Formalized HR practices and firm performance: An empirical comparison of family and non-family firms

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FORMALIZED HR PRACTICES AND FIRM PERFORMANCE: AN EMPIRICAL COMPARISON OF FAMILY AND NON-FAMILY FIRMS[1]

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ABSTRACT

The influence of the family on human resource (HR) management structures creates important idiosyncrasies with potential implications in terms of firm performance. Based on the agency and socioemotional wealth (SEW) perspectives, this paper examines the formalization and effectiveness of three basic HR practices – selection, training, and compensation – in different contexts of family and non-family firms. Using a sample of 500 Spanish companies, the results show that a higher degree of HR formalization has a positive influence on firm performance, confirming the negative moderating influence of family involvement on the relationship between the formalization of training practices and the firm performance. In addition, the findings indicate that the mediating role of selection practices in the relationship between training and firm performance is smaller in family than in non-family firms.

Keywords: formalized human resource practices; family vs. non-family firms; agency theory; socioemotional wealth perspective; firm performance

1. Introduction

HR management in family firms is a complex task, in which the relationships between owners, managers, employees, and family are not clearly defined in terms of authority and responsibilities (Leon-Guerrero, McCann, & Haley, 1998; Reid, Morrow, Kelly, Adams, & McCartan, 2000). The influence of the family on HR management creates specific idiosyncrasies regarding the extent to which HR practices are oriented toward the economic interests of the business or toward the welfare of the family (Cruz, Firfiray, & Gomez-Mejia, 2011; Eddleston & Kellermanns, 2007; Gomez-Mejia, Haynes, Nuñez-Nickel, Jacobson, & Moyano-Fuentes, 2007; Schulze, Lubatkin, Dino, & Buchholtz, 2001), with potential implications in terms of firm performance. Indeed, most of the literature reveals differences in HR practices between family and non-family firms (De Kok, Uhlaner, & Thurik, 2006; Reid and Adams, 2001) insofar as family firms use a set of HR practices that is less complex and structured than that of non-family firms. Family firms often use criteria for employee selection based on fitting their culture and values (Dyer & Mortensen, 2006), placing more emphasis on informal long-term training activities for employees (Harris & Reid, 2008; Kotey & Folker, 2007) and setting more static and seniority-based compensation for employees (Anderson & Reeb, 2003; Carrasco-Hernández & Sánchez-Marín, 2007).

However, there are still some important gaps and contradictions that need to be investigated. First, not all studies show the relationship between formalized HR practices and family and non-family firms in the same way. For example, Miller, Le Breton-Miller, and Scholnick (2008) and Tsao, Chen, Lin, and Hyde (2009) find that family firms implement certain formalized HR practices to a greater extent than non-family firms. These authors show that family firms develop more specific skills among employees than non-family firms as a consequence of a higher level of professionalization of HR practices. Second, some research focuses on the

differences in the formalization of HR practices between family and non-family firms, while others centre on the differences associated with the level of family involvement in the business – mainly in terms of ownership and management – producing, in both cases, mixed results (Kim & Gao, 2010; Sciascia & Mazzola, 2008; Westhead & Howorth, 2006). Third, little is known about the effects of the formalization of HR practices in terms of firm performance, yet it is supposed to be a key aspect in the HR literature (Jackson, Schuler, & Jiang, 2014; Jiang, Takeuchi, & Lepak, 2013). Fourth, with few exceptions (De Kok et al., 2006; Reid & Adams, 2001), studies on family firms examine the formalization of specific HR practices in isolation, without an integrated and comprehensive theoretical and empirical framework in which to understand how these practices are interconnected and have an impact on firm performance (Cruz et al., 2011; Subramony, 2009).

Therefore, this paper is a response to the need for further research on this line to increase the knowledge about the impact of the degree of formalization of HR practices on firm performance (Björkman & Welch, 2015; Jiang et al., 2013), highlighting the interrelationships between HR practices in a comparing framework of family and non-family firms. To that end, we build on a combination of agency theory and the SEW perspective (Gomez-Mejia et al., 2007; Schulze et al., 2001) to explain why the degree of formalization and the effectiveness of HR practices depend on family firms' idiosyncrasies. In this vein, while the purpose of formalizing HR practices in non-family firms is to optimize the economic utility function, improving the economic performance, in family firms there is a balance between economic and non-economic objectives derived from the emotional engagement between the firm and its employees, which is likely to emphasize the preservation of family wealth (Berrone, Cruz, Gomez-Mejia, & Larraza, 2010; Cruz et al., 2011; Gomez-Mejia, Cruz, Berrone, & De Castro, 2011). As a result, employees in family firms show strong altruism and alignment of interests that steer their behaviours towards

improving their performance without requiring excessively formalized HR practices. However, family firms may also show asymmetric altruism, which can result in inadequate or informal control through HR practices, implying potential inability to attract, retain, and motivate employees, negatively affecting the firm performance (Chrisman et al., 2007; Lubatkin et al., 2005; Schulze et al., 2001).

Based on these theoretical considerations, and using a structural equation modelling methodology with a sample of 500 Spanish family and non-family firms, we intend to contribute to the literature in several ways. First, this is the first research, to the best of our knowledge, to respond to the demands of several recent studies (Berrone, Cruz, & Gomez-Mejia, 2012; Cruz et al., 2011; Gomez-Mejia et al., 2011), combining the SEW and agency perspectives to provide a better explanation of the reasons why the degree of formalization of HR practices can vary between family and non-family firms. Second, this study advances an explanation of the effects of the formalization of HR practices on firm performance, which is fundamental to understanding the whole picture of the role of HR management practices (Jackson et al., 2014; Jiang et al., 2013). Third, with this study we elaborate further on the interactions of individual HR practices – selection, training, and compensation – to provide a comprehensive view of the sequential process of implementing HR practices and how their relationships condition firm performance (Jiang, Lepak, Hu, & Baer, 2012; Subramony, 2009).

The paper is structured as follows. First the theoretical aspects are set out, leading to the formulation of hypotheses. Then the methodology is described, to show how the empirical variables are measured and the statistical analyses are performed. Finally the results are presented and discussed in terms of both practical implications and possible future research.

2. Effects of the formalization of HR practices on firm performance

HR management is defined as the process of attracting, developing, and maintaining a workforce that supports and helps to advance the mission, the objectives, and the strategies of the organization. The field of HR management has emerged from the conceptual, empirical, and practical intersection of several disciplines (Jackson et al., 2014; Jiang et al., 2013), so that certain sets of HR practices are widely defined in the literature as 'best practices' or 'high work performance' (Becker & Huselid, 1998; Collins & Clark, 2003; Delaney & Huselid, 1996; Huselid, 1995) or, in the family firm fields, as 'formal' or 'professional' (Dekker, Lybaert, Steijvers, Depaire, & Mercken, 2013; De Kok & Uhlaner, 2001; De Kok et al., 2006; Songini, 2006).

