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1

Antecedents and consequences of trust on a virtual team leader

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Abstract

Purpose – The purpose of this paper is to examine, among the possible causes, whether trust in the leader is one of the most relevant factors on the success of a virtual work team by analyzing different antecedents of the trust and its consequences.
Design/methodology/approach – The influence that certain physical and behavioral characteristics of the leader (attractiveness, empathy and justice) exert on the degree of trust is evaluated. On the other hand, the influence of trust on the efficiency of the team, in terms of organizational citizenship behavior and commitment, is analyzed. To test the model, a survey was conducted on real work teams and the data were analyzed through a model of structural equations.
Findings – The results support the hypotheses and consequently, the relevance of trust in the leader. Specifically, the leader's physical and behavioral characteristics have a significant effect on the trust in the leader. This trust results in greater organizational efficiency.
Originality/value – Despite the undisputable growth in the number of companies using virtual teams, it is also true that many of these teams fail to perform. In this sense, this paper analyzes if certain factors related to leadership can be relevant when influencing the efficiency of a virtual work team. This paper contributes to a better understanding of the internal processes within a virtual team in order to maximize the chances of success in this type of organizations.
Keywords Leadership, Trust, Justice, Empathy, Virtual team, Attractive
Paper type Research paper

1. Introduction

Virtual teams are ever more important in organizations and their growth and popularity continues to rise. However, these teams are more difficult to manage than traditional teams. Virtual team members are geographically dispersed, they interact electronically through telematic networks, have diverse roles and work in temporary systems, therefore there may be team members working in different time zones (Jarvenpaa and Leidner, 1999). They are frequently self-managed knowledge-based teams with distributed expertise and that can be formed or dissolved depending on the specific objectives of the organization (Jarvenpaa *et al.*, 2004). The management of these teams is more difficult than for traditional teams since in traditional teams working relationships are developed naturally through the face-to-face exchange of information, however, in a virtual team, where communication is carried out through electronic means, team coordination becomes much more complex and communication is less fluid. A study carried out by OnPoint (2013), found that 25 percent

of virtual teams are not fully effective, 27 percent of stakeholders involved with virtual teams perceive their overall performance to be only adequate or less than adequate and, in terms of performance, 17 percent of virtual teams are rated as less than adequate. These results coincide with another study undertaken by MIT Sloan Management (2009), according to which only about 18 percent of the virtual teams studied achieve a high degree of success. What are the reasons that explain the failure of these virtual teams?

Trust is a key factor in social and economic relationships and is therefore one of the most determinant factors of performance within an organization (Mackenzie, 2010). However, in a virtual environment, the traditional mechanisms by which trust is built may not work (e.g. the lack of face-to-face interaction and the absence of non-verbal language reduces the richness of the communication between team members). However, it is precisely in this virtual environment where trust becomes more necessary, since it helps reduce the psychological distance between team members (Jarvenpaa and Leidner, 1999) and create a sense unity in the team (Wilson *et al.*, 2006).

On the other hand, a key success factor for a virtual team is leadership (Morgeson *et al.*, 2010). The literature recognizes the challenge that managing a virtual team poses as compared to managing a traditional team (Hoch and Kozlowski, 2014). A virtual leader is someone that must use IT tools such as collaborative software and online communication tools, to manage a team of people who are geographically dispersed, to meet a specific objective. These leaders must make a greater effort to coordinate the team's tasks, build relationships among team members and facilitate team processes (Zigurs, 2003). Studies such as Gilson *et al.* (2015) cite leadership as one of the most relevant research topics in the field of virtual teams.

The study of trust in the leader is the primary objective of this research, more specifically to analyze its possible antecedents and consequences within the context of a virtual environment. Although the literature highlights trust, both between team members and in the leader, as one of the important variables in the efficiency of a virtual team (Muethel *et al.*, 2012; Lipnack and Stamps, 2000), there is a certain consensus regarding the need to revise traditional patterns of leadership in order to adapt them to what is a completely different organizational reality. However, prior research has not reached a clear consensus when it comes to establishing management patterns for virtual teams and it is still not clear that traditional control mechanisms can be applied to virtual work teams (Bisbe and Sivabalan, 2017).

For all the above, this work analyzes the physical and behavioral characteristics of the leader that have to be perceived by their subordinates in order to create trust among the members of the group, as well as the consequences of this trust in organizational efficiency refers. Although all these variables have been analyzed in traditional environments, the present work intends to broaden the work analyzing these variables within a virtual work environment, given that the literature has not analyzed in depth the characteristics that a virtual leader must possess in order to build trust in these types of environments.

To conduct this research, this paper is structured as follows: first, there is a review of the key variables of trust in the leader. The following section corresponds to the research model and the formulation of the working hypotheses. The methodology used to corroborate the hypotheses is then reviewed and, finally, the last two sections correspond to the results and conclusions of the study.

2. Theoretical and conceptual framework.

In the following section, the key variables used in this study are reviewed, as are the theories that underpin them.

2.1 Trust in the leader

Trust is a construct of great relevance and consequently numerous definitions of trust have been put forward, especially at the individual level. However, the vast majority of them revolve around

two key aspects (Dietz and Den Hartog, 2006). First, the predisposition to trust, which refers to expectations, beliefs or attitudes toward the other person and the intention to trust them. Second, the intention to accept some degree of vulnerability derived from the risk of trusting the other party (Möllering, 2006; Curras-Perez et al., 2017). Along these lines, one of the conceptualizations most used in the literature is that proposed by Mayer et al. (1995), according to which trust is the willingness of a party to be vulnerable to the actions of another party based on the expectation that the other will perform a particular action important to the trustor, irrespective of the ability to monitor or control that other party. Furthermore, Mayer et al. (1995) take into account three antecedents on which the trustworthiness of the trustee is evaluated, ability, which refers to the competencies and skills of the trustee, benevolence, which refers to the motives and intentions of the trustee for a particular action; and integrity, which is the antecedent of the trusting process that refers to the principles governing the conduct of the trustee.

In this online context, trust is acknowledged as one of the most influential factors in allowing an efficient exchange of information and knowledge among team members to be developed (Kim et al., 2008; Guinalíu and Jordán, 2016). Trust plays a key role in the context of online decision-making, as well as in sustaining the relationships within the work team (Kim et al., 2008). Taking into account the difficulties of deploying formal and informal controls in virtual contexts, a line of research has emphasized the importance of interpersonal trust to manage interdependent tasks in overcoming the pitfalls caused by dispersion (e.g. Jarvenpaa and Leidner, 1999; Muethel et al., 2012; Staples and Webster, 2008). However, knowledge of how trust works in a traditional team cannot be transferred directly to a virtual context due to the innate structural characteristics of the latter. On the one hand, virtual teams have a much higher degree of task interdependence (Lipnack and Stamps, 2000), and on the other hand, hierarchy takes on a much more relevant role due to the continuous coordination that is necessary between leaders and subordinates in a dispersed context (Bell and Kozlowski, 2002).

Furthermore, communication in a virtual team is much more limited since communication is fragmented, it lacks non-verbal communication and the communication is not as rich. All this reduces the ability to build and maintain interpersonal trust in virtual environments (Gibson and Cohen, 2003). In this sense, the Information Richness Theory (Daft et al., 1987) postulates that communication differs in richness depending on the medium used to transmit it. These authors present a hierarchy of levels of communication that reflects the richness of their content, in order of decreasing richness: face-to-face communication, telephone, personal documents such as e-mails and electronic documents. The Information Richness Theory suggests that different communication modes have different linguistic ability to transmit social cues and capacity to elicit an immediate response to the message (Saparito and Gopalakrishnan, 2009).

2.2 Perceived attractiveness
Previous research in the area of social psychology and marketing has proven that the perception of the person who delivers a message has a clear influence on the effectiveness of that message (Reingen and Kerman, 1993). On the other hand, the effect of attractiveness has drawn the attention of social psychology for many years. In the early works of Kelman (1961), it was argued that the attractiveness of the person who delivers a message is a relevant dimension that influences whether or not the message is approved by the receiver. Studies measure attractiveness based on subjective rankings of people's physical appearances (Mocan and Tekin, 2010; Hamermesh and Abrevaya, 2013). This approach is consistent with standard dictionary definitions of beauty as "the quality or aggregate of qualities in a person or thing that gives pleasure to the senses or pleasurably exalts the mind or spirit" (Hamermesh, 2011, p. 11).

With the objective of acknowledging physical attractiveness as an objectively measurable trait, previous research has focused on the deductions made by people concerning their perception of other people's appearance. Articulated through stereotypes such as "What is beautiful is good" (Dion et al., 1972; Lorenzo et al., 2010), "You can judge the book by its cover"

(Yamagishi *et al.*, 2003) or "Beauty Pays: Why Attractive People are more Successful" (Hamermesh, 2011). One of the most renowned theories in the literature on the effect of physical attractiveness is that of Thorndike (1920); this theory acknowledges a "halo effect" which refers to a cognitive bias by which the perception of one particular attribute of a person (in this case, the attractiveness of the leader) influences the perception of the rest of that individual's traits. Thorndike (1920) was the first to demonstrate through empirical evidence that physical attractiveness is the variable that most evokes the halo effect. Physical attractiveness gives people measurable information about the halo effect, and it is some of the characteristics of physical attractiveness that best evoke it. The role of attractiveness in evoking the halo effect is supported by numerous studies. One recent study (Zhao *et al.*, 2015) revealed that attractiveness can affect the perception we have of a person's life, success and personality.

Furthermore, people often assign positive attributes to attractive people and negative attributes to less attractive people (Eagly *et al.*, 1991). In this sense, more physically attractive people are usually more successful than unattractive ones, given that there is a belief that attractive people have a series of more positive traits attributed to them in comparison to less attractive people (Riggio, 1986). The effect of physical attractiveness has also been studied in a virtual context, specifically studies such as Zhao *et al.* (2015) analyze whether individuals coordinate themselves differently based on the attractiveness of an individual in a virtual environment.

2.3 Perceived empathy

Emotions are a fundamental aspect of the psychological functioning of human beings. Affection, moods, emotions and all other aspects related to emotional intelligence have generated a wide debate in the psychology literature (e.g. Barrett, 2006; Izard, 1992). From a social functional point of view, emotions signal relevant information that can be used to understand how to interact successfully with others (Keltner and Kring, 1998). Likewise, empathy can be defined as an exchange of positive and negative emotions that fosters a connection between people (Plutchik, 1980).

Although in the literature there is some debate concerning the construct of emotional intelligence and its influence on leadership, Ashkanasy and Daus (2005) defend the idea that the relational aspects of an activity will need to draw upon the emotional intelligence of the person in charge. Therefore, leaders who have greater ability to perceive the emotions of others, and understand the impact of their actions, will be more likely to play an effective leadership role (Day and Carroll, 2004). Plutchik (1980) describes empathy as an exchange of positive and negative emotions that fosters bonding among people. The concept of empathy has also been analyzed in business management. Goleman *et al.* (2002) argue that empathy is the fundamental competence of social awareness and the condition *sine qua non* of effectiveness for all work within the company. Furthermore, they argue that effective leaders have an impact on their subordinates that leads them to have a stronger emotional response and greater efficiency in their work.

Likewise, the literature acknowledges the fact that a factor such as empathy can be perceived through a virtual environment in which there is no physical exchange of information. In this sense, studies such as those of Carrier *et al.* (2015) show that it is possible to empathize (virtual empathy) through computer-mediated communication. Furthermore, it has been proposed that electronic communication environments, such as social networks, can facilitate empathy through easy and frequent access to other people in similar situations (Caplan and Turner, 2007; Guinalíu and Jordán, 2016).

2.4 Perceived justice

The study of the perception of organizational justice has caught the attention of researchers and practitioners and has become a recurring topic of research within the fields of

organizational psychology, human resource management and organizational behavior (Cropanzano and Greenberg, 1997). Over the past 30 years, organizational justice has been a subject of social psychology research, more specifically in organizational contexts (Trevino and Weaver, 2001). Perceptions of organizational justice constitute an important heuristic in decision making within an organization. We can define organizational justice as the way in which employees perceive fairness in the workplace. Previous research has highlighted perceived justice as a significant predictor of both the employees' attitudinal reactions (e.g. commitment and trust) and their behavioral reactions (Karriker and Williams, 2009). Organizational justice is beneficial for organizations in the long-term in the sense that it can foster positive employee work attitudes and behaviors (Cohen-Charash and Spector, 2001).

In general, the literature suggests that people want to be treated fairly and consistently, and this leads them to trust (Ambrose and Schminke, 2003; Greenberg, 2003). Justice is perceived when leaders are able to take into account the point of view of their subordinates, manage personal biases and explain the decision-making process, including appropriate feedback between the parties (Whitener, 1997). Justice will increase the felling of trust between leaders and subordinates (Burke *et al.*, 2007). In addition, the perception of justice benefits the organization in the sense that employees will be willing to respond with better performance and a better attitude.

The role of perceived justice in online environments has also been studied in previous literature, for example, within the scope of virtual communities, in which users are able to form their perceptions of justice while interacting with other members of the community (Chou *et al.*, 2016). Justice in an online environment is one of the fundamental pillars for lasting and sustainable relationships (Fang and Chiu, 2010).

2.5 Organizational commitment

Organizational commitment can be defined as the intensity with which employees participate in, and identify with, an organization (Mowday *et al.*, 1982). On the other hand, Mowday *et al.* (1979) describe organizational commitment as a strong belief in the goals and values of the organization and a predisposition to work on its behalf. Bishop and Scott (2000) define it as the intensity with which the members of a team engage and identify with their work team, that is, it describes the psychological attachment that team members experience toward the team. Likewise, organizational commitment has a strong link to the variable trust. There are numerous studies, following the relationship marketing approach and the commitment-trust theory proposed by Morgan and Hunt (1994), which have considered trust as the primary antecedent of commitment. Along the same lines, the work of Flavián and Guinalíu (2006) confirm that this relationship continues to be valid in online environments.

The interest in the study of commitment at the organizational level is especially relevant, with studies such as those by Koch and Steers (1978) and Angle and Perry (1981), which show how commitment can influence the attitudes and behaviors of the organization in the workplace. Much of the research in this field was intended to establish the link between organizational commitment and employee turnover, a relationship that has received considerable empirical support (e.g. Mathieu and Zajac, 1990). Various studies emphasize organizational commitment as an output within a virtual work team along with other variables such as effectiveness and satisfaction, at both the individual and the team levels (Dulebohn and Hoch, 2007).

2.6 Organizational citizenship behavior "OCB"

OCB refers to the term that reflects the behavior of the different members of an organization, but goes beyond performing the normal functions that each individual has assigned. According to the definition of Organ (1988), OCB represents the discretionary behavior of an individual, which is not directly or explicitly recognized by the organization's or company's

formal reward system, and furthermore promotes efficiency and effectiveness in the functioning of the organization (Bagozzi *et al.*, 2016). Later, Organ (1997) perfected this definition, conceptualizing it as a form of organizational efficiency that is based on the social and psychological environment in which the task performance takes place. Contextualizing this variable within a virtual environment, numerous studies exist that have studied the OCB variable within a virtual context, in the cases of both virtual communities (Yu and Chu, 2007) and virtual work teams (Creasy and Carnes, 2017). In all cases this variable is grouped within the variables of efficiency that a team or organization achieves.

3. Research model and hypotheses

As discussed earlier in the definition of trust in the leader, the level of trust in a team leader is associated, in part, with the subordinates' perception of a set of patterns of behavior (Dirks and Ferrin, 2002). These behavioral patterns have been analyzed in broader terms through a set of beliefs related to trust; more specifically Mayer *et al.* (1995) propose three dimensions of trust based on benevolence, ability and integrity. By virtue of this conceptualization of trust, the present research model has identified a series of antecedents of trust in a virtual leader, on the one hand based on the physical attributes of the leader and on the other, on the behavioral characteristics of the leader. Furthermore, the consequences of trust in the leader of a virtual work team have also been analyzed. The model considers the consequences of trust analyzed at a global level within the group, such as OCB and commitment to the team. These variables take into account the efficiency of the team through variables that reflect the social success of the work group.

Research in the field of psychology supports the fact that people that are more attractive are more likely to possess a wide variety of positive qualities (Hatfield and Sprecher, 1986). In fact, people often attribute positive characteristics to what is attractive, and negative characteristics with that which lacks attractiveness (Eagly *et al.*, 1991). There is abundant previous literature that acknowledges that physical attractiveness plays an important role in decision making among individuals. As proof, we can cite recent studies that acknowledge that physically attractive people perform better in areas such as job interviews (Wood and Eagly, 2012) or political elections (Benjamin and Shapiro, 2009). Focusing on the study of leadership, several previous studies have substantiated the importance of the leader's physical attractiveness in the way they are perceived by their subordinates (e.g. Spisak *et al.*, 2012; Benjamin and Shapiro, 2009). Framing this hypothesis in the context of a virtual environment, we find various studies that support the importance of the physical attractiveness of the leader of a virtual team or community when it comes to influencing subordinates (Zhao *et al.,* 2015). In fact, the more attractive the virtual leader, the better he is able to transmit certain positive traits to his subordinates. This, together with the need for virtual workers to connect with other members of the workgroup, given the innate characteristics of a distributed environment, can facilitate the building of trust. Accordingly, we expect that more physically attractive leaders will be able to generate greater trust among their subordinates:

H1. The degree of attractiveness of leaders of virtual work teams directly and positively influences the trust toward them.

The works of Mayer *et al.* (1999) and Goleman (1999) stress the importance of emotional intelligence and leadership, with empathy being one of the most important components of emotional intelligence. Within the literature on team management and leadership, it is accepted that there is a relationship between personal communication and the trust that is perceived in another person (Zolin *et al.*, 2003). In fact, Feng *et al.* (2004) argue that the group's management should promote mechanisms to help members of a work team to identify with each other, adopting an empathic attitude that helps build trust. Furthermore, it has been shown that certain behaviors are capable of being transmitted through a virtual environment. While these conducts

may emerge naturally in a face-to-face environment, it is perhaps more difficult that they arise in a virtual environment due to the distance that exists between members of the group. Accordingly, empathy can emerge within a virtual team through the messages exchanged between group members and the leader (Preece and Ghozati, 2001) or through other perceptions of the leader that subordinates may develop. Due to this, we expect that an empathic virtual leader will be able to create more trust. Therefore, we expect that leaders that show more empathy toward their subordinates will result in their subordinates having greater trust in them:

H2. The perceived empathy of the leaders of virtual work teams directly and positively influences the trust in them.

Justice involves an evaluative judgment concerning the treatment of a person by others (Furby, 1986). On the other hand, trust and organizational justice are linked (Aryee et al., 2002), it is expected that fair treatment will improve the social exchange relationship and, therefore, increase the level of trust between the two parties. When employees perceive that the interpersonal treatment by their leader has been fair, it is logical that a degree of trust develops between the leader and the subordinates. Employees can see organizational justice as a way for leaders to communicate care and respect, which could lead to increased trust in the leader (Thau et al., 2007). Furthermore, previous studies have empirically contrasted that organizational justice is positively related to commitment and trust in the organization and its employees (e.g. Alexander and Ruderman, 1987; Folger and Cropanzano, 1998). Within a virtual team and from the perspective of building relationships within the team, when subordinates perceive fairness in the results of personal interactions with, and conduct of, their leader they tend to feel more at ease in the team and their perceptions of the integrity, benevolence, and ability of their leader increase (Fang and Chiu, 2010). For these reasons, we expect that fairer virtual leaders will be able to create more trust:

H3. The perceived justice in the leaders of virtual work teams directly and positively influences the trust toward them.

Easily observable features, such as attractiveness or gender, can be used to categorize individuals based on stereotypes (Jones et al., 1998). In keeping with this, the stereotype of "what is beautiful is good" is determined by the "halo effect" (Thorndike, 1920). The halo effect refers to a cognitive bias whereby the perception of a particular trait of an individual (in this case the attractiveness of the leader) influences the perception of other traits of that person. Along these lines, Mathes and Kahn (1975) argue that people that are more physically attractive have greater empathic ability than those that are less attractive. Consequently, the perception of empathy in the leader may be influenced by their degree of attractiveness. Therefore, the same level of empathy would be perceived more intensely when the leader is more attractive in the eyes of the subordinate. The reason would be that the individual has internalized the idea that people that are more attractive are more empathic, because of the halo effect. Based on these arguments, the following hypothesis is proposed:

H4. The degree of attractiveness of the leaders of virtual work teams directly and positively influences the level of empathy perceived in them.

Prior research suggests that organizational justice has a moral foundation in the sense that unfair treatment violates people's moral standards (Folger and Cropanzano, 1998). From this moral perspective, it is to be expected that empathy serve as a way to translate these moral norms into concrete actions toward other individuals, since empathy contributes to widening the number of people who are entitled to fair treatment (Aquino et al., 2005). According to Hoffman (1987), the fact that any principle of justice is applied has in itself an

empathic connotation, which is explained by the fact that the person who dispenses justice can imagine the consequences of a poor system of justice within the organization, especially for those that are the most vulnerable. Therefore, the following hypothesis is proposed:

H5. The degree of empathy perceived in the leaders of virtual work teams directly and positively influences the level of justice perceived in them.

In recent years, trust has been considered one of the primary assets for fostering the attitude toward the work and the performance of the employees of an organization (McEvily and Tortoriello, 2011). Workers with a higher level of trust in their leader and their work team will tend to adopt behavior oriented toward the success of the team (Schoorman *et al.*, 2007), while also tending to be more loyal to their organization and more active in decision-making. Furthermore, several meta-analyzes carried out by Dirks and Ferrin (2002) and McEvily and Tortoriello (2011), confirm the positive effect of trust in leaders on a variety of attitudes in the workplace; among them is the relationship between trust in the leader and organizational commitment, which indicates that trust in the leader usually translates into strong organizational commitment.

In virtual work teams, trust positively influences the exchange of information and mitigates the uncertainty concerning the behavior of others (Muethel *et al.*, 2012). In fact, it has been found that the positive relationship between interpersonal trust and team effectiveness is stronger as geographic dispersion and computer-mediated communication increase (Muethel *et al.*, 2012). By emphasizing the importance of trust to ensure the success of a virtual team, these teams experience predictable communication patterns, positive leadership, enthusiasm and an improved ability to cope with technical uncertainty. Along these lines, Staples and Webster (2008) show that trust is positively associated with the transfer of knowledge within a virtual team, which results in the team being more effective. On the other hand, it has also been shown that trust increases task completion, commitment to the organization and the willingness to assume additional roles within the team (Long and Sitkin, 2006). By virtue of all the above, we can state the following working hypothesis:

H6. Trust in the leaders of virtual work teams directly and positively influences the degree of commitment with the team.

Trust has shown to be an important predictor of certain organizational outcomes, such as OCB (Van Dyne *et al.*, 2000). OCB is understood as a measure of organizational efficiency based on the social or psychological environment in which work is performed (Organ, 1977). The trust of employees in their leader is acknowledged in the literature as an antecedent of OCB. Different previous studies (e.g. Erturk, 2007) indicate that in a work context where the social exchange is of quality, trust acquires an important weight as an antecedent of OCB. On the other hand, Deluga (1994) argues that the actions of the leader aimed at strengthening trust among his subordinates are directly related to a high level of OCB among them. Other studies by Organ (1990) affirm that subordinates have a higher level of OCB in situations where social exchange facilitates the development of mutual trust between leaders and subordinates. That is why the closer and more frequent the relationship between the leader and the subordinates, the greater the trust and the associated OCB will be.

In a virtual environment, trust plays a key role in interpersonal relationships when the people are geographically dispersed, and consequently there is asymmetric information and uncertainty (McKnight and Chervany, 2002). In this regard, the influence of trust on certain outcomes has been demonstrated, an example being OCB (Konovsky and Pugh, 1994). It is reasonable to assume that when there is trust among the team members, one will be more willing to participate in OCB (Pillai *et al.*, 1999). In addition, trust is vital to creating a culture of knowledge exchange in online teams

and organizations (Collier and Bienstock, 2006). Therefore, the following argument is set forth as a working hypothesis:

H7. Trust in the leaders of virtual work teams directly and positively influences the degree of OCB of the team.

Organizational commitment is receiving a great deal of attention in the literature, among other reasons due to the important role it plays in on-the-job attitudes, such as job satisfaction and employee behavior. There is a positive correlation between organizational commitment and performance (Fu and Deshpande, 2014), not only at the level of individual performance, but also at the corporate level. With the idea of conceptualizing performance at a global level within the company, many authors use the variable OCB to show the importance of organizational commitment to employee motivation, behavior, and effort (Johnson and Chang, 2006; Organ, 1997). Based on these arguments the final working hypothesis is stated:

H8. The commitment to the team directly and positively influences the team's degree of OCB.

4. Methodology
The data needed to undertake this study were obtained through a self-administered internet survey of people who routinely work in virtual teams. To accomplish this, a database extracted from the social network LinkedIn was used. This is a professional social network, so it is particularly useful when it is necessary to filter certain profiles, in our case, managers. First, a database of managers and team leaders was created and an invitation to participate in the research was sent by e-mail. The invitation, which was sent to 1,000 individuals, included a question about their participation in virtual work teams. A total of 320 individuals responded affirmatively to the invitation, but once incomplete questionnaires and those that did not work in virtual teams were eliminated, the sample was reduced to 241. The structural equation methodology was used to analyze the data. Since this technique is highly sensitive to cases of missing and atypical data, an exhaustive analysis of the database was necessary before proceeding with the process of statistical analysis. The sample size is considered adequate for the structural equation methodology and the model to be tested (Boomsma, 1982, 1985). Tables I and II show the sociodemographic characteristics and the economics sectors of the sample used and the respondents' sector of activity.

The validation process of the scales proposed for the measurement of the variables that constitute the research model consisted of several phases that are described below. First, the development of the measurement scales was based on a previous review of the literature (see Table III). Thanks to this literature review, it was possible to formulate an initial proposal of scales. However, the scales had to be adapted to the context of the virtual work teams. The objective of the adaptation was to guarantee face validity; face validity is defined as the extent to which the measurement scale is representative of that which is intended to

Sociodemographic data	
Sample size	241
Age (under 20)	2%
Age (between 20 and 29)	30%
Age (between 30 and 39)	31%
Age (between 40 and 49)	29%
Age (over 50)	8%
Sex (male)	71%
Level of education (above primary)	85%
Internet experience (more than 5 years)	92%

Table I.
Sociodemographic data

Sector	No. of surveys	Percentage
Cultural activities	6	2.49
Commerce	9	3.73
Communications	8	3.32
Economics-Finance	18	7.47
Services	15	6.22
Education	31	12.86
Hospitality	3	1.24
Information technology	24	9.96
Engineering	6	2.49
Law-Legal	3	1.24
Marketing	42	17.43
Environmental	3	1.24
Healthcare	5	2.07
Tourism and recreation	11	4.56
Other	57	23.65
Total	241	

Table II.
Economic sectors

Construct	Adapted from
Trust in the leader	Roberts and O'really, Korsgaard *et al.*
Level of empathy perceived	Kellett *et al.* (2006)
Level of justice perceived	Niehoff and Moorman (1993)
OCB	Allen and Rush (1998), Organ (1988)
Organizational commitment	Allen and Meyer (1991)
Attractiveness	Ohanian (1990)

Table III.
Content Validity

be measured. Face validity is often confused with the concept of content validity. However, content validity is the extent to which the items correctly represent the theoretical content of the construct and is guaranteed by a thorough review of the literature. The level of face validity was contrasted using a variation of the Zaichkowsky (1985) model in which each item was classified by a group of experts as being" clearly representative," "somewhat representative" or "not representative." Finally, in line with Lichtenstein *et al.* (1990) each item was kept if there was a high degree of consensus among experts.

The validation process included an exploratory analysis of the reliability and dimensionality of the instruments of measurement. First, the Cronbach's α method was used to assess the reliability of the scales, where a minimum value of 0.7 was considered acceptable (Nunnally, 1978). The variables under consideration easily exceeded this minimum threshold. Furthermore, the item-total correlation, which measures the correlation of each item with the sum of the rest of the items of the scale, was higher than the minimum of 0.3 (Nurosis, 1993).

Second, the degree of unidimensionality of the scales was evaluated by means of a factor analysis. The extraction of factors was based on the existence of eigenvalues greater than 1, while also requiring factor loadings to be greater than 0.5 for each item, and the explained variance for each factor extracted to be significant. By this means, a single factor corresponding to each one of the proposed scales was extracted. Confirmatory factor analysis was used to confirm the dimensional structure of the scales. EQS 6.1 statistical software was used to perform the analyses and the Robust Maximum Likelihood estimation method was used due to the fact that it provides greater security when working with samples that could present some type of multivariate abnormality. A factorial model that included all of the variables under consideration was designed following the criteria

proposed by Jöreskog and Sörbom (1993) for the possible refinement of the items: the weak convergence criterion by which all indicators that did have significant factorial regression coefficients (t-student > 2.58; $p = 0.01$) were eliminated, the strong convergence criterion, which eliminated all indicators whose standardized coefficients were less than 0.5, and the elimination of all of those indicators that contributed the least to the explanation of the model (those indicators whose R^2 was less than 0.3 were eliminated).

In this stage eight items were eliminated. The adjusted confirmatory model presented acceptable values. Comparative fit index (CFI) $=$ 0.908; Bollen (IFI) Fit Index $=$ 0.909; Root Mean Sq. Error of App. (RMSEA) $=$ 0.064; 90 percent Confidence Interval of RMSEA (0.056, 0.072). Table IV shows the scale items and their factorial loads, means and standard deviation.

Finally, both the variables "trust in the leader" and "OCB" were measured multi-dimensionally, since working with a multidimensional view of these variables allows a much more precise understanding of the implications of the concept. Finally, to confirm the existence of multidimensionality in the variable "trust in the leader" and "OCB" a rival models strategy was developed (Anderson and Gerbing, 1988) whereby a second-order model in which various dimensions measure the multidimensional construct under consideration was compared with another first-order model in which all the items were loaded on a single factor (Steenkamp and Van Trijp, 1991). The results corroborated the multidimensional structure of the variable trust (integrity, benevolence and ability) since the second-order model had a much better fit than the alternative first-order model. Table V shows the results of the multidimensionality analysis.

Although Cronbach's α is the generally accepted indicator to assess the reliability of the scales, some authors argue that this indicator may understate reliability (e.g. Smith, 1974). Therefore, various authors such as Jöreskog (1971) recommend the use of an additional statistic, such as construct validity. The results were positive taking 0.7 as a minimum value (Steenkamp and Geyskens, 2006), as shown in Table VI.

Construct validity was analyzed using two fundamental criteria for validity: firstconvergent validity that indicates whether the items that make up the scales converge toward a single construct. Convergent validity was confirmed when it was shown that the factor loading of each indicator was greater than 0.5 and significant at the level of 0.01 (Steenkamp and Geyskens, 2006). Furthermore, the analysis of variance extracted (Ping, 2004) was also used following the criterion of Fornell and Larcker (1981) which states that the measurements with an adequate level of convergent validity should contain less than 50 percent of the variance of the error (which implies an AVE statistic value greater than 0.5). The results obtained were satisfactory as shown in Table III. Second, discriminant validity, which tests whether the construct being analyzed is significantly distant from other constructs that are not theoretically related to it. Discriminant validity was assessed using two criteria: verifying that the value of 1 was not found in the confidence interval for correlations between the different scales, and checking that the correlation between each pair of scales was not significantly greater than 0.8. The results were satisfactory since all pairs of constructs met the two criteria mentioned.

5. Results

To contrast the proposed hypotheses, the structural equations model shown in Figure 1 was developed. The fit of the model showed acceptable values: CFI $=$ 0.922; Bollen (IFI) Fit Index $=$ 0.923; RMSEA $=$ 0.049; 90 percent Confidence Interval of RMSEA (0.043, 0.54). Focusing on the antecedents of trust in the virtual leader, we observe that physical attractiveness has a positive and significant effect on trust in the leader ($\beta = $ 0.078; $p < 0.05$), therefore H1 is accepted. Likewise, behavioral traits of a virtual leader such as empathy ($\beta = 0.355$; $p < 0.01$) and perceived justice ($\beta = 0.381$; $p < 0.01$) exert a positive and significant effect on trust, therefore H2 and H3 are accepted. Furthermore, the results obtained reveal the existence of a positive and significant relationship between the degree of perceived attractiveness and the perceived empathy of the leader ($\beta = $ 0.441; $p < 0.01$), as

Trust in the leader		CFA	Mean	Desv.
CONF1 – Integrity	My team leader is sincere in his relationships with subordinates	0.804	5.77	1.316
CONF2 – Integrity	I trust my leader because he is a person of integrity	0.875	5.84	1.32
CONF3 – Integrity	I trust my leader because he fulfills the promises he makes	0.864	5.53	1.325
CONF4 – Integrity	I feel that I can trust the determination of my leader in all circumstances	0.891	5.36	1.374
CONF5 – Integrity	I trust my leader because he has not disappointed me so far	0.876	5.39	1.529
CONF6 – Integrity	When making decisions, my leader takes the welfare of the team members into account	0.778	5.46	1.408
CONF7 – Benevolence	I can expect a positive attitude from my leader, even though sometimes I may make mistakes	0.801	5.74	1.095
CONF8 – Benevolence	I trust my leader because he provides me with all the necessary information	0.793	5.19	1.491
CONF9 – Benevolence	If I have difficulties with my job, I know my leader will try to help me	0.797	5.65	1.239
CONF10 – Benevolence	I feel safe and comfortable discussing problems and difficulties with my leader	0.766	5.56	1.33
CONF11 – Benevolence	I know my leader takes my opinions into account when making decisions that affect me professionally	0.829	5.59	1.36
CONF12 – Ability	I have confidence in my leader´s ability	0.826	5.91	1.189
CONF13 – Ability	I trust my leader for his ability to manage a team	0.931	5.62	1.418
CONF14 – Ability	I trust my leader for his reputation in managing teams	0.75	5.13	1.582
CONF15 – Ability	I think my leader has the appropriate knowledge to manage a team	0.848	5.76	1.29
Empathy				
EMP1	My leader understands the emotions that the rest of the team members experience	0.851	5.03	1.414
EMP2	My leader is able to share the felling of the rest of the team members	0.899	4.85	1.566
EMP3	My leader encourages the rest of the team members to express how they feel	0.785	4.55	1.691
Justice				
JUST1	In decisions related with my job, my leader treats me with kindness and consideration	0.903	5.98	1.069
JUST2	In decisions related with my job, my leader treats me with respect and dignity	0.957	6.12	0.969
JUST3	In decisions related with my job, my leader discusses decisions that affect my work with me	0.703	5.65	1.314
Degree of attractiveness				
ATRAC1	My leader is an attractive person	0.855	4.15	1.556
ATRAC2	My leader is a person with class	0.848	4.58	1.582
ATRAC3	My leader is handsome	.948	4.06	1.57
ATRAC4	My leader is elegant	0.841	4.26	1.582
ATRAC5	My leader is a sexy person	0.81	3.21	1.6
Commitment				
COMP1	I would like to stay part of this team for a long time	0.799	5.4	1.623
COMP2	I truly feel the problems of the team as my own	0.726	5.18	1.511
COMP3	This team means a lot to me	0.948	5.07	1.564
COMP4	I have strong sense of belonging to this team	0.907	4.98	1.692
OCB				
OCB1 – Altruism	I try to help other members of the team even though the issues are not directly related to work	0.727	5.87	1.057
OCB2 – Altruism	I help the other members of the team when they have to miss work	0.849	5.82	1.108

(*continued*)

Table IV.
Items of the scales, CFA, means and standard deviation

Trust in the leader		CFA	Mean	Desv.
OCB3 – Altruism	I help the other members of the team when they have a heavy workload	0.721	5.68	1.157
OCB4 – Courtesy	I inform the other members of the team before making an important decision	0.689	6.04	1.05
OCB5 – Courtesy	If a member of the team could be affected by my decisions or actions I consult them beforehand	0.819	6.19	0.841
OCB6 – Awareness	Regarding my participation on this team, I am always at my job punctually	0.707	5.89	1.193
OCB7 – Awareness	Regarding my participation on this team, I always finish my work on time	0.804	5.74	1.168
OCB8 – Awareness	Regarding my participation on this team, I try to be orderly in my work	0.728	6.01	0.985
OCB10 – Citizenship	I keep abreast of the advances of the team´s activities	0.832	5.86	1.04
OCB10 – Citizenship	I pay attention to the messages that give information about the advances of the team's activities	0.808	6.08	0.92

Table IV.

			Trust		OCB	
		Suggested value	First order	Second order	First order	Second order
Absolute fit	χ^2	$p > 0.05$	473.355 90 df $p < 0.001$	22.558 88 df $p < 0.001$	284.897 34 df $p < 0.001$	53.187 28 df $p < 0.001$
	RMSEA 90% Confidence interval RMSEA	RMSEA < 0.08	0.103 [0.091; 0.115]	0.054 [0.038; 0.068]	0.126 [0.107; 0.145]	0.000 [0.000; 0.047]
Incremental fit	NFI	NFI > 0.9	0.766	0.890	0.772	0.963
	NNFI	NNFI > 0.9	0.788	0.942	0.745	1.000
	CFI	Near 1	0.818	0.951	0.807	1.000
	IFI	Near 1	0.820	0.952	0.810	1.000
Parsimony fit	Normed χ^2	[1;5] o minor	5.25	2.50	8.37	1.89

Table V.
Multidimensionality analysis

	FCC	AVE
Attractiveness	0.93	0.74
Empathy	0.88	0.72
Justice	0.90	0.74
Organizational commitment	0.92	0.74
OCB – Altruism	0.81	0.59
OCB – Courtesy	0.73	0.57
OCB – Consciousness	0.79	0.56
OCB – Civism	0.89	0.67
Trust – Integrity	0.94	0.72
Trust – Benevolence	0.92	0.70
Trust – Ability	0.91	0.71

Table VI.
Construct reliability and convergent validity analysis

well as the relationship between empathy and the perceived justice of the leader ($\beta = 0.477$; $p < 0.01$) allowing us to also accept *H4* and *H5*.

Concerning the consequences derived from trust in the leader, we observe that trust exerts a positive and significant influence on commitment to the team ($\beta = 0.480$; $p < 0.01$), which justifies accepting *H6*. Likewise, trust in the leader also exerts a direct and positive influence on the variable OCB ($\beta = 0.439$; $p < 0.01$), so we can accept *H7*. Finally, a direct
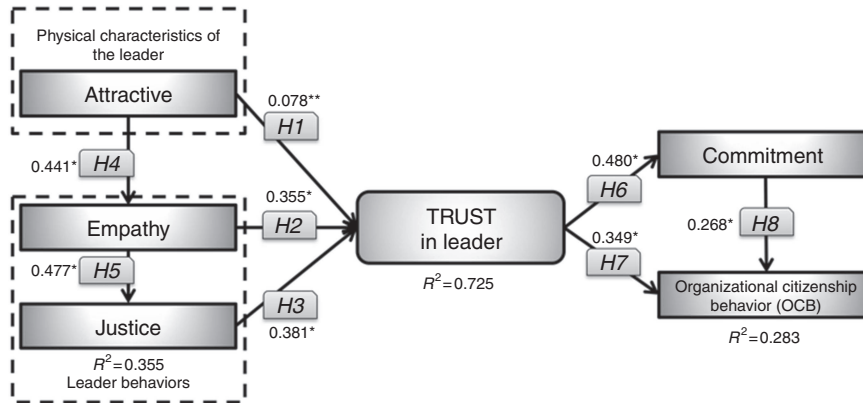
Notes: *,**Indicate that the coefficients are significant at 0.01 and 0.05 levels, respectively

Figure 1.
Research model

and significant relationship between the commitment to the team and OCB ($\beta = 0.268$; $p < 0.01$) is also observed, so H8 can also be accepted. The proposed model explains more than 72 percent of the variance of the variable trust in the leader ($R^2 = 72.5$).

6. Conclusions
The development of virtual work teams is a phenomenon that grows day by day. At this moment, it is not difficult to find a company where, more or less intensively, its employees work virtually. However, despite its growing importance, there are still management aspects of virtual teams that require more attention (Olaisen and Revang, 2017). The lack of physical proximity in a virtual environment makes it difficult to develop methods of control, as much in terms of direct supervision as for informal control mechanisms (culture or non-verbal messages). Previous studies corroborate that formal rules and regulations are more difficult to implement in virtual teams where the role of traditional authority is diluted by the very characteristics of the virtual environment. In keeping with this, previous studies highlight trust as a key factor in mitigating the difficulties of working online. Accordingly, the present research seeks to analyze in more detail the process of generating trust in the leader of a virtual work team and the consequences that are derived from it.

It is also possible to highlight the importance of a number of factors when the subordinates a virtual work team makes the decision to trust the leader. At this point two fundamental blocks of analysis of the antecedents of trust in the leader must de differentiated. First, we analyze characteristics of the leaders' behavior toward their subordinates, operationalized in the empathy that the leaders are able to convey to their subordinates and the justice that the subordinates perceive in their leaders. This block seeks to analyze some of the classic aspects of the analysis of trust in the leader previously analyzed for traditional contexts. Although prior studies confirm the possibility of extrapolating these variables to virtual environments, greater input is still needed when considering them in the context of a virtual work team. Second, the physical characteristics of the leader are analyzed, expressed by the physical attractiveness of the leader as perceived by the subordinates. The choice of attractiveness is based on the fact that it is considered to be the very core by which the physical characteristics of a person are evaluated (Kniffin *et al.*, 2014), and several studies have been carried out in which the attractiveness of an individual is evaluated in virtual environments through their profile picture or other electronic means (Zhao *et al.*, 2015). Therefore, it is interesting to emphasize how it is possible to communicate elements such as physical attractiveness and different aspects of behavior in a virtual environment, which gives us an idea of the richness

of the content that can be transmitted through virtual channels. In this regard, we must bear in mind that in recent decades the digital literacy of the population has increased significantly, which may mean that today's users of digital communications are capable of perceiving many of the non-verbal signals and a richness of content that years ago would only be possible through traditional communication channels.

In addition, it is interesting to highlight how this study reveals that it is possible to transmit elements such as physical attractiveness and different aspects of behavior in a virtual environment, which gives an idea of the richness of the content that can be communicated through a virtual channel. Daft *et al.* (1987) developed the theory of content richness. In principle, Daft's work developed a hierarchy of media through which greater richness of content (face-to-face communication), and less richness of content (digital communication) could be transmitted. In this respect, it should be borne in mind that in recent decades the digital literacy of the population has grown significantly, which may be the reason that digital users are able to perceive many of the nonverbal signals and a richness of content that years ago would only be possible through traditional communication channels (Zolkiewski and Littler, 2004).

Concerning the physical attractiveness of the leader in its direct and positive relationship with trust in the virtual leader, it is interesting to note that, although the role of physical attractiveness has been analyzed in other research contexts, it has not yet been analyzed in the context of virtual leadership. Accordingly, a greater physical attractiveness of virtual leaders is associated with greater trust in them. These results are consistent with previous research on the theory of stereotypes in which positive characteristics are associated with the more attractive people. It should also be noted that there is a direct and positive relationship between the degree of physical attractiveness and perceived empathy, a fact that confirms the importance that physical attractiveness plays in the leadership of a virtual team.

Furthermore, the variables empathy and perceived justice in the leader also directly and positively influence trust in the virtual leader. The management of empathy by the leader has been widely studied in traditional work environments, and is one of the most important variables to manage within a work team (Goleman, 2004). However, research on this variable in virtual work environments is still scarce. The perceived empathy of the leader is an important element in building trust in individuals who are not completely familiar with the online work environment. The results of this research endorse empathy as one of the ways through which leaders can build trust among their subordinates by displaying empathic behavior toward them. In addition, perceived justice is especially important in a work environment where people do not work face to face and have the need to believe that they will be treated fairly at all times. The results of the model corroborate this belief since the perceived justice in the leader is directly and positively related to the level of trust in the leader. It is also interesting to highlight the relationship between empathy and justice, the former being an antecedent of the latter, which reinforces the importance of perceived empathy in the leader in a virtual work environment.

The proposed model takes into account the consequences derived from trust in the virtual work leader. Along these lines, other studies analyze the results of a team from an economic point of view through economically quantifiable variables. However, taking into account the variables that have been used as antecedents and moderators of trust, it is reasonable to think that the efficiency of the team could respond more to social and group type variables, than to a mere economic figure. The use of social efficiency variables to assess behavioral models is a common practice in the literature (Morgan and Hunt, 1994). Therefore, if we analyze once again the results obtained from the research model, we can see that there are two consequences associated with trust in the virtual leader. First, it can be seen that trust in the leader favors higher levels of "OCB" as well as greater organizational commitment. There is also a direct and positive relationship between commitment to the organization and OCB. These results confirm that a high level of trust in the virtual leader favors social conduct by subordinates that goes beyond that which is formally established,

thus favoring cohesion and creating a sense of belonging to the group, which is especially important in the case of virtual teams where the members are scattered and it is more difficult to create a sense of unity within the team.

6.1 Implications for management

As a result of global competition, organizations are increasingly opting for knowledge-based production models (Townsend *et al.*, 1998), adopting innovative strategies to ensure their survival (Miró *et al.*, 2010), and tending toward more flexible and competency-based structures which involve an increase in knowledge management-related activities and the redistribution of their employment structures in order to design more flexible and versatile work teams (Lurey and Raisinghani, 2001). Accordingly, companies should be agile in creating virtual work teams to cope with the challenges imposed on them by the competitive environment, since virtual teams endow organizations with greater flexibility. At the same time, they foster knowledge creation, skills development and give organizations a wider perspective compared to traditional work teams (Greenberg *et al.*, 2007). The results of this study are intended to help organizations manage their teams more efficiently, by building trust and thereby contributing to improving the results through a better understanding of the factors that affect the trustworthiness of a team leader.

The results of the model highlight several strategies aimed at building trust in the leader. First, promote empathy between leaders and their subordinates. Although face-to-face interaction between leaders and subordinates it is not common, virtual teams have communication tools available to them (e.g. chat, video conference, e-mail) that can be used by leaders to interact with their subordinates in an empathic way, trying to put themselves in their subordinate's position and taking interest in the problems that they may have in the course of their work. Likewise, it would be advisable, whenever possible, to have an initial face-to-face meeting between all team members to share first impressions; this would also help to generate trust initially and reinforce the following trust building process. Second, leaders must be able to transmit the perception that they are fair to their subordinates. Virtual team leaders can develop a sense of justice among their subordinates by applying the principles of organizational justice, treating subordinates fairly and consistently, taking into consideration their subordinates' points of view, being able to manage personal biases and explaining the decision-making process, as well as by maintaining adequate feedback loops between the leader and the subordinates. Furthermore, the results of this study also show that the more attractive leaders are the ones who generate the greatest trust. Therefore, it is recommended that the virtual leader pay maximum attention to the visual signals they give to their subordinates through electronic media (e.g. profile images) so that the subordinates perceive of their leaders to be as attractive as possible and thereby increase their level of trust in them.

6.2 Limitations and further research

One of the primary limitations of this research is the fact that the vast majority of the individuals who have participated in it are Spanish speaking. Although the diversity of the economic sectors analyzed makes it possible to establish certain generalizations from the results obtained, it would be advisable to re-validate the proposed model with a more extensive sample of work teams, especially in cultural terms. This would confirm the appropriateness of the factors selected as well as their independence in relation to the cultural context.

Another possible limitation of the study refers to not including some variables that could be relevant in explaining the process of generating trust the leader of a virtual team. There are many variables that can influence the process of creating trust in the virtual leader. Likewise, it is also possible that other consequences related to trust in the leader have not been included in this study. Therefore, a future line of research would be to expand the list of antecedents of trust by analyzing other physical and behavioral characteristics of the

leader (Van *et al.*, 2017), as well as to include variables of the personality of leader himself in the analysis (Won Kim and Makana, 2017). As an example, a new future research could test if the gender of the leader and the gender of the respondent (the same or different) have any influence on trust or if it mediates the relationship between attractive and trust.

Another interesting line of research would be to analyze the leader's facial features in order to analyze their levels of trustworthiness. A recent study indicates that those with female-looking or happy-looking faces are perceived to be more trustworthy, while competitiveness, dominance and kindness are associated with specific facial features such as larger foreheads, prominent noses and strong chins (Olivola *et al.*, 2014).

Some research suggests that the problems of leadership in virtual teams lie in the fact that the leaders do not possess specific skills that differ from those required to manage traditional teams (Kayworth and Leidner, 2002). Future research should investigate what specific skills are needed to lead and manage a virtual work team compared to a traditional team (Vallejo, 2009)

An interesting line of additional research could be to analyze the frequency of communication between the leader and the subordinates in order to establish ranges of communication frequency. This could be operationalized as a control variable in the analysis of the primary variables of the research; trust, empathy, justice […] or other related variables.

Likewise, it would also be interesting to undertake a mediation and moderation analysis of the variables of the actual model, or to introduce new variables into the model in order to broaden existing knowledge. The new variables could include variables related to the leader (e.g. leadership style), traits of the subordinate (e.g. risk aversion, extroversion) or of the work atmosphere of the virtual team (e.g. stress level).

Finally, this research has only taken into account whether or not a work team performs its functions virtually, however, it is possible that, depending on the team, the virtuality of the work may be more or less intense and may be combined with face-to-face meetings or other methods of collaborative working. Therefore, an interesting future line of research would be to analyze how trust in the leader develops depending on the degree of virtuality of the team.

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Human capital: the link between leadership and organizational learning

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Abstract

Purpose – There is some research showing that leadership behaviors could be important antecedents to learning, but knowledge is scarce on the impact of which leadership styles support exploitative and explorative learning. The purpose of this paper is to hypothesize that transformational leadership – more concerned with innovation – will encourage generalist human capital (HC), while transactional leadership – more focused on the efficiency of existing operations – will promote specialist HC.

Design/methodology/approach – To test the hypotheses, the authors adopt a structural ambidexterity approach as the authors consider that organizations need units working on both types of learning.

Findings – The results show the versatile role of transformational leaders, who are able to promote both types of HC and, in turn, both types of organizational learning. The authors have also found that marketing departments are more willing to explore than production departments.

Originality/value – This study highlights the relevance of considering the department as a unit of analysis (structural ambidexterity approach), the significant role of transformational leaders in organizational learning and the mediating role of HC.

Keywords Leadership, Human capital, Exploration and exploitation learning

Paper type Research paper

1. Introduction

Innovation and learning are vital to an organization's capacity to create value in today's knowledge-based market. In a knowledge-based economy, the development of human capital (HC), and its transformation into organizational learning, is a challenge for leaders. HC is among the key organizational resources that are hard to imitate (Ndinguri *et al.*, 2012). Organizations rely on the knowledge and skills of their HC to boost their competitive advantage (Kelly *et al.*, 2011).

Human resources (HR)-related issues are central to any discussion about a firm's ability to learn, innovate and change (Wright *et al.*, 2001). HC reflects individuals' knowledge, skills and abilities (Yang and Lin, 2009); however, it is larger than the sum of this individual knowledge (Scaringella and Malaeb, 2014). HC is at the center of knowledge creation and competitive advantage (Carayannis *et al.*, 2007), and here leaders have considerable responsibility in the way they manage knowledge and generate new knowledge through people. A triangle of leadership, HC and organizational learning therefore emerges that calls for further in-depth investigation.

Recent research has shown that leadership behaviors could be important antecedents of learning (Chang, 2016; Chang *et al.*, 2012; Chang and Hughes, 2012; Smith and Tushman, 2005). However, this relationship remains unclear and the empirical evidence for its role is

inconsistent and incomplete (Prasad and Junni, 2016; Vera and Crossan, 2004). The mechanisms through which leadership impacts on learning have not been defined, and in this paper we suggest that HC could be an important mechanism in this relationship. Transactional or transformational leaders could stimulate different types of HC (specialist or generalist), which in turn lead to exploitative or explorative organizational learning, respectively.

Conceptual frameworks that describe organizational learning distinguish between exploration and exploitation organizational learning (March, 1991). Exploitation involves learning how to make incremental improvements in existing products, services or processes. Exploration entails finding innovative new products, services or processes. Such classifications can oversimplify complex processes, however. There is growing evidence that most organizations require both learning processes, because methods usually associated with exploitation can be used to reduce costs for expensive forms of exploration, and methods usually associated with exploration can help to improve the efficiency of established processes (Yukl, 2009).

There are two widely accepted approaches of organizational ambidexterity: structural and contextual ambidexterity. Recent studies regard contextual ambidexterity as a meta-level capacity that pursues exploration and exploitation simultaneously, encouraging individuals to divide their time between activities (Wang and Rafiq, 2014; Gibson and Birkinshaw, 2004). However, since exploration and exploitation require such different management styles, organizational structures and routines (Stettner and Lavie, 2011; Lawrence and Lorsch, 1967), we consider the structural ambidexterity approach to be better suited to explore these relationships. This approach is complicated by the difficulty of obtaining data and comparing departments in the same company, because structural separation considers that organizations undertake exploration and exploitation concurrently in different organizational units (Raisch et al., 2009). Certain organizational units will have generalist HC that undertakes exploration while other units are more likely to have specialist HC to concentrate on exploitative activities. The way managers use their leadership to stimulate unit employees in their search for new knowledge and to upgrade their existing knowledge is thus vital to achieve organizational ambidexterity (Chang, 2016).

In light of the above, the aim of this study is to analyze the role of transactional and transformational leaders in generating organizational learning, as they are able to promote specific and generalist HC, respectively. Specifically, our contribution aims to bridge two important gaps in the literature: the role of HC in relation to leadership style and the resulting organizational learning, and the relevance of the department as a unit of analysis, adopting an ambidextrous approach and comparing firms' production and marketing departments.

To this end, this paper is structured as follows. The next three sections introduce the research framework and the hypotheses. The scope of the study, the measures and the results are presented in the methods section. Finally, the study conclusions are reported.

2. Leadership and human capital

Many researchers have advocated a paradigm shift from HR to HC in order to sustain firms' competitive advantage (McGregor et al., 2004; Bontis and Fitz-Enz, 2002). Bontis (2001, p. 5) defined HC as "the combined knowledge, skill, innovativeness and ability of the company's individual employees to meet the task at hand." HR management practices, particularly staffing, training, performance appraisal and rewards, may be implemented to develop HC (Birasnav and Rangnekar, 2009; Snell and Dean, 1992). But HC is not only developed through HR management; other organizational processes should also be introduced. It is in this context that leadership emerges as a useful framework for explaining how HC is generated, since leadership style will provide the foundations on which to develop

employees' motivation, their relationships and their behavior patterns. HC must be understood as the most important resource in all types of organizations, but to reach its full potential it has to be effectively managed (Hitt and Ireland, 2002; Lesser and Prusak, 2001).

Elenkov *et al.* (2005) define leadership as "the process of forming a vision for the future, communicating it to subordinates, stimulating and motivating followers, and engaging in strategy-supportive exchanges with peers and subordinates." Leadership has been identified as one of the most important factors affecting organizational innovation, especially in the way transformational leadership can empower subordinates and create an appropriate climate for innovation (Jung *et al.*, 2003), following the line of Bass (1985).

Bass's framework was developed within larger organizational contexts (Burns, 1978), and has been successfully applied to the study of top-level managers (Zhu *et al.*, 2005; Judge and Piccolo, 2004; Lowe *et al.*, 1996). We therefore focus on top-level transformational and transactional leaders to explore the relationship between leadership and HC (Zhu *et al.*, 2005; Avolio and Bass, 1991; Bass, 1985).

Transactional leadership refers to managers' contingent reward behavior (providing constructive feedback and valuing individual contributions), management by exception (clarifying what the follower has to do and taking remedial actions if needed) and laissez-faire behaviors. In contrast, transformational leadership style is characterized by charismatic influence (serving as a good work model), inspirational motivation, intellectual stimulation (being open to new ideas) and individual consideration behaviors, moving followers away from their self-interest by providing support, mentoring and coaching (Avolio and Bass, 1991; Bass, 1985).

HC refers to employees' knowledge, skills, capabilities, commitment, know-how and ideas, which add economic value to firms (Birasnav and Rangnekar, 2009; Sullivan, 1999; Ulrich *et al.*, 1999; Becker, 1962). Kang and Snell (2009) distinguish between specialists and generalists. Specialists have deep knowledge in a specific domain while generalists are more versatile and equipped with a variety of useful skills for different situations. Transactional leadership helps organizations to achieve their current objectives more efficiently through rewards linked to job performance, and by providing employees with the resources they need to do their work (Zhu *et al.*, 2005). Transactional leaders, who are more oriented to achieving efficiency, are more likely to foster specialized HC. This specialist HC is more interested in acquiring new knowledge in its own area than expanding knowledge beyond it (Brown and Duguid, 1991).

Conversely, generalists have more diverse mental models, knowledge distributed across different areas and a better disposition to discover and apply new knowledge (Taylor and Greve, 2006; Bunderson and Sutcliffe, 2002; Wright and Snell, 1998). All these characteristics facilitate innovation, which in turn interests transformational leaders (Elenkov *et al.*, 2005). Chang *et al.* (2011) conclude that hiring and training multi-skilled core customer–contact staff has significant benefits for innovation. Firms benefit more from innovation when employees have sufficient skills because workers have complementary capabilities and learning abilities (Trung *et al.*, 2014). Through intellectual stimulation, transformational leaders encourage their employees to be innovative and creative by promoting new approaches for solving problems without criticizing mistakes (Bass *et al.*, 2003). When leaders are supportive, creativity is more likely to occur; leaders' understanding of their employees is also crucial for stimulating creativity (Trung *et al.*, 2014). Transformational leaders identify employees' demands and needs, satisfy them and increase their levels of motivation (Akbari *et al.*, 2017). Ultimately, transformational leadership will result in high levels of cohesion, commitment, trust, motivation and performance in new organizational environments (Zhu *et al.*, 2005).

Based on the above arguments, we propose that transformational leadership – more oriented to innovation – will encourage generalist HC, while transactional leadership – centered

on efficiency of existing operations rather than acquisition of new capabilities (Shamir *et al.*, 1993) – will promote specialist HC. Transformational leaders can stimulate individual and team spirit among employees by coaching, encouraging and supporting them to tackle task-oriented problems in innovative ways (Birasnav *et al.*, 2011; Yukl, 2006). Moreover, each type of leader is likely to seek out those who are similar to themselves, forming teams with people who share their way of thinking or attitudes to risk-taking or experimentation. They may also develop their followers' knowledge and skills in their own style. The result of these leadership behaviors is that transformational leaders will more likely encourage generalist HC, and transactional leaders, specialist HC:

H1. Leadership is related to HC.

H1a. Transformational leadership is positively related to generalist HC.

H1b. Transactional leadership is positively related to specialist HC.

3. Leadership and organizational learning

Organizational learning has been suggested as a key process to maintain a sustainable competitive advantage (Kang and Snell, 2009). The actions of top managers can engender explorative and exploitative innovations (Chang and Hughes, 2012; Lubatkin *et al.*, 2006). But despite the growing interest in the topic, little is known about the role of CEO and top management teams in supporting organizational learning in their firms (Vera and Crossan, 2004). Some research studies have shown that leadership behaviors could be important antecedents of learning (Chang and Hughes, 2012; Smith and Tushman, 2005; Gibson and Birkinshaw, 2004; Tushman and O'Reilly, 1996). Nevertheless, leadership and organizational learning have largely remained disconnected fields of inquiry (Vera and Crossan, 2004), and knowledge about the impact of different leadership styles on supporting exploitative, explorative and ambidextrous learning is scarce. Moreover, most studies explore transformational leadership behavior, since such behavior contributes to creating HC, which in turn helps organizations achieve competitive advantage (Birasnav *et al.*, 2011), while the possibility that transactional leadership could also enhance efficiency is often ignored.

Although there is an implicit assumption that leaders are a guiding force behind organizational learning (Yukl, 2009; Lahteenmaki *et al.*, 2001), researchers have not defined the specific behaviors and mechanisms through which leaders impact on learning. We propose that depending on the type of learning an organization wants to promote, it should encourage different types of leadership. A leader should present the full range of leadership behaviors and the effectiveness of his or her leadership will be related to the relative frequency of each style (Sosik and Jung, 2010). Using only transactional or transformational leadership has been found to be ineffective in the long term (Chaimongkonrojna and Steane, 2015). Transformational leaders are often effective communicators; their idealized influence and inspirational motivation provides ideological explanations linking individuals' identities with the organizational identity. Transformational behaviors serve to engage individuals' self-concepts in the interest of the firm's mission (Jung *et al.*, 2003), and increase followers' intrinsic motivation to engage in exploratory learning. Leadership style plays an important role in promoting firm innovation, as leaders can take decisions to introduce new ideas into the organization, set goals and encourage behaviors to stimulate innovation among their subordinates (Domínguez Escrig *et al.*, 2016; Aragon-Correa *et al.*, 2007).

Through intellectual stimulation, transformational leaders encourage individuals to think unconventionally, examine problems from different angles and follow generative and exploratory thinking processes (Sosik *et al.*, 1997). By encouraging and displaying such behaviors, these leaders act as role models, and help spread these practices to lower levels of

management (Waldman and Yammarino, 1999). Transformational leaders are key actors in integrating processes to construct a learning organization. They are strategic players in creating a climate that stimulates the disciplines of organizational learning and their interaction (Densten, 2005; Slater and Naver, 1995; Senge, 1990). Leaders with transformational behaviors also champion innovation, recognize and identify with innovative ideas and drive enthusiasm for exploratory innovations across the organization (García-Morales *et al.*, 2008).

Transformational leaders look for new ways of working, challenge fixed mindsets and are more likely to reject conventional norms (Conger and Kanungo, 1987). Leaders who coach, counsel, mentor and train their followers can improve their skills and motivation to seek out opportunities and try new methods to deal with problems (Schneier *et al.*, 1988). Leaders who are perceived to have idealized influence will more readily become involved in risk-taking activities and are therefore more influential, effective and willing to trust their employees (Bass and Riggio, 2006).

Transformational leaders allow greater autonomy, stimulate employees intellectually and encourage and give them the freedom to solve task-oriented problems in new and different ways (Burpitt, 2009; Birasnav and Rangnekar, 2009). Indeed, Lee (2008) found that transformational leadership has a positive impact on innovativeness. Risk-tolerant leadership tends to encourage large, risky commitment of resources, such as investing in new products and services with new technology (Chang and Hughes, 2012; Wiklund and Shepherd, 2005).

The managerial thinking underlying transformational leadership creates flexibility of strategy, and develops HC, turning it into an appropriate set of skills to respond to a dynamic environment (Sarlak *et al.*, 2012).

Drawing on the idea that exploration is based on search, risk-taking, experimentation and innovation (March, 1991), transformational leadership behaviors are expected to positively influence exploration learning:

H2a. Transformational leadership is positively related to explorative learning.

Transactional leaders, in turn, tend to focus on maintaining the status quo, and organizational members' interaction with these leaders is based on exchanges in which individuals are specifically rewarded and recognized for meeting targets. Leaders with transactional behaviors also monitor individual and team performance to anticipate errors and take corrective action when required (Howell and Avolio, 1993). In contrast to transformational leaders, transactional leaders prioritize the efficiency of existing operations over acquiring new capabilities (Burpitt, 2009; Shamir *et al.*, 1993). In stable conditions, the leader's energy and efforts may be invested in exploiting the organization's current strategy, capabilities and markets (Burpitt, 2009; Jansen, 2004).

A transactional leader operates within the existing system or culture, tends to avoid risks and focuses on time constraints, standards and efficiency (Bass, 1985). Because transactional leaders promise their followers tangible rewards for achieving goals, they may encourage them to solve problems with the simplest and most straightforward method rather than challenging them to explore other alternatives (Amabile, 1998). Such leaders do not actively set out to enhance followers' innovativeness (Lee, 2008; Jung, 2001).

Exploitation creates reliability by refining familiar routines that are closely aligned with a company's experiences and embedded in organizational cognitions (Gilbert, 2005), ensuring efficiency and reducing risk and potential for loss (Burpitt, 2009). Therefore, considering that exploitative learning results from activities focused on refinement, production, efficiency and execution (leading to increased efficiency and proficiency) (March, 1991), we can expect transactional leadership to be positively related to exploitative learning:

H2b. Transactional leadership is positively related to exploitative learning.

4. Human capital and organizational learning

While many other factors may affect firms' ability to learn, HC has been identified as a crucial foundation for organizational learning (Kelly *et al.*, 2011). Individuals who are more open to new experiences and risks have been shown to contribute more to developing radical ideas, and characteristics such as motivation, educational profile, professional background and skills can influence the generation and implementation of ideas that lead to both incremental and radical innovation (Intan-Soraya and Chew, 2010; Baer, 2007; Romijn and Albaladejo, 2002). In light of Kang and Snell's (2009) distinction between generalist and specialist HC and the knowledge they involve, it seems reasonable to assume that each of these HC types may be related to organizational learning. Having diverse knowledge of multiple domains or deep knowledge in a specific domain will influence future knowledge search behaviors, whereas a specialist focus may imply that individuals are less willing and able to exchange and combine new knowledge beyond their specialized area (Dougherty, 1992).

As mentioned above, exploration derives from a relatively broad and generalized search to extend the firm's knowledge domains into unfamiliar or new terrains and/or to establish new combinatory mechanisms. Because generalist HC tends to be less entrenched in a particular perspective and can potentially adapt to discover, understand, combine and apply new knowledge in the future (Taylor and Greve, 2006; Shane, 2000), it is more predisposed to exploratory learning (Kang and Snell, 2009).

In contrast, exploitation causes firms to remain in familiar areas and rely on existing solutions, rather than seeking out innovative, emerging and pioneering knowledge (Kang and Snell, 2009; March, 1991). Specialist HC tends to be more effective for acquiring and assimilating new, in-depth knowledge, and is likely to focus on exploitation. Because the deeper knowledge that individuals already possess is necessary to improve exploitation, specialists are best positioned for exploitation learning. These considerations predict that:

H3a. Generalist HC is positively related to explorative learning.

H3b. Specialist HC is positively related to exploitative learning.

5. Mediation effect of human capital on the relationship between leadership and learning

So far, we have proposed that transformational leaders promote generalists, and they, in turn, are able to build exploratory learning; by contrast, transactional leaders encourage specialists, who may contribute to developing exploitative learning. This suggests that a firm's HC may be seen as a link or nexus between leadership style and organizational learning. The skills, ideas, information or attitudes for building knowledge are held by individuals, and leaders must be capable of transforming that HC into organizational learning (Zhu *et al.*, 2005). We have argued above that different leadership styles foster different types of HC and, in turn, HC engages in different types of organizational learning. In other words, HC may play a mediating role between leadership style and organizational learning, as proposed in our final hypothesis:

H4. HC will mediate the relationship between leadership style and organizational learning.

H4a. Generalist HC will mediate the relationship between transformational leadership and explorative learning.

H4b. Specialist HC will mediate the relationship between transactional leadership and exploitative learning (Figure 1).
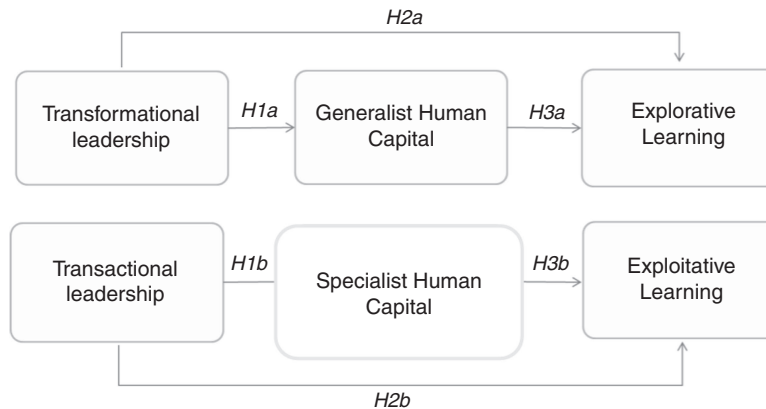
Figure 1.
Theoretical model

6. Method

6.1 Population and sample

Our population comprised Spanish manufacturing firms with more than 50 employees included in the SABI database. These firms were selected from the most innovative sectors in Spain in recent years (INE, 2005), namely, manufacture of machinery; manufacture of motor vehicles; manufacture of radios, TV and telecommunications equipment; and the chemical activities sectors. These five industries are all in manufacturing sectors and they all perform innovative activities, which could help to control for common factor markets and inter-industry variance (Burpitt and Valle, 2010). Several studies on organizational learning have considered manufacturing firms to test their hypotheses (e.g. Burpitt and Valle, 2010; Lee and Huang, 2012; Huang and Li, 2017). Our population included 530 Spanish manufacturing firms.

Structural ambidexterity refers to the organization's capacity to enable dualism, by creating some units specifically focused on alignment or continuity, and others centered solely on the rapidly changing demands of the environment (Jansen *et al.*, 2009; Duncan, 1976). Therefore, structural ambidexterity implies that organizational units engaged in exploration are physically separated from those involving exploitation (Tushman and O'Reilly, 1996). In line with the structural ambidexterity perspective adopted in this study, our unit of analysis is organizational departments. We selected HR, production and marketing units or departments, the managers of which were the respondents for the study. These managers have information about employees' characteristics and HRM practices in their departments, as well as information about the firm as a whole.

All the firms in the population were initially contacted by telephone. We then sent them three questionnaires covering issues of leadership style, HC and learning. The HR managers were asked to complete the questions about both the production and the marketing departments, and the production and marketing managers were asked about their own organizational units. A total of 107 firms returned the three questionnaires answered by the HR, production and marketing managers, yielding a 20.18 percent response rate. We also obtained only one questionnaire from 23 firms and two questionnaires from 11 firms, although this information was not used in this study.

We performed an ANOVA between respondent and non-respondent firms to identify potential non-response bias, considering industry membership, number of employees and revenue. The results revealed no significant differences between respondent and non-respondent firms.

The three questionnaires received from 107 firms, completed by the HR, production and marketing managers, were then analyzed to evaluate the degree of similarity between the

responses from the three manager types, by comparing their responses in pairs. Specifically, the responses from the HR managers were aggregated to the responses from the production managers, and to the responses from the marketing managers.

To this end, we calculated the interrater agreement index (rwg) to test correspondence between the different respondents in the same firm (Kozlowski and Hattrup, 1992), following the method proposed by James *et al.* (1993). This analysis yielded the following results in the production departments: rwg = 0.84 for transformational leadership, rwg = 0.76 for transactional leadership, rwg = 0.89 for specialist HC, rwg = 0.89 for generalist HC, rwg = 0.82 for exploration learning and rwg = 0.71 for exploitation learning. In the marketing departments we obtained rwg = 0.84 for transformational leadership, rwg = 0.95 for specialist HC, rwg = 0.91 for generalist HC, rwg = 0.82 for exploration learning and rwg = 0.73 for exploitation learning.

6.2 Measurements

The proposed hypotheses were tested using structural equation models, following the two-step process proposed by Anderson and Gerbing (1988). A confirmatory factor analysis (CFA) was performed to verify the reliability and validity of the scales and the composite reliability and discriminant validity analyses of the factors (Bagozzi and Phillips, 1982; Bagozzi *et al.*, 1991). Content validity was guaranteed by the literature review (Bollen, 1989). The CFA was performed using EQS software.

6.2.1 Dependent variables. Organizational learning was measured with scales adapted from Lubatkin *et al.* (2006) and Atuahene-Gima (2005). These authors identified two dimensions for organizational learning: exploitation and exploration learning. Lubatkin *et al.*'s (2006) scale includes 12 items, 6 items related to exploitation learning and 6 related to exploration learning. Atuahene-Gima (2005) measured exploitation and exploration learning using 8 and 9 items, respectively. We proposed a new scale to measure organizational learning linked to both the previous scales. Our scale includes the similar items from Lubatkin *et al.* (2006) and Atuahene-Gima (2005) as well as the different items proposed by these authors. Our final scale has a total of 17 items, 8 related to exploitation learning, and the other 9 to exploration learning.

A K-means cluster analysis and an ANOVA were performed to examine the ratio of production and marketing units devoted to exploitation and exploration learning in our sample. Results show that 91 (84.25 percent) production departments engaged in exploitation learning and 70 (64.82 percent) marketing departments carried out exploration learning. We can therefore conclude that production departments are exploitative organizational units, whereas marketing departments are explorative organizational units.

6.2.2 Independent and mediating variables. We adapted the scales from Subramaniam and Youndt (2005) and Kang and Snell (2009) to measure organizational HC. Subramaniam and Youndt (2005) measure HC with five items, as a dimension of intellectual capital. Four of these items are related to specialist HC and one is related to generalist HC. Kang and Snell (2009) distinguish and describe two different types of HC: specialist and generalist HC. Our proposed scaled included nine items, five related to specialist HC and four related to generalist HC.

The leadership styles considered in this study – transformational and transactional leadership – were adapted from the items proposed in previous research. Specifically, the 21-item scale from McKenzie *et al.* (2001) was used to measure transformational leadership style, and transactional leadership style was measured with Podsakoff *et al.*'s (1996) four-item scale.

6.2.3 Control variables. The control variables used in this study were firm size and department size, environmental turbulence and activity sector. These variables were

included in all the analyses and equations. Firm size was measured as the natural logarithm of the number of employees in the firm. Department size (production or marketing department) was measured as the natural logarithm of the number of employees in the department. Environmental turbulence was measured with the environmental turbulence scale proposed by Jansen *et al.* (2006). Finally, we selected five different activity sectors ranked from sector 1 to sector 5. Sector 1 was chosen as a reference category and is not included in the analysis. The other categories were introduced as dummy variables, taking the value of 1 when the firms belong to the corresponding sector and 0 otherwise.

In this study all items were measured on a seven-point Likert scale (1 = totally disagree, 7 = totally agree). Some of the original scales used a five-point Likert scale.

The reliability and validity of the scales were verified by CFA using EQS. CFA is a statistical technique used to verify the factor structure of a set of observed variables, and allows researchers to test the hypothesis that there is a relationship between observed variables and their underlying latent constructs. Based on knowledge of the theory and/or empirical research, the researcher first postulates the relationship pattern and then tests the hypothesis statistically.

Tables I and II report the results of the CFA for production and marketing units, respectively, comprising leadership style, HC and organizational learning for each department.

Table I presents the results for the production departments. Two factors were obtained for transformational leadership ($t = 2.671$; $t = 2.319$) and one for transactional leadership ($t = 2.974$). Two factors capture employees' HC: specialist HC ($t = 2.436$) and generalist HC ($t = 2.031$). For organizational learning we found two significant factors, one for exploitative learning ($t = 3.393$) and one for explorative learning ($t = 4.419$). Table II shows the results for the marketing departments. Two factors were obtained for transformational leadership ($t = 1.980$; $t = 2.664$), but none were obtained for transactional leadership. Two factors capture employees' HC: specialist HC ($t = 2.561$) and generalist HC ($t = 2.770$). For organizational learning we found one significant factor for exploitative learning ($t = 2.736$) and one for explorative learning ($t = 4.132$). In all cases, t-values were higher than 1.96, confirming that all the factors are significant at 95 percent.

Tables I and II also include the goodness-of-fit-indices from the CFA. In both cases, all indicators are favorable. The two tables only report the significant indicators for each factor, and confirm the convergent validity in all cases, due to the high and statistically significant values of the standardized factor loadings (Bagozzi *et al.*, 1991; Hair *et al.*, 1999).

From Tables III and IV we can conclude that the scales are reliable and that convergent and discriminant validity are confirmed for both the production and the marketing departments. Discriminant validity was confirmed following the procedures proposed by Fornell and Larcker (1981). Tables III and IV show that the average variance extracted (the main diagonal in the two tables) is higher than the square of the correlations between factors in both cases.

We use structural equation modeling to test the research hypotheses, applying the methodology proposed by Anderson and Gerbing (1988). The correlations between the different factors and their significance were analyzed, as well as the composite reliability associated with each factor (Tables V and VI).

6.3 Results
6.3.1 Testing the hypotheses. The hypotheses proposed were tested using covariance structure models. We started with the theoretical model in which the leadership style has some effect on employees' HC, which in turn affects learning. This model assumes that HC plays a mediator role between leadership and learning.

	Transformational leadership_1	Transformational leadership_2	Transactional leadership	Specialist human capital	Generalist human capital	Exploration learning	Exploitation learning	t-statistic
VIS_2: Paints an interest picture of the future of our group	0.874							6.084
VIS_3: Has a clear understanding of where we are going	0.815							2.957
VIS_4: Inspires other with his/her plans for the future	0.855							3.329
APY_1: Acts without considering my feelings		0.845						3.171
APY_2: Shows respect for my personal feelings		0.873						1.803
TRNS_2: Gives me special recognition when my work is very good			0.872					2.487
TRNS_3: Commends me when I do better than average work			0.809					4.857
TRNS_4: Complements me personally when I do understanding work			0.858					4.700
SPEC_1: Our employees are highly skilled in a very particular knowledge domain				0.817				4.973
SPEC_2: Our employees have knowledge that is deeper in a particular domain				0.778				3.859
SPEC_3: Our employees have a specific repertoire of capabilities				0.702				4.393
SPEC_4: Our employees can use their capabilities across specific situations				0.868				5.198
GEN_1: Our employees are experts in their particular jobs and functions					0.869			5.198
GEN_2: Our employees are multi-skilled in multiple knowledge domains					0.624			5.878
GEN_3: Our employees are able for varied interpretations of problems and situations					0.826			5.233

(*continued*)

Table I.
Confirmatory analysis factor (standardized solution): production department

	Transformational leadership_1	Transformational leadership_2	Transactional leadership	Specialist human capital	Generalist human capital	Exploration learning	Exploitation learning	t-statistic
GEN_4: Our employees have the potential to adapt in order to discover, comprehend, combine and apply new knowledge in the future					0.791			5.101
PLORAT_3: Learns product development skills and processes entirely new to the industry						0.749		4.764
PLORAT_5: Aggressively ventures into new market segments						0.811		5.266
PLORAT_6: Acquires entirely new managerial and organizational skills that are important for innovation						0.749		5.258
PLORAT_7: Looks for creative ways to satisfy its customer's needs						0.766		4.010
PLORAT_8: Learns new skills in areas such as funding new technology, staffing R&D function, training and development of R&D and engineering personnel for the first time						0.819		4.629
PLOIT_9: Upgrades current knowledge and skills for familiar products and technologies							0.777	4.898
PLOIT_10: Upgrades current knowledge and skills for familiar products and technologies							0.825	3.976
PLOIT_12: Invests in enhancing skills in exploiting mature technologies that improve productivity of current innovation operations							0.821	3.332
PLOIT_14: Fine-tunes what it offers to keep its current customers satisfied							0.782	5.939

Notes: $n = 107$. Goodness-of-fit indices: Satorra-Bentler $\chi^2 = 303.9834$; $p = 0.03542$; BB-NFI = 0.814; BB-NNFI = 0.824; CFI = 0.867; RMSEA = 0.043; df = 775

Table I.

	Transformational leadership_1	Transformational leadership_2	Specialist human capital	Generalist human capital	Exploration learning	Exploitation learning	t-statistic
VIS_1: Is always seeking new opportunities for the unit/department	0.804						5.577
VIS_2: Paints an interest picture of the future of our group	0.834						2.902
VIS_3: Has a clear understanding where we are going	0.861						4.121
VIS_4: Inspires other with his/her plans for the future	0.863						4.365
APY_1: Acts without considering my feelings		0.874					2.265
APY_2: Shows respect for my personal feelings		0.861					2.964
SPEC_1: Our employees are highly skilled in a very particular knowledge domain			0.856				2.673
SPEC_3: Our employees have a specific repertoire of capabilities			0.781				2.487
SPEC_4: Our employees can use their capabilities across specific situations			0.725				4.386
GEN_1: Our employees are experts in their particular jobs and functions				0.852			2.050
GEN_3: Our employees are able for varied interpretations of problems and situations				0.751			3.324
GEN_4: Our employees have the potential adaptability to discover, comprehend, combine and apply new knowledge in the future				0.866			5.704
PLORAT_3: Learned product development skills and processes entirely new to the industry					0.807		4.412
PLORAT_4: Creates products or services that are innovative to the firm					0.759		4.163
PLORAT_8: Learned new skills in areas such as funding new technology, staffing R&D function, training and development of R&D and engineering personnel for the first time					0.637		5.536
PLOIT_14: Fine-tunes what it offers to keep its current customers satisfied						0.742	4.734
PLOIT_16: Continuously improves the quality and reliability of its products and services						0.727	3.918
PLOIT_17: Fine-tunes what it offers to keep its current customers satisfied						0.868	3.324

Notes: $n = 107$. Goodness-of-fit indices: Satorra-Bentler $\chi^2 = 96.1727$; $p = 0.028316$; BB-NFI $= 0.872$; BB-NNFI $= 0.932$; CFI $= 0.949$; RMSEA $= 0.027$; df $= 704$

Table II.
Confirmatory analysis
factor (standardized
solution): marketing
department

	Transformational leadership_1	Transformational leadership_2	Transactional leadership	Specialist HC	Generalist HC	Exploration learning	Exploitation learning	Composite reliability
Transformational leadership_1	0.7092							0.885
Transformational leadership_2	0.2116	0.6347						0.849
Transactional leadership	0.1755	0.1697	0.7170					0.883
Specialist human capital	0.0906	0.0973	0.0829	0.6297				0.871
Generalist human capital	0.0882	0.0942	0.0812	0.1011	0.7399			0.862
Exploration learning	0.0670	0.0655	0.0585	0.0590	0.0615	0.6074		0.885
Exploitation learning	0.0900	0.0888	0.0772	0.0745	0.0750	0.0992	0.6424	0.877

Notes: $n = 107$. The values on the diagonal are the average variance extracted for each factor

Table III.
Discriminant validity
for the production
department

	Transformational leadership_1	Transformational leadership_2	Specialist HC	Generalist HC	Exploration learning	Exploitation learning	Composite reliability
Transformational leadership_1	0.757						0.906
Transformational leadership_2	0.550	0.636					0.858
Specialist HC	0.428	0.434	0.622				0.831
Generalist HC	0.438	0.446	0.429	0.702			0.863
Exploration learning	0.242	0.263	0.264	0.273	0.544		0.780
Exploitation learning	0.361	0.374	0.295	0.299	0.257	0.615	0.827

Notes: $n = 107$. The values on the diagonal are the average variance extracted for each factor

Table IV.
Discriminant validity
for the marketing
department

	Transformational leadership_1	Transformational leadership_2	Transactional leadership	Specialist HC	Generalist HC	Exploration learning	Exploitation learning	Mean	SD
Transformational leadership_1	0.885							5.925	0.744
Transformational leadership_2	0.46	0.849						5.633	0.817
Transactional leadership	0.419	0.412	0.883					5.352	0.931
Specialist HC	0.301	0.312	0.288	0.871				5.667	0.887
Generalist HC	0.297	0.307	0.285	0.318	0.862			5.349	1.048
Exploration learning	0.259	0.256	0.242	0.243	0.248	0.885		5.289	1.418
Exploitation learning	0.3	0.298	0.278	0.273	0.274	0.315	0.877	4.251	1.685

Notes: $n = 107$. The values on the diagonal are the composite reliability of each factor

Table V.
Means, standard deviations and correlations between factors and composite reliability for the production department

40

	Transformational leadership_1	Transformational leadership_2	Specialist HC	Generalist HC	Exploration learning	Exploitation learning	Mean	SD
Transformational leadership_1	0.906						5.926	0.744
Transformational leadership_2	0.55	0.858					5.633	0.817
Specialist HC	0.428	0.434	0.831				5.609	0.889
Generalist HC	0.438	0.446	0.429	0.863			5.560	0.937
Exploration learning	0.242	0.263	0.264	0.273	0.780		5.401	1.294
Exploitation learning	0.361	0.374	0.295	0.299	0.257	0.827	4.763	1.633

Notes: $n = 107$. The values on the diagonal are the composite reliability of each factor

Table VI.
Means, standard deviations and correlations between factors and composite reliability for the marketing department

The results for the relationships between HC and leadership show that in the production departments (Equation (1) in Table VII) both transactional and transformational leadership styles are positively and directly related to specialist HC. In turn, transformational leadership in the marketing departments is positively associated with generalist HC (Equation (1) in Table VIII). *H.1.1* and *H.1.2* are therefore supported. These results are presented in Figures 2 and 3.

In addition, our results show that transformational leadership is directly and positively associated with exploitation learning in both the production departments (Equation (2) in Table VII), and the marketing departments (Equation (2) in Table VIII). *H2a* is therefore supported, although *H2b* is not.

Our findings also show that specialist HC is positively associated with exploitation learning (Equation (2) in Table VII) and generalist HC is positively related to exploration learning (Equation (2) in Table VIII). *H3a* and *H3b* are therefore supported.

At last, in order to verify the existence of mediator effects of HC on the relationships between leadership and organizational learning, we examine Equation (2) in Tables VII and VIII. These results initially support the mediating effect of HC in the relationships between leadership style and learning. Table VII shows that in the production departments, the relationship between transformational leadership and exploitation learning is mediated by specialist HC. In the marketing departments (Table VIII) generalist HC mediates the relationship between transformational leadership and exploration learning. *H4* is therefore supported.

7. Conclusions

The aim of this study was to investigate the role of HC in the link between leadership and organizational learning. We proposed that different leadership styles promote specialist or generalist HC, which in turn, lead to different organizational learning (exploitative or explorative learning, respectively). To test the hypotheses, we adopted a structural

|	Equation (1) dependent variable: specialist HC	Equation (2) dependent variable: exploitation learning
Control variables		
Environmental turbulence	ns	ns
Firm size	2.471**	ns
Production department size	ns	0.204***
Chemical industry	ns	ns
Manufacture of radios, TV and telecommunications equipment	ns	0.239***
Manufacture of machinery	ns	ns
Manufacture of motor vehicles	ns	ns
Independent variables		
Transactional leadership	0.252*	ns
Transformational leadership	0.310*	0.246***
Specialist HC	–	0.360***
Generalist HC	–	ns
	Goodness-of-fit indices: Satorra-Bentler $\chi^2 = 239.1619$; $p = 0.02423$; BB-NFI $= 0.817$; BB-NNFI $= 0.821$; CFI $= 0.883$; RMSEA $= 0.044$; df $= 198$	Goodness-of-fit indices: Satorra-Bentler $\chi^2 = 220.1105$; $p = 0.03547$; BB-NFI $= 0.834$; BB-NNFI $= 0.843$; CFI $= 0.897$; RMSEA $= 0.043$; df $= 184$

Notes: $n = 107$. *$p < 0.05$; **$p < 0.01$; ***$p < 0.001$

Table VII.
Results for the production department

	Equation (1) dependent variable: generalist HC	Equation (2) dependent variable: exploration learning
Control variables		
Environmental turbulence	0.497***	ns
Firm size (F9)	ns	ns
Marketing department size	ns	ns
Manufacture of radios, TV and telecommunications equipment	0.192**	ns
Chemical industry	ns	ns
Manufacture of machinery	0.115**	ns
Manufacture of motor vehicles	ns	ns
Independent variables		
Transformational leadership	0.359***	0.689***
Transactional leadership	ns	ns
Specialist HC	–	0.357***
Generalist HC	–	ns
	Goodness-of-fit indices: Satorra-Bentler $\chi^2 = 166.7858$; $p = 0.06081$; BB-NFI $= 0.811$; BB-NNFI $= 0.866$; CFI $= 0.894$; RMSEA $= 0.042$; df $= 140$	Goodness-of-fit indices: Satorra-Bentler $\chi^2 = 184.6767$; $p = 0.07988$; BB-NFI $= 0.814$; BB-NNFI $= 0.887$; CFI $= 0.909$; RMSEA $= 0.039$; df $= 159$

Table VIII.
Results for the
marketing department

Notes: $n = 107$. *$p < 0.05$; **$p < 0.01$; ***$p < 0.001$

Figure 2.
Results for the
marketing department

Notes: *$p<0.1$; ***$p<0.01$
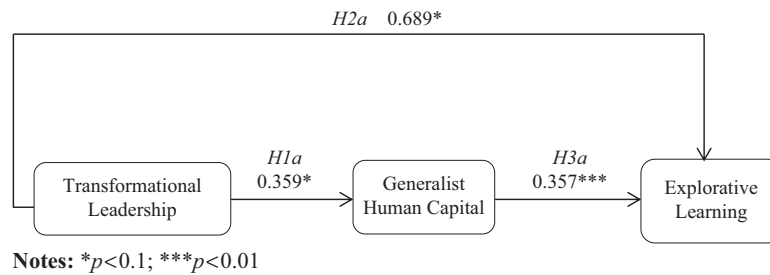
Figure 3.
Results for the
production
department

Notes: *$p<0.1$; ***$p<0.01$
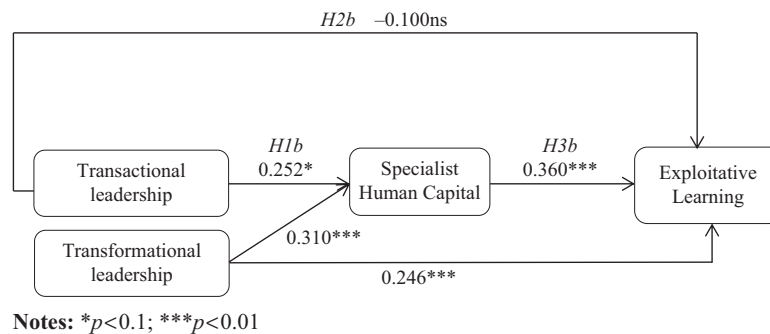
ambidexterity approach as we consider that organizations need units working on both types of learning.

We found that transactional leaders promote specialist HC, and transformational leaders encourage generalist HC, as we proposed. However, the former relationship was only found in the production departments, and the latter, in the marketing departments. Contrary to our expectations, transformational leadership is also related to specialist HC in the production departments. Regarding the kind of organizational learning that leaders encourage, we confirmed that transformational leaders stimulate exploration learning (marketing departments), but in contrast to our hypothesis, these leaders are also able to promote exploitation learning (production departments). On the other hand, transactional leaders do not appear to be directly linked with either type of learning; their only influence on learning is through HC. Specifically, they support specialist HC, which in turn leads to exploitative learning. In sum, we confirm that HC acts a as mediation variable between leadership and type of organizational learning. However, it is important to note that the link between specialists and exploitation learning only arises in the production departments, and the positive effect of generalist HC on exploration learning only appears in the marketing departments.

Based on the above results, we now elaborate on the three main contributions of the research: the relevance of considering the department as a unit of analysis (structural ambidexterity approach), the significant role of transformational leaders in organizational learning and the mediating role of HC. First, the department emerges as a key factor in understanding what kind of learning is generated, so our results are consistent with the structural approach. All organizations learn by exploring or exploiting knowledge, perhaps at different intensities, but both types of learning can be found in each organization (Vera and Crossan, 2004). Our results show that production departments are more inclined toward exploitation while marketing departments typically follow exploration learning. It is therefore interesting to highlight the preference of production units for efficiency, whereas marketing departments tend to prefer innovation. Even when a transformational leader is found in a production department, he or she is able to promote specialist HC to obtain exploitative learning. Our interpretation is that the unit prevails over leadership type in explaining which kind of knowledge is developed. A unit's innovation culture could therefore play a key role in understanding the influence of leaders, who may adapt to the existing culture. Previous research has highlighted the importance of leaders in generating an innovative culture (Sattayaraksa and Boon-itt, 2016), but only a transversal design reveals the association between the two variables. This confirms that contextual variables should be taken into account in order to further our understanding of the role leaders play in generating organizational learning.

The second contribution concerns the role of transformational leaders in organizational learning, as we have shown that they are able to promote both types of HC and, in turn, both types of organizational learning. Transformational leaders are consequently more versatile than transactional leaders, who are only able to stimulate specialist HC, and indirectly, exploitative learning. Our results suggest an issue that requires further research: whether transformational leaders are able to get the best out of employees, by making specialists exploit and generalists explore, or whether they only act according to the type of HC available. In the first case, we could say that transformational leaders are ambidextrous themselves, because they can act in different ways to generate the most appropriate HC for the type of organizational learning the organization wants. Such leaders would be able to take full advantage of their employees' knowledge, by making specialists exploit and generalists explore, which could be the best result for the organization because specialists can contribute with efficiency and generalists with innovation.

The second interpretation is that the transformational leaders in the study were simply adapting to the type of knowledge available in their departments. In any case, what our results reveal is that only transformational leaders are found behind generalist HC and

explorative learning. Hence, they appear to be a necessary condition for generating the most appropriate environment to stimulate employees' attitudes and capabilities and achieve explorative learning.

The third and final contribution of the paper is the mediating role of HC in organizational learning, which extends our understanding of the mechanisms through which leadership impacts on learning. HC emerges as the link between leadership and organizational learning, and as such is a prerequisite for both exploitative and explorative learning.

From a practical point of view, it seems that the versatility of transformational leaders makes them more suitable in the current changeable environment, as they can contribute to the flexibility of the firm. These results can show practitioners that transformational leaders are able to promote both types of HC and also exploitation and exploration learning in different organizational units. Although firms must actively build a climate of empowerment through appropriate HR practices to promote employee behavioral outcomes regardless of leadership behavior, the importance of leadership also appears to be clear (Chang, 2016). Moreover, recent research shows that transactional leadership behavior may be less effective in pursuing organizational innovation in a dynamic environment (Prasad and Junni, 2016).

Our study therefore suggests that transformational leaders are best suited to address ambidexterity. HR departments could usefully invest in developing this kind of leader, or bring in leaders with a transformational style through the selection process. This would ensure that the firm's leaders will act according to its needs, exploiting actual knowledge or exploring new knowledge. In any case, leaders should be aware of their special role in generating knowledge, and how they should contribute to developing the HC the organization requires.

This study has some limitations. First, HR practices are not included in this model; introducing such practices would provide a better understanding of the relationships between leadership, HC and organizational learning. Second, approaches other than the structural perspective could also be taken into account (Chang and Hughes, 2012). Third, individual learning is a necessary but insufficient condition for organizational learning (Youndt and Snell, 2004; Argyris and Schön, 1978). Future research could include social and organizational capital to extend understanding of the effect intellectual capital has on organizational learning. Other unsolved questions concern the usefulness and role of transactional leaders in organizational learning. Our results confirm the preference for transformational leaders, which is in line with other studies on the effectiveness of this leadership style in emergent change processes (van der Voet, 2014) and knowledge sharing at group and individual levels (Li et al., 2014). Future research should also study other industries, with different intensities of innovation activities.

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Appendix. Scales

Organizational learning (Lubatkin *et al.*, 2006; Atuahene-Gima, 2005)
Exploratory learning: our employees […]:

(1) look for novel technological ideas by thinking "outside the box";

(2) based their success on their ability to explore new technologies;

(3) create products or services that are innovative to the firm;

(4) look for creative ways to satisfy customers' needs;

(5) aggressively venture into new market segments;

(6) actively target new customer groups;

(7) strengthen innovation skills in areas where they had no prior experience;

(8) learn product development skills and processes entirely new to the industry; and

(9) acquire manufacturing technologies and skills entirely new to the firm.

Exploitation learning: our employees […]:

(1) commit to improve quality and lower cost;

(2) continuously improve the reliability of the firm's products and services;

(3) increase the levels of automation in the firm's operations;

(4) constantly survey existing customers' satisfaction;

(5) fine-tune what they offer to keep current customers satisfied;

(6) penetrate more deeply into the firm's existing customer base;

(7) upgrade current knowledge and skills for familiar products and technologies; and

(8) invest in enhancing skills in exploiting mature technologies that improve productivity of current innovation operations.

Human capital (Subramaniam and Youndt, 2005; Kang and Snell, 2009)
Specialist human capital:

- our employees are highly skilled in a very particular knowledge domain;

- our employees have knowledge that is deeper in a particular domain;

- our employees have a specific repertoire of capabilities;

- our employees can use their capabilities across specific situations; and

- our employees are experts in their particular jobs and functions.

Generalist human capital:

- our employees are experts in their particular job;

- our employees are multi-skilled in multiple knowledge domains;

- our employees can make varied interpretations of problems and situations; and
- our employees can potentially adapt to discover, comprehend, combine and apply new knowledge in the future.

Leadership (McKenzie *et al.*, 2001; Podsakoff *et al.*, 1996)
Transformational leadership:

- is always seeking new opportunities for the unit/department;
- paints an interesting picture of the future of our group;
- has a clear understanding of where we are going;
- inspires other with his/her plans for the future;
- is able to get others committed to his/her dream of the future;
- fosters collaboration among work groups;
- encourages employees to be "team players";
- gets the group to work together for the same goal;
- develops a team attitude and spirit among his/her employees;
- acts without considering my feelings;
- shows respect for my personal feelings;
- behaves in a manner that is thoughtful of my personal needs;
- treats me without considering my personal feeling;
- shows us that he/she expects a lot of from us;
- insists on only the best performance;
- will no settle for second best;
- leads by "doing" rather than simply "telling";
- provides a good model to follow;
- leads by example;
- has provided me with new ways of looking at things which used to be a puzzle for me; and
- has ideas that have forced me to rethink some of my own ideas I have never questioned before.

Transactional leadership:

- always gives me a positive feedback when I perform well;
- gives me special recognition when my work is very good;
- commends me when I do better than average work; and
- personally complements me when I do understanding work.

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Emotional intelligence of the HR decision-maker and high-performance HR practices in SMEs

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Abstract

Purpose – The purpose of this paper is to examine the influence of the emotional intelligence (EI) of the person in charge of making human resource management (HRM) decisions on the adoption of high-performance human resource (HR) practices in small- and medium-sized enterprises (SMEs).

Design/methodology/approach – This study takes evidences from 157 HR decision makers in SMEs who autonomously make the decisions in the HR area and were responsible for the HR practices in their firm. The authors used multiple linear regression analysis to test the hypotheses.

Findings – Results show that both the EI and the different EI competencies of which it is comprised affect the adoption of various HR practices. Thus, the main theoretical contribution of this work stems from the incorporation of a psychological variable (EI) as an antecedent of HRM. Managers of the SME will find guidance about which emotional competencies are the most important for them to be more successful in their roles and for improving HRM.

Research limitations/implications – First, the sample of firms the authors studied is limited to a specific geographic area in one country – Spain (Canary Islands) – that will necessarily limit generalisation of the results obtained to other populations of SMEs. Researchers should replicate the current model in other geographic areas. Second, and with regard the methodology, researchers could explore other tools to measure EI and emotional competencies. It would be interesting to measure this construct using qualitative analytical techniques, with 360 – or 180 – degree tools. Finally, the current study is cross-sectional in nature, which limits our ability to draw causal inferences from the data. This cross-sectional design prevents us, for example, from analysing EI's influence on the continued development of high-performance HR practices over time. Future research using longitudinal methodologies to study these variables could provide additional advances in this area. This work makes important contributions to both the literature and the business world. With regard to the theoretical implications, results confirm that EI as a whole, as well as in terms of its specific emotional competencies, affects the decision making related to the adoption of high-performance HR practices, which is known to contribute to the organisational performance.

Practical implications – With regard its practical implications, SMEs' owners-managers and HR practitioners may find our results and conclusions interesting. Indeed, recommendations in business management have often been accompanied by new approaches in HRM (Kent, 2005), as this study proposes. In particular, managers will find evidence of how a decision-maker's higher EI propitiates the adoption of high-performance HR practices, thus being able to improve HRM in their SMEs. Moreover, managers will obtain guidance on which emotional competencies are the most important for adopting each HR practice, and so find greater success in their HRM roles. SMEs could organise programmes to develop the HR decision-maker's emotional competencies, as large firms do for their executives.

Originality/value – Thus, the main theoretical contribution of this work stems from the incorporation of a
psychological variable (EI) as an antecedent of HRM. Managers of the SME will find guidance about which
emotional competencies are the most important for them to be more successful in their roles and for
improving HRM.

Keywords Emotional intelligence, High-performance HR practices, HR decision-maker,
Small and medium- enterprises

Paper type Research paper

Introduction

During the past few decades, and building on Huselid's (1995) study, research on
high-performance human resource (HR) practices has primarily focused on testing the impact
of these practices on employees' and organisations' performances, as some meta-analyses
(e.g. Subramony, 2009) and further works (e.g. Kehoe and Wright, 2013) show. According to this
research, these practices give rise to a number of intended work outcomes, so becoming relevant
to firms. The academic interest in showing the positive outcomes of high-performance HR
practices contrasts with a few studies interested in identifying organisational and individual
antecedents of the adoption of these fruitful practices (Liu *et al.*, 2009). The antecedents, which
arguably fall into the categories of market-related factors, business characteristics and access to
HR expertise (Wu *et al.*, 2014), are: sector of activity (e.g. Hunter, 2000), firm size and the relative
proportion of HR departments' employees within a firm (Huselid and Rau, 1997), competitive
strategy and exposure to the HR profession – participation of HR managers in decision making
and their position in the company hierarchy – (e.g. Horgan and Muhlau, 2003), organisational
culture (e.g. Mavondo *et al.*, 2005), employee union membership rates (Liu *et al.*, 2009) and age of
the firm (e.g. Geary, 1999).

However, despite organisations existing within emotional contexts (Radhakrishnan and
UdayaSuriyan, 2010), to the best of our knowledge no previous theoretical or empirical study
addresses the influence of managers' emotional intelligence (EI[1]) on the adoption of high-
performance HR practices. Certainly, some previous studies have been interested in
relationships between leaders' EI and followers' outcomes, such as motivation, job satisfaction
or willingness to make an extra effort, but those studies recommend additional research along
this line (e.g. Alston *et al.*, 2010; Miao *et al.*, 2016; Sy *et al.*, 2006), and its association with the
adoption of HR practices in the firm has been not previously been considered. Authors' claims
have raised the point that research should analyse the importance of managers' EI (e.g. Jamali
et al., 2008), and particularly of each individual factor that it is comprised of (Alston *et al.*, 2010;
De Haro *et al.*, 2018), in workplace contexts (Hwa and Amin, 2016). The present study aims to
fill this gap. Whereas rationality – based on qualities such as the manager's academic
background and technical knowledge – was traditionally considered as the key element of
effective management (Brotheridge and Lee, 2008), some researchers put emotions at the heart
of all work relationships (Goleman, 1998; McClelland, 1973).

Understanding emotion to be the individual systematic responses to stimuli, which
includes biological, cognitive, motivational and experiential systems and psychosomatic
subsystems (Salovey and Mayer, 1990), emotional displays during interactions at work can
have a significant impact on employees' behaviour (e.g. Zampetakis and Moustakis, 2011).
Workplaces need emotionally intelligent individuals "who are able to identify, manage, and
focus their emotions effectively, and cope successfully with the demands of daily life"
(Nafukho and Muyia, 2014, p. 625; in Farnia and Nafukho, 2016). Along with this line,
managers with high levels of trait EI may regulate their emotional states by supporting
effective courses of action to deal with situations in ways that create more positive
emotional responses from subordinates. A manager who is poor at perceiving emotions may
unknowingly miss important emotional signals from his or her team members. Similarly, a
manager who is poor at managing his or her own emotions may allow emotions to interfere
with effective action (Zampetakis and Moustakis, 2011).

According to this approach, emotions are the essence of the manager's work. Thus, EI is seen as a variable that affects the manager's decisions (Cherniss and Goleman, 2001), improves workplace performance, and helps to develop the individuals within organisations. All this has made it an attractive construct for HR development scholars and practitioners (Farnia and Nafukho, 2016).

Based on the above, and taking into account that recommendations in business management are usually preceded by the incorporation of new approaches in HRM (Kent, 2005), we propose that the HR manager's perception about the utility of adopting high-performance HR practices could be influenced not only by rational criteria – e.g., the balance between the additional labour costs and productivity-enhancing benefits associated with using such practices – but also by his/her EI. This proposal might be especially relevant for the setting of small- and medium-sized enterprises (SMEs). SMEs' management is often exercised by a single person who centralises decision making and makes a large number of decisions of hugely varying types and degrees of importance, among them those related to HR (Kotey and Slade, 2005). Since this type of firm does not usually form part of a business group, the owners are frequently entirely responsible for practically all the decision making (Suárez-Núñez, 2003. In addition, in SMEs, management is characterised by proximity, since the decision maker is physically and emotionally close to his or her subordinates (Suárez-Núñez, 2003; Kotey and Slade, 2005). This personal contact may affect the way HR policies and practices are applied, the impact of this proximal management being important for the development of the labour force within the firm. Based on all the above, we pose the following question:

RQ1. Does the HR decision-maker's EI directly affect the adoption of the different high-performance HR practices in SMEs?

However, EI is a multi-dimensional construct consisting of different emotional competencies (e.g. Boyatzis *et al.*, 2000; Goleman, 1998) – e.g., empathy, self-control, communication – and no previous studies examine the influence of each emotional competency on the adoption of the various HR practices. Therefore, a second research question arises:

RQ2. Which emotional competencies directly affect the adoption of each HR practice?

In order to answer these questions, we carried out fieldwork whereby we took evidence from 157 HR decision makers in SMEs who autonomously make the decisions in the HR area and were responsible for the HR practices in their firm.

The present study contributes to HR literature in three ways. First, it expands our knowledge about the impact of managers' EI in SMEs as an antecedent of the decision making in the HR area. Second, it specifically contributes towards understanding the impact of EI on the adoption of high-performance HR practices. Third, the variables in the study and the conclusions reached are pioneering in the HR literature, since an analysis of the effect of EI, and particularly of each emotional competency, is made regarding the HR decision maker on the adoption of every high-performance HR practice.

We will proceed in the following manner: we start by briefly outlining the theoretical issues of the study by conceptualising EI, contextualising high-performance HR practices in SMEs, and examining how the different dimensions of EI are likely to affect the adoption of high-performance HR practices in SMEs in the second section). In the third section, the methodological design of the empirical study is clarified. We analyse the empirical evidence in the fourth section, so answering the two research questions and testing the hypotheses in the study. The discussion raised from our research and stated in the fifth section provides new insights for research in the HRM field. Finally, in the sixth section, we conclude with some findings and recommendations for future works.

Theoretical framework

EI: conceptualisation and models

Academics in the fields of management, psychology and health sciences, as well as practitioners in various industries have shown increasing interest in the term EI (Cho *et al.*, 2015; Jamali *et al.*, 2008; Rathore and Pandey, 2018; Ybarra *et al.*, 2014). Despite this interest, authors have not reached a consensus about its conceptualisation, so do not as yet agree on its definition (Cho *et al.*, 2015; Ciarrochi *et al.*, 2000; Mayer and Salovey, 1997). Nevertheless, the proposals of various authors do have similarities, so the different definitions are more complementary than diverging (Ciarrochi *et al.*, 2000).

Salovey and Mayer (1990) were the first authors to publish a scientific study of EI, starting from Gardner's (1983) intrapersonal and interpersonal intelligence. Later on, they revised their initial conceptualisation and proposed one of the definitions of EI that has gained most acceptance: "the ability to perceive accurately, appraise, and express emotion; the ability to access and/or generate feelings when they facilitate thought; the ability to understand emotion and emotional knowledge; and the ability to regulate emotions to promote emotional and intellectual growth" (Mayer and Salovey, 1997, p. 10). From this perspective, EI is conceptualised as "a set of interrelated abilities possessed by individuals to deal with emotions" (Wong and Law, 2002, p. 244). A large number of research works follow this approach (e.g. Schutte *et al.*, 1998; Arunachalam and Palanichamy, 2017). Another widely accepted definition that has become dominant in the management field is Goleman's (Joseph *et al.*, 2015), whereby EI is "the capacity for recognising our own feelings and those of others, for motivating ourselves, and for managing emotions well in ourselves and in our relationships" (Goleman, 1998, p. 317). According to this conceptualisation, EI involves a set of emotional competencies that allow people to adapt their personal functioning to the demands of their work and the environment, so that EI is observed when a person demonstrates the correct emotional competencies at the appropriate times and with sufficient frequency to be effective in practice (Boyatzis *et al.*, 2000). Focusing on emotional competencies, McClelland (1973) calls them critical differentiators of individual performance at work. These competencies facilitate the handling of one's own and others' emotions (Boyatzis *et al.*, 2000).

The different conceptualisations of EI and its morphological structure in emotional competencies and/or abilities have led to various theoretical models, which can be classified into two types: ability models and mixed models (Cho *et al.*, 2015; Mayer *et al.*, 2000). First, ability models study the individual's aptitude for processing affective information (Salovey and Mayer, 1990), and consider EI as a cognitive capability founded on the real potential of the individual to recognise, process and utilise emotionally charged information. According to Meisler and Vigoda-Gadot (2014), the ability model involves an intellectual understanding of emotion, and states how emotion can guide both thought and actions. This model considers EI as a form of pure intelligence; as a set of cognitive abilities (Mayer and Salovey, 1997; Mayer *et al.*, 2000). Referring its structure, authors have identified four levels of emotional abilities (Mayer *et al.*, 1999), with each level being built on the abilities achieved at the previous level. Moreover, each level has specific abilities: perception, appraisal and expression of emotion; emotion as a facilitator of thinking; understanding of emotion; and management and regulation of emotion (Day and Carroll, 2008). However, such internal structure has stimulated debate lasting nearly a decade with authors finding competing models, which range from one- to four-factor solutions (Fan *et al.*, 2010).

Second, the mixed or trait, models are more eclectic in their conceptualisation than the ability models (Day and Carroll, 2008), since they characteristically combine various personality-related dimensions (e.g. optimism, assertiveness or empathy) with cognitive and emotional factors (e.g. perception, assimilation, understanding and management of emotions) (Sosa-Correa, 2008). Pérez *et al.* (2005) see trait EI as emotional self-efficacy since they relate EI with the individual's behaviours and skills, just as the individual perceives them (Petrides and Furnham, 2001).

Their structure depends on the mixed model proposed by each author. Authors identify from four to two dozen emotional competencies which are mainly grouped into four main areas, although structures of three (e.g. Boyatzis *et al.*, 2000; Nowack, 2007), five (e.g. Goleman, 1998) and even seven areas of competencies have been also proposed. The most frequent structure is the following (Cherniss and Goleman, 2001; Kim and Liu, 2017):

(1) self-awareness (i.e. knowing one's internal states, preferences and feelings), which includes competencies such as emotional awareness, accurate self-assessment and self-confidence;

(2) self-management (i.e. skills to control emotions and recover from psychological distress), which encompasses competencies such as emotional self-control, adaptability, achievement orientation, initiative, optimism and transparency;

(3) social awareness (i.e. knowing the emotions of people around you), which is comprised of competencies such as empathy, organisational awareness and service orientation; and

(4) relationship management (i.e. skills to direct emotions toward constructive activities and induce desirable responses in others), which is comprised of competencies such as developing others, building bonds, influence, communication, conflict management, inspirational leadership, change catalyst, teamwork and collaboration.

In the literature, some models have gained general acceptance and empirical support (Jamali *et al.*, 2008): Mayer and Salovey's (1997) model, Goleman's (1995, 1998) model and Bar-On's (1997) model. The first is an ability model, while the other two are mixed models. After analysing their characteristics, Petrides and Furnham (2001) argued that the distinction between EI as an individual's trait – mixed model – and EI as an individual's capability – ability model – is not based so much on the theoretical model *per se*, but rather on the instruments that each model uses to operationalise and measure the concept. While the mixed models mostly use self-report measures (i.e. the individual's evaluation of their own behaviours and abilities), the ability models initially used only objective measures of performance (i.e. objective evidence consisting of responses to emotional stimuli), albeit recently an increasing number of works have also been using self-report measures (e.g. Meisler and Vigoda-Gadot, 2014; Arunachalam and Palanichamy, 2017). Harms and Credé's (2010) meta-analysis on EI and leadership show that trait measures of EI demonstrate higher validities than ability-based measures. These models also better predict some relevant variables related to HRM, such as job performance (Joseph *et al.*, 2015) and career decisions (Di Fabio and Saklofske, 2014). Accordingly, recent research on EI is heavily based on trait models (e.g. Hwa and Amin, 2016; Kim and Liu, 2017; Santos *et al.*, 2015) and particularly on Goleman-based models (e.g. Batista-Foguet *et al.*, 2008; Jamali *et al.*, 2008; Nowack, 2007). The current research follows this trend.

High-performance HR practices in SMEs
HRM is a key area that covers all the decisions affecting the nature of the relationships between the organisation and its employees (Boxall and Purcell, 2000). Boxall (1996) argues that a firm's advantage in its HR should be conceived of as the product of excellent HR and superior processes. HR practices are seen as the principal way in which firms can influence their employees' skills, attitudes and behaviour so they can do their work and help the organisation achieve its objectives (Chen and Huang, 2009). There is some disagreement about the exact HR practices that firms can adopt with that end. However, literature puts great emphasis on "utilising a system of management

practices providing employees with the skills, information, motivation and latitude resulting in a work force which is a source of competitive advantage" (Guthrie *et al.*, 2009, p. 112). In this sense, literature has paid attention to high-performance work systems, which improve firm performance by contributing to employee development (Den Hartog *et al.*, 2013).

The AMO framework of Appelbaum *et al.* (2000) provides a basis for a stronger conceptualisation of high-performance HR practices (Obeidat *et al.*, 2016). The AMO model proposes three dimensions of practices that boost employees' abilities, motivation and opportunities (Huselid, 1995; Jiang *et al.*, 2013). Therefore, many research works interested in the study of high-performance HR practices follow Appelbaum *et al.*'s (2000) AMO model in deciding the HR practices to include in their studies (e.g. Kroon *et al.*, 2013; Obeidat *et al.*, 2016). In particular, as the "A" dimension refers to the employee's ability to perform, HR practices of personnel selection and training are of interest because they contribute towards enhancing those abilities (Appelbaum *et al.*, 2000). The "M" dimension, in turn, deals with motivation; HR practices of assessment, internal promotion, salary incentives or pay are of relevance as they can enhance the employee's desire to perform (Appelbaum *et al.*, 2000). Finally, the "O" dimension of AMO refers to the opportunity to perform and HR practices that contribute to it encompass participation, teamwork or job design, as they provide employees with the autonomy to make decisions related to their post, to work together and share feedback about work goals and to have the opportunity to influence business decisions (Appelbaum *et al.*, 2000).

Because of SMEs' size and lack of resources, some debate has existed about the factual possibility of these firms adopting the AMO model of the high-performance work system, but small business employers' associations have proclaimed that their members do (Wu *et al.*, 2014), and some authors have found evidence of it. For example, Kroon *et al.* (2013) found high-performance work systems in SMEs, and although being smaller in terms of the number of practices adopted when compared to large firms, such systems encompassed coherent bundles of practices.

In SMEs, the manager – who is often also the owner (Lattimore *et al.*, 1997) – usually makes the firm's decisions in their entirety. HR specialist advisers are often too expensive for SMEs (Matlay, 1999). Thus, the manager must invest time in formulating a more suitable HRM system. Consequently, he/she can be very influential in the application of HR practices (Cassell *et al.* 2002; Matlay, 1999). Indeed, HRM will differ between SMEs and large firms because in SMEs it is often more informal, intuitive and simple in its application (Nguyen and Bryant, 2004). Under this working premise, the SME's manager plays a key role in the employment relationship. Thus, we think it is important to ask the following research question:

RQ3. What makes some managers adopt high-performance HR practices while others do not in SMEs?

Some authors attribute the low level of adoption of high-performance HR practices to size, and so the relative lack of resources available to the SME. However, according to Kroon *et al.*'s (2013) study, size alone is not enough to explain it. Other factors such as managers' perceptions of the utility of HR practices (e.g. Boudreau and Ramstad, 2003) and their strategic decision making (Kroon *et al.*, 2013) provide additional and, in all likelihood, more accurate answers to the question. For example, the lack (or a low level of adoption) of HRM practices in small firms could be due to the fact that some managers are unaware of the importance of these practices for the effective management and development of their HR (e.g. Singh and Vohra, 2009). In addition, such low adoption can be related to managers' strategic choices because their decision to adopt high-performance HR practices will depend on their beliefs with respect to the benefits

of such practices as a solution for business issues (Kroon *et al.*, 2013). If this is true, we need more research analysing the figure of the individual manager, since he/she makes the decision to adopt HR practices in SMEs.

EI of HR decision maker and the adoption of high-performance HR practices in SMEs
Irrespective of the EI model considered, research finds that EI as a whole gives the individual greater personal and social success. This occurs because people with higher EI frequently use adaptive and infrequently use maladaptive coping strategies due to their emotional abilities to appraise the circumstances and react to life events (Petrides *et al.*, 2007). EI involves a set of emotional competencies (Goleman, 1998) and evidence suggests that the control of a "critical mass" of competencies is necessary for individuals to reach a higher level of performance (Boyatzis *et al.*, 2000). Accordingly, we will refer below to managers with high EI as those having such a critical mass of competencies.

Looking at the HR managers in firms, literature states that it is their responsibility to provide a working environment that generates and maintains employees' engagement (Brunetto *et al.*, 2012), that is, a work situation where employees find work meaningful, and, consequently, they wish to – and can – invest themselves in their work in order to achieve personal and career benefits (Kahn, 1990). Engagement is likely to be influenced more by management practices and the work environment and climate than by the demographic – e.g., age or gender – and personality characteristics of employees (Richman, 2006). In this respect, HR managers are responsible for providing employees with individual development plans, benefits such as salaries or opportunities to carry out their tasks with autonomy, among other practices, in order to generate such engagement. In SMEs, the HR manager mainly corresponds to the owner-manager, who is the person that makes HR decisions (Lattimore *et al.*, 1997; Matlay, 1999) and is also often responsible for implementing the adopted HR practices, so that he/she is in close contact with employees (Kroon *et al.*, 2013).

Focusing our attention on these HR managers, literature states that they are required to deal with their own emotions and those of others, it being important for people in this role to effectively generate emotions that create a positive setting and contribute to employee satisfaction and support (O'Brien and Linehan, 2014; Santos *et al.*, 2015). In other words, HR managers are required to have a high EI, which is a prerequisite for inducing positive responses from others, as well as positive emotional states, even in cases where there are challenging circumstances (Pérez *et al.*, 2005). In addition, managers with higher EI scores are considered to be more motivated to offer appropriate solutions to solve the difficulties and challenges that occur on a daily basis in a work setting (Rezvani *et al.*, 2016), and to choose adaptive coping strategies (Petrides *et al.*, 2007).

Based on this, and taking into account the challenges SMEs face, we consider that the HR decision-makers' perceptions about the utility of adopting HR practices and their decisions in this regard may be related to their EI. In particular, due to the small size of SMEs, it can be expected that HR decision makers with high EI greatly value the utility of adopting high-performance HR practices based on the AMO model. As the low number of employees in SMEs makes each individual especially relevant for firms' daily operations and prospects of growth, managers with high EI will understand that the adoption of such HR practices may bestow upon the firm employees with superior abilities to perform, with desire (or motivation) to perform, and with opportunities to do so (Appelbaum *et al.*, 2000). Accordingly, authors have found that successful small firms use innovative HR practices that support their business philosophy, quite similar to high-performance HR practices, including the ones related to increasing ability, motivation and opportunity (Kroon *et al.*, 2013).

In this regard, Cherniss (2001) states that managers' EI influences organisational effectiveness in HR aspects such as employee recruitment and retention, development of talent and teamwork, among other things. Just by way of examples, we will refer to managers' EI and the recruitment, retention and development of talent. The effect of managers' EI on the recruitment of talent (Cherniss, 2001) is critical because such managers make the decision of using high-performance criteria (e.g. applicants' abilities to address and solve problems, to provide ideas for improvement, effort values, customer orientation).

The development of talent through the adoption of HR practices of training can be related to managers' views about the value of having increasingly qualified employees able to assume greater responsibilities within the SME. Therefore, they will encourage training practices as an investment in the SME to reach more skilled employees that can solve the challenges of their job by themselves and feel more confident to autonomously perform their tasks. However, managers with high EI will likely understand that having superior, qualified employees is not sufficient in and of itself. The SME must cultivate the retention of employees and facilitate their contributions as it has invested part of its scarce resources in increasing employees' abilities. For example, it has been found that in successful SMEs, HR decision makers invest more in incentive schemes (i.e. motivation practices) and have a strong belief in the advantages of involving employees in teamwork and in designing their job (i.e. opportunity practices) to facilitate their contribution to the SME (Kroon *et al.*, 2013). Thus, high-performance motivation and opportunity practices are also necessary. Accordingly, we posit:

H1. The higher the HR decision-maker's EI, the more they will adopt high-performance HR practices in the SME to enhance employees' abilities, motivation and opportunities.

EI is a multi-dimensional construct consisting of different emotional competencies that can be organised into categories such as self-awareness, self-management, social awareness and relationship management. According to examples provided by Boyatzis *et al.* (2000), competencies within each category can: complement each other in functional behaviour (e.g. in a changing context and referring to self-management, the combined use of competencies of adaptability and initiative would increase individuals' effectiveness); alternate manifestations depending on the setting; be compensatory (e.g. a person with high-achievement orientation may innovate new ways of accomplishing tasks, so requiring to a lesser degree the use/availability of initiative); and be antagonistic (e.g. an employee with a high level of self-control, who is capable of preventing impulses and uncontrolled actions, would also face some difficulties demonstrating initiative). It becomes of interest to identify the specific set of emotional competencies that influence the adoption of the various high-performance HR practices in the SME as it might happen that different competencies show positive, negative or no influence. It may also happen because different high-performance HR practices aim at different objectives (Appelbaum *et al.*, 2000).

In the absence of research specifically analysing the relationships under study; considering that HR managers are increasingly required to provide strategic leadership in organisations (Paauwe and Boselie, 2005); and taking into account that this role highly corresponds to the owner-manager of the SME (Lattimore *et al.*, 1997; Matlay, 1999), we turn when necessary to the literature on leadership to provide a theoretical foundation for our discussion.

Given the HR decision-maker's role in the SME, his/her competencies in the EI dimensions of self-awareness, self-management, social awareness and relationship management may be relevant in the adoption of high-performance HR practices. According to Boyatzis *et al.* (2000), the four-mentioned dimensions are expected to have a

developmental relationship. Specifically, as self-awareness refers to knowing one's internal states, preferences, resources and intuitions, such a dimension is needed for sustaining the dimension of self-management (i.e. managing one's internal states, impulses and resources). In other words, self-awareness can be considered a prerequisite for the competencies in the self-management dimension to be sustained. Similarly, the social awareness dimension that refers to the consciousness of others' feelings, needs and concerns can be considered a prerequisite for sustainable demonstration and use of the relationship management category of competencies (i.e. induce desirable responses in others). Accordingly, we will focus on the self-management and relationship management categories of competencies in our discussion below.

Self-management refers to EI competencies such as achievement orientation (i.e. striving to improve or meeting a standard of excellence), initiative (i.e. readiness to act on opportunities), optimism (i.e. persistence in pursuing goals despite obstacles and setbacks), among others (Goleman, 1995, 1998), which are related to the manager's strategic ambition and entrepreneurial orientation. Thus, HR decision makers high in these competencies will likely try to implement growth-oriented activities in SMEs and will display initiatives related to innovation and proactivity. As a consequence, high-performance HR practices will be considered an opportunity to achieve such intended growth since these managers need to complement their abilities with skilled employees in order to reach this growth and hence success (Kroon *et al.*, 2013). In terms of the AMO model, they will mainly adopt HR practices related to ability that allows them to select and develop employees. Motivation practices, albeit relevant, can require financial resources that SMEs often do not have and are necessary to boost the firms' growth. Finally, Kroon *et al.* (2013) warn that opportunity practices involve delegating responsibilities, which could be in stark contrast with the preference of an SME's manager to keep tight control in order to lead the firm to success, so it is possible that HR managers high in the self-management competency do not show a strong preference for HR practices of participation, teamwork and job design:

H2a. In SMEs, the higher the HR decision-maker's emotional competencies in the area of self-management, the more they will adopt high-performance HR practices to boost employee's abilities, this relationship being weaker for motivation – and especially for opportunity-enhancing practices.

HR decision-makers' EI competencies in the dimension of relationship management are also likely to affect the adoption of HR practices based on the AMO model. According to Goleman (1995, 1998), relationship management refers to EI competencies that help individuals to induce desirable responses in others. Among them, we find inspirational leadership **(i.e.** inspiring and guiding individuals and groups), communication (i.e. emitting clear and convincing messages), developing others (i.e. sensing others' developmental needs and bolstering their abilities) and influence (i.e. wielding effective tactics for persuasion). HR decision makers that have such emotional competencies are able to induce in employees a sense of being part of the firm and to get them to commit to their objectives. In this respect, Rezvani *et al.* (2016) found that managers with a high communication competency might connect effectively with their subordinates and facilitate both their motivation and inspiration towards addressing challenging tasks. Thus, these HR managers are able to boost employees' motivation as a substitute for formal high-performance motivation practices that are expensive and often unavailable to the SME. Even more, as these managers are equipped with the EI competency of developing others, they are aware of employees' needs to increase their abilities. So, they can display their communication and influence competencies to enhance employees' abilities through the daily and close contact they have with them, hence reducing the need for the SME to invest in resources related to ability-enhancing HR practices – which should be not at all or, at least, a low level of adoption.

In addition, the EI dimension of relationship management includes another set of emotional competencies that can be related to HR opportunity practices (e.g. participation, teamwork and job design). Specifically, competencies such as building bonds (i.e. nurturing helpful relationships, especially with people who can help us to reach our goals), teamwork and collaboration (i.e. working with others toward shared goals creating group synergy in pursuing collective goals), and conflict management (i.e. negotiating and resolving disagreements) (Goleman, 1995, 1998) may affect managers' opinions about the desirability and value of adopting opportunity practices. Specifically, the higher these competencies, the better the manager will understand the added benefit of using them:

H2b. In SMEs, the higher the HR decision-maker's emotional competencies in the area of relationship management, the more they will adopt high-performance HR practices to boost employees' opportunities and the less they will adopt ability- and motivation-enhancing practices.

Methodology

Population and sample

The population for the current work consists of SME managers responsible for the decision making in the HR area, that is, for the adoption of the HR practices operating in the firm at the time of the study. For the purposes of the research, we define small- and medium-sized firms as companies of between 10 and 249 employees. With regards the sector and geographic location, this study considers SMEs located in Spain (Canary Islands) that operate in different industrial and service sectors from the Spanish business classification (CNAE), but excluding public administration, education, agriculture, fishing and hunting.

The population in the study was 5,538 active SMEs. Due to the financial limitations of the study, we stated as an objective a sample error of 5.0 per cent, so that accepting a confidence level of 95.5 per cent, the defined sample size was 193 firms. We carried out the data collection on the two Canary Islands where the business activity is most developed: Tenerife and Gran Canaria. The sample selection followed a quota sampling method for the categories of small firms and medium-sized firms, and a proportional stratification sampling method for the sector and geographic location. The firms were contacted by phone to locate and ask for the collaboration of the decision makers in the HR area (i.e. the person who made the decisions about what HR practices to implement in the SME or, having arrived at the firm after this choice, had reconsidered and updated the content of such practices as he/she is currently responsible in this area). Finally, we achieved a valid sample of 157 HR decision makers. Therefore, the real sample error was eventually 5.56 per cent. The fieldwork was carried out in 2008, so the potential influence of Spain's financial and economic crisis on the results of this study can be disregarded.

With regard to the representativeness of the sample, the proportion of SMEs from the two Canary Islands in the population (48.56 per cent in Tenerife and 51.44 per cent in Gran Canaria) is similar to the proportion in the sample (46.50 per cent and 53.50 per cent, respectively). The sample includes industrial and services SMEs and the profile by sector is similar to the total population: industry 16.6 per cent (11.29 per cent in total population); building 18.4 per cent (19.18 per cent in total population); services 23.6 per cent (27.30 per cent in total population); trade 33.1 per cent (30.55 per cent in total population); hotel and catering 8.3 per cent (11.68 per cent in total population). In addition, the firms are small (46.5 per cent) and medium-sized (53.5 per cent), are on average between 16 and 25 years old and 75 per cent or more of their workforce are on permanent contracts.

Referring to the socio-demographic profile of the respondents, they are mostly male (61.1 per cent) and aged between 31 and 50 years old. Most respondents have full degrees (54 per cent), while 44 per cent have a secondary education or lower. The university

graduates studied business administration (24.8 per cent), or another social science degree (14 per cent), or law (14 per cent). A small percentage of the respondents is specialised in HR (4.5 per cent).

Measures
To collect the data, we designed a self-administered questionnaire consisting of three sections: 74 items measuring the respondent's EI; 49 items measuring the firm's HR practices; and 13 items measuring aspects to do with the respondent and his/her firm. The EI and the HR practices were measured on seven-point Likert scales.

EI scale. Following Kim and Liu (2017), we chose a self-report scale. In particular, we chose the People Index measure (Nowack, 2007), which is an instrument that is easy to understand and provides a global approach to analysing the emotional competencies that managers possess (Nowack and Learning, 2005). After studying EI in a Spanish sub-sample, Batista-Foguet *et al.* (2008) warn about translation problems of scales in the self-report measurements. Therefore, the People Index Scale was considered suitable for our research as this instrument is available in 16 languages, among them Spanish. Being a member of Daniel Goleman's Consortium for Research on EI in Organisations, Nowack developed this scale, albeit where possible, items were drawn from three previously validated multi-rater feedback tools (Nowack, 1992, 1997). The People Index Scale is conceptually based on the Goleman (1998) model and evaluates the same full range of personal and social EI dimensions included in that model through 17 theoretical competencies. In line with some previous studies that identify three dimensions of competences (e.g. Boyatzis *et al.*, 2000), and unlike other Goleman-based models that use four dimensions (e.g. Cherniss and Goleman, 2001), Nowack (2007) distributes the 17 competencies among the categories of personal conduct, interpersonal relationships and communication. These categories cover the dimensions of self-awareness, self-management, social awareness, and relationship management stated by Goleman *et al.*,. We asked Envisia Learning[2] for a copyrighted 2004 version of the scale that included some revision in item content and wording after checking the psychometric properties of the instrument. This scale has been considered by further studies as Harms and Credé's (2010) meta-analysis.

Keele and Bell (2008, p. 487) warn that "[a]n unresolved but pertinent issue in the field of EI is factorial validity". Although a large number of researchers include validity issues in their studies (e.g. Saklofske *et al.*, 2003), most only analyse the existence of bivariate correlations between the items forming each theoretically defined subscale. These correlations are always high and statistically significant, leading the authors to conclude that the scales are unidimensional, albeit they are built on several different emotional competencies. This limitation also affects the People Index Scale.

So, we first ran a confirmatory factor analysis in order to test the existence of one factor that represents the manager's EI as a whole, based with that end on the 17 emotional competenciesincluded in the Scale. Results indicate that Bartlett's test of sphericity and the Kaiser–Meyer–Olkin (KMO) test of sampling adequacy gave values of 3,312.931 ($p = 0.000$) and 0.884, respectively; however, the obtained factor only explains 32.682 per cent of the total variance. So, results cannot be considered suitable. As an alternative for reducing the information to a global measure of the HR decision maker's EI, we carried out a non-hierarchical cluster analysis with the *k*-means algorithm, which allows us to differentiate individuals according to their EI. The pseudo-*F* statistic (Calinski and Harabasz, 1974), which identifies the optimal number of groups, confirms that the solution that is most parsimonious and that offers the greatest explanatory power is obtained with two groups (pseudo-*F* = 34.95). This solution differentiates between individuals with low EI (48 individuals, 34 per cent of the sample) and a high EI (91 individuals, 66 per cent).

The method used allows us to work in line with McClelland (1998), who found that firms benefit from having leaders with a critical mass of strengths in EI competencies.

Second, as the present work aims to study not only the effect of EI, but also of each emotional competency on the adoption of every HR practice, we went beyond the use of global measures and identified the set of emotional competencies. We carried out a principal-component factor analysis with varimax rotation to empirically identify the emotional competencies of EI. This analysis found nine emotional competencies that explain 67.39 per cent of the total variance. These competencies cover all the three dimensions of EI proposed by the People Index, although the 17 theoretical competencies are empirically synthesised in 9. Specifically, the six original competencies proposed by the author for the dimension of personal conduct are summarised in 3; the six competencies in the dimension of interpersonal relationships in 4 and the five competencies in the dimension of communication in 2. Bartlett's test of sphericity and the KMO test of sampling adequacy gave values of 3,647.220 ($p = 0.000$) and 0.889, respectively. The overall reliability of the EI scale is excellent (0.944), as are the individual reliabilities of the nine factors, since their Cronbach's α range from 0.639 to 0.879. Appendix 1 shows the items that load significantly, information on loadings and explained variance for each factor. Results adjust to common magnitudes of communalities in social science, which are from 0.4 to 0.7 (Costello and Osborne, 2005), with factor loads above 0.5 in all the cases as we followed the criterion stated by Hair *et al.* (2009). For the sake of the quality of the factor structure, we disregard items under 0.5, although previous literature shows many examples of factor structures with items whose factor loadings are higher than 0.4 (e.g. Schutte *et al.*, 1998; Saklofske *et al.*, 2003; Arunachalam and Palanichamy, 2017). The obtained EI competencies group together in three theoretical dimensions proposed by models based on Goleman: orientation towards success, self-control and time management (i.e. dimension of self-management); empathy and service orientation (i.e. dimension of social awareness); and building internal relationships, promotion of cooperation and conflict management and communication and influence (i.e. dimension of relationship management). We did not find competencies in the dimension of self-awareness, which can be related to Spanish cultural background, as founded by Batista-Foguet *et al.*'s (2008) study. In particular, when comparing two samples of American and Spanish people, they dealt with problems for the self-awareness comparison and they argued a likely problem of emotional expression of self-awareness in the self-report measurement for the Spanish context (that which is observable by others in social and work settings).

HR practices scale. In developing a scale to measure the HR practices, we used as reference the scales previously proposed by other authors (e.g. Arthur, 1994; Delery and Doty, 1996; Sels *et al.*, 2006). We combined them and proposed 49 items to measure ten high-performance HR practices in the SME aimed at the AMO model (Appelbaum *et al.*, 2000; Huselid, 1995; Jiang *et al.*, 2013). This scale was pre-tested by three SME managers and four HRM experts, which confirmed its content validity.

The principal-components factor analysis with varimax rotation identified nine factors that explain 75.14 per cent of the total variance. Bartlett's test of sphericity and the KMO test of sampling adequacy gave values of 3,007.517 ($p = 0.000$) and 0.856, respectively. Factors mirror the three categories of practices in the AMO model: personnel selection and training (i.e. ability practices); assessment, internal promotion, salary incentives and equity in fixed salary (i.e. motivation practices); and participation, teamwork and job design (i.e. opportunity practices). Results show that the HR practice initially called internal communication split into two, one part integrating into employee participation and the other into Salary incentives. Similarly, the HR practice initially called Remuneration separated into two factors: salary incentives and equity in fixed salary. Appendix 2 shows the items

that load significantly, information on loadings and the explained variance for each factor. We only considered variables with factor loads above 0.6, albeit 0.5 is the rule-of-thumb for research in social science (Hair *et al.*, 2009). Appendix 2 also shows the means and standard deviation of these items. Mean values show that all the HR practices, except for equity in fixed salary and salary incentives, have values higher than 4.0 on the seven-point used scale, so evidencing their use by SMEs in our sample. In general, practices stimulating motivation (except for internal promotion) are less frequently implemented than opportunity-enhances practices, which are in turn less frequently implemented (except for job design) than practices that enhance ability. Also, items in less frequently used HR practices (equity in fixed salary and salary incentives) range from 3.75 to 5.07, which are very close to the midpoint of 4. High values in some standard deviations indicate that whereas some SMEs make a good use of practices, others hardly use them at all.

The validity of the scale was also analysed. The construct validity is made clear, given that the principal-component factor analysis made it possible to summarise and synthesise the observed phenomenon. The content validity is guaranteed with both the theoretical and empirical literature review, as well as the pre-test of the questionnaire. The discriminant validity is corroborated as the correlation between each pair of factors obtained in this analysis has a correlation of 0.000, guaranteeing concepts of variance (Appendix 3). Finally, the overall reliability of the HR scale is excellent ($\alpha = 0.932$), as are the individual reliabilities of the nine factors, since their Cronbach's α range from 0.750 to 0.905.

Control variables. From the relevant work of Wiersema and Bantel (1992), educational specialisation is considered a key characteristic of managers as it shapes individuals' perspectives that condition their decision making. Thus, we controlled for the HR decision maker's academic background. We followed García-Cabrera and García-Soto's (2009) research on HR managers and used an ordinal variable ranging from basic science (1) – e.g., maths, physics – to human resource management (HRM) (4). We expect that the more specialised in the HR area the manager is, and so aware of benefits of high-performance HR practices, the more he/she will adopt these practices. We also controlled for gender (male is the reference category that takes value 0) and tenure in the SME. Since previous literature has highlighted that female owner-managers tend to operate in micro firms more than in small and medium firms, and it is less probable that micro firms will adopt high-performance HR practices (Kotey and Slade, 2005), we expect that where females are concerned, the possibilities of using such HR practices will be low. In addition, high-performance HR practices may be highly adopted by decision makers with less tenure in the SME given the possibility that both entrepreneurs' and HR specialists' awareness of such practices may have increased in recent years and hence these decision makers introduce into the SME the knowledge necessary to adopt the practices (Wu *et al.*, 2014). With regards to the firm, we followed Kotey and Slade's (2005) study and controlled for the percentage of permanent employees. According to these authors, permanent employees provide the stability in operations SMEs need to growth (as opposed to personnel on flexible contracts that mainly assist fluctuations in growth). Permanent employees increase the returns from investments in a high-performance HR practices (Huselid and Rau, 1997). Therefore, we expect that SMEs with higher percentage of permanent employees will be more likely to adopt HR practices that allow the performance of their employees to increase.

Data analysis techniques
First, in order to analyse relationships between decision-makers' EI and the adoption of the various HR practices in SMEs, we carried out a number of difference of means tests between decision makers with low and high EI. Therefore, to do this, our sample was split into two sub-samples. Second, in order to analyse the influence of each emotional competency of the

HR decision maker on the adoption of each HR practices, we estimated nine linear regression models, where the dependent variable in each case was one of the nine HR practices analysed. The independent variables were the nine EI factors along with the control variables. Typified values (factor scores) obtained from orthogonal solutions of the principal-components factor analysis for HR practices were used in the difference of means tests and regression analyses. They were also used for correlation analysis. We also carried out a multicollinearity diagnosis using: the variance inflation factor (VIF) and the condition number. The higher the index in each case, the greater the dependence between the variables concerned.

The current research is cross-sectional in nature and uses a single data source, which could result in a common method variance (Podsakoff *et al.*, 2003). To minimise this risk, respondents were guaranteed full anonymity and the questionnaire was pre-tested to provide evidence as to respondents' understanding of the questions (Podsakoff *et al.*, 2003). In addition, after building the database, we ran Harman's one-factor test to check that common method variance unlikely affected the significance of the relationships we measured, as previous authors have done (see, Koropp *et al.*, 2013) introducing all 120 variables measuring EI competences (independent variables) and HR practices (dependent variables). The results of this analysis show the existence of 17 factors with eigenvalues greater than 1. The results remained the same whether we used principal-components factor analysis without rotation (total variance explained = 72.62 per cent), principal-components factor analysis with varimax rotation (total variance explained = 72.62 per cent) or principal-axis factor analysis with varimax rotation (total variance explained = 66.94 per cent).

Analysis of results
Appendix 3 reports the results of the correlation analysis. The absence of bivariate correlations over 0.75 indicates that multicollinearity should not be a problem in the data. Correlations among HR practices are all zero and none of the correlations among EI dimensions are significant because, as stated above, we used for the analysis the factor scores resulting from orthogonal solutions of factor analysis. With respect to the estimated correlations, it can be observed that emotional competences of influence and service orientation have a negative and significant association to some HR practices (i.e. salary incentives and job design). As these negative associations are also found when estimating the regression equations, they will be discussed later on in this work.

Table I provides evidence of a significant difference in the use of HR practices of training (ability practice), assessment and internal promotion (motivation practices) and participation (opportunity practice) between decision makers with low and high EI, with

| High performance HR practices | | Mean values | | |
		HR decision makers with low EI ($n = 48$)	HR decision makers with high EI ($n = 91$)	F-test
Ability enhancing	Personnel selection	−0.013	0.116	0.645
	Training	−0.194	0.176	4.925*
Motivation enhancing	Assessment	−0.270	0.131	5.148*
	Internal promotion	−0.293	0.214	8.843**
	Salary incentives	0.073	−0.108	1.007
	Equity in fixed salary	0.002	0.015	0.005
Opportunity enhancing	Participation	−0.324	0.181	8.896**
	Teamwork	−0.049	0.031	2.31
	Job design	0.002	0.011	0.003

Notes: *$p < 0.05$; **$p < 0.01$

Table I.
Anova test: comparing the adoption of HR practices by HR decision makers with low and high emotional intelligence

more emotionally intelligent managers demonstrating a higher level of adoption of such high-performance HR practices. Although these tests do not provide evidence on the relationship between EI and each HR practice under study, it is reasonable to say that they are sufficient to support *H1* as such a relationship is found for practices that cover all the three categories of the AMO model.

Table II shows the results of all the nine regressions carried out with their corresponding co-linearity diagnostics, albeit the analyses of the Equity in fixed salary practice give non-significant results ($F = 1.261$, $p = 0.243$). The VIF and condition number for each model estimated are comfortably under 10 and 20, respectively – the cut-off points recommended in the literature. These results suggest that multicollinearity is not a problem in the data. The four control variables used to show, when significant, the expected effect in the estimated equations with one exception. SMEs with higher percentage of permanent employees will be more likely to adopt the HR practice of Salary incentives. The more specialised in the HR area the manager is, the more he/she will adopt the HR practice of participation. Considerations about the negative and significant influence of managers' specialisation in the HR area the manager on the practice of Equity in the fix salary must be disregarded, since according to *F*-test the model estimated is not significant. As expected, men make more use of HR practices of assessment and participation, but women of internal promotion. Finally, tenure in the SME relates to lower adoption of practices of participation and job design.

The results show that all the emotional competencies in the three categories of self-management, social awareness and relationship management contribute towards positively or negatively explaining at least one HR practice. Table III summarises these results. In particular, self-management competencies positively condition HR ability practices and, to a lesser degree, motivating and opportunity practices, *H2a* therefore being supported. Relationship management competencies positively condition the opportunity practices of Participation and teamwork, but not job design; have almost no significant effect on motivation practices and show low and mixed effect on ability practices. In this respect, as expected, the EI competencies of communication and influence reduce the use of ability practices. So *H2b* finds partial support.

Discussion

When comparing HR decision makers with low and high EI, we found that more emotionally intelligent managers made greater use of some high-performance HR practices, specifically training, assessment, internal promotion and participation. These results are relevant because they support the expected relationships, so showing that managers' perceptions regarding the utility of adopting high-performance HR practices could be influenced not only by rational criteria, but also by his/her EI. However, relationships were not found for all the HR practices under study (e.g. teamwork, salary incentives, personnel selection, job design and equity in fixed salary are not related to managers' overall EI). In this respect, Wu *et al.* (2014) found that the extent of the adoption of high-performance HR practices in small businesses is positively related with workforce skill levels. Therefore, it is possible that the manager, despite having high EI competencies in wishing to adopt several high-performance HR practices, also takes into account employees' talent when making HR decisions. In addition, given that smaller firms have limited resources and deliberately adopt smaller sets of high-performance HR practices (Kroon *et al.*, 2013), it is possible that HR decision-makers' EI does not condition the choice of every practice of the whole package, but only those that can be considered, in the manager's eyes, the observable cues of high-performance, based on the AMO model for the SME. In this respect, we found evidence of positive relationships between EI-training (i.e. an employee ability practice), EI-assessment and EI-internal promotion (i.e. employee motivation practices) and EI-participation (i.e. an employee opportunity practice).

Variables	Personnel selection β	Training β	Assessment β	Internal promotion β	Salary incentives β	Equity in fixed salary β	Participation β	Teamwork β	Job design β
Step 1: controls									
Gender	0.005	−0.058	−0.123	0.146****	0.012	0.003	−0.142*	0.018	0.110
Tenure in the SME	−0.039	−0.029	−0.054	0.080	0.111	0.032	−0.168****	−0.043	−0.076
Respondent's academic background	0.089	0.012	0.029	0.034	−0.037	−0.146****	0.184*	−0.116	−0.069
% permanent employees	0.122	−0.039	0.066	0.081	0.186*	0.076	0.150****	0.026	−0.023
ΔR^2 (%)	3	0.5	2.2	2.7	4.7	2.8	11.9	1.2	2.4
ΔF	1.16	0.17	0.84	1.03	1.87	1.11	5.13	0.47	0.92
Step 2: controls + main effects of EI competences									
Gender	0.026	−0.073	−0.141****	0.167*	0.001	−0.009	−0.148*	0.026	0.050
Tenure in the SME	−0.012	−0.034	−0.081	0.075	0.113	−0.050	−0.182*	−0.039	−0.158****
Academic background	0.109	0.008	−0.024	0.026	−0.025	−0.189*	0.126****	−0.133	−0.101
% permanent employees	0.107	−0.048	0.061	0.089	0.162*	0.073	0.090	−0.046	0.005
Self-control	0.067	0.157*	0.090	0.199*	0.127	−0.072	−0.056	−0.023	0.139****
Orientated to success	0.149****	0.155*	−0.015	0.210**	−0.059	−0.134****	−0.006	−0.036	−0.100
Time management	0.098	0.147****	0.239**	0.019	−0.112	0.096	−0.018	0.024	0.262**
Empathy	−0.054	0.063	0.114	0.225**	0.036	0.172*	0.104	0.008	0.176*
Service orientation	0.068	−0.033	0.049	−0.076	−0.236**	−0.083	−0.140*	0.177*	−0.188*
Promotion of cooperation and conflict management	0.171*	0.006	0.119	0.026	0.059	0.023	0.193**	0.358***	−0.092
Building internal relationships	−0.121	0.248**	0.009	−0.003	−0.004	0.029	0.213**	0.210**	0.055
Communication	−0.172*	−0.021	0.166*	−0.070	0.037	0.012	0.256***	0.005	0.066
Influence	0.099	−0.136****	0.028	0.029	−0.112	0.088	0.059	−0.018	−0.176*
ΔR^2 (%)	11.9	15.6	11.9	15.1	10.6	7.4	18.3	20.3	19.5
ΔF	2.21*	2.94**	2.19*	2.91**	1.19*	1.31	4.15***	4.11***	3.97***
F	1.19*	2.1*	1.80*	2.37**	1.98*	1.26	4.74***	3.0**	3.08***
Dubin–Watson	1.756	2.147	2.104	2.097	1.902	2.011	1.741	2.222	2.039
Final adjusted R^2	7.10%	8.4%	6.3%	10.3%	7.60%	2.1%	23.8%	14.4%	14.80
Condition number	15.868	15.868	15.868	15.868	15.868	15.868	15.868	15.868	15.868
VIF (lower–upper limits)	1.009–1.335	1.009–1.335	1.009–1.335	1.009–1.335	1.009–1.335	1.009–1.335	1.009–1.335	1.009–1.335	1.009–1.335

Notes: *$p < 0.05$; **$p < 0.01$; ***$p < 0.001$; ****$p < 0.1$

Table II.
High-performance HR
practices: EI
competences as
antecedents

68

EI dimensions	EI competences	Ability enhancing			Motivation enhancing			Opportunity enhancing		
		Personnel selection	Training	Assessment	Internal promotion	Salary incentives	Equity in fixed salary[a]	Participation	Teamwork	Job design
Self-management	Self-control		+		+		n/a			+
	Orientation towards success	+	+		+		n/a			
	Time management		+	+			n/a			+
Social awareness	Empathy				+		n/a			+
	Service orientation					−	n/a			−
Relationship management	Promotion of cooperation and conflict management	+					n/a	−	+	
	Building internal relationships		+				n/a	+	+	
	Communication		−				n/a	+	+	
	Influence	−					n/a	+		−

Notes: [a]Relationships between EI competences and HR practices cannot be considered as the estimated regression for Equity in fixed salary was not significant according to *F*-Statistic

As HR practices related to different components of the AMO model are aimed at different objectives and are adopted to varying degrees by SMEs (Kroon *et al.*, 2013), as well as managers' emotional competencies being able to complement one another, alternate manifestations, both compensatory and antagonistic, can advance the current knowledge about HRM in SMEs from the analysis of how EI competencies condition the adoption of such practices. Accordingly, we studied such relationships and found evidence of them.

Specifically, we identified three categories of EI competencies (i.e. self-management, social awareness and relationship management) and all of them contribute to explaining at least one HR practice in the ability, motivation and opportunity dimensions of AMO, except for social awareness, whose competencies of empathy and service orientation do not directly affect ability practices. Self-management competencies positively condition HR ability practices and, to a lesser degree, motivating and opportunity practices. These competencies have a low level of influence on the choice of opportunity practices, only conditioning the choice of job design. This is probably the case because the higher the EI competencies in self-management (e.g. orientation towards success, self-control), the more confident the managers are and the more they prefer to control SME's activities by themselves instead of delegating, and so guaranteeing success. On the contrary, relationship management competencies have a greater impact on opportunity practices of participation and teamwork and have almost no significant effect on motivation practices. It can be explained because an HR decision maker with high relationship management abilities uses such emotional competencies needed to motivate employees through direct contact, which is possible in the context of an SME, so saving the limited financial resources that these firms have. Something similar happens with ability practices, since results show that some emotional competencies such as communication and influence reduce the manager's adoption of personnel selection and training.

In addition, and in order to better understand the found effects, we also looked at every HR practice in turn and offer some arguments that justify the results. Appendix 4 shows our extensive discussion and a final remark for each practice. In doing so, we referred to each HR decision-maker's emotional competency that significantly influences every HR practice.

Finally, we distinguish two groups of HR practices in our analysis: those that are explained to a greater extent by EI competencies ($R^2 > 14$ per cent), and those that are explained less extensively ($R^2 < 14$ per cent). Examining both groups, we note that in the second group, adopting the practices requires a higher economic investment. Specifically, personnel selection, training, assessment, internal promotion, salary incentives and equity in fixed salary (all corresponding with ability-enhancement and motivation enhancement practices according to the AMO model) could be conditioned by the financial resources available to the firm, a variable that is particularly important in SMEs. In contrast, participation, teamwork and job design are opportunity-enhancement practices, which are less dependent on the availability of resources because these involve lower costs (Kroon *et al.*, 2013) and so are explained to a greater extent by emotional competencies. The adoption of these HR practices in SMEs that usually have scarce resources could depend more on the manager's own criterion, on the way he/she is and how he/she understands the value of the firm's employees and the best way to manage them. Along this line, Kroon *et al.* (2013) assert that the lower than average adoption of ability and motivation practices in smaller organisations compared to larger firms relates to the frequent resource poverty of SMEs.

Accordingly, we can conclude that the adoption by the SME of high-performance HR practices whose implementation is less dependent on the availability of financial resources, that is, opportunity practices, will be determined to a greater extent by the HR decision-maker's emotional competencies.

Globally considered, these findings about EI antecedents of the adoption of high-performance HR practices based on AMO corroborate the hypothesis that although

emotional competencies enforce each other and sometimes are complementary, they also can be antagonistic, with some of them having a positive effect whereas others have a negative influence on the same individual decision. Our results corroborate this for the case of HR decision makers in SMEs.

Conclusions, implications and limitations

The current research is based on the premise that adopting high-performance HR practices in the SME depends not only on the HR decision-maker's technical skills, but also on his/her EI. With the aim of empirically analysing this premise, we considered the EI as a whole and as a set of different emotional competencies. Results provide evidence to confirm our initial premise.

First, and with respect to EI as a whole, we found that in SMEs, the more emotionally intelligent the HR decision makers were, the more they would adopt high-performance HR practices. It is worth noting that practices affected by managers' EI cover all the three components of the AMO model, in particular ability with training practices, motivation with assessment and internal promotion and opportunities with participation. According to this, it can be expected that SMEs nurtured by managers with high EI might adopt more HR practices that promote the abilities, motivation and opportunities of their employees. Unlike previous studies that have inquired about the antecedents of the adoption of high-performance HR practices in SMEs by focusing on market-related factors, business characteristics and access to HR expertise (e.g. Wu *et al.*, 2014), we provide an additional antecedent related to the human factor, which is the EI of the decision maker. Additionally, this study contributes towards clearing up doubts in relation to the adoption of high-performance HR practices in SMEs. SMEs are not a homogenous group of firms, although, in this regard, HR practices are almost always lacking because of the scant availability of economic resources or the more informal character of the organisational structure at those firms. Other reasons besides the economic ones and the non-existence of a separated HR department (and manager), which might otherwise guarantee SMEs' success in improving the ability, motivation and opportunities of their employees. The EI of the persons (owners or managers) in charge of making decisions in the firm will condition the importance attached to the adoption and ulterior implementation of high-performance HR practices in SMEs. Thus, SMEs will be heterogeneous in their approach to HRM, as well as in the efforts they make to implement high-performance HR practices. However, if we consider the managers' EI not as a whole, but rather as their different emotional competencies, we can obtain some additional conclusions, as we present below.

We can also confirm that the emotional competencies do have a significant and differential effect on the adoption of high-performance HR practices, as this effect can be positive, negative or nonexistent. In general, the majority of the HR decision-maker's emotional competencies explain the adoption of at least three high-performance HR practices. The competencies that must explain the use of these practices are: self-control, orientation towards success, time management, service orientation, promotion of cooperation and conflict management, building internal relationships and communication. In contrast, the EI competencies that explain the adoption of a fewer number of high-performance HR practices are empathy and influence. If we pay attention to the theoretical dimensions in which we can classify the EI competences and the categories of the AMO model, further considerations can be raised. Whereas managers' emotional self-management mainly affects the adoption of ability-related, high-performance HR practises (i.e. personnel selection and training) and, to a lesser extent, motivation-related HR practices (specifically, assessment and internal promotion), managers' social awareness and relationship management mainly condition opportunity-related HR practices (i.e. participation, teamwork and job design). In addition, it must be highlighted

that the motivation-related HR practices of Salary incentives and Equity in fixed salary are the practices that are almost always not conditioned by managers' emotional competencies. It likely happens because in SMEs the availability of financial resources can be more relevant than other consideration in the choice of such specific practices. An important conclusion for SMEs in terms of the emotional competencies of their owner-managers is that SMEs with managers high in emotional self-management will undertake growth-oriented activities (improving the ability and motivation of the employees) because the emotional competencies in which they are high (self-control, orientation towards success, time management) are related to the manager's entrepreneurial orientation. Similarly, if owner-managers in SMEs are high in emotional competencies related to social awareness and relationship management (service orientation, promotion of cooperation and conflict management, building internal relationships and communication), the SMEs will build strong bonding internal social capital through the encouragement of participation and teamwork as an opportunity for improving internal networks inside the firm. Given that it is desirable for managers to have a critical mass of emotional competencies that include those in the three dimensions (self- management, social awareness and relationship management), it would be a guarantee for SMEs to grow based on strong internal bonds that would constitute a very important source of competitive advantage for them.

This work makes important contributions to both the literature and the business world. With regard to the theoretical implications, results confirm that EI as a whole, as well as in terms of its specific emotional competencies, affect the decision making related to the adoption of high-performance HR practices, which is known to contribute to the organisational performance. One of the novelties of the current work lies in its analysis of the managers' EI – and their particular emotional competencies – in the specific case of SMEs, rather than in firms in general. Thus, this work contributes to the management literature by offering a theoretical framework in which a psychological variable – the HR decision makers EI – acts as an antecedent of the adoption of high-performance HR practices in SMEs, showing the heterogeneity of SMEs in HRM. Moreover, based on the new insights provided, we shed light on the concept of EI as applied to management and on the specific emotional competencies that condition the use of different high-performance HR practices and in turn the success of the SME.

However, additional contributions can be made in the future if we consider the different roles that EI can play in explaining management decisions in SMEs, as well as certain behaviours of their employees. If we consider that EI influences organisational effectiveness in areas such as HRM (Cherniss and Goleman, 2001), the EI of the person in charge of making those decisions could be understood as a mediator variable in any research that relates some other ability or personality measure with successful management in such areas. In that research, the proposal could be that personality traits and some other abilities (e.g. cognitive intelligence) are related to the likelihood of being more or less emotionally intelligent (Cavazotte *et al.*, 2012; De Haro *et al.*, 2018). Given that being more emotionally intelligent is linked to achieving greater success in practically any job and particularly in leadership positions (Adetula, 2016; Boyatzis *et al.*, 2012; Brackett *et al.*, 2011; Cheung *et al.*, 2015; Goleman, 2001), EI dimensions would act as mediators in the relationship between the personality or other non-emotional abilities and the successful leadership in HRM.

Moreover, the moderating role of the EI could be also considered. Some recent research has contributed towards filling this unexplored role (e.g. Hwa and Amin, 2016) by analysing the moderating role played by EI in the influence exerted by emotional labour – the management of workplace emotions – on employees' outcomes (e.g. job satisfaction, burnout, turnover intention). Their results indicate to us that EI may act as a mechanism that moderates the dysfunctional effects of emotional labour since it protects the firm from high levels of deviant work behaviour. In the context of HRM, this finding invites us to

analyse the protective role of the HR decision-makers' EI. Their EI could exert a moderating role on the potential negative relationship between a complex and turbulent organisational and environmental context for the SME's – and the resulting negative individual and team performance – in terms of burnout, absenteeism, job dissatisfaction and turnover.

The entrepreneurial activity has its origin in both cognitive and emotional competencies besides personality traits. Due to frequent interaction and close social and/or physical distance between leaders and subordinates in SMEs, subordinates may feel more strongly and directly that they can derive benefit or harm from owners-managers' competencies (Miao *et al.*, 2016). Thus, inquiring into the role of each of these competencies and in the way they positively or negatively relate to each other to define the SMEs' decisions and the behaviour of their personnel has become crucial. Specifically, it would be interesting to discover the role that EI plays in relation to this whole set of entrepreneurial competencies. The direct, moderator and mediator effect of managers' EI can open a new research avenue that provides suggestions for improving HRM and people development in organisations in general and in SMEs in particular.

From a methodological point of view, our study supports the research proposals that suggest analysing the specific dimensions of EI, rather than only assessing the impact of general EI measures, which seems to have provided unclear results (Rode *et al.*, 2008).

With regard its practical implications, SMEs' owners-managers and HR practitioners may find our results and conclusions interesting. Indeed, recommendations in business management have often been accompanied by new approaches in HRM (Kent, 2005), as this study proposes. In particular, managers will find evidence of how a decision maker's higher EI propitiates the adoption of high-performance HR practices, thus being able to improve HRM in their SMEs. Moreover, managers will obtain guidance on which emotional competencies are the most important for adopting each HR practice, and so find greater success in their HRM roles. SMEs could organise programmes to develop the HR decision-maker's emotional competencies, as large firms do for their executives. Executive training should emphasise managing and expressing emotions, since these abilities are directly linked to leadership, communication and influence processes (Humphrey *et al.*, 2008; Lopes, 2016). We also consider that SMEs can benefit from incorporating measures of emotional competencies into managers' selection and promotion decisions.

Likewise, designers of syllabuses for business-oriented university courses could consider incorporating the development of emotional competencies as a fundamental objective, since some of the students will be destined for the management posts of the future.

The current work suffers from a number of limitations, which we urge researchers to tackle in future works. First, the sample of firms we studied is limited to a specific geographic area in one country – Spain (Canary Islands) – that will necessarily limit generalisation of the results obtained to other populations of SMEs. Researchers should replicate the current model in other geographic areas. Second, and with regard the methodology, researchers could explore other tools to measure EI and emotional competencies. It would be interesting to measure this construct using qualitative analytical techniques, with 360 – or 180 – degree tools.

Finally, the current study is cross-sectional in nature, which limits our ability to draw causal inferences from the data. This cross-sectional design prevents us, for example, from analysing EI's influence on the continued development of high-performance HR practices over time. Future research using longitudinal methodologies to study these variables could provide additional advances in this area.

Notes

1. EI is a learnable skill and a component of social intelligence (Thorndike, 1920) that enables a person to monitor, understand and respond appropriately to emotional cues in self and others (Salovey and Mayer, 1990).

2. www.envisialearning.com/360_degree_feedback/emotional_intelligence_view

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Appendix 1

Factor	Items in the questionnarie	Factor load	EI dimensions
Self-control Variance explained = 8.65%	I manage tense situations without exaggerated or defensive reactions	0.790	Self-management
	I cope well under pressure and in stressful situations	0.750	
	I demonstrate aplomb and control in situations where interpersonal challenge or threat exists	0.750	
	I maintain a positive and constructive point of view although the plans are complicated	0.656	
	I am optimistic, and I get the best out of situations	0.598	
	I keep an open mind when others disagree, resisting the urge to react defensively	0.537	
Orientation towards success Variance explained = 10.37%	I take risks and make impulsive decisions in the absence of adequate information	0.699	
	I make quality and logical decisions based on adequate information and data	0.657	
	I fulfil the established commitments	0.657	
	I consider different options before making a decision	0.628	
	There is consistency between my words and my actions	0.590	
	I use written communication in an effective and appropriate way	0.570	
	I give clear, logical and concise answers	0.521	
Time management Variance explained = 4.30%	I manage time effectively and efficiently	0.831	
	I am able to balance work, family and personal life	0.826	
Empathy variance explained = 10.56%	I understand and care for others' feelings	0.728	Social awareness
	I develop friendly and useful work relationships	0.704	
	I show interest in the feelings and needs of others	0.703	
	I work collaboratively and not in competition	0.689	
	I recognise and appreciate contributions and achievements	0.591	
	I trust in peoples' skills and abilities	0.555	
	I keep an open, honest, and friendly attitude in interpersonal relationships	0.545	
Service orientation variance explained = 3.80%	I take time to listen to and understand others	0.570	
	I am sensitive to diversity in the workplace, and I treat others fairly and in a consistent way	0.503	
Promotion of cooperation and conflict management Variance explained = 6.38%	I encourage cooperation and teamwork	0.702	Relationship management
	I strive to detect and resolve interpersonal conflicts	0.644	
	I search for feedback and constructive criticism	0.631	
Building internal relationships Variance explained = 8.27%	I initiate and strengthen strategic internal alliances	0.777	
	I encourage others to express their opinions even if they are different from mine	0.710	
	I offer formal and informal help, training and coaching	0.655	
	I ask for and value others' thoughts and opinions	0.609	
Communication Variance explained = 9.56%	I clearly state and request information to/from others	0.714	
	I ask in a receptive and diplomatic way	0.698	
	I communicate information quickly, and in a timely fashion	0.670	

(*continued*)

Table AI.
Emotional
competencies

Factor	Items in the questionnarie	Factor load	EI dimensions
	I maintain eye contact and I use a good non-verbal communication	0.662	
	When speaking, I clearly articulate and pronounce the words	0.578	
	When writing, I correctly use the language (grammar, tense, etc.)	0.545	
Influence Variance explained = 5.50%	I know how to convince and persuade others and how to get them to understand my ideas and perspectives	0.858	
	I know how to communicate and express ideas so that I persuade and influence others	0.834	
	I can summarise and paraphrase, making myself understood	0.541	

Table AI. **Note**: Factor loads from SPSS Pc 17.0

Appendix 2

Items in the questionnaire	Descriptive statistics		Principal-component analysis	
	Mean	SD	Factor load	Factor
The ability to address and solve problems is a criterion to consider when we select employees	5.41	1.290	0.807	Personnel selection ("A") Variance
We select those employees who can provide ideas for improvement	5.01	1.540	0.738	explained = 6.65%
We consider the candidates' values relative to work (team spirit, good job, effort, customer orientation) as a criterion when we select employees	5.93	1.093	0.716	
Employees participate in training programmes that allow their continuous updating	4.87	1.738	0.854	Training ("A") Variance
We assign to training all the economic resources that our annual budget allows us	5.21	1.780	0.783	explained = 10.84%
Training programmes seek to teach new employees the skills they need to perform their jobs	4.75	1.808	0.742	
Training courses are developed for all the employees	5.25	1.785	0.747	
Our firm offers training aimed at enabling employees to assume greater responsibilities at the firm	4.50	1.734	0.663	
Employees' assessment is regularly carried out at our company	4.08	2.018	0.810	Assessment ("M") Variance explained = 12.48%
Employees' work performances are assessed following a previously established procedure	4.18	2.033	0.800	
Employees' assessment is carried out on the basis of quantifiable objectives known by them	4.66	1.927	0.773	
Employees are informed of the results obtained in their assessment	4.48	1.902	0.756	
Employees' work performances are assessed according to their results	4.97	1.761	0.674	
Operational employees with high capabilities have the opportunity of promotion to a better position in the firm	5.48	1.444	0.789	Internal promotion ("M") Variance explained = 7.09%
When a vacancy arises in our firm, we offer current employees the opportunity of promotion to that position before filling it with new employees	5.51	1.571	0.783	
In our firm, employees are clear about their actual promotion opportunities	5.06	1.440	0.636	
In our firm, we offer additional incentives to fixed salary according to the firm results	4.22	2.232	0.785	Salary incentives ("M") Variance
In our firm, we offer additional incentives to fixed salary according to the teams' productivity	3.76	2.181	0.611	explained = 6.15%
Economic and operational results achieved by the firm are shared with employees	3.75	1.904	0.624	
In our firm, the fixed part of the employees' salary is assigned according to his/her individual performance	3.85	2.067	0.893	Equity in fixed salary ("M") Variance
In our firm, the fixed part of the employees' salary is assigned according to his/her abilities	3.97	2.160	0.889	explained = 6.06%
The suggestions of our employees are evaluated and, if appropriate, implemented	5.29	1.533	0.772	Participation ("O") Variance
In our firm, the superiors ask their employees to participate in the decision-making process	4.85	1.482	0.746	explained = 10.50%

(*continued*)

Table AII.
HR practices scale.
Descriptive statistics
and factor loads

	Descriptive statistics		Principal-component analysis	
Items in the questionnaire	Mean	SD	Factor load	Factor
In our firm, we have mechanisms to achieve the participation of the employees and to gather their suggestions and opinions (e.g. suggestion box, periodic meetings, etc.)	4.63	1.982	0.702	
We offer the employees the opportunity to suggest improvements in the way tasks are done	5.42	1.537	0.660	
In our firm, we allow employees to make decisions in their jobs	4.99	1.263	0.627	
Employees spend most of their working day working as a team	4.91	1.627	0.757	Teamwork ("O") Variance explained = 9.31%
Employees carry out a good part of their tasks organised as a team	4.99	1.621	0.744	
In our firm, we try to involve employees in the tasks assigned to the team	5.24	1.438	0.710	
In our firm, we set up teams only to solve problems	4.58	1.714	0.702	
Job positions have an updated description of their tasks	5.57	3.85	0.858	Job design ("O") variance explained = 6.03%
Tasks and duties of the job are clearly defined	5.69	3.97	0.845	

Note: [a]HR practices were measured on seven-point Likert scales

Table AII.

Appendix 3

	HR1 person. select.	HR2 training	HR3 assestment	HR4 internal promotion	HR practices HR5 salary incent	HR6 Equity fix salary	HR7 participation	HR8 team work	HR9 job design	EI competencies EI1 self-control	EI2 orient. towards success
HR1	1										
HR2	0.000	1									
HR3	0.000	0.000	1								
HR4	0.000	0.000	0.000	1							
HR5	0.000	0.000	0.000	0.000	1						
HR6	0.000	0.000	0.000	0.000	0.000	1					
HR7	0.000	0.000	0.000	0.000	0.000	0.000	1				
HR8	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1			
HR9	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1		
EI1	0.065	0.165*	0.103	0.195*	0.131	−0.064	−0.036	−0.023	0.143****	1	
EI2	0.142****	0.167*	−0.011	0.204*	−0.078	−0.136****	0.014	−0.039	−0.065	0.011	1
EI3	0.103	0.133*****	0.210**	0.038	−0.116	0.090	−0.050	0.015	0.246**	−0.018	−0.007
EI4	−0.046	0.066	0.109	0.238**	0.039	0.150****	0.081	−0.003	0.146*****	0.028	0.020
EI5	0.069	−0.031	0.053	−0.087	−0.248**	−0.089	−0.129	0.179*	−0.191*	0.010	0.002
EI6	0.183*	0.001	0.134*****	0.031	0.083	0.030	0.230**	0.352***	−0.080	−0.009	−0.024
EI7	−0.102	0.243**	0.017	0.004	0.021	0.029	0.227**	0.199*	0.038	0.009	0.001
EI8	−0.144****	−0.037	0.158*	−0.063	0.020	−0.007	0.300***	−0.006	0.053	−0.005	0.001
EI9	0.089	−0.127	0.069	0.008	−0.097	0.096	0.102	−0.041	−0.175*	−0.008	−0.036
Gender	0.016	−0.047	−0.110	0.121	−0.032	−0.021	−0.090	0.020	0.128	−0.070	0.025
Tenure in SME	−0.075	−0.015	−0.031	0.024	0.113	0.077	−0.195*	−0.011	−0.083	−0.038	−0.158*
Acad. Back.	0.117	0.013	0.046	0.028	−0.051	−0.148****	0.248**	−0.097	−0.039	−0.015	0.027
Perm Emp %	0.134****	−0.033	0.079	0.075	0.177*	0.057	0.186*	0.013	−0.034	0.045	−0.036

(*continued*)

Table AIII.
Correlations

	EI3 time management	EI4 empathy	EI5 service orient.	EI competencies EI6 coop/ conflict manag	EI7 building internal relations	EI8 Communication	EI9 Influence	Gender	CONTROL variables Tenure SME	Acad. back	Perm emp %
HR1											
HR2											
HR3											
HR4											
HR5											
HR6											
HR7											
HR8											
HR9											
EI1											
EI2											
EI3	1										
EI4	0.017	1									
EI5	−0.014	−0.003	1								
EI6	−0.008	0.011	0.012	1							
EI7	−0.004	−0.014	−0.011	0.012	1						
EI8	−0.039	−0.002	−0.005	0.019	−0.005	1					
EI9	0.036	0.030	0.011	−0.036	0.017	0.060	1				
Gender	0.082	−0.034	−0.039	0.003	−0.048	0.068	−161*	1			
Tenure in SME	0.079	0.149****	−0.049	−0.054	0.047	−0.141****	0.053	−0.282**	1		
Acad. Back.	0.033	0.047	0.017	0.048	0.027	0.155****	0.061	0.072	−0.334***	1	
Perm Emp %	−0.049	−0.069	−0.048	0.173*	0.115	0.018	0.090	−0.054	−0.038	0.119	1

Note: *$p < 0.05$; **$p < 0.01$; ***$p < 0.001$; ****$p < 0.1$

Appendix 4

AMO category	HPHRP	Discussion	Conclusion
Ability practices	Personnel selection	Managers adopt this practice with high performance criteria more the higher their score in the competency promotion of cooperation and conflict management. In a selection process, managers evaluate candidates not only on their technical skills, but also on their aptitude for facing up to and solving problems and their team spirit. Doing this will guarantee the right working environment by hiring human resources with the right qualities. In addition, managers with orientation toward success will probably seek employees that contribute to the firm's success whereas they get their own development, following the criteria of a high-performance HR system. Thus, they will pay special attention to the Personnel selection practice In contrast, this HR practice will be less formally developed when managers consider that they can guide their personnel's attitudes to get high performance through their communication. Therefore, personnel selection is not a key HR practice for developing managers with a high level of this emotional competency because of their confidence in their communication for granting the creation of a successful working environment	The HR decision maker will be more likely to adopt a high-performance personnel selection the higher his/her emotional competency is in promotion of cooperation and conflict management and in orientation toward success, and the lower his/her emotional competency is in communication
	Training	When managers have a high level of building internal relationships, they are more likely to use Training as a means of improving employee qualifications and providing them with resources and capabilities. This training seems to affect the integral development of the HR, permitting their continuous recycling, increasing their capabilities and hence improving their potential and confidence about getting actively involved in their firm. Likewise, training as a mechanism to support new employees conceivably helps these new members to acquire the knowledge they need to do their jobs better and adapt to the firm as quickly as possible. Thus, through this HR practice the manager may encourage and facilitate the internal labour relationships thanks to employees' knowledge resources Furthermore, managers with the competency of self-control seem be more likely to invest in Training to develop their firm's human capital, so that the employees are suitably qualified to do their jobs and handle complicated and tense situations. Such managers may project their self-control outwards and use training to help generate the same competency in their workforce. Thus, training would include not only task-related competencies, but also EI competencies In addition, managers who develop orientation towards success are more likely to make decisions with the aim of improving not only their own skills and knowledge, but also those of their employees, given their importance in the firm's operations. Thus, orientation towards	The HR decision maker will be more likely to adopt high performance training the higher his/her emotional competencies are in building internal relationships, self-control, orientation towards success and time management, and the lower his/her emotional competencies are in influence

(continued)

AMO category	HPHRP	Discussion	Conclusion
		success may increase the manager's predisposition to dedicate economic resources and time to training with the aim of making employees capable of doing their work successfully Finally, when managers have the emotional competency of time management they will encourage training practices as an investment in the SMEs to reach more skilled employees that can solve by themselves the challenges of their job. This result in more options for managers make better use of their time managing the SME, instead of wasting it supporting employees in dealing with problems associated to daily operations. In addition, employees will feel more confident in their jobs as they are skilled to autonomously perform their tasks. In contrast, managers with a high Influence tend to adopt the Training practice less. In these cases, the HR decision maker may decide that training is less important, believing that his/her own skills to make others to understand his/her ideas may be sufficient to provide them with some concepts to assume higher responsibilities	
Motivation practices	Assessment	Results suggest that the higher the manager's emotional competency in effective and efficient time management, the more likely he/she will adopt the assessment practice. A manager with this emotional competency may consider this HR practice to be worth investing in. The effort and time dedicated to employees' assessment may result in substantial improvements for the firm because of superior employee performance and the greater availability of information for the decision making, reducing future time loss and avoiding unforeseen events, since time management is founded on planning The assessment is also determined by the emotional competency communication. Managers with a high level of this competency will easier transmit information to the employees about their level of performance and about what the firm wants from them, making the assessment more useful for the firm and for the employee	The HR decision maker will be more likely to adopt Assessment with high performance criterion the higher his/her emotional competencies are in time management and communication
	Internal promotion	Managers with high empathy manage to develop an appropriate and fair promotion process, adequately channelling and distributing the opportunities and offering current employees the first option for a vacant post if they show they have the abilities, aptitudes, and attitudes required. In contrast, managers who lack empathy may not recognise their employees' achievements or be aware of their interests and needs. They will consequently be unaware of their expectations, and so may be less likely to use internal promotion Managers with a high level of orientation towards success will also encourage Internal promotion, facilitating the advance of talented operations staff if they satisfy the requirements	The HR decision maker will be more likely to adopt Internal promotion the higher his/her emotional competencies are in empathy, orientation towards success and self-control

AMO category	HPHRP	Discussion	Conclusion
		for the post. These managers seem to value work that is well done, on time and of the right quality, so they may seek to promote employees with the right profile to higher positions to help the firm and employees achieve their objectives The current research defines Internal promotion as offering higher level positions to those employees capable of occupying them. Thus, this HR practice also depends on managers having the right emotional competencies to be able to think clearly despite the pressures they may perceive from the different candidates for the post (self-control). Some employees may not accept the promotion of colleagues to a higher level, potentially leading to conflicts and tense situations. Self-control could help the manager stay balanced, positive and understanding even in the most critical moments	
	Salary incentives	The only emotional competency that has an influence, this time negative, on the adoption of salary incentives is Service orientation. When managers have developed this competency, they seem to value a subordinate more as a human asset than as a business resource, and consider other aspects relating to his/her contribution to the firm and value from a more integral perspective. In fact, these managers stand out for their fair and consistent treatment of employees. The factor explaining salary incentives in this work consists of items linking variable remuneration with the firm's financial and operational results or with group productivity, with individual performance being less relevant, so it seems logical that managers with a higher service orientation will not use such incentives	The HR decision maker will be more likely to adopt salary incentives associated with group performance the lower his/her emotional competency is in service orientation
	Equity in fixed salary	According to F-test ($F = 1.261$, $p = 0.243$) the model estimated to Equity in fixed salary is not significant; coherently its adjusted R^2 is also too low (2.4%). So, we omit doing any interpretation about the influence of emotional competencies on this HR practice	–
Opportunity practices	Participation	Three emotional competencies of the HR decision maker affect the adoption of this HR practice. Managers with high communication levels seem to be more likely to encourage employees' participation, to value their contributions, and to establish mechanisms to formalise participation in the firm. These managers are used to timely and quick communication and so conceivably offer their employees transparent, useful information to do their jobs and adequately make evidence-based suggestions Managers with the competency promotion of cooperation and conflict management could also make more use of participation because they are confident of their ability to solve any conflicts	The HR decision maker will be more likely to adopt high performance participation the higher his/her emotional competencies are in communication, promotion of cooperation and conflict management, and building internal relationships and the lower his/her

(*continued*)

Table AIV.

AMO category	HPHRP	Discussion	Conclusion
		that may arise as a consequence of the different opinions that participatory processes generate, and because they are sure that this participation could even reinforce cooperation between the members of the firm	emotional competencies are in service orientation
		Managers will also use participation more when they have a higher level of building internal relationships. This emotional competency seems to make the manager more willing to encourage strategic interconnections and alliances within the firm (Chopra and Kanji, 2010). Through open participation and the expression of suggestions and opinions, the manager could be strengthening the building of such relationships	
		In contrast, managers' service orientation has a significant, negative influence on the participation practice. Managers with a high level of this emotional competency seem to be interested in investigating in employee diversity and understanding what is happening among their employees. This competency could help them to understand that not all employees are adaptable enough to take part in participation processes. Moreover, understanding situations often requires that the manager approaches the employees, rather than the employees showing initiative and participating. Rather than using formal mechanisms to channel employee participation, these managers are more likely to approach their employees themselves to obtain the information they need	
	Teamwork	Managers with a high level of promotion of cooperation and conflict management will value teamwork, try to achieve a good working environment in the organisation, and seek feedback and constructive criticism. The HR practice teamwork may therefore be a tool for achieving everything in the firm that managers with this competency consider important, since within teams' spaces, reflection commonly emerges, and people discuss solutions and measures to help improve how things are done, generating superior performance. Nevertheless, more employee interaction can sometimes generate interpersonal conflicts. Managers with that emotional competency may be able to handle problems of the type that teamwork can generate, which will also facilitate the adoption of this practice	The HR decision maker will be more likely to adopt Teamwork the higher his/her emotional competencies are in promotion of cooperation and conflict management, building internal relationships and service orientation
		Likewise, when managers are interested in building internal relationships, they implement teamwork with the aim of enriching the work carried out and consolidating those alliances in a more restricted, particular context. Similarly, teamwork is encouraged when managers manifest service orientation. This emotional competency seems to lead the managers to treat their employees fairly and consistently, demonstrating sensitivity towards diversity in the	

AMO category	HPHRP	Discussion	Conclusion
		workplace, so that adopting the teamwork practice may be a means of supporting the employees' need for inclusion. On the other hand, managers with this competency may appreciate when teams operate according to the particular characteristics of their members, in other words in function of each member's experience, culture and so on. Because of their attention to diversity, these managers will recognise that a team is a human group and as such is susceptible to showing all the phenomena that can naturally arise in such groups. The managers will be aware that each individual in the team will have a personal space that the other members must respect, and they will stress to all members the need to be sensitive to other members' personal space	
	Job design	When managers carry out an effective and efficient time management, they encourage job design as a tool for optimising that resource and adequately organising the firm's activity. Individuals who manage their time well will conceivably prefer to dedicate time to job design rather than improvising. By adopting Job design, the employees' tasks are clearly defined, so managers seem to make better use of their time, not wasting time constantly giving out instructions. At the same time, fewer conflicts of function between jobs may arise, and hence overlaps and duplications that undermine employees' attempts to make full use of their working day. The managers may thereby ensure an adequate organisation of their employees' time, since the latter will be more efficient if they know what they should be doing. Employees normally feel better with a clear specification of their tasks and without uncertainties about which are their professional obligations. When the managers have the emotional competency of understanding this (Empathy), they will also encourage job design. Nevertheless, the definition of tasks can generate internal conflicts that must be resolved. Self-control may give managers the composure they need to tackle these situations more objectively In contrast, managers with a high level of Influence tend to adopt the Job design practice less. In these cases, the HR decision maker may decide that Job design is less important, believing that his/her verbal skills are sufficient to be able to clarify and communicate the functions of each post to the employees. The manager may expect to achieve similar results in this way to those obtained with a formal, up-to-date definition of functions Likewise, when the Service orientation defines the HR decision maker's EI, Job design receives less attention. Job design leads to rigidity rather than the flexibility the manager needs to be able to address diversity at any time. The management of diversity seems to make it possible to develop different types of person-job adjustment, understanding and listening to the employee, and considering their personal characteristics. This may explain why this emotional competency has a negative influence on the decision to adopt job design	The HR decision maker will be more likely to adopt Job design the higher his/her emotional competencies are in time management, empathy and self-control and the lower his/her emotional competencies are in influence and service orientation

Contextual determinants of HR professionals' self-perceptions of unethical HRM practices

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Abstract

Purpose – The purpose of this paper is to examine human resources (HR) professionals' self-perceptions of ethically questionable human resource management (HRM) practices (i.e. disregard for the individual, favoring those in power and discrimination). The research sought specifically to determine how these perceptions are influenced by their organizations' ethical infrastructure and corporate social responsibility (CSR) practices.

Design/methodology/approach – Data were collected from 134 HR professionals using an anonymous structured questionnaire.

Findings – The scope of organizations' ethics programs and the degree of importance given to developing an ethical infrastructure were found to predict the level of acceptance of unethical HRM practices related to discrimination. These practices are also less acceptable to professionals from organizations that are perceived as more socially responsible regarding their employees.

Research limitations/implications – Additional studies with larger samples are needed to determine more clearly not only the influence of contextual determinants, but also the practical consequences of high levels of acceptance of unethical practices in HRM.

Practical implications – Organizations can decrease their HR professionals' acceptance of ethically questionable HRM practices by developing and emphasizing a strong ethical infrastructure and CSR practices, especially those affecting employees.

Originality/value – HR professionals' perceptions of ethical issues have rarely been analyzed using empirically tested methods. By surveying HR professionals, this study contributes to a fuller understanding of their perceptions regarding the ethics of their own practices. The results show that contextual determinants play an important role in predicting the level of acceptance of unethical HRM practices, especially those leading to discrimination.

Keywords Corporate social responsibility, Ethics, Unethical practices, Ethical infrastructure, Human resource management practices

Paper type Research paper

1. Introduction

Most organizations currently assume that corporate social responsibility (CSR) is a valid strategy, and they are adhering to its principles and practices in increasing numbers (e.g. KPMG, 2017). All their members are thus clearly acknowledged as crucial stakeholders, and the ethical scrutiny of every domain of organizational life is seen as a natural result of CSR. In reaction to the corporate scandals of the last two decades, public expectations also appear to be moving in the same direction, which means that individuals clearly expect organizations to behave in ethical and socially responsible ways (e.g. Burchell and Cook, 2006; Carroll and Shabana, 2010).

However, some researchers have noted (e.g. Pinnington *et al.*, 2007) that prevailing human resource management (HRM) practices and discourses appear to be somewhat detached from these ethical concerns. The prevailing emphasis on strategic and structural alignment with top management's key purposes and values has led human resources (HR) practitioners to focus primarily on organizational rationality and control objectives. This focus on HRM's contributions to corporate profitability stresses the tacit meanings of functional area designations, such as when "workers are named 'resources,' which entails that they are treated like commodities" (Alzola, 2018, p. 836).

Even though HR practitioners' decisions can significantly alter people's lives in organizations (e.g. Margolis *et al.*, 2007), the dominant tendency now appears to be a distancing of HR departments from their traditional image of a welfare-promoting force in the workplace. This includes downplaying the humanist matrix endorsed by HRM's historical origins. In previous stages of its evolution, HRM was associated with a strong social-values orientation, and HRM continues to be "an inherently ethical activity in that its fundamental core is concerned with the treatment of humans" (Greenwood, 2013, p. 355).

This asymmetry also appears to exist in social sciences research. While the number of empirical studies in the fields of ethics and CSR has increased exponentially over the past decade, journal articles that focus specifically on the ethical concerns of HRM practitioners are scarce. Some analyses have been conducted of the present state of affairs in HRM, with various scholars accusing HR professionals of promoting a "mercantilist" view of workplace practices (Dale, 2012; Jack *et al.*, 2012). For example, de Gama *et al.* (2012, p. 97) concluded, based on interview data on a sample of HR professionals, that "HRM as it is practiced is concerned with distancing, depersonalizing, and dissembling, and acts in support of the 'moral' requirements of business, not of people."

Prevailing models of HRM are almost a theoretical and mainly prescriptive, drawing on economic and financial theories that "assume and explain organizational control of employees in order to achieve strategic goals" (Greenwood, 2002, p. 263). In the same vein, public discussions of HR professionals' ethical duties in academic and professional training programs are not only unusual but also, when this issue is addressed, it is often downplayed (Van Buren and Greenwood, 2013). For instance, after analyzing 26 HRM textbooks, Frawley and Boiarintseva (2015, p. 1) report that "textbooks ultimately presented HRM's duty to promote ethics as subservient to organizational needs."

Notably, responsibility for ethical scandals in the global economy (i.e. financial areas) has been placed almost exclusively on chief executive officers and chief financial officers. The HR profession has apparently escaped scrutiny, indicating perhaps "at best a lack of visibility or muteness in ethical stewardship and at worst the active support and promulgation of irresponsible action" (Parkes and Davis, 2013, p. 2412).

What all these trends evidently suggest is that the almost exclusive focus of HRM activities on serving economic rationality purposes may favor the tendency to blur the boundaries of HR ethics in the workplace. Despite the widespread discussion of the relationship between ethics and HRM in recent years – even after taking into account some notable exceptions (e.g. Parkes and Davis, 2013) – the literature reveals a scarcity of

empirical research specifically assessing HR professionals' degree of involvement in assuring typical HRM procedures, norms and practices are ethical. Therefore, further studies need to be conducted that contribute to a clearer picture of how those professionals perceive ethical issues in their organizations and, more especially, how they judge the ethics of their own practices.

The present research thus sought to address this gap to understand how HR professionals' self-perceptions of unethical HRM practices are influenced by their organizational contexts, namely, their companies' ethical infrastructure and CSR practices. Figure 1 shows the conceptual model of this study. The literature review conducted for this research revealed that no previous studies have developed and empirically tested specific hypotheses and/or instruments focusing on the impact of organizational context on the self-perceived ethical quality of HRM practices.

To that end, this paper is structured as follows. First, the theoretical framework and research hypotheses are presented. The study methodology is then described, including the sample, procedures, variables and measures. Next, the statistical analyses and results are presented. Finally, some conclusions are offered, and the results' theoretical and practical implications are discussed.

2. Theoretical framework and research hypotheses

2.1 Ethical challenges and HRM practices

Previous studies have identified the most detrimental, unethical HRM practices (e.g. Society for Human Resources Management, 1991). These include, among others, recruitment and promotion based on favoritism, wage differentials and career development based on friendships with top management, gender discrimination in promotions, inconsistent use of disciplinary norms and attention given to exogenous factors in performance evaluations. Currently, however, the complexity of ethical challenges in HRM is far greater, going well beyond the above practices and other more identifiable situations, which, in many cases, are already legally framed.

The reasons for this complexity are twofold. First, it comes from deep changes in organizational settings in recent decades. For example, the increasing diversity of the workforce has radically changed the demographic landscape of organizations, challenging managers to deal with problems related to ethnic, gender or age discrimination. The second source of complexity in HR professionals' ethical judgments and actions is the assumption that strategic HRM (SHRM) is imperative to organizations' success, which strongly impacts employer–employee relationships.

The priority given to SHRM research and practices stems from a unitarist view of management. This rests on the idea that organizations and their members serve a common goal and, therefore, all employees benefit from their organizations' successes. However, along
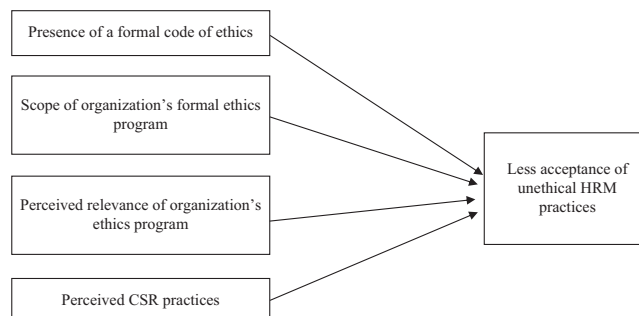
Figure 1.
Conceptual model

with the decline of collective representation of workers (Legge, 2007), SHRM – as reflected in a discourse of "fascination with consensus-based ethics" (Rhodes and Harvey, 2012, p. 56) – may result in one-sided practices, to the detriment of employees' needs and rights.

The advent of SHRM has been accompanied by an increase in HRM interventions seen as demoralizing to employees, such as restructuring initiatives and work intensification. Researchers have concurrently appeared to focus on reconciling management's pressure for results and HR concerns about justice and ethical practices. Presumably, this reconciliation could occur even if HR professionals' propensity to support ethics actively in the workplace were contingent on their organizations' culture and structure (Foote and Robinson, 1999). The research in this field, however, does not provide evidence for this reconciliation process. For instance, empirical findings from a study of the UK's charity sector indicate "ethical inconsistency" can result from the obvious application of strong ethical values to relationships with external clients but not to employees in internal HRM practices (Foote, 2001). In summary, the harshest permutations of SHRM mean that employees are treated as instruments to meet organizations' financial goals. The well-known axiom, "human resources are the most important asset," becomes "HR practitioners are a valuable asset" to the extent that they ensure employees function as an input variable required to meet organizations' financial objectives.

Nonetheless, scarce and mixed empirical evidence has been reported for the consequences of HR professionals' acknowledged propensity to valuate economic results at the expense of any ethical scrutiny of workplace relationships. In a rare example of empirical research on this issue, Van Buren *et al.* (2011) analyzed data on a large sample of Australian HR professionals and concluded that they have shifted toward a strategic mindset. This implies a pervasive neglect of any ethical scrutiny of employer–employee relationships, that is, a tendency to ignore organizations' obligations to their employees.

The extent to which HR professionals are (un)aware of this shift and the way they feel about it remain unclear, as other empirical approaches to this issue have supported different conclusions. For instance, a case study of HR managers' reactions to major downsizing started by their CEOs led Wilcox (2012, p. 95) to assert that these professionals can escape from their "economicist" contexts and seek out "ways of mitigating the negative impacts of senior executive decisions on the firm's employees." This thus suggests the creation of relational spaces propitious to asking critical questions and exercising moral agency in HRM.

In summary, some researchers have shown interest in understanding possible changes in how HR professionals deal with ethics, especially concerning the ethical nature of workplace relationships. However, a review of the relevant literature revealed no empirical studies specifically on the effects of HR professionals' ethical context at work on their self-perceptions of unethical HRM practices. The present study thus sought to fill this gap. The next sections present the theoretical framework supporting the specific objectives of this research, as well as the development of the hypotheses integrated into the proposed research model.

2.2 HRM practices and organizations' ethical infrastructure
Some simplistic studies have portrayed the above-mentioned tendency of SHRM to neglect any ethical scrutiny of HR professionals' own practices as a mere opposition between two premises. The first is the humanist view of welfare in which the ethics of HRM practices are measured in terms of their responsiveness to employee needs. The second is the managerial view, which puts pressure on HR professionals to maximize meeting performance requirements (Fryer, 2009). However, the results of many years of research on ethical decision making suggest a more complex picture (see Treviño *et al.*, 2014 for a review).

While ethical failures within and outside organizations tend to be seen as deliberate and the result of individuals' character faults (i.e. "bad apples"), the evidence found by behavioral ethics studies in organizations indicates that "good" people can do "bad" things (e.g. Bersoff, 1999; De Cremer, 2009). That is, for the most part, ethical violations are not a direct product of specific individual characteristics, and these violations do not always stem from conscious, deliberate choices to subvert moral norms. Thus, HR professionals may not immediately recognize that an ethical problem exists in a given situation because this requires inferences that are not always easy to make concerning their decisions' consequences for others (e.g. Chugh *et al.*, 2005).

In addition, this difficulty in recognizing the existence of ethical problems in a given situation or practice is becoming more pronounced in societies today. Norms, values, morals and ethical standards have become increasingly more complex and ambiguous (Treviño and Brown, 2004). Therefore, ethical issues in HRM practices are not always – or perhaps not mostly – a matter of deliberate, consciously unethical actions. On the contrary, individuals tend to fail to grasp the moral dimension of ethically dubious situations and/or distort this meaning subconsciously (Moore *et al.*, 2012).

An absolute emphasis on financial outcomes may, in some cases, lead HR professionals to rationalize and justify for their own ethically questionable HRM practices – all in the name of achieving strictly financial goals. These professionals would normally judge these practices as unacceptable based on their own moral principles. However, the existing behavioral ethics research suggests (e.g. Gino and Ariely, 2012; Umphress and Bingham, 2011) that HR practitioners may be prone to use rationalization and neutralization to justify unethical behavior, especially if these professionals believe this behavior benefits their organization.

Individual ethical judgments are strongly influenced by contextual factors. Organizations' internal environments provide implicit clues as to what should be considered an ethical issue. Contrary to popular belief, the influence of social contexts on decision-making processes involving ethical issues is often more powerful than individual characteristics (e.g. Tenbrunsel and Messick, 1999; Treviño *et al.*, 2014; Treviño and Weaver, 2001). Based on well-known metaphoric formulas, ethical behaviors in organizations are determined by multiple factors including individual characteristics (i.e. "bad apples"), the moral significance of situations (i.e. "bad cases") and organizational environments (i.e. "bad barrels") (Kish-Gephart *et al.*, 2010). Serving as organizers of individual experiences, social contexts provide clues to how individuals shape ethical judgments and subsequent decisions.

This can be particularly important in the field of HRM, in which the need to discern ethical dimensions is inherent to the work itself due to the multiple roles played by HR professionals that "influence the opportunity for ethical dilemmas" (Wooten, 2001, p. 163). Some variables are important elements in the development of employees' attitudes toward ethics in general, such as the (non)existence of formal ethical norms, ethics inherent in managers' leadership styles or robustness of values acknowledged in organizational cultures. These variables may provide implicit guidelines for dealing with ethical issues in the field of HRM.

Tenbrunsel *et al.* (2003) coined the term "ethical infrastructure" to describe the formal and informal elements that help an organization to be ethically effective. This infrastructure includes sanction and communication systems and organizations' ethical climates, which support the entire ethical infrastructure. The importance attached by organizations to their infrastructure's formal communication elements, such as codes of conduct and value-based mission statements, is often justified by the need to (re)gain public trust in a period of frequent ethical scandals and fraud. Organizations are also concerned about implementing internal controls to anticipate, monitor and avoid irresponsible behaviors and thus prevent possible damage caused by inappropriate behaviors (e.g. Riera and Iborra, 2017).

The existence of an ethical infrastructure can influence organizational actors' behaviors when they encounter ethical issues. The relationship between ethical infrastructure and ethical behaviors in organizations may not always be linear and direct. However, the argument can be made (e.g. Tenbrunsel *et al.*, 2003) that a strong normative framework, especially the presence of informal surveillance and sanction systems, is positively related to ethical behaviors.

As formal codes of ethics vary in content and implementation, their impact is difficult to assess empirically (Treviño and Nelson, 2007). Researchers have found that the existence of codes of ethics is associated with an attenuation of unethical behaviors (e.g. McCabe *et al.*, 1996) and a refusal to engage in ethically questionable behavior toward organizational stakeholders (McKinney *et al.*, 2010). Nonetheless, an overview of empirical results on this issue shows mixed evidence, as only one-third of the studies confirmed ethics codes' effectiveness (Kaptein and Schwartz, 2008; O'Fallon and Butterfield, 2005).

Even though the effects of existing codes of ethics on behaviors are ambiguous, more recent research has shed light on the factors that impede or foster their effectiveness. For example, a recent research model included the content of the code of ethics, the frequency and quality of communication about the code, and managers' embedding of the code in the organization (Kaptein, 2011). The model explained 32 percent of observed unethical behaviors compared to a modest explanatory value of less than 2 percent of the code of ethics alone.

The scope of an ethics program is probably one of the most important variables explaining the influence of ethical infrastructure. Kaptein (2015) examined the effects of an ethics program's components (e.g. training, communication, accountability policies and ethics report lines) on the frequency of ethical behaviors. The cited author found a direct negative relationship between the number of components and the frequency of observed unethical behaviors. Moreover, Kaptein's (2015) results show that composition and sequence, that is, which ethics program components are adopted and in what order, are also significant factors explaining this preventive effect on unethical behaviors.

Drawing from these previous empirical results, the present study posited that HR professionals cannot avoid the effects of their organization's ethical infrastructure on these professionals' process of judging the ethics of HRM practices. More specifically, the existence of an ethics code and the scope of the associated ethics program were expected to influence the degree to which HR professionals accept unethical practices. This led to the following hypotheses:

H1a. The presence of a formal code of ethics in organizations negatively influences their level of acceptance of unethical HRM practices.

H1b. The scope of organizations' formal ethics programs negatively influences their level of acceptance of unethical HRM practices.

In addition, the present research assumed that the way organizations use their ethical infrastructure, for example, giving more or less importance to norms and proactively supporting the effectiveness of the organizations' ethics code, impacts individuals' ethical behaviors and awareness. Thus, the second hypothesis of this study read as follows:

H2. The perceived relevance of organizations' ethics programs negatively influences the level of acceptance of unethical HRM practices.

2.3 Corporate social responsibility and human resource management

CSR refers to the degree to which organizations maximize the creation of shared value for all stakeholders and society at large and mitigate possible negative impacts by considering

social and environmental issues alongside financial ones in their business operations (Aguinis, 2011; European Commission, 2001, 2011; Jamali and Neville, 2011). Consequently, organizations develop principles, policies and practices that appear to further the social good (Carroll, 1979, 2016; McWilliams and Siegel, 2001; Wood, 1991). CSR is a multidimensional construct that includes a broad range of actions and practices, such as reducing environmental impacts, ensuring the organizations' financial sustainability, providing support to communities and investing in employee development (Carroll and Shabana, 2010; Dahlsrud, 2008; Duarte *et al.*, 2010; Turker, 2009). CSR thus constitutes a significant challenge for organizations.

An important dimension of CSR is employee well-being, which traditionally is assumed to be directly relevant to HRM. This is why some experts argue that HR professionals can help organizations to address CSR and ethical challenges more efficiently (Barrena-Martínez *et al.*, 2017; Buckley *et al.*, 2001; Jamali *et al.*, 2015; Sharma *et al.*, 2009; Voegtlin and Greenwood, 2016), most notably by adopting standards related to ethical stewardship (Caldwell *et al.*, 2011). Evidence has been found that CSR influences different stakeholders' reactions to organizations, including employees' attitudes and behaviors in the workplace (e.g. Aguinis and Glavas, 2012; Turner *et al.*, 2018). This happens because CSR highlights norms regarding the fair treatment of individuals both within and outside organizations (Rupp, 2011; Rupp *et al.*, 2006).

CSR can promote a framework that reinforces ethical behavior by clearly signaling organizations' values system and ethical priorities, thereby inducing organizational members to pay more attention to ethical issues (Guerci *et al.*, 2015). Although formal CSR statements are usually not considered a part of organizations' ethical infrastructure, how CSR practices are perceived may have similar effects on the way internal organizational actors judge ethical issues (Turner *et al.*, 2018). With regard to HRM, the above considerations indicate that this positive influence should be especially noticeable for people-related CSR practices, which directly affects HR professionals' position on the ethics of their own practices. These findings led to the following hypothesis:

H3. Perceived CSR practices have a negative relationship with the level of acceptance of unethical HRM practices.

3. Method

3.1 Sample and procedure

An electronic self-report questionnaire was administered to a convenience sample of 134 HR professionals working in organizations operating in Portugal. The respondents were members of a Portuguese non-profit HR professional association that assisted this study by distributing the survey through the association's regular communication channels. These individuals participated in the study voluntarily. A letter accompanied each questionnaire to explain the research goals and guarantee the maximum confidentiality of the data collected and anonymity of respondents. The respondents were between 22 and 72 years old (mean $(M) = 43.0$; standard deviation $(SD) = 10.41$) and mostly females (67.2 percent). The education level of the sample was quite high since 55.5 percent have an undergraduate degree, 31.3 percent a masters and 6.7 percent a doctorate. The average job tenure was 10.8 years $(SD = 8.8$, maximum (max.) $= 35$ years). A total of 75.4 percent had a permanent employment contract, and nearly half of them had a management position (45.5 percent).

A further 64.9 percent of the respondents indicated that the organizations to which they belong have a code of ethics or a similar formal document. Most respondents worked in a for-profit organization (71.6 percent), most of which were private (79.9 percent). The size of the organizations was as follows: 56.7 percent had up to 250 employees, 13.4 percent had between 251 and 500 employees and 29.9 percent had more than 500 employees.

These organizations operated in different sectors, including consultancy, technical services, construction, energy, manufacturing, health and education. In order to address the study's objectives, the survey included instruments with questions about three main areas: ethical infrastructure, perceived CSR and unethical HRM practices.

3.2 Predictor variables and measures

3.2.1 Existence of ethics code. This study followed standard procedures in measuring this variable (e.g. Kaptein, 2009, 2015; Treviño and Weaver, 2001). The existence of a code of ethics (i.e. a formal document articulating the organization's values and standards of conduct) was assessed via a dichotomous question to which respondents answered either "Yes" (0) or "No" (1).

3.2.2 Scope of ethics program. In order to develop an indicator of the scope of ethics programs within organizations, the current research also followed standard procedures in measuring this variable (e.g. Kaptein, 2009, 2015; Treviño and Weaver, 2001; Weaver *et al.*, 1999). The respondents were questioned regarding the existence of five additional elements of an ethics program. These were ethics code training, clear rules for sanctions for misconduct, an anonymous and confidential "hotline" on ethical issues, monitoring of compliance with the ethics code, and a manager responsible for the code. Responses were given as "No" (0) or "Yes" (1). A composite variable was created by adding together the number of elements of the ethics program reported by respondents, including the existence of a code of ethics.

Thus, the score for this variable ranged from 1, corresponding to the mere existence of a code of ethics, to 6, corresponding to the existence of a code of ethics plus the five other elements. The *M* value of this variable was 3.59 (SD = 1.53, minimum = 1, max. = 6) indicating a relatively low level of ethics program implementation within organizations. Despite the broad scope of ethics programs in some organizations – with all six elements present – in other organizations, the scope was limited to the existence of a code of ethics.

3.2.3 Perceived importance of ethics program. This variable was measured via three independent statements adapted from the relevant literature (e.g. Treviño and Nelson, 2007):

(1) "Employees are aware of the existence of a code of ethics (or similar document) in the organization" ($M = 3.26$, SD = 1.26).

(2) "Workers who violate the standards established by the code are investigated and punished" ($M = 3.28$, SD = 1.53).

(3) "The different department heads of the organization play an active role in monitoring employees' compliance with the code of ethics" ($M = 3.38$, SD = 1.78).

Respondents were asked to indicate to what extent each statement was true of their organization, using a five-point response scale (1 = "Not at all," 5 = "Totally").

3.2.4 Perceived CSR practices. The respondents' perceptions regarding their organizations' engagement in social responsibility practices were measured using 14 items based on the perceived CSR scale developed by Duarte (2011). Various measures of perceived CSR are available in the literature (e.g. Maignan and Ferrell, 2000; Martínez *et al.*, 2013; Turker, 2009), but Duarte's (2011) was considered better suited for the present study, given that the cited scale was developed and validated in Portugal.

The items relate to three dimensions of CSR (see Table I). The first is employee CSR, which includes practices such as promoting gender equality or work-family balance (alpha (α) = 0.84; composite reliability (CR) = 0.84; average variance extracted (AVE) = 0.52, $M = 4.04$, SD = 0.82). The second is community and environment CSR, which includes practices such as supporting social causes or the development of nature conservation

Dimensions and Items	Factor loadings
Employee CSR ($\alpha = 0.84$, CR $= 0.84$, AVE $= 0.52$)	
Stimulates employees' occupational training	0.850
Fulfills labor laws	0.737
Guarantees job security	0.654
Promotes equality between men and women	0.614
Promotes work-family balance	0.720
Community and environment CSR ($\alpha = 0.88$, CR $= 0.88$, AVE $= 0.61$)	
Invests in the development of environmental conservation projects	0.704
Supports cultural and educational events	0.867
Supports social causes	0.829
Gives donations to environmental protection associations	0.707
Supports sports events	0.772
Economic CSR ($\alpha = 0.80$, CR $= 0.80$, AVE $= 0.51$)	
Strives to be financially viable	0.708
Incorporates fair-trade policies in its activities	0.615
Strives to be the best organization in the relevant business sector	0.773
Seeks to make responsible use of natural resources (e.g. water and electricity)	0.748
Goodness of fit indices	
χ^2	164.63
df	74
χ^2/df	2.23
RMSEA	0.096
CFI	0.905
TLI	0.884
AIC	226.63

Table I.
Confirmatory
factor analysis of
CSR practices
(standardized solution)

Notes: CR, composite reliability; AVE, average variance extracted; RMSEA, root mean square error of approximation; CFI, confirmatory fit index; TLI, Tucker–Lewis index; AIC, Akaike information criterion

projects ($\alpha = 0.88$, CR $= 0.88$, AVE $= 0.61$, $M = 3.50$, SD $= 0.96$). The last dimension is economic CSR, which encompasses practices such as striving to be financially viable or being the best organization in the relevant business sector ($\alpha = 0.80$, CR $= 0.80$, AVE $= 0.51$, $M = 4.10$, SD $= 0.78$). These three dimensions revealed good levels of reliability and convergent validity.

SPSS Amos 22.0 software was used to conduct confirmatory factor analyses, which confirmed support for the three-dimensional structure of these items. The results for the three correlated factors model were chi-square (χ^2) $(74) = 164.63$, probability value (p) < 0.000, confirmatory fit index (CFI) $= 0.905$, Tucker–Lewis index (TLI) $= 0.884$, root mean square error of approximation (RMSEA) $= 0.096$ and Akaike information criterion (AIC) $= 226.63$. The scores for the single factor model were χ^2 $(77) = 311.49$, $p < 0.000$; CFI $= 0.775$; TLI $= 0.711$; RMSEA $= 0.151$; and AIC $= 367.49$. The respondents were asked to indicate their level of agreement with each statement using a five-point response scale (1 = "Totally disagree," 5 = "Totally agree"). A composite variable was created for each dimension by averaging the pertinent items. Higher scores represent perceptions of higher engagement of organizations in CSR practices.

3.3 Criterion variable
To assess the variable of level of acceptance of unethical HRM practices, an adequate measure had to be developed since this instrument was not available in the literature. Following the usual steps in the development of new measures, a set of HRM practices

considered unethical was collected from the relevant literature, particularly from research that sought to organize specific taxonomies of these practices (e.g. Wooten, 2001). Three experts in business ethics and HRM assessed the content validity of the items. Exploratory and confirmatory factor analyses identified a set of 12 items (see Table II). These were organized into three correlated factors that showed a good fit for the data (χ^2 [51] = 82.55, $p < 0.01$, CFI = 0.951, TLI = 0.937, RMSEA = 0.068, AIC = 5,324.58) compared to a single factor solution (χ^2 [54] = 120.14, $p < 0.001$, CFI = 0.897, TLI = 0.874, RMSEA = 0.096, AIC = 5,356.16).

The three dimensions referred to, first, discrimination practices ($\alpha = 0.73$, CR = 0.73, AVE = 0.41, $M = 2.25$ and SD = 1.08) including four items (e.g. "selecting men for roles that involve a heavier workload"). The second dimension was practices showing a disregard for the individual ($\alpha = 0.64$, CR = 0.67, AVE = 0.42, $M = 2.48$, SD = 1.30) with three items (e.g. "recommending a 'problematic' worker to another area of the organization"). The last was practices favoring those in power ($\alpha = 0.82$, CR = 0.84, AVE = 0.52, $M = 2.09$, SD = 1.12) including five items (e.g. "facilitating the process of selecting a family member of a senior corporate officer for a job opening in the organization").

All three factors revealed adequate levels of internal consistency with α and CR values above 0.60 (Awang, 2012; Fornell and Larcker, 1981). Regarding convergent validity, these factors revealed AVE values above 0.40, which are acceptable when CR values are above 0.60 (Fornell and Larcker, 1981). The respondents were asked to indicate the degree to which

Dimensions and items	Factor loadings
Practices favoring those in power ($\alpha = 0.82$, CR = 0.84, AVE = 0.52)	
Disciplining less severely employees with a higher position in the organization's hierarchy	0.907
Facilitating the process of selecting a family member of a senior corporate officer for a job opening in the organization	0.880
Ignoring a sexual harassment complaint against a senior official of the organization when no evidence is available	0.654
Increasing the CEO's salary when the organization is going through a period of budget cuts and employee dismissals	0.621
Turning a blind eye to unprofessional behaviors of the organization's most profitable employees (e.g. delays)	0.459
Discrimination practices ($\alpha = 0.73$, CR = 0.73, AVE = 0.41)	
Not selecting candidates from particular ethnic origins	0.830
Selecting men for roles that involve a heavier workload	0.626
Not recruiting candidates in advanced stages of pregnancy	0.607
Using job quotas to select candidates from a particular university	0.448
Practices showing a disregard for the individual ($\alpha = 0.64$, CR = 0.67, AVE = 0.42)	
Repeating to other colleagues information confided by an employee	0.850
Recommending a "problematic" worker to another area of the organization	0.554
Sending performance appraisals to employees by e-mail	0.465
Fit indices	
χ^2	82.55
df	51
χ^2/df	1.62
RMSEA	0.068
CFI	0.951
TLI	0.937
AIC	5,356.16

Notes: CR, composite reliability; AVE, average variance extracted; RMSEA, root mean square error of approximation; CFI, confirmatory fit index; TLI, Tucker–Lewis index; AIC, Akaike information criterion

Table II.
Confirmatory factor analysis of unethical HRM practices (standardized solution)

they personally considered each practice acceptable on a 7-point response scale (1 = "Totally unacceptable to me," 7 = "Totally acceptable to me"). A composite variable was created for each dimension by averaging the pertinent items. Higher scores represent higher levels of acceptance of unethical HRM practices.

4. Results

The data were analyzed using IBM SPSS software 22.0 version. Table III presents the Ms, SDs, correlations and internal reliabilities of variables. Except for the existence of an ethics code and two indicators of the perceived importance of ethics programs, the predictor variables showed weak to moderate correlations with the different dimensions of unethical HRM practices.

4.1 Effects of existence of ethics code and scope of ethics programs

Analyses were performed to assess the effects of organizational ethical contexts on HR professionals' level of acceptance of unethical HRM practices, including separate linear regression analyses for each predictor variables. As can be seen in Table IV, the results reveal that the mere existence of an ethics code has no significant effect on the level of acceptance of any dimension of the unethical HRM practices assessed. Practices favoring those in power (f-statistic $(F)[1,133] = 0.439$; not statistically significant (ns.)), discrimination practices ($F[1,133] = 0.113$; ns) and practices showing a disregard for the individual ($F[1,133] = 1.338$; ns) are all associated with no statistically significant impact. Therefore, $H1a$ is not supported by the data.

Similarly, the scope of ethics programs does not affect the HR professionals' judgments of the acceptability of practices showing a disregard for the individual ($F[1,86] = 0.480$; ns) and practices favoring those in power ($F[1,86] = 3.051$; ns). However, professionals from organizations with broader ethics programs appear to be more prone to rejecting discrimination practices ($F[1,86] = 9.656$, $p < 0.01$; beta (β) $= -0.319$, $p < 0.01$). Thus, $H1b$ is partially supported.

4.2 Effects of perceived importance of ethics programs

Regarding the possible effects of the perceived importance of ethics programs, regression analyses revealed that the perceived significance of sanctions for violations of ethical norms influences HR professionals' judgments about the acceptability of unethical HRM practices (see Table IV). That is, the higher the perceived significance of the punishment is, the less acceptable are the practices. More specifically, this effect occurs with discrimination practices ($F[1,86] = 10.090$, $p < 0.01$; $\beta = -0.326$, $p < 0.01$), practices showing a disregard for the individual ($F[1,86] = 15.708$, $p < 0.000$; $\beta = -0.395$, $p < 0.000$) and practices favoring those in power ($F[1,86] = 17.472$, $p < 0.000$; $\beta = -0.413$; $p < 0.000$).

However, the respondents' opinions of other employees' awareness of the existence of a code of ethics or a similar document did not contribute to explaining these professionals' level of acceptance of unethical practices. Thus, discrimination practices ($F[1,86] = 0.159$; ns), practices showing a disregard for the individual ($F[1,86] = 0.344$; ns), and practices favoring those in power ($F[1,86] = 0.070$; ns) are not associated with a statistically significant impact.

In the same vein, the respondents' opinion about the role of department heads in monitoring compliance with their organizations' ethics code did not reveal a significant effect on these HR professionals' level of acceptance of unethical HRM practices. Since the results for discrimination practices ($F[1,86] = 3.002$; ns), practices showing a disregard for the individual ($F[1,86] = 2.516$; ns) and practices favoring those in power ($F[1,86] = 1.760$; ns) reveal no significant impact, this indicates that $H2$ is only partially supported by the data (see Table IV).

	M	SD	1	2	3	4	5	6	7	8	9	10	11
1. Existence of ethics code (0 = Yes, 1 = No)	3.59	1.53	–										
2. Scope of ethics program	3.26	1.26	–	–									
3. Employee awareness of existence of code of ethics	3.28	1.53	–	0.20	–								
4. Relevance of sanctions for violations of ethical norms	3.38	1.78	–	0.12	0.17	–							
5. Role of department heads in monitoring compliance with ethics code			0.02	–0.10	–0.08	0.24*	–						
6. Employee CSR	4.04	0.82	–0.11	0.23*	0.13	0.15	0.26*	(0.84)					
7. Community and environment CSR	3.50	0.96	–0.11	0.24*	–0.01	0.19	0.15	0.61**	(0.88)				
8. Economic CSR	4.10	0.78	–0.04	0.38**	0.21*	0.22*	0.13	0.67**	0.57**	(0.80)			
9. Practices favoring those in power	2.09	1.12	0.00	–0.22*	–0.10	–0.46**	–0.12	–0.19*	–0.17*	–0.20*	(0.82)		
10. Discrimination practices	2.25	1.08	0.08	–0.36**	–0.13	–0.35**	–0.17	–0.42**	–0.21*	–0.33**	0.57**	(0.73)	
11. Practices showing a disregard for the individual	2.48	1.30		–0.11	0.01	–0.38**	–0.12	–0.16	–0.24**	–0.20	0.49**	0.32**	(0.64)

Notes: Cronbach's αs between parentheses. *$p < 0.05$; **$p < 0.01$

Table III.
Ms, SDs, correlations and internal reliability

| | | | Unethical HRM practices | | | | | |
| | | | Practices favoring those in power | | Discrimination practices | | Practices showing a disregard for the individual | |
Hypotheses	Predictors		R2adj	β	R2adj	β	R2adj	β
H1a	Existence of ethics code (0 = Yes, 1 = No)		−0.004	0.058	−0.007	0.029	0.003	0.100
H1b	Scope of ethics program		0.023	−0.067	0.091	−0.319**	0.006	−0.075
H2	Perceived importance of organizations' ethics programs	Employee awareness of existence of code of ethics	−0.011	0.029	−0.001	−0.043	−0.008	0.063
		Relevance of sanctions for violations of ethical norms	0.161	−0.413***	0.096	−0.326**	0.146	−0.395***
		Role of department heads in monitoring compliance with ethics code	0.009	−0.142	0.023	−0.185	0.017	−0.170

Notes: R2adj, adjusted R^2. ** $p < 0.01$; *** $p < 0.000$

Table IV.
Effects of existence and implementation of ethical infrastructure on self-perception of unethical HRM practices

4.3 Effects of perception of CSR practices

Regarding *H3*, the effects of the perceived engagement of organizations in three dimensions of CSR on HR professionals' level of acceptance of unethical HRM practices were subjected to a set of regression analyses. The three predictors (i.e. employee CSR, community and environment CSR, and economic CSR) were considered at the same time for each dimension of the criterion variable (see Table V).

The findings indicate that none of the three dimensions of perceived CSR affect the HR practitioners' judgments about the acceptability of practices showing a disregard for the individual ($F[3,133] = 2.342$; ns). The same is true of practices favoring those in power ($F[3,133] = 3.083$; ns). However, respondents' opinions regarding the engagement of their organizations in employee CSR had a significant effect on these professionals' acceptance levels of discrimination practices. The higher the perceived engagement in these specific CSR practices is, the higher the rejection of discrimination practices in HRM ($F[3,133] = 12.536$, $p < 0.000$; $\beta_{Employees\ CSR} = -0.474$, $p < 0.000$). The organizations'

| | | | Unethical HRM practices | | |
| | | | Practices favoring those in power | Discrimination practices | Practices showing a disregard for the individual |
Hypotheses	Predictors		β	β	β
H3	Perceived CSR practices	Employee CSR	−0.147	−0.474***	−0.081
		Community and environment CSR	−0.080	0.011	−0.064
		Economic CSR	−0.072	−0.009	−0.119
		R2adj	0.049	0.206	0.029

Note: *** $p < 0.000$

Table V.
Effects of perceived CSR on self-perception of unethical HRM practices

perceived engagement in community and environment CSR ($\beta_{Community\ and\ Environment\ CSR}$ = 0.011; ns) and in economic CSR ($\beta_{Economic\ CSR}$ = −0.009; ns) does not help explain the respondents' opinions regarding discrimination practices.

5. Discussion and conclusions

This study sought to understand more fully how HR professionals perceive HRM ethical issues in their organizations. More specifically, the research focused on how much these professionals are influenced by their organizations' ethical infrastructure and socially responsible practices when judging the ethics of their own HRM practices. The results indicate that being embedded in an organizational environment with a significant ethical and social responsibility framework appears to increase the ethical self-vigilance of professionals for some unethical HRM practices. This is the case with discrimination practices, which tend to be rejected when HR professionals perceive their organizations as socially responsible toward its employees, as well as having an extensive implementation of their ethics program.

These results are consistent with meta-analytic findings (Kish-Gephart *et al.*, 2010), which indicate that the simple existence of an ethics code has no effect on the acceptance of unethical HRM practices. However, this code has a positive effect on reducing unethical behavior when associated with other organizational variables that are consistent with prescribed formal norms. Thus, this study provides further empirical evidence of the importance of the dynamics and nature of ethics programs to preventing and reducing unethical behavior (Kaptein, 2015; Kaptein and Schwartz, 2008; O'Fallon and Butterfield, 2005).

In addition, the present results highlight the significance of control systems as an infrastructural influence on ethical behavior in organizations (e.g. Tenbrunsel *et al.*, 2003; Weaver *et al.*, 1999), specifically regarding ethical HRM practices. The perceived importance of sanction systems for violations of ethical norms appears to be a major factor stopping HR professionals from accepting unethical behaviors. Sanctions have significant effects on the three dimensions of unethical HRM practices assessed, suggesting that ethics program follow-through has a strong influence on ethical behavior (Treviño and Weaver, 2001).

The positive effect of CSR practices is only partially supported by the present study's results, since community, environment and economic CSR fail to show any negative association with an acceptance of unethical HRM practices. However, it is notable that the predicted effect of perceived employee CSR was confirmed, supporting the conclusion that internal CSR practices are important for maintaining the ethical quality of organizations' internal relationships. This specific result is also in line with the tendency for HRM to be more involved in internal CSR linked to HR policies (e.g. diversity or work-family balance; Sarvaiya *et al.*, 2016). Moreover, this finding appears to confirm the proposed link between employee-focused CSR and ethical HRM practices (Voegtlin and Greenwood, 2016).

Although the present study potentially has ecological validity because the sample was composed of HR professionals, this research also had limitations that suggest enhancements and corrections are needed in future studies. The main limitations relate to the sample size and the difficulty of controlling social desirability effects in the respondents' assessment of their level of acceptance of unethical HRM practices. Although the number of HR professionals involved in the study is similar to other few studies on analogous issues (e.g. Parkes and Davis, 2013), the sample was relatively small. This fact may have limited the statistical significance of some analyses. Future studies could replicate the findings reported here with larger samples of HR professionals.

Regarding self-perceptions of unethical HRM practices, social desirability probably exacerbated the occurrence of low M values, which did not exceed 2.48 on a seven-point response scale. However, despite any probable social desirability effects, the respondents' responses showed a moderate variance (i.e. SD ranged between 1.08 and 1.30). This is in line with some researchers' findings reported in the literature on decision making (e.g. Gino *et al.*, 2009), namely, that ethical judgments are volatile and ambiguous and that, consequently, individuals are mostly unaware of the consequences of their choices.

Although the present results are complex, they have practical implications and suggest directions for future research. First, the findings suggest that the clarity of organizations' CSR policies and the emphasis these entities place on their ethical infrastructure can favor HR professionals' recognition of ethical issues. This could give these individuals a stronger voice and help them gain the "courage to challenge" (Parkes and Davis, 2013) top management decisions that are ethically questionable.

Developing ethics programs focused on maintaining the ethical quality of employer–employee relationships appears to be an indispensable element of organizational culture, as these programs increase the practical relevance of formal ethical norms. Thus, since the development of ethics programs is integrated in HRM's functional areas, this task can be seen as a key responsibility of HR professionals today (Sloan and Gavin, 2010). Daily experiences of the application of ethics in the workplace can provide basic support to HR professionals who seek to balance and/or compensate for less ethical leadership's potential effects on the well-being of workers (Kalshoven and Boon, 2012).

By maintaining high ethical standards in HRM processes, HR professionals can more easily follow a more ethical pathway leading to "human quality treatment" (Melé, 2014), adding an additional dimension to their organizations' quality processes, products and services. The present study thus opens a significant avenue of research related to the strength of HRM's role in promoting organizational ethics. More specifically, future studies could analyze how HRM's importance to organizational strategy relates to HR professionals' capacity to influence their organizations' level of acceptance of unethical HRM practices. For these reasons, insisting on the development of ethics programs and promoting their application throughout organizations can be regarded as simultaneously a duty and a right of HR professionals. After all, if SHRM can contribute directly to organizations' success, HR professionals could now be more than ever in a position to adopt a framework of genuine ethical stewardship that creates more satisfactory work environments for employees.

The present research's findings support the conclusion that some contextual factors influence – albeit only partially – how HR practitioners perceive the ethical acceptability of their own practices. To expand on this study's focus on self-perceptions, future research will need to evaluate hetero-perceptions to verify if the effects of the aforementioned contextual factors are also felt by other organizational actors (i.e. non-HR professionals).

The possible effects of individual differences in personal values and a propensity to engage in ethical assessments were not analyzed in this study. Thus, further research could also examine whether individual variables related to ethical judgments (e.g. moral identity and Machiavellianism) moderate these effects. Finally, following the lead of recent research (Linehan and O'Brien, 2017), more attention should be paid to the role of individuals' emotions in the moral framing of issues in HRM-related ethical decision making.

This study's findings contribute to the literature on how behavioral ethics research can be applied to HRM practices. The present study used a different approach from that of the few previous studies focusing on the way HR professionals judge their own ethically questionable practices. Helping these professionals to recognize and overcome any distortions in their self-perceptions of ethics in their own practices can be the first step toward ensuring that HRM plays a strategic role in organizational ethics.

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