball players participated in this study; 147 men (67,7%) and 70 women (32,3%). The mean age of the sample was 17 years (SD=4). All players participated in a regional competition and had a mean experience of 10 years (SD=4). Finally, it is important to point out that the participants belonged to 16 different teams with a main coach for each team; all were men.

#### 2.2 INSTRUMENTS

Authentic Coach Leadership. This variable was assessed with the Authentic Leadership Questionnaire (ALQ) (Walumbwa et al., 2008) in the Spanish version validated by Moriano et al., 2011. This instrument consists of 12 items with a Likert-type response of 1 (never) to 7 (always). The mean of the scores of the items was used as a final score. The scale had good reliability (Cronbach's  $\alpha = 0.92$ ).

Perceived Justice A Colquitt adaptation (2001) carried out by García-Calvo et al. (2014) and adapted to the specific sports framework was used to assess this variable. This instrument consists of 12 items with a Likert-type response of 1 (never) to 7 (always). The mean of the scores of the items was used as a final score. Finally, this questionnaire also had good reliability (Cronbach's  $\alpha = 0.87$ ).

Perceived coach competence. This variable was measured with the Athletes' Perceptions of Coaching Competency Scale (APCCS II-HST) from Myers, Chase, Beauchamp, & Jackson (2010), validated in Spanish (González-Ponce et al., 2017). This scale consists of fifteen items with a Likert-type response from 1 (totally incompetent) to 7 (totally competent) distributed into four subscales: the coach's competence to motivate (Cronbach's alpha = 0,72), to make decisions and manage the team (Cronbach's alpha = 0,75), to teach and manage players' skills (Cronbach's alpha = 0,77), and to positively influence players (Cronbach's alpha = 0,67).

Perception of Support of Basic Psychological Needs. This variable was assessed with the Questionnaire of Basic Psychological Needs Support

(QBPNS) (Sánchez-Oliva et al., 2013) adapted to the sports context. This instrument has fifteen items with a Likert-type response from 1 (totally incompetent) to 7 (totally competent) distributed into three subscales: *autonomy* (Cronbach's  $\alpha = 0.76$ ), *competence* (Cronbach's  $\alpha = 0.78$ ) and *relationships* (Cronbach's  $\alpha = 0.83$ ).

#### 2.3 PROCEDURE

The participants were informed of the study methodology, which guaranteed their confidentiality and anonymity at all times. We requested their participation and told them that this study was completely voluntary and that they could withdraw at any time. Once they agreed to participate, they signed written informed consent and began to answer the questionnaire in a private room. The mean time to complete the questionnaire was 12 minutes. This research respected the standards of the Declaration of Helsinki.

#### 2.4 STATISTICAL ANALYSIS

An α of 0,05 was used for all analyses. Likewise, two one-factor MANOVA were used to study differences between genders and the perceived competence of the coach (ability to motivate, make decisions, lead the team, teach and educate skills, and positively influence character) and the perception of support for basic psychological needs (autonomy, competence, and relationships). An a posteriori ANOVA was used to determine the competencies and basic psychological needs where gender was found.

Finally, a t-test for independent samples was used to study gender differences in authentic leadership and perception of justice. Cohen's d (Cohen, 1988) was used in all analyses of independent samples as an indicator of effect size.

#### **3 RESULTS**

The descriptive information of the study variables is shown in Table 1.

**Table 1.** Description of the dependent variables according to the independent variable gender.

Dependent variables	Gender	М	SD	Mín.	Máx.
Authentic leadership	man	5,18	0,97	2,17	6,92
	woman	5,49	1,17	1,67	6,83
Perceived Justice	man	5,21	0,96	2,17	7,00
	woman	5,55	0,98	3,00	7,00
Competence: motivate	man	3,84	0,67	2,00	5,00
	woman	3,95	0,83	1,75	5,00
Competence: decision making	man	3,55	0,68	1,50	5,00
	woman	3,65	0,93	1,50	5,00
Competence: teach skills	man	3,77	0,69	1,00	5,00
	woman	4,08	0,71	2,00	5,00
Competence: influence players	man	4,01	0,67	2, <b>3</b> 3	5,00
	woman	4,19	0,78	1,67	5,00
Basic psychological need: autonomy	man	3,37	0,78	1,00	5,00
	woman	3,28	0,88	1,25	4,75
Basic psychological need: competence	man	4,03	0,66	2,00	5,00
	woman	4,28	0,68	1,75	5,00
Basic psychological need: relationships	man	4,13	0,70	2,00	5,00
	woman	<b>4,2</b> 1	0,86	1,25	5,00

<sup>\*</sup> Note:  $n_{men} = 147$ ,  $n_{women} = 70$ .

First, women had a higher score in the perception of authentic leadership (t(215) = -2,05; p = 0,042; d = 0,29) and perceived justice (t(215) = -2,38; p = 0,018; d = 0,35) of their coach.

Regarding the perceived competence of the coach, a MANOVA was performed that included the dimensions of competence (ability to motivate, make decisions, lead the team, teach and educate players' skills, and positively influence players) as dependent variables and gender as an independent variable. First, Box's M test was not significant (M = 18.62; p = 0,052); therefore, the equality of the covariance matrices of the dependent variables can be assumed. MANOVA was significant for the variable gender (Wilks lambda = 0,95; F(4, 212) = 2,96; p = 0,021). The a posteriori ANOVA showed that gender differences were only found in the ability to teach and educate skills (F(1,215) = 9.75; p = 0.002; d = 0.44), with women showing a higher score (see Table 1).