In this study we adopt the term formalization to analyse the effectiveness of three of the most important HR practices in terms of firm performance. Formalization involves using a set of procedures and rules to develop comprehensive HR structures to attract qualified human capital, to develop proper capabilities among employees, and to steer employees' behaviour to improve their performance (Dekker et al., 2013; Songini, 2006). Formalized HR practices involve intensive and complex processes, including selection, training, and compensation, which contribute to improving the knowledge, skills, and abilities of a firm's current and potential employees, increasing their motivation and enhancing the retention of quality employees and those who perform best (Huselid, 1995).

Some scholars examine the determinants of the adoption of effective – or formalized – HR practices to identify, develop, and reward work behaviours that are consistent with the company goals (Aragón-Sánchez, Sánchez-Marin, & Mueses-Morales, 2015; Martell & Carroll, 1995). Studies identify the appropriate design of HR practices that promote a firm's productivity (MacDuffie, 1995; Youndt, Snell, Dean, & Lepak, 1996) and financial performance (Collins &

Clark, 2003; Delaney & Huselid, 1996; Huselid, 1995). These studies highlight the need to formalize a bundle of mutually reinforcing HR practices to shape the pattern of interactions between and among managers and employees (Jackson et al., 2014; Lepak, Liao, Chung, & Harden, 2006). The logic behind the HR literature is that the formalization of HR practices can improve firm performance when the company ensures that the employee has the knowledge and skills required and is motivated to apply them appropriately (Jiang et al., 2013). Indeed, recent research provides empirical evidence that there is a positive and synergistic relationship between the formalization of a set of HR practices and firm performance when employees are able to obtain, develop, and apply knowledge and skills that are consistent with the specific aims of the company (Crook, Todd, Combs, Woehr, & Ketchen, 2011; Jiang et al., 2013). Considering this to be our base hypothesis, in the following sections, we develop this framework, taking into account the context of family firms.

2.1. The moderating effect of family firms

There is no unique or dominant theoretical paradigm to explain the sources and consequences of the formalization of HR practices in family firms (Verbeke & Kano, 2012). Theoretical explanations ranging from a sociological view, represented by stewardship theory and SEW theory (Davis, Schoorman, & Donaldson, 1997; Gomez-Mejia et al., 2007), to an economic perspective, exemplified by transaction cost theory and agency theory (Eisenhardt, 1989; Williamson, 1979), emphasize the importance of obtaining, retaining, and developing human capital in family firms. We adopt agency theory and SEW theory as complementary views that make it possible to analyse how the formalization of HR practices influences firm performance depending on the family involvement in the firm.

Agency theory provides a highly flexible framework in which to analyse consequences of the formalization of HR practices in family firms (Chrisman, Chua, & Litz, 2004). At the core of this theory is the potential conflict between the principal (owners) and the agent (employees) due to divergent interests under conditions of asymmetric information and in the absence of complete contracts (Jensen & Meckling, 1976). Owners can minimize the agency costs by imposing formalized (internal) controls to restrain employees' self-serving behaviour and by aligning the interests of agents with those of the firm (Fama & Jensen, 1983). To the extent that HR practices are formalized and adjusted to the specific characteristics of the company and its agents, company–employee behaviour will be better aligned and thus the risk of agency problems – such as adverse selection and moral hazard – will be reduced. According to agency theory, the few empirical studies that analyse HR management as a set of practices recognize a difference in orientation between family and non-family firms. De Kok et al. (2006) and Reid and Adams (2001) find that family firms place more emphasis on spontaneous and lax procedures and rules, designing their HR practices at the expense of intensive and more complex HR management principles, supporting that family involvement implies less tension in adopting formal HR practices to align employees' behaviours (Kotey & Sheridan, 2004).

This lack of formalization can be explained by the existence of altruism or kinship relationships (Verbeke & Kano, 2012) that reduce the conflicts of interest between the firm and its employees, encouraging commitment and selflessness among the parties involved in the family firm (Chrisman, Chua, Kellermanns, & Chang, 2007; Chrisman et al., 2004; Chua, Chrisman, & Bergiel, 2009; Lubatkin, Durand, & Ling, 2007; Lubatkin, Schulze, Ling, & Dino, 2005; Schulze, Lubatkin, & Dino, 2003; Schulze et al., 2001). The existence of altruistic behaviours in family firms creates a self-reinforcing system of incentives that encourages owners and employees to be

more careful and less partisan, which strengthens their involvement in the business, increases their communication and cooperation, and emphasizes a long-term orientation (Chrisman et al., 2004; Eddleston & Kellermanns, 2007; Schulze et al., 2001). Altruistic employees, who are mostly selected for their close family social and cultural networks, (Chrisman et al., 2004; Daily & Dollinger, 1992; Schulze et al., 2001), 'self-align' their interests with those of the family firm avoiding the emergence of conflicts that might subsequently cause organizational inefficiencies, limiting moral hazard and differences in objectives (Eddleston & Kellermanns, 2007; Lubatkin et al., 2007). Altruism and trust relationships then influence the design of HR practices in family firms toward simplicity – which is stronger as family members become more involved in the ownership and/or the management of the firm –, making it possible to dispense with complex or formal mechanisms of selection, training, and compensation of employees (Chrisman et al., 2004; Gomez-Mejia, Larraza-Kintana, & Makri, 2003; Gomez-Mejia, Nuñez-Nickel, & Guttierez, 2001). In the case of non-family firms, however, there is a greater propensity to implement formal HR practices as a way to monitor their employees to ensure the alignment of individuals' interests with those of the organization (Gomez-Mejia et al., 2001) as a consequence of the higher risk of employees who are not constrained by family ties will not cooperate but will rather seek their own benefit (Sánchez-Marín, Portillo-Navarro, & Clavel, 2016; Verbeke & Kano, 2012).

In this sense, Gomez-Mejia et al. (2007) associate this approach with the SEW perspective and the idea of preserving family's SEW – which derive from several sources that include the desire of family control and influence over the firm, the identification of family members with the firm, the construction of social ties through the family firm, the emotional attachment of family members, and the renewal of family bonds to the firm through dynastic succession (Berrone et al., 2012). Research on SEW theory shows that family firms make decisions unlike those of non-

family firms based on the assumption that family owners' seek utility in the form of preserving SEW generated by the non-economic aspects of family businesses (Berrone et al., 2012; Gomez-Mejia et al., 2011). Since family firms try to sustain and increase owners' SEW, their preservation affects their business decision-making in such a way that might seem unprofessional from the viewpoint of non-family firms (such as appointing as a manager an unexperienced family member) but might be logical to family owners as they provide non-financial benefits (Gomez-Mejia et al., 2011). Thus, family firms do not always seek to maximize their economic efficiency if it means jeopardizing the reputation, continuity, or family influence on the business (Berrone et al., 2010; Gomez-Mejia et al., 2007). A loss of SEW for the family means the frustration of its expectations, and a loss of its privacy and its status (Cruz et al., 2011), so that the main objective of the owning family will be to preserve its SEW, even at the cost of financial interests or the competitive advantage of the business (Gómez-Mejia et al., 2011).

On the basis of SEW propositions, the main priority of a family firm is the attraction, retention, motivation, and development of human capital, which is best advanced by applying social and emotional principles that are related to the family (Cruz et al., 2011). These goals result in the search for development and motivation of employees who are engaged in and involved with the values of the family that owns the company, contributing to the welfare of the family and employees while reducing the need to maximize the economic performance by means of complex, structured, and intensive HR practices (Cruz et al., 2011). Hence, family's desire to preserve SEW seem to affect family firms' economic performance negatively. This view is also consistent with the agency theory propositions based on the concept of asymmetric altruism (Chrisman et al., 2004, 2007; Chua et al., 2009; Lubatkin et al., 2005; Schulze et al., 2001, 2003) that, considering the economic impact of family involvement, holds that non-formalized HR practices are subject to

many agency problems which potentially cause negative effects on firm performance. Thus, we expect a negative moderating effect of family involvement on the influence of the formalization of HR practices on firm performance. That is to say, the relationship between the formalization of HR practices and the firm performance is weaker in family firms than in non-family firms. All these arguments lead us to formulate the following hypothesis:

Hypothesis 1. Being a family firm negatively moderates the relationship between the formalization of HR practices and the firm performance.

From this global hypothesis, we can extract particular sub-hypotheses comparing individual HR practices between family and non-family firms. With regard to selection practices, family firms tend to rely more heavily on close social networks in the recruitment process while applying selection processes only to a small set of candidates – who are usually family members – who share the values and culture of the family company (Dyer & Mortensen, 2006). They reject complex processes of selection that involve assessing the match between the employee and the specific requirements of the job. Instead, they prefer to depend on family ties to ensure a supply of reliable employees, minimizing the potential agency problems regarding trust and delegation (Ram & Holliday, 1993). Candidates who are closely linked to the family are more trusted and have a longer-term orientation, limiting the moral hazard and reducing the differences in objectives and information asymmetries (Berrone et al., 2010; Lubatkin et al., 2007). At the same time, however, family firms that select close family members are reducing the possible economic benefits proffered by non-family employees in terms of specialized knowledge and expertise,

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facing them with a loss of potential benefits in terms of firm performance (Cruz et al., 2011).
Therefore, we hypothesize the following:

Hypothesis 1a. Being a family firm negatively moderates the relationship between the formalization of selection practices and the firm performance.

Regarding training, Kotey and Folker (2007) find that family firms, irrespective of their size, put more emphasis on informal training activities for their employees. Only in non-family firms do training practices grow in complexity and formalization as the firm's size increases (Kim & Gao, 2010). Family firms are also distinctive in their use of informal mentoring to promote employees. For example, Harris and Reid (2008) find that family managers tend to convey their strategic vision of the business to their successors by means of close and informal relationships in conjunction with long periods of mentoring instead of objective decisions based on education and merits. Family firms perceive the development of managerial competences among their employees as a threat to their power (Kotey & Folker, 2007), tending to avoid investment in training managers and emphasizing only technical skills rather than managerial skills, ignoring the potential benefits of training for firm performance. Thus, because family firms consider that agency problems are minor when family ties increase, they implement less formal training practices, seeking a supply of reliable employees at the expense of improvements in firm performance. Thus, we formulate the following hypothesis:

Hypothesis 1b. Being a family firm negatively moderates the relationship between the formalization of training practices and the firm performance.

Family involvement also has an important influence on the design of compensation systems. Carrasco-Hernández and Sánchez-Marín (2007) show that the level of pay of employees in family firms is lower than that in non-family firms, while the use of incentives is much more common in non-family firms. Family firms tend to put more emphasis on seniority as a criterion to guide promotions and set pay levels, giving more weight to non-monetary rewards than to performance-related components of compensation, especially when such incentives involve ownership through share distribution schemes (Anderson & Reeb, 2003; Gomez-Mejia et al., 2003). Tenure-based compensation involves rewarding employees for their loyalty to the company and the family and not necessarily for specific achievements linked to individual or collective performance (Davis & Harveston, 2001). Family firms perceive less risk of agency problems as family involvement increases, and, as employees show a greater alignment of their interests with those of the owning family, there is less need to formalize the compensation practices by incentive-based payments, reducing the likelihood of potential improvements in firm performance (Gomez-Mejia et al., 2003). Considering that, we formulate the following hypothesis:

Hypothesis 1c. Being a family firm negatively moderates the relationship between the formalization of compensation practices and the firm performance.

2.2. The mediating effect of selection practices

From an agency perspective, the general relationships between the formalization of HR practices and the firm performance are usually reported simultaneously. However, different arguments indicate that the acquisition and improvement of knowledge and skills are sequential, depending

on the process by which HR practices are implemented (Jiang et al., 2012). That is why it is necessary to consider HR practices individually and systemically (Bowen & Ostroff, 2004; Jackson et al., 2014; Wright & Boswell, 2002).

Accordingly, the HR literature postulates that, individually considered, the formalization of selection, training, and compensation practices, respectively, improves firm performance. Specifically, the formalization of rigorous selection practices supports the reduction of adverse selection by the choice of high-quality candidates (Raghuram & Arvey, 1994), ensuring the adjustment of the employee to the requirements of both the position and the organizational culture (O'Reilly, Chatman, & Caldwell, 1991), influencing the firm performance positively (Huselid, 1995; Terpstra & Rozell, 1993). The formalization of training can help employees to acquire the knowledge and skills required by the company (Sheridan & Williams, 2011). Because there are many agents, both inside and outside the training function, the formalization of training actions contributes to increasing the alignment of interests between firm and employees, fostering training efforts to improve firm performance (Becker & Huselid, 1998; Collins & Clark, 2003). The formalization of compensation practices, although it does not guarantee the development of knowledge and skills of the employees, clearly contributes to reducing the agency risks (Gerhart & Milkovich, 1992). Misaligned employee behaviour, such as egoism, selfishness, or laziness (related to information asymmetries), is reduced by a proper and formalized design of compensation packages that direct the efforts of employees toward achieving the goals of the organization, thus supporting firm performance (Delaney & Huselid, 1996; Gerhart & Milkovich, 1992).

Systemically considered, recent studies suggest that the effectiveness of the formalization of HR practices follows a certain sequence (Jiang et al., 2012; Subramony, 2009). As Subramony

(2009) affirms, the interactive effects of various HRM practices affecting the same work characteristic (for example, staffing and training practices affecting employees' skills or performance appraisal and compensation practices affecting employees' motivation) can create a net result that exceeds – if they are reinforcing each other – or diminishes – if they are not – the effect of a single practice. Several empirical studies provide evidence that the sequential acquisition and improvement of skills are primarily related to selection practices, which then influence the effectiveness of training and compensation practices (Hitt et al., 2001; Jiang et al., 2012; Subramony, 2009; Takeuchi, Lepak, Wang, & Takeuchi, 2007). On one side, selecting the most qualified candidates through the use of formalized selection practices (using structured and validated selection tools) can enhance the employees' access to job-relevant training that provides greater human capital levels (Hitt et al., 2001; Takeuchi et al., 2007). On the other side, formalized (or selective) staffing practices are likely to lead to the hiring of employees who possess the desired skills, and job-related compensation practices are likely to enhance these skills, providing the focus and necessary motivation for attaining the expected individual and organizational performance (Jiang et al., 2012; Subramony, 2009).

Thus, the resulting synergistic combination of attracting highly skilled employees by formalized selection procedures can result in the creation of a highly skilled workforce by ensuring the acquisition and development of task-related skills and by emphasizing the motivational procedure necessary for attaining high levels of performance (Jackson et al., 2014). Conversely, the lack of a formalized and rigorous process of staffing can result in a problem of adverse selection (Fama & Jensen, 1983), which occurs when the selected candidate is not the best one for the job, negatively affecting the effectiveness of subsequent training and compensation practices (Jiang et

al., 2012). Accordingly, we expect that the effectiveness of training and compensation practices is primarily conditioned – or mediated – by the level of formalization of selection practices.

Hypothesis 2: Selection practices mediate the relationships between training practices and firm performance and compensation practices and firm performance.

Combining the above arguments regarding hypothesis 2 with those proposed in the first hypothesis, we posit that family involvement negatively moderates the mediating effect of selection practices in the effectiveness of training and compensation practices. From a theoretical viewpoint, the low level of formalization of selection practices in family firms, which arises because of the tight control that family members exert over business issues, reveals the so-called agency problem of asymmetric altruism (Schulze et al., 2003). Asymmetric altruism, or nepotism, is the consequence of the potential inability to attract and select the best employees from outside the family (Gomez-Mejia et al., 2001) and the placement of family members in positions for which they are not adequately capable (Burkart, Panunzi, & Shleifer, 2003; Gomez-Mejia et al., 2001). The lack of a formalized process of selection in family firms emphasizes the potential problems of asymmetric altruism that can result in adverse selection, resulting in the appointment of low-skilled employees with little potential for improving their capabilities and labour conditions (Chua et al., 2009; Jorissen, Laveren, Martens, & Reheul, 2005; Schulze et al., 2003). The inclusion of personal, non-economic factors in the utility function of family firms and the lack of self-control among the decision makers (McConaughy, 2000; Schulze et al., 2001) results, to the extent that the selection practices are less formalized, in a negative effect of the subsequent training and compensation practices on firm performance.

In that vein several studies empirically demonstrate that being a family firm is a critical (negative) moderator of the effects of high-performance work practices, through the selection practices, on organizational performance (Astrachan & Kolenko, 1994; Lansberg, 1983; Tsao et al., 2009). For example, Tsao et al. (2009) show that family firms with a highly formalized system of HR practices outperform family firms without formalized HR practices, which supports the important role that HR practices play in the success of family firms. They affirm that, because of the nepotism problem in family businesses, family firms may experience more difficulty in attracting professional personnel than their non-family-firm counterparts, in which more rigorous selection procedures are applied (Dyer & Mortensen, 2006). The lack of highly skilled employees will influence the subsequent effectiveness of HR practices, affecting employee job satisfaction, motivation, and performance (Cruz et al., 2011). However, non-family firms, as they are not affected by nepotism and adverse selection, can select the most capable employees, obtaining a better chance of developing more effective training programmes and compensation plans that lead to better firm performance (Tsao et al., 2009).

Additionally, Greer, Carr, and Hipp (2015) provide evidence in their recent study that staffing is a critical determinant of whether small family-owned firms succeed or fail. Their results indicate that selection practice approaches imitating the formalized practices of larger non-family businesses are positively related to the perceived effectiveness of other strategic HR practices (including training and performance) as well as to firm performance. They point out that the contextual knowledge of founders and owners and their perceptions about their (family vs. non-family) business moderate the understanding of the performance implications of selection practices. Based on these arguments, we expect that the low level of formalization of selection

practices in family firms – and, therefore, their inability to attract the best employees – will produce ineffective training and compensation practice outcomes in comparison with non-family firms.

Hypothesis 3: The mediating effect of selection practices – in the relationships between (a) training practices and firm performance and (b) compensation and firm performance – is lower in family firms than in non-family firms.

3. Methodology

3.1. Sample and data collection

Data on the influence of family involvement on the formalization of HR practices and on performance were collected by selecting a sample including family and non-family firms. A sample of non-listed Spanish small and medium-sized (SMEs) firms was surveyed and the respondents were later divided into two subsamples, namely family and non-family firms. The total population, selected from the database OSIRIS (Van Dyck Bureau of Electronic Publishing), consists of a total of 5,113 firms operating in manufacturing sectors and having between 25 and 249 employees. Smaller companies were excluded because they lack a clear definition of a set of HR practices. Similarly, large firms were excluded because they have much greater access to resources than small and medium-sized firms, which could distort the analysis of HR practices. We provided a market research company with these contacts to carry out a telephone survey addressed to the HR manager or, in his or her absence, the CEO of the company, between May and June 2011. The final sample reached 500 firms (sample error 4.74% and 95.5% confidence level for p=q=0.5), resulting in an effective response rate of 9.8% of total population and consisting of 280 family firms (56% of the sample) and 220 non-family firms (44% of the sample). A general

description about firms in the sample indicate an average age of 25.7 years (without any differences between family and non-family firms) and an average number of 81 employees (72 in family firms and 93 in non-family firms). For family firms, the percentages of family ownership and management are 93.7% and 52.2% respectively while the CEO position is held by a family member in 85% of cases.

To test the quality of the data gathered, although the sample selection was totally random, a non-response test was conducted to check for bias. Following Armstrong and Overton (1977), no significant differences were found in the study variables between the first and the last responders, suggesting that response bias is not a problem. Furthermore, to avoid common method variance, we used data from two sources, the OSIRIS database and the survey. In addition, as suggested by Podsakoff, MacKenzie, Lee, and Podsakoff (2003), confirmatory factor analysis (CFA) was used as a more sophisticated test. A worse fit for the one-factor model would suggest that common method variance does not pose a serious threat. The one-factor model yielded a $\chi2$=1480.94 with 54 degrees of freedom (CFI=0.545; RMSEA=0.230). The fit is not good[1] and is considerably worse for the unidimensional model than for the measurement model ($\chi2$ (48)=137.582; CFI=0.967; RMSEA=0.061), suggesting that common method bias is not a serious threat in the study.

3.2. Measures and psychometric properties of the scales

Formalization of HR practices. There is no single agreed list of HR practices that are used to define or measure HR management. Boselie, Dietz, and Boon (2005) identify as many as 26

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[1] The NFI, NNFI, and CFI statistics should be higher than 0.9 and the RMSEA should be less than 0.08, as recommended in the literature (Hoyle & Panter, 1995).

different practices that are used in different studies, of which the top three, in order of popularity, are training and development, compensation and performance management, and recruitment and selection. These three practices can be seen to reflect the main objectives of the majority of strategic HR management schemes, namely to identify and recruit strong performers, to provide them with the skills and confidence to work effectively, and to monitor and reward staff well for meeting or exceeding the expectations (Paauwe, 2009). This is a combination of practices that broadly corresponds to so-called high work performance systems (Paauwe & Boselie, 2005). Thus, drawing on this evidence and previous high work performance research (e.g., Collins & Clark, 2003; Huselid, 1995; MacDuffie, 1995; Youndt et al., 1996), this study constructs a scale of formalization of the main HR practices, including selection, training, and compensation. This nine-item scale was derived from a combination of the items proposed by Chen and Huang (2009) and Thang and Quang (2005), which measure the three practices of selection (three items), training (three items), and compensation (three items) depending on their level of strategic formalization and sophistication. Table 1 shows the specific formulation and the appropriateness of the items – in terms of the factor loadings, composite reliability, and average variance extracted (AVE) – based on the assessment of the degree of structural development of each of these three main HR practices (Dekker et al., 2013; Songini, 2006). For each of the defined items, a five-point Likert scale was used to measure the level of formalization on a spectrum ranging from 'totally disagree' (value=one) to 'totally agree' (value=five).

Firm performance. Although quantitative indicators of performance are widely used in the business literature, the increased use of qualitative variables to measure organizational performance can also be noted, as the latter are a reasonable substitute for objective measures (Dess & Robinson, 1984; Love, Priem, & Lumpkin, 2002; Lubatkin, Simsek, Ling, & Veiga,

2006). Companies are more willing to disclose qualitative data, and the use of qualitative measures facilitates a comparison between different companies, especially if they belong to different sectors (Bae & Lawler, 2000). In addition, the financial performance of SME firms is rarely available (Lubatkin et al., 2006), as private companies often refuse to provide financial data (Miller, Lee, Chang, & Le Breton-Miller, 2009). Thus, we measure firm performance based on a subjective scale of three items adapted from Choi and Lee (2003) and Quinn and Rohrbaugh (1983). Each item is formulated on a five-point Likert scale, from one (strongly disagree) to five (strongly agree), as shown in Table 1. Firms were asked to position themselves in relation to their main competitors on a set of performance variables including profit, sales, and financial independence. This subjective measure of performance is suitable for incorporating the contribution of HR practices for several reasons: first, considering the difficulty in accessing quantitative information related to the effectiveness of HR practices, especially when many SME firms lack an HR department (Heneman & Berkley, 1999; Wagar, 1998); second, taking into account the high correlation between objective and subjective measures in the area of HR (Guthrie, 2001; Huselid, 1995); and, third, bearing in mind that both in the field of family firms and in HR research, several works employ this approach with similar items (e.g., Guthrie, 2001; Kellermans & Eddleston, 2007; Sciascia & Mazzola, 2008), highlighting the suitability of this measure.

Family firm. The degree of family involvement in the business is analysed by differentiating family firms from non-family firms. To this end, we use the criterion of self-classification for considering a company to be a family or a non-family firm, based on whether the family owns enough stock to control the company. Following Westhead and Cowling (1998), two criteria were combined to identify family firms. The respondent had to answer two questions in the affirmative: (1) 'Are ownership and management control of the company dominated by one

family?' and (2) 'Do you consider your business to be a family business?' This measure is used in several previous studies in the field of family firm research (Sonfield & Lussier, 2004; Westhead & Cowling, 1998), identifying appropriately companies with particular management and cultural characteristics influenced by the owning family. Thus, we created a dummy variable taking the value one for family firms (n=282) and zero for non-family firms (n=218).

Control variables. To capture other forces that are related to both the adoption of HR practices and the firm performance, we included three control variables: firm size, firm age, and the technological intensity of the industry in which the firm operates. The literature recognizes *firm size* as one of the most important variables that determines decisions in family firms (Kim & Gao, 2010), including those related to HR management (Leon-Guerrero et al., 1998; Reid et al., 2000). Firm size was measured as the natural logarithm of the average number of employees during the year 2011 (extracted from the OSIRIS database). *Firm age*, measured as the years since the founding of the firm (information collected from the questionnaire), is also recognized as an important factor influencing HR practices in family firms (Anderson & Reeb, 2003; Schulze et al., 2003). *Industry technological intensity* is an important indicator that allows a comparison between manufacturing firms, and some studies show its influence on both HR decisions and firm performance (Lepak, Takeuchi, & Snell, 2003). It was measured using the classification proposed by the OECD Directorate for Science, Technology and Industry, the *ISIC rev. 3 technology intensity definition* (Directorate for Science, Technology and Industry. Economic Analysis and Statistics Division, 2011), which classifies firms from low-technology industries to high-technology industries (extracted from the OSIRIS database).

Table 1. Confirmatory factor analysis of the scales

Items	Factor loadings (t-value)	Composite reliability	AVE
Firm performance		0.977	88.2%
It is most profitable	0.767 (18.161)		

It has a better performance in sales	0.860 (20.744)		
It is more independent financially	0.709 (16.620)		
Selection		0.977	88.2%
There is a rigorous selection process	0.790 (19.466)		
The selection of employees is based on skills required for the position	0.786 (19.305)		
The selection of potential employees is matched to business development	0.756 (18.325)		
Training		0.993	92.7%
There is a comprehensive training policy	0.824 (21.833)		
Training is available for employees	0.928 (26.206)		
New recruits have easy access to training activities	0.827 (21.941)		
Compensation		0.940	82.7%
There is a close relationship between employee performance and compensation received	0.729 (16.302)		
There is individual incentive pay (bonus or bonuses)	0.729 (16.293)		
There is group incentive pay (profit sharing)	0.599 (12.965)		

Values in parentheses are t-values

To test the psychometric properties of the proposed scales, we conducted a confirmatory factor analysis (CFA) using SPSS Amos 19. As Table 1 shows, all the factor loadings were significant, which demonstrates the convergent validity of the data (Bagozzi & Yi, 1988). The composite reliability was calculated according to the recommendations of Bagozzi and Yi (1988), while the variance was extracted according to the recommendations of Fornell and Larcker (1981). As shown in Table 1, all of the constructs introduced into the study exceed the value of 0.8. Nunnally (1978) suggests that values higher than 0.8 can be considered as strictly reliable. To confirm the convergent validity we used the criterion of AVE: all the constructs have an AVE above the value of 0.5 recommended by Fornell and Larcker (1981). The statistical model fits are satisfactory ($\chi^2 (48)=137.582$; CFI=0.967; RMSEA=0.061). The CFI statistics are higher than 0.9, and the RMSEA is less than 0.08, as recommended in the literature (Hoyle & Panter, 1995).

In order to check the appropriateness of factors in our model, different alternatives have been formulated. In Table 2 the results of combining different scales are reported and also compared to the base model. Fit indices reveal a better fit in the base model as well as the models' comparisons, which conclude the suitability of our model.

Table 2. Confirmatory factor analysis: model comparisons

Model	Fit indices	Δdf	Δχ2	p
Base model (four factors)	χ2 (48)=137.582; CFI=0.967; RMSEA=0.061			
Combining selection and training (three factors)	χ2 (51)=442.491; CFI=0.865; RMSEA=0.121	3	304.9	***
Combining selection and compensation (three factors)	χ2 (51)=305.173; CFI=0.908; RMSEA=0.100	3	167.6	***
Combining compensation and training (three factors)	χ2 (51)=295.885; CFI=0.911; RMSEA=0.098	3	158.3	***

[†] p<0.1; * p<0.05; ** p<0.01; *** p<0.001

To assess the discriminant validity, we compared the square root of the AVE (diagonal of Table 3) with the correlations between constructs (off-diagonal elements of Table 3) (Fornell & Larcker, 1981). As can be seen, the square root of the AVE for all the constructs is greater than the correlation between them, suggesting that each construct relates more strongly to its own measure than to others. The correlation analysis reveals a strong association between performance and selection, while there is a weaker relationship with the other two practices, training and compensation. Moreover, the three practices are very strongly interrelated.

Table 3. Descriptive statistics and discriminant validity of the scales

	Means	Standard deviation	Firm performance	Selection	Training	Compensation
Firm performance	3.485	0.878	0.939			
Selection	3.980	0.853	0.224***	0.939		
Training	3.814	1.029	0.122*	0.635***	0.963	
Compensation	3.068	1.077	0.104[†]	0.299***	0.634***	0.940

[†] p<0.1; * p<0.05; ** p<0.01; *** p<0.001
Elements in the main diagonal are the square root of the AVE

Following Hair, Black, Babin, and Anderson (2009), to check the invariance of the measure between the samples of family and non-family firms, we performed a confirmatory factorial analysis for each subsample for both family firms (χ2(48)=92.535,; CFI=.972; RMSEA=.057) and non-family firms (χ2(48)=104.846; CFI=.951; RMSEA=.074). The results show the appropriate distribution of the measures for each construct for each subsample. Another way to check for

metric invariance is to make equal loading factors in both groups. With this restriction, the model fit is no better ($\Delta\chi2$=8.496; Δdf=8; p=0.387), thus confirming the invariance of the loading factors.

Table 4 shows the estimation of the second-order construct formalization of HR practices. The paths from the second-order construct to the three first-order factors are significant and of a high magnitude, greater than the suggested cut-off of 0.7. The results suggest a good fit of the second-order specification for our measure of formalization of HR practices ($\chi2$ (23)=80.41; CFI=0.966; RMSEA=0.071). Marsh and Hocevar (1988) suggest that the efficacy of the second-order model should be assessed by the target coefficient (T ratio) with an upper bound of 1. Our model has a very high T ratio of 0.97, indicating that the higher-order factor accounts for a very large portion of the covariation among the first-order factors, implying that the relationship among the first-order constructs is sufficiently captured by the second-order construct.

Table 4. Second order of the construct formalization of HR practices

Items	Factor loadings	Composite reliability
Selection	0.776	
Training	0.815	0.811
Compensation	0.709	

4. Results

The hypotheses were tested through structural equation models (SEM). The moderation effect of family firms was examined through multi-group analysis. We followed the recommendations of Dayan and Di Benedetto (2010) for conducting multi-group analysis. First, the sample was divided into family and non-family firms. Next, the restricted model in which the parameters were equalized between groups was estimated. The third step was to estimate the same model but now allowing variation of all of the parameters. Finally, significant differences between groups were determined from the chi-square differences.

To test hypothesis 1, two models were analysed. In the first (Table 5), the second-order construct, namely HR formalization, is the independent variable ($\chi 2$ (172)=291,850; CFI=0.957; IFI=0.958; RMSEA=0.037). Although the formalization of HR has an influence on performance that is only significant in non-family firms, the chi-square difference is not significant in family firms. The second model (Table 6) considers each practice separately ($\chi 2$ (174)=625,422; CFI=0.838; IFI=0.840; RMSEA=0.072). In this case there is a significant influence on performance of selection practices but only a significant contribution of training in non-family firms in both groups, on the basis of a significant chi-square difference. Thus, an effect of HR formalization on performance is confirmed in non-family firms, due to the influence of selection and training practices. In family firms the formalization of selection is the only practice that positively influences performance. Significant differences are found in training practices, confirming hypothesis 1b.

Table 5. Structural model coefficients: Model 1

	Non-family firms	Family firms	
	Standardized coefficient (p)	Standardized coefficient (p)	Chi-square difference
Path			
HR formalization → Firm performance	.333 (.000)***	-.082 (.261)	$\chi^2(1)$=2.354
Control variables			
Size	-.049 (.490)	.136 (.035)*	
Age	.073 (.304)	-.044 (.491)	
Technological intensity	-.002 (.977)	-.084 (.193)	

[†] p<0.1; * p<0.05; ** p<0.01; *** p<0.001

Table 6. Structural model coefficients: Model 2

	Non-family firms	Family firms	
	Standardized coefficient (p)	Standardized coefficient (p)	Chi-square difference
Paths			
Selection→ Firm performance	.259 (.001)***	.171 (.016)*	$\chi^2(1)$=0.029
Training→ Firm performance	.138 (.065)[†]	-.077 (.241)	$\chi^2(1)$=2.859[†]
Compensation→ Firm performance	-.013 (.862)	.034 (.632)	$\chi^2(1)$=0.16
Control variables			
Size	-.050 (.481)	.138 (.031)*	
Age	.134 (.060)[†]	-.017 (.794)	

| Technological intensity | .006 (.927) | -.075 (.240) | |

To evaluate hypotheses 2 and 3, two additional structural models were estimated. Model 3 ($\chi 2$ (104)=317.693; CFI=0.894; IFI=0.895; RMSEA=0.064) includes only the direct effects of training and compensation, the variables of which the effect on performance is supposed to be mediated by selection. Model 4 ($\chi 2$ (170)=424.402; CFI=0.909; IFI=0.910; RMSEA=0.055) is the full model, in which all the direct and indirect effects are considered and in which selection practice is positioned as a mediating variable for the two other human resource practices. A variety of strategies to gauge the extent and significance of indirect effects is available, among which bootstrapping strategies are among the most popular (MacKinnon, Lockwood, Hoffman, West, & Sheets, 2002). Preacher, Rucker, and Hayes (2007) describe this technique and argue that it can be used to estimate indirect effects. Cheung and Lau (2007) find that SEM provides unbiased estimates of mediation effects and that the bias-corrected bootstrap confidence intervals perform best in testing for mediation effects. In our analysis the significance of the indirect effects is calculated using bootstrapping strategies.

Table 7. Structural model coefficients: Model 3

| | Non-family firms | Family firms | |
	Standardized coefficient (p)	Standardized coefficient (p)	Chi-square difference
Direct effects (no mediation)			
Training→ Firm performance	.224 (.002)**	-.010 (.883)	$\chi 2$(1)=4.071*
Compensation→ Firm performance	.042 (.592)	.078 (.283)	$\chi 2$(1)=.158
Control variables			
Size	-.039 (.583)	.144 (.026)*	
Age	.133 (.063)†	-.007 (.916)	
Technological intensity	-.001 (.986)	-.084 (.193)	

Table 8. Structural model coefficients: Model 4

| | Non-family firms | Family firms | |
	Standardized coefficient (p)	Standardized coefficient (p)	Chi-square difference

Direct effects			
Training→ Selection	.564 (.000)***	.526 (.000)***	$\chi^2(1)$=.542
Compensation→ Selection	.275 (.000)***	.309 (.000)***	$\chi^2(1)$=.030
Selection→ Firm performance	.233 (.037)*	.185 (.059)[†]	$\chi^2(1)$=.011
Training→ Firm performance	.111 (.264)	-.107 (.209)	
Compensation→ Firm performance	-.013 (.881)	.022 (.783)	
Indirect effects			
Training→ Selection→ Firm performance	.131 (.045)*	.097 (.044)*	$\chi^2(2)$=.547
Compensation→ Selection→ Firm performance	.064 (.039)*	.057 (.035)*	$\chi^2(2)$=.042
Control variables			
Size	-.047 (.505)	.139 (.031)*	
Age	.134 (.059)[†]	-.017 (.791)	
Technological intensity	.003 (.965)	-.074 (.245)	

[†] $p<0.1$; * $p<0.05$; ** $p<0.01$; *** $p<0.001$

The full model reveals a mediating role of selection, confirming hypothesis 2. The indirect effects of training and compensation on performance are both significant (Table 8) in non-family firms (β=.131, $p<0.05$ and β=.064, $p<0.05$, respectively) and family firms (β=.097, $p<0.05$ and β=.057, $p<0.05$, respectively). Although the chi-square differences are not significant, the analysis of the type of mediation shows differences between groups in training practices. In non-family firms there is full mediation, which is stronger than the mere indirect effect in family firms, thus confirming hypothesis 3a. In model 3 (Table 7), a significant direct effect of training on performance is found (β=.224, $p<0.01$), although this disappears when selection is introduced into the model (Table 7) as a mediating variable (β=.111, $p=0.264$).

5. Conclusions and discussion

HR practices in family firms are idiosyncratic, taking different directions depending on the complexity of the kinship relationships among the owners, managers, and employees of the organization. Although a few empirical studies offer a comprehensive analysis of this topic (De Kok et al., 2006; Reid & Adams, 2001), there is relatively little research in this field, and the research that does exist is fragmented and inconclusive, with various studies providing

contradictory results due to the diversity of theoretical frameworks and the variety of definitions of family business, levels of HR practices, and firm outcomes (Cruz et al., 2011; Gomez-Mejia et al., 2011).

This study contributes to the literature by clarifying the differences in the formalization of a set of HR practices – selection, training, and compensation – between family and non-family firms while considering the interactive effects among HR practices and their impact on firm performance. The theoretical frameworks provided by agency theory and the SEW perspective (Chrisman et al., 2004; Chua et al., 2009; Gomez-Mejia et al., 2007) enable an adequate analysis of economic and non-economic factors determining both the degree of formalization and the effectiveness of HR practices. HR practices can be more or less formalized in response to the firm's orientation toward economic objectives (e.g., firm profitability, firm financial performance) or non-economic objectives (e.g., continuity and preservation of family wealth in the firm), affecting the quality of human capital that contributes to firm performance. To examine these issues, this paper used a large sample of 500 Spanish companies containing family and non-family firms.

A number of conclusions were reached. First, according to our expectations based on the literature on family firms, there are differences in the effectiveness of the formalization of HR practices between family and non-family firms (Cruz et al., 2011). Family firms' adoption of less formalized HR practices linked to family needs contrast with non-family firms' higher level of professionalized, economically optimized HR practices. This level of formalization has significant effects on firm performance; non-family firms outperform family firms as a result of a greater rigour of procedures and rules in the implementation of HR practices, which makes it possible for them to attract, develop, and motivate qualified human capital to improve performance (Dekker et

al., 2013; Songini, 2006). Theoretically, in family firms but not in non-family firms, high alignment of interests limits principal–agent moral hazard and reduces information asymmetries, making HR practices based on formalized business criteria less necessary (Gomez-Mejia et al., 2001, 2003; Lubatkin et al., 2007), which has less impact on firm performance. Individually considered, training practices confirm these results, characterized by a lower level of effectiveness in family firms than in non-family firms, while compensation and selection practices do not show significant differences. Nevertheless, while selection practices contribute to firm performance in both types of firms, no significant effects were identified for compensation practices, probably due to the greater degree of standardization of compensation policies across firms (Van Essen, Carney, Gedajlovic, Heugens, & Van Oosterhout, 2011).

Second, our results also demonstrate the relationships between the formalization of HR practices and their synergistic influence (Jackson et al., 2014; Jiang et al., 2012; Subramony, 2009), confirming the mediating effect that selection practices – the point of entry of the employee into the HR management system – exert on the effectiveness of training and compensation practices. This mediating effect is less positive in terms of firm performance as the degree of family involvement increases, that is, in the context of a family firm (Greer et al., 2015; Tsao et al., 2009). This further supports our theoretical argument that selection practices are critical to achieving the proper alignment of interests among the members of family firms (Chua et al., 2009; Schulze et al., 2003). Selection practices in family firms are loose and based on informal adaptation to the family values and culture, which ensures a high level of employee engagement (Eddleston & Kellermanns, 2007) with a subsequent reduced influence on the effectiveness of training practices on firm performance. While this approach may have positive effects for family firms in non-economic terms, such as reputation and continuity, these do not outweigh, at least as found in this

study, the negative effects introduced by asymmetric altruism (Azevedo & Akdere, 2011) through adverse selection practices and the subsequent negative influence on the effectiveness of training and compensation practices (Tsao et al., 2009).

This paper has also important academic implications for the HR literature, contributing new evidence to the important academic debate about the effectiveness of HR practices in terms of how the degree of formalization of and interconnection among HR practices affect firm performance. First, our investigation contributes to showing that selection practices – one of the less analysed HR practices (Paauwe, 2009) – mediate the relationships between HR practices and firm performance (Jiang et al., 2012; Subramony, 2009). This is an important finding, in line with the suggestions of Boselie et al. (2005), who point out that selection practices, usually considered simultaneously with other HR practices, should take priority not only in the sense that they come before other practices but also due to the potential bias of research analysing HR practices systemically (Paauwe & Boselie, 2005). Second, our findings indicate, in line with previous studies in the high work performance practices stream of research (Becker & Huselid, 1998; Collins & Clark, 2003; Delaney & Huselid, 1996; Huselid, 1995), that formalization of HR practices is, in general, positive in improving the effectiveness of other HR practices. However, our results refine this assertion by showing that the relationship is stronger for training practices than for compensation practices (Takeuchi et al., 2007). This might be explained by the fact that compensation practices are usually more constrained and subject to a need for external legitimation (Mazza & Alvarez, 2000; Sánchez-Marín, 2008), forcing firms to design and implement more formalized and standardized compensation systems. In contrast with this, training practices are less externally constrained, being more linked to the internal characteristics and peculiarities of firms – included those related to the fact of being family firms. And third, based on the previous

point, an institutional view of HR practices is required to obtain a complete picture of the determinants of the level of HR practices, as several authors point out in studies published in the last few years (Boon, Paauwe, Boselie, & Den Hartog, 2009; Paauwe & Boselie, 2003).

Furthermore, this study offers several contributions from the viewpoint of business practices. First, the paper emphasizes that HR practices are important not only for economic performance but also for the emotional implications for employees, especially in family firms. Considering that the main goal of HR practices is to encourage organizations to attract, retain, and motivate resourceful and competent employees, firms should implement the most effective HR practices that they can to adapt employees to their internal and external contexts. Second, firms should take into account the fact that the effectiveness of HR practices is mainly predicated on selection practices, so they should design and implement selection practices to achieve good returns. This is especially true in family firms, in which the selection processes are usually based more on the alignment of cultural aspects and values than on the skill and knowledge requirements (Sánchez-Marín, Danvila-del-Valle & Sastre-Castillo, 2015). In addition, the effectiveness of other HR practices is conditional on the quality of the selection process. And third, our findings indicate that family firms may harm the effectiveness of HR practices by not formalizing them, which is particularly important in training practices and less important in compensation practices, mainly because in the latter there is a higher level of contextual standardization regardless of the firm's internal characteristics.

Finally, this study is not without limitations, which, in turn, may provide fruitful lines for future research. First, it would be desirable to include the explicit measurement of SEW aspects representing family values in this discussion, analysing their effects on HR practices and overall performance in economic and non-economic terms (Cabrera-Suarez, Déniz-Déniz, & Martín-

Santana, 2015). The FIBER model proposed by Berrone et al. (2012) might be a straightforward way to operationalize the SEW aspects of family firms and how they influence the design of HR practices in family firms. Second, the firm performance measures used are based solely on scales of perceived performance as reported by top managers. Although useful in certain contexts and offering certain advantages (Bae & Lawler, 2000), it would be preferable to complement these measures with objective indicators based on data extracted from information published by the companies. In addition, this information would be more complete if it were combined with other non-economic outcomes, such as reputation, representing the non-economic objectives of family firms. Third, the classic and simple measure used to identify family firms, although accepted in the literature, could be enriched by including more specific indicators related to the idiosyncrasy of family firms, as exemplified in the F-PEC scale of familiness (Astrachan, Klein, & Smyrnios, 2002; Merino, Monreal-Pérez, & Sánchez-Marín, 2015). The use of such measures would facilitate a more global perspective on the relationship between the family involvement in the business and the orientation of HR practices. Finally, the paper does not consider the influence of HR practices on the behaviours of employees. It would be interesting for future research to use a multilevel approach (Jiang et al., 2013) to compare the attitudes of employees of family and non-family firms and the behaviours regarding the implementation of HR practices in family firms and non-family firms.

In short, this study finds that family involvement in the business, and the consequent introduction of non-economic objectives, has a clear effect in differentiating the HR management of family firms from that of other organizations. Family relationships in business create common bonds and mutual expectations grounded in psychological aspects other than contractual ones, based on emotions, feelings, and values (trust, altruism, and loyalty) that permeate the operation

of HR management (Cruz et al., 2011; Gomez-Mejia et al., 2011; Schulze et al., 2001). In the dilemma between economic and non-economic objectives, more formalized HR practices that increase the financial performance of the company are mostly followed by non-family firms, while family firms put more emphasis on non-formalized HR practices adapted to non-economic goals related to the welfare of the family and employees but resulting in a less optimal financial performance.

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