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Are high performance work practices really necessary in family SMEs? An analysis of the impact on employee retention

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ABSTRACT

The present study examines the adoption of high-performance work practices (HPWPs) in family versus non-family firms, and evaluates the effect of such practices on the retention of valuable employees in light of different family contingencies. The analysis is carried out on a sample of 232 companies with more than 10 and less than 250 employees, operating in Austria and Hungary. The results indicate that the relational mechanisms originating from the family social capital may act as substitutes of formal practices aimed at fostering employee involvement and commitment and that those mechanisms depend on the extent family involvement in the governance of the business.

1. Introduction

Acquiring, developing, but particularly also keeping talented individuals have become some of the most important goals of human resource management (HRM) practices in the past two decades (Govaerts, Kyndt, Dochy, & Baert, 2011; Hiltrop, 1999). Organizations that do not succeed in retaining the high performing workforce lose their ability to remain competitive (Rappaport, Bancroft, & Okum, 2003) as voluntary turnover can affect various dimensions of performance, such as productivity and corporate financial performance (Guthrie, 2001; Huselid, 1995; Shaw, Dineen, Fang, & Vellella, 2009; Sun, Aryee, & Law, 2007).

The recent literature on employee retention has unambiguously shown that one particular set of HRM practices, known as high performance work practices (HPWPs), plays a significant role towards the intermediate organizational goal of curbing voluntary turnover rates. Indeed HPWPs have been shown to positively influence employee retention in a variety of sectors (production and service), settings (unionised and non-unionised, small and large companies, etc.) and countries (e.g. Combs, Liu, Hall, & Ketchen, 2006; Karatepe, 2013; Sarikwal & Gupta, 2013).

Also in family firms, attracting and retaining qualified employees and fostering value-creating behaviours can be crucial factors for performance and long-term competitive advantage (e.g. Chrisman, Chua, & Litz, 2003; Mitchell, Morse, & Sharma, 2003; Sieger, Bernhard, & Frey, 2011). The issue in the family business context might be even more critical because the majority of the employees usually face a particularly complex and ambiguous situation, since they are part of the business, but not of the family system (Barnett & Kellermanns, 2006).

Despite the evident conceptual and practical relevance of the topic, the theoretical and empirical contributions on HRM practices in family firms are, however, rather scarce and fragmented (Botero & Litchfield, 2013; Cruz, Firfiray, & Gomez-Mejia, 2011). Further, the existing studies have mainly examined HRM choices involving family members, while having substantially overlooked, or addressed only in an indirect way, the role of non-family personnel (e.g. Astrachan & Kolenko, 1994; Burkart, Panunzi, & Shleifer, 2003; Cruz, Gomez-Mejia, & Becerra, 2010; Dawson, 2012; Eddleston & Kellermanns, 2007; Khanin, Turel, & Mahto, 2012; Lansberg, 1983; Lubatkin, Schulze, Ling, & Dino, 2005; Sharma & Irving, 2005).

The existing evidence shows that the extent of use of formal HPWPs is generally lower in family firms compared to non-family firms, also when size differences are taken into account (e.g. De Kok, Uhlaner & Thurik, 2006; Pittino & Visintin, 2013). To the contrary, family firms appear to prefer informal, often discretionary measures, often leading (a) to the adoption of unfair compensation and performance appraisal systems (Barnet & Kellermanns, 2006; Chua, Chrisman, & Bergiel, 2009; Fiegener, Brown, Prince, & File, 1994), (b) to cases of managerial entrenchment (Gomez-Mejia, Nuñez-Nickel,

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& Gutierrez, 2001), (c) to nepotism in personnel recruiting and career decisions (Spranger, Colarelli, Dimotakis, Jacob, & Arvey, 2012), (d) to scapegoating of non-family executives and employees (Gomez-Mejia, Larraza-Kintana, & Makri, 2003), and, generally, (e) to lower actions for the engagement and worker development of non-family employees (Cruz, Larraza Kintana, Garcés Galdeano, & Berrone, 2014). For the above-mentioned reasons, a growing number of studies argue for the need to introduce more formal and equitable practices. Others argue quite the opposite, and suggest that, compared to non-family firms, despite the lower use of formal HPWPs, family companies are inclined to treat their employees with higher consideration. Family firms have been shown to invest in building cohesive internal communities (Chrisman, Chua, & Kellermanns, 2009; Miller, Le Breton-Miller, & Scholnick, 2008; Miller, Lee, Chang, & Le Breton-Miller, 2009), to be more sensitive to the quality of life and welfare of their workers (Cennamo, Berrone, Cruz, & Gomez-Mejia, 2012) and to promote employees' involvement and long-term work relations (Kang & Kim, 2014).