A final MANOVA was performed that included basic psychological needs (autonomy, competence, and relationships) as dependent variables and gender as the independent variable. Box's M test was not significant (M = 11.43; p = 0,082); therefore, the equality of the covariance matrices of the dependent variables did not differ. MANOVA was significant for the variable gender (Wilks lambda = 0,93; F(3, 214) = 5,15; p = 0,002). The univariate ANOVA revealed that women had a higher basic psychological needs score than men (F(1,215) = 6,35; p = 0,012; d = 0,37) with no significant differences in autonomy and relationships.

#### **4 DISCUSSION**

Considering the main objective of this study, to know the gender differences related to the perception of their coach in the variables authentic leadership, perceived justice, competence, and attention to basic psychological needs, we discuss the results.

First, it is important to point out that female players had a better perception of the variable authentic leadership than men. Considering the dimensions of this leadership style, we can state that women, unlike men, perceive their coach as processing information in a more balanced manner. The coach internalizes their values and principles and mediates trust in relationships by publicly sharing information and perceiving levels of self-awareness that allow them to understand their strengths and weaknesses. The characteristics of the authentic leadership style can be associated with more democratic leader behaviors that promote the participation of followers in decision-making, aspects that athletes prefer, as already shown (Weinberg & Gould, 2003). On the other hand, the effects that are associated with this leadership style, team commitment and athlete satisfaction (Bandura & Kayussano, 2018; Kim et al., 2013; Tracey, 2016), coach competence (Soto et al., 2021), and perceived justice (González-Ponce, 2018) will be reinforced in female teams as opposed to male. Likewise, the results in this research concur with Macdowell et al. 2018, who concluded that the perception of authentic leadership of their coaches seemed more influenced when their coach was a man.

The coach's leadership style has a powerful influence on the level of athlete commitment. The athlete's perception of justice with the decisions that the coach adopts is related to desirable behaviors and better group dynamics. Female players perceive that their coaches are significantly fairer in athletes' decisions. This fact could be because women prefer more democratic leadership styles than men. On the other hand, these results reinforce the positive and significant relationship between perceived justice and authentic leadership (González-Ponce et al., 2018). Thus, we can consider that the effects associated with a greater perception of justice, such as satisfaction, commitment, effort, team unity (Nikbin, 2014) and cohesion (Leo et al., 2010, 2011), are generally reinforced in female teams in contrast to male teams.

Regarding coach competence, a variable that has been associated with leadership effectiveness and the influence on the athlete and coach relationship, we found that in the dimension ability to teach and educate player skills, there are differences between genders; female players significantly better perceive their coaches than male players. These results could be interpreted in the same line of previous studies (González-Ponce, 2018), where a greater capacity of the coach in this dimension is related to fewer relationship conflicts. In other words, the finding that players perceive their coach as more competent to teach and educate skills would indicate that there could be a lower level of relationship conflict in female teams than in male teams. The results of this study can be modulated by the perception that athletes have of their male coaches since they consider them more skilled (Frey et al., 2006; Kalin & Waldron, 2015; Parkhouse & Williams, 1986).

Regarding the coach's attention to basic psychological needs, it should be noted that players obtained significant results from the coach's attention to the need for competition, unlike players who did not show any difference. This finding could indicate that female players perceive, unlike men, that their coaches provide clear and understandable guidelines, managing to instill a sense of competence. On the other hand, the results do not coincide with other research in which it was found that women had greater satisfaction with the need for a relationship (Gené & Latinjak, 2014; Moreno et al., 2007, Parra-Plaza et al., 2018). Considering this fact, Niemiec et al., 2006 and Markland Tobin, 2010 argue that the three support dimensions are related. The findings of this research could be additionally interpreted in the sense of this interrelation, determining that female players feel better attention to basic psychological needs by their coaches than male players. Nevertheless, there is no consensus about the possible differences between men and women. concerning the satisfaction of basic psychological needs since other studies have not found differences (Sánchez & Núñez, 2007; Wilson et al., 2006) and others found greater satisfaction of the need for relationship and competence in men (Brunet & Sabiston, 2008).

#### **5 CONCLUSIONS**

The main conclusions that can be drawn from this research are the significant differences between athletes of different genders in the perception of the authentic leadership style of their coach, perceived justice, competence in teaching and educating skills, and the basic psychological need for competence. This study should be useful for coaches to recognize their players' perceptions and refine their strategies depending on the gender of the team they train.

Therefore, according to the results of this study, coaches should consider the gender of the athletes they train so that their leadership style is appropriate to the gender of the players and thus effective.

### 6 FUTURE PROSPECTS

Since significant differences between women and men in relation to the variables analyzed were observed, it would be positive to continue with this line of research and select a sample of professional women's and men's team sports. Similarly, several measurements could be made throughout the season to assess the fluctuations of authentic leadership style, perceived justice, coach competence, and attention to psychological needs. It could also be convenient to introduce the variable of coach's gender in future research.

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