The present work attempts to reconcile these opposing views, by examining a particular outcome of non-family human resource management, namely the retention of valuable employees, and by assessing to what extent HPWPs contribute to this outcome at various levels of family influence. In doing this, we draw from a social exchange theoretical perspective (Blau, 1964; Cropanzano & Mitchell, 2005). A social exchange view presumes that employment practices would motivate employees to reciprocate with performance, commitment and intention to stay (Jia, Shaw, Tsui, & Park, 2014). Our key argument is that even if family firms rely less on formal HPWPs, they achieve high retention results because the socio-emotional component of the familial management philosophies triggers individual attitudes, and feelings of reciprocation (Cennamo et al., 2012; Cropanzano & Mitchell, 2005) that translate in lower levels of turnover. We expect such practices to be less pronounced in non-family firms and in companies where the family influence is lower.

In the empirical analysis, carried out on an original sample of 232 small to medium-sized companies (121 family firms and 111 non-family firms) located in Austria and Hungary, we compare primarily family and non-family firms. The comparison is relevant, as family control and influence have been shown to significantly affect the adoption of informal HR practices at the expense of formal ones, even in smaller firms, where the level of formalization is generally lower compared to large companies (e.g. Aldrich & Langton, 1997; De Kok et al., 2006; Kotey & Folker, 2007; Pittino & Visintin, 2013). Thus, we examine whether the family firm status, as a distinctive feature affecting HRM practices, has an impact on employee retention. This focus generates a further motivation for distinguishing between family and non-family firms, because in family firms the majority of the employees face a particularly complex and ambiguous situation, since they are part of the business, but not of the family system (Barnett & Kellermanns, 2006). On the other hand, in non-family firms we do not observe this distinction between social groups based on family and business systems' overlap. Also, we recognize the need to consider the heterogeneity among family firms (Chua, Chrisman, Steier, & Rau, 2012), and compare different situations of family influence, expressed by family versus non-family CEO leadership and first generation versus second and later generation family control.

The study has produced three sets of results: first it shows that the family firm status and the conditions strengthening the family influence on the firm have a positive impact on retention; second it shows that in the presence of HPWPs, the "family effect" combines with the formal practices to produce a positive influence on retention; finally, it also suggests that some of the outcomes of the family influence and of the adoption of formal practices may be so similar that they produce substitution effects on retention.

Our results contribute to the literature on both family business and human resource management. First, we add to the debate on the management of non-family employees in family firms by focusing not only on the adoption of human resource practices, like most of the studies so far (e.g. Cruz et al., 2014; De Kok et al., 2006; Reid & Adams, 2001), but also on a significant outcome of such practices, namely the retention of talented non-family employees. To the best of our knowledge, this study is one of the first attempts to conceptualize and empirically explore the causal link between HRM practices and behaviours of non-family employees. The findings help us to reconcile the previous conflicting arguments about the attitude towards non-family employees in the family business literature (e.g. Cennamo et al., 2012; Cruz et al., 2014).

Moreover, we extend the existing work that applies social exchange theory in family firms, which so far has been mainly theoretical (e.g. Barnett, Long, & Marler, 2012; Long & Mathews, 2011; Pearson & Marler, 2010), by empirically testing a typical response to the social exchange process, namely employees' intention to stay (Cropanzano & Mitchell, 2005), and drawing from the results further conceptual implications on the dimensions of social exchange in the family business setting.

We also contribute to the HRM literature, and in particular to the study of HPWPs from a social exchange perspective (Cropanzano & Mitchell, 2005; Shaw et al., 2009) and to the research on fit among HRM practices (Delery, 1998; Guest, Paauwe, & Wright, 2012), showing how the ownership and leadership contexts may provide social resources that combine with the formal practices through additive and substitution effects to elicit positive responses from the employees.

The article is structured as follows. We first review the main theories and empirical findings on the adoption of HPWPs and their effects on organizational outcomes. Based on a social exchange viewpoint, we then develop our hypotheses on the relationship between HPWPs and the retention of valuable employees, first in family versus non-family firms, and then in different types of family firms. The hypotheses section is followed by our methods and findings. Then we conclude with a discussion of implications and limitations of the study.

2. Employee retention and HPWPs

As mentioned above, activities aimed at acquiring, developing and keeping talented individuals have become central in the management of human resources over the last twenty years (Govaerts et al., 2011; Hiltrop, 1999). HPWPs, a set of specific human resources practices developed during the 1990s (Combs et al., 2006) and including techniques ranging from selective staffing to employee training, team working and other arrangements illustrated below, have shown to have a positive impact on employee retention in a variety of settings, including steel minimills (Arthur, 1994), automotive assembly plants (MacDuffie, 1995), trucking organizations (Shaw, Gupta, & Delery, 2005), call centers (Batt, 2002), small firms across a variety of industries in both the manufacturing and service sectors (Kerr, Way, & Thacker, 2007; Patel & Conklin, 2012), and publicly held firms in all major US industries (Huselid, 1995), as well as across different nations in North America (e.g. Batt, 2002; Kerr et al., 2007), Europe (Patel & Conklin, 2012; Razouk, 2011), Asia (Su & Wright, 2012; Wang, Bruning, & Peng, 2007), and Oceania (Guthrie, 2001).

The impact of HPWPs on employee retention has been shown to leverage on systems of coherent practices that affect individual level attitudes and behaviours (Jiang, Lepak, Hu, & Baer, 2012; Sparham & Sung, 2008; Su & Wright, 2012). In particular, empirical evidence indicates that the higher the number of HPWPs employed, the more positive the employee responses (e.g. Delery & Shaw, 2001; Guest et al., 2004; Macky & Boxall, 2007).

Following a recent classification (Lepak, Liao, Chung, & Harden, 2006), HPWPs practices can be grouped into three sets according to the primary goal they pursue. The empirical evidence shows that all three sets of practices directly or indirectly influence also the extent of voluntary turnover. Human capital, motivation and social exchange theories help explaining the phenomenon.

Skill-enhancing practices, such as selective staffing, intensive training, and career development, aim at developing the abilities and self-efficacy of the workforce. Such practices have been shown to negatively influence voluntary turnover (see for example Arthur, 1994; Guthrie, 2001). Human capital theory suggests that employees with high qualifications tend to learn more easily at work and as a consequence develop a firm-specific human capital that would not be valuable in other occupations (Lepak & Snell, 1999). Indeed, the more talented and valuable employees, even though have more opportunities in the labour market, appear to increase their positive emotional responses to the organization and to be less attracted by alternative jobs (Jiang et al., 2012; Maertz & Griffeth, 2004; Shaw et al., 2009).

Further, selective staffing (e.g. through selection criteria such as person-job fit, openness to learn, or the ability to work in teams) (MacDuffie, 1995), can also enhance the commitment of new but also of existing employees, since a rigorous selection process signals that only the best are chosen, that the organization offers good job opportunities, that high performance is required, and that people matter (Pfeffer, 1994). Likewise, extensive training possibilities by their very nature increase the skills and abilities, but can also have a positive effect on retention as they help employees to reach their career goals (Batt, 2002; Huselid, 1995; Stovel & Bontis, 2002). Training and development activities can also be part of more comprehensive career development initiatives. Transparent career paths and opportunities can have a positive effect on employee intention to stay (Jiang et al., 2012), as they enable employees to extend their abilities through mastering new challenges and performing a broader set of tasks that may not be offered in different companies.

Also *motivation-enhancing practices*, which aim at increasing the willingness of employees to apply their skills and use their knowledge in their daily working lives, and to align individual and organizational interests and goals, have shown to influence the extent of job satisfaction and organizational commitment, and therefore the intention to stay. Among these, the provision of generous pay and benefits are extensively used to increase employees' motivation (Middlebrook, 1999). Although the motivational effect of compensation was also questioned, as extrinsic rewards could potentially undermine intrinsic motivation (Deci, 1971; Oh & Lewis, 2009), many researchers include some form of variable compensation, particularly based on individual or company performance, as part of their proposed set of HPWPs (Delaney & Huselid, 1996; Patel & Conklin, 2012; Patel, Messersmith, & Lepak, 2013; Sels et al., 2006; Wright, Gardner, Moynihan, & Allen, 2005). Performance appraisals are another HRM tool that can be used to trigger positive employee attitudes and behaviour, through providing feedback, clarifying expectations, and discussing career development opportunities (Razouk, 2011). Huselid (1995) argued that appraisals are particularly effective in retaining individuals when they are tightly linked to incentive compensation systems.

Finally, *opportunity-enhancing* HRM practices, aimed at increasing the empowerment of the employees and at creating opportunities for them to participate to the decision making process, have shown to increase the extent of employees' organizational commitment (Lines, 2004) and intention to stay (Yücel, 2012). More generally, having a voice in decision-making processes can be seen as an indicator of respect for a person, and can lead to an increase in the identification with the company (De Cremer, 2002; Lind & Tyler, 1988). Instruments that offer structured opportunities to participate—for example through decentralized decision making, autonomy in organizing one's own work, consultation and regular information exchange, self-managed teams, or formal grievance procedures—are also included in this group of HPWPs (e.g. Patel & Conklin, 2012; Patel et al., 2013; Prince, Katz, & Kabst, 2011; Sels et al., 2006).

The three sets of HRM practices have been shown to influence the extent of retention through another important mechanism that is well explained by social exchange theory (Blau, 1964; Luna-Arocas, & Camps, 2007; Patel & Conklin, 2012).

According to this approach, the employee–employer relationships are based both on economic and social exchange. Social exchange relationships rely on mutual obligations, which involve resources and behaviours that are often difficult to specify and measure (Blau, 1964). From the point of view of the employer, these behaviours may include, for example, the interest in employee well-being, stability, and career advancement, as well as more symbolic dimensions, such as the commitment to promises and the capacity to ensure fairness and procedural justice (Cropanzano & Mitchell, 2005; Guest, 1999; Macky & Boxall, 2007; Tsui, Pearce, Porter, & Tripoli, 1997). On the other hand, the employees may reciprocate with long-term and open-ended contributions, such as willingness to learn firm-specific skills, availability for tasks that may fall outside of the formal job description, a high sense of responsibility, and also a strong intention to stay with the organization (Shaw, Delery, Jenkins, & Gupta, 1998). The adoption of HPWPs by the organization has been shown to strengthen the social dimension of the exchange, thereby stimulating the long-term commitment of the employees (Macky & Boxall, 2007; Maertz & Campion, 2004).

Formal HPWPs, however, are not the only mechanism that leads to the urge of reciprocating by the employees. As it will be explained in the next section, also informal mechanisms stemming from peculiar organizational environments or individual behaviours by entrepreneurs and top managers may trigger this kind of phenomenon. In particular, we suggest that some of the familial informal practices operate at the individual level by reducing the intention to leave and increasing the retention rate (Combs et al., 2006).

3. HPWPs and retention of valuable employees: family versus non-family firms

A large part of the scant empirical evidence on HRM in family business shows that the rate of adoption of HPWPs is generally lower in family firms compared to their non-family counterparts (e.g. Carney, 2005; Cruz et al., 2014; De Kok et al., 2006; Pittino & Visintin, 2013; Stewart & Hitt, 2012). Family firms appear to prefer informal, often discretionary, mechanisms and "familial logics" in the management of human resources rather than formalised systems, particularly at small and medium organizational sizes (Pittino & Visintin, 2013).

Small to medium sized firms are generally less inclined to adopt formalized managerial practices (including HRM techniques), regardless of their family business status. However, both theoretical arguments and empirical evidence support the idea that family ownership and management are associated with an even stronger propensity to privilege informal HRM systems (e.g. De Kok et al., 2006; Kotey & Folker, 2007; Pittino & Visintin, 2013; Reid & Adams, 2001). For example, De Kok et al. (2006), examining the adoption of professional HRM practices among small and medium companies, find the family business status to be significantly related to a lower degree of adoption of formalized HR practices, after controlling for firm size and various indexes of organizational complexity. Similar results are found in Pittino and Visintin (2013) and Reid and Adams (2001).

One of the main reasons behind this phenomenon is the decisive influence of the family social system in shaping, through mechanisms of isomorphism, the characteristics of the organizational system. The emphasis on informality, trust, interpersonal ties, tacit and shared norms and values that characterizes the family relationships is likely to be imprinted in the organizational processes and routines, influencing also the HR practices (e.g. Arregle, Hitt, Sirmon, & Very, 2007; Brannon, Wiklund, & Haynie, 2013; Marquis & Tilcsik, 2013)

The prevalence of informal HR systems has led several authors to argue for an inadequacy of family firms in attracting, managing and retaining the employees, particularly the talented ones, based on the argument that the latter may prefer to work in a more transparent environment, where opportunities to grow and participate are well-defined and clear-cut (Barnet & Kellermanns, 2006; Chua et al., 2009; Fiegener et al., 1994).

So far, studies are missing that specifically analyse the organizational outcomes of such informal practices. Out of the four mechanisms mentioned above, we argue that familial informal HR practices generate peculiar forms of social exchanges, which positively influence retention, even of those valuable employees who are typically the targets of human resource management practices, as testified by the ever growing literature on talent management (for a review see Collings & Mellahi, 2009).

In the past few years, a number of studies have employed social exchange theory to explain what mechanisms shape individual family business members' attitudes and behaviours towards pursuing transgenerational, collective, and not only economic goals (Barnett et al., 2012; De Massis, 2012a, 2012b; Long & Mathews, 2011). In particular, Long and Mathews (2011) argue that family firms are typically characterised by a so called Generalised Exchange System (GES) which is based on norms of unilateral and indirect reciprocity, whereby there are no expectations among family members of an immediate and direct return for an action. This type of exchange is based on friendship, kinship and affection and leads to behaviours that are cooperative, homogeneous and cohesive. Non-family firms, on the contrary, tend to be closer to a restrictive type of exchange, whereby individuals tend to pursue self-interest in forms of exchange that are typically mutual and direct, based on a quid pro quo mentality (Uehara, 1990 as quoted by Long & Mathews, 2011; p. 290). Such firms most closely resemble Jensen and Meckling's (1976) nexus of contracts in which relations are of the market variety (e.g. economic agency) with an emphasis on direct/mutual reciprocity, formal/prescribed interactions, and hierarchical arrangements of the legalistic (Weber, 1978) and universalistic (Carney, 2005) kind. In these settings, primary exchanges are significantly instrumental, impersonal, and time-limited, as are the underlying obligations and expectations of the contracted participants' (p. 292). On the other hand, the dominant coalition running a family business (even though in different degrees according to the peculiar characteristics of the coalition itself), shapes individual behaviours within a long-term, trust-based, non-economic framework.

In line with Barnett et al. (2012), and Pearson and Marler (2010), we argue that the typical GES that characterises individual attitudes and behaviours of family members extends so as to shape also the behaviours of non-family employees.

It is well established in the literature that those managerial philosophies that are the basis of the familial GES aim at maximising a utility function that includes many goals other than profit, typically connected with the long-term survival of the company and the overall economic, social and emotional well being of the family members and future descendants (e.g. Berrone, Cruz, & Gomez-Mejia, 2012; Chrisman, Chua, Pearson, & Barnett, 2012; Gomez-Mejia, Haynes, Núñez-Nickel, Jacobson, & Moyano-Fuentes, 2007; Zellweger, Nason, Nordqvist, & Brush, 2013). Those same philosophies typically leverage on strategies that follow predictable trajectories of change based on cumulative, tacit knowledge developed and shared with employees, customers, suppliers and other significant stakeholders (Le Breton Miller & Miller, 2006) and inspired by mutual trust (rather than formal non-disclosure agreements), personal respect and intimate knowledge.

Besides the goal of building and maintaining the company's strategic knowledge capital, the development of a cohesive and long-lasting community of employees also serves the perpetuation of a positive family image and reputation among the stakeholders (Dyer & Whetten, 2006; Zellweger et al., 2013) and the enhancement of the family business' social capital endowment and network of binding social ties (Miller & Le Breton-Miller, 2005).

To achieve these goals, family firms tend to emphasize loyalty and caring for workers (Le Breton-Miller & Miller, 2006), attention for the quality of life and welfare of the employees (Stavrou & Swiercz, 1998), more stable employment (Block, 2010; Stavrou, Kassinis, & Filotheou, 2007), and the implementation of more "protective" contractual features for non-family personnel (Cennamo et al., 2012). Under such conditions non-family employees experience a feeling of proximity to the family owners and perceive that they are being looked after and taken care of with a long-term perspective (Block, 2010; Le Breton-Miller & Miller, 2006), even in periods of crisis (see also Bammens, Van Gils, & Voordeckers, 2010; Bernhard & O'Driscoll, 2011; Miller et al., 2008, 2009). These feelings of loyalty and gratitude, combined with the perception that the organization invests in employment relations with a long-time horizon (Berrone et al., 2012; Cennamo et al., 2012; Cruz et al., 2011) are likely to reduce the intentions to leave also among those valuable employees who have other options in the labour market (Shaw et al., 2009).

Besides social exchange mechanisms, also processes of organizational identification (Carmon et al., 2010; Vallejo & Langa, 2010) and cultural fit may (Cruz et al., 2011) influence the extent of retention. Family image, history and values might promote empathy with the family by the non-family employees (Miller & Le Breton-Miller, 2005; Zellweger et al., 2013), often being an example to follow and a goal to aim for. The process of social identification favours the emergence of feelings of psychological ownership, affective commitment and job satisfaction (e.g. Avey, Luthans, & Jensen, 2009; Sieger, Zellweger, & Aquino, 2013; Van Dyne & Pierce, 2004), thus reducing employees' intention to quit.

Non-family firms, on the other hand, do not experience the translation into the business of the familial traits of reciprocity, trust, shared norms and values. Long-term orientation may be also weaker as business owners and leaders might be more focused on short-term horizons. It is, for example, the case of outside investors or serial entrepreneurs. Thus, non-family firms might be less able to leverage on certain informal dimensions of the social exchange and need higher levels of formal practices to increase the degree of retention (Le Breton Miller & Miller, 2006).

In light of these features, we could argue that family firms, compared to their non-family counterparts, possess an advantage in terms of symbolic resources and behaviours that trigger feelings of reciprocation by the employees that non-family firms have difficulties in achieving.

As mentioned before, the empirical evidence appears to show an additive relationship among skill enhancing, motivation enhancing and engagement enhancing HPWPs practices (Combs et al., 2006). We propose that informal familial practices complement HPWPs in retaining the employees, particularly by strengthening the feelings of obligation and reciprocation described above.

Therefore, we expect that, given the same extent of adoption of formal HPWPs, family firms will show a higher level of retention of employees thanks to the use of the above-mentioned informal practices, or, in equivalent terms, that family firms may need lower levels of HPWPs compared to non-family firms to achieve the same level of retention of employees. The above argument is summarized in the following:

Hypothesis 1. Family firms will perform better than non-family firms in the retention of valuable employees at any level of adoption of HPWPs.

HR practices could also produce substitute effects (the organizational benefits arising from the adoption of two practices is respectively the same as the benefits that would arise from the adoption of a single practice) (Delery, 1998). We propose that informal familial practices may combine with HPWPs through partial substitute effects in retaining the employees, as far as the social exchange determinants of retention is concerned. In particular, the family firms' attention towards trans-generational sustainability (e.g. Zellweger et al., 2013), the willingness to establish and preserve a cohesive community of employees (e.g. Cruz et al., 2011; Miller & Le Breton-Miller, 2005), and also the tendency to promote employees' spontaneous involvement in informal innovation activities (e.g. Bammens, Notelaers, & Van Gils, 2015) can be seen as substitutes of those HPWPs aimed at increasing the perception of organizational long-term investments in employees' skills (e.g. Huselid, 1995; Pfeffer, 1994) and those aimed at strengthening employees' participation and sense of belonging (e.g. Patel & Conklin, 2012). Thus, in family firms the informal HR practices grounded on the emotional bond with the family may make redundant some the formal HPWPs aimed at affecting the perception of social exchange by the employees. In other words, an increase in HPWPs adoption may translate in lower positive effects than in non-family firms.

Hypothesis 2. In family firms the marginal effect of an increased adoption of HPWPs may be lower compared to non-family firms.

4. The effects in different types of family firms

Family firms should not be treated as a homogeneous group (Chrisman, Chua, & Sharma, 2005; Zahra, Hayton, & Salvato, 2004), especially regarding their emphasis on socioemotional dimensions (e.g., Berrone et al., 2012). In light of our theoretical framework it is therefore appropriate to explore how existing differences within family firms influence the relationships between HPWPs and the retention of valuable employees. We focus on two sources of heterogeneity that have been indicated as being strongly related to the importance of socioemotional goals in family firms, namely family CEO versus non-family CEO leadership and the family generation involved in the business (Berrone et al., 2012; Gomez-Mejia et al., 2007).

4.1. Family vs. non-family CEO family firms

The presence of a family CEO is usually associated with a higher emphasis on the protection and enhancement of the family firm's socioemotional wealth, in comparison to situations where family owners delegate the company leadership to a professional non-family executive (e.g. Berrone et al., 2012; DeTienne & Chirico, 2013).

It is certainly possible (and even common) that also non-family CEOs exhibit high levels of cultural congruence with the family and are loyal to its values and goals (e.g. Blumentritt, Keyt, & Astrachan, 2007; Hall & Nordqvist, 2008). However, a family CEO, by virtue of the kinship ties, the shared family name, and the reference to the common family history is more likely to promote a common identity and a stronger "family vision" within the organization (Arregle et al., 2007; Barnett et al., 2012). It has been suggested that a strong family vision, defined as the shared intention within the dominant coalition for the transgenerational sustainability of the firm (Chrisman et al., 2012), is associated to the establishment of norms of reciprocity that broaden the scope of the social exchange. In particular, as the family vision becomes stronger, the exchange system of the organization moves from a restricted type, which is characterized by a transactional and bilateral view of reciprocity, to a generalized type, which involves a "serial" view of reciprocity and a focus on the collective interest (Long & Mathews, 2011). The exchange system affects both family and non-family employees (Pearson & Marler, 2010). Thus, if non-family employees are involved in a generalized exchange system that leverages on group-based and long-term obligations among organizational members, they are more likely to experience feelings of commitment and lower intentions to leave (Barnett et al., 2012).

Moreover, as observed by Gomez-Mejia et al. (2007), the stronger the role of the family in the ownership and management, the more the company will adopt strategies to satisfy its socioemotional priorities, including the preservation of long-lasting relationships with the employees (Berrone, Cruz, & Gomez-Mejia, 2014). The direct involvement of a family member in the most important top executive position also reinforces the interaction between the owning family and the company stakeholders (e.g. Block & Wagner, 2010). Moreover, it has been suggested that strong levels of family commitment and identification with the firm, expressed by the presence of a family CEO, can create similar feelings among employees. Zahra et al. (2008), for example, report empirical evidence of a "social contagion" of commitment attitudes: when one member of an organization behaves in a committed fashion, it increases the probability that other members will also experience higher identification and commitment to the organization (Barsade, 2002). According to Rhoades and Eisenberger (2002), the organization's leaders are the main influencers of employee commitment. Whereas the social contagion effect can occur also in presence of a non-family CEO, who can be a good role model for the non-family members, we assume that a family CEO usually exhibits the strongest levels of commitment to the family vision of the business, and this is the main trigger of imitative attitudes by the employees. Hence, family CEO leadership is likely to produce an overall improvement of non-family employees' feelings of psychological ownership and affective commitment, thereby reducing the intentions to leave.

Consistent with the arguments already developed in support to Hypothesis 1 and Hypothesis 2, we therefore suggest that at any given level of adoption of HPWPs, family firms led by a family CEO have an advantage in the retention of valuable employees compared to family firms led by a non-family CEO, thanks to stronger expected feelings of reciprocation and higher extent of commitment and identification.

Hypothesis 3. For a given level of adoption of HPWPs, family firms with a family CEO achieve higher retention of valuable employees compared to family firms with a non-family CEO.

However, in the situations of family CEO leadership, the immaterial and symbolic resources exchanged with the employees may present a higher overlap with the social-exchange effects of some HPWPs. Thus, as a consequence of a possible substitution effect, the marginal effect of an increased use of HPWPs on the retention of valuable employees may be less pronounced in family firms led by a family CEO in comparison to those led by a non-family CEO. Therefore it follows that:

Hypothesis 4. The marginal effect of an increase in HPWPs on the retention of valuable employees may be lower in family firms with a family CEO in comparison to family firms with a non-family CEO.

4.2. First generation vs. later generation family firms

There is widespread agreement in the family business literature that family identification, family influence and personal investments in the company are at their highest levels in the founding, first generation stage, and decrease as the firm moves into subsequent stages of family ownership and leadership (e.g. Gersick, Lansberg, Desjardins, & Dunn, 1999; Gomez-Mejia et al., 2007; Le-Breton Miller & Miller, 2013; Ward & Aronoff, 1994). In first generation family firms, the social systems of family and organization are largely isomorphic (Arregle et al., 2007; Sirmon & Hitt, 2003), since the actors involved are usually members of a nuclear family and there is a predominant role of the founder (Schein, 1983). The founding families have a deep emotional attachment to the companies they have built and strong affective ties with the non-family employees, which have helped the firm to survive and grow throughout the initial difficulties (Le Breton-Miller & Miller, 2013). In first generation family companies, the main socioemotional goal is the transmission of the business to later generations, and this results in an enhanced long-term perspective of business strategies and stakeholders' relationships (Berrone et al., 2014; Zellweger et al., 2013). Although in first generation companies the influence of the family is limited in comparison to the paramount role of the founder (e.g. Cruz & Nordqvist, 2012), the "dynastic priorities" of the family business are at their highest levels (e.g. Arregle et al., 2007). Founders feel the responsibility to provide long-term benefits for family members, mainly by securing the family control of the firm beyond the founding generation. As founders tend to view their businesses as extensions of themselves (Schein, 1983), they strive for the perpetuation of their entrepreneurial effort by transferring a business legacy to future generations, (Dyer & Whetten, 2006). By virtue of their roles as heads of families and business leaders, founders aim at protecting and promoting the family business reputation, and the continuation of their business lineage (Athanassiou, Crittenden, Kelly, & Marquez, 2002; Lim, Lubatkin, & Wiseman, 2013). These factors are consistent with a strong family vision within the business and thus reinforce the broad scope and the collective dimension of social exchange, involving also non-family employees (Barnett et al., 2012)

As the family firm proceeds to second and later generation stages, the overlap between family and organization diminishes, the family members' emotional attachment and identification become progressively weaker, the socioemotional priorities are generally less pronounced, more fragmented and more focused on short-term needs of individual family members (e.g. Gomez-Mejia et al., 2007; Miller, Minichilli, & Corbetta, 2013).

We might therefore expect that first generation family firms, compared to post-founder and later generation ones, have a more intense exchange of immaterial resources with non-family employees in the form of more intense and meaningful informal practices. This is likely to create an advantage in the capacity to retain valuable non-family personnel. From this it follows:

Hypothesis 5. At any given level of adoption of HPWPs, first generation family firms achieve a higher retention of valuable employees compared to second and later generation family firms.

Also, as a consequence of a possible substitution effect between the use of HPWPs and the informal relational system and symbolic involvement experienced by the non-family employees in first-generation companies we may expect the following:

Hypothesis 6. The effect of an increase in HPWPs on the retention of valuable employees may be lower in first generation family firms in comparison to second and later generation family firms.

5. Sample and method

5.1. Sample

To test our hypotheses, we conducted a quantitative study based on a sample of companies from two European countries, Austria and Hungary. The sample was taken from the same two industries, "manufacture of food products" and "manufacture of computer, electronic and optical products/manufacture of electrical equipment" in both countries. The CMDcomplete (Austria) and OPTEN (Hungary) databases were used to identify executive board members and managing directors of companies within these industries. As micro enterprises were considered as being unlikely to have systematic HPWPs in place, businesses with less than ten employees were excluded from the list.

We sent personalized e-mails with a link to the online survey instrument to 1649 managers (917 in Austria, 732 in Hungary), guaranteed anonymity following Podsakoff, MacKenzie, Lee, and Podsakoff's (2003) advice, and used a multiple contact method (with two reminders after the first e-mail) as suggested by Dillman, Smyth, and Christian (2009), yielding a gross response rate of 20.3%. Of the 335 respondents, those who were not in a top management position or insufficiently filled out the questionnaire were excluded. Eventually, 232 questionnaires were used in the analysis, representing a net response rate of 14.1% overall (15.5% in Austria and 12.3% in Hungary), which is somewhat lower than in prior empirical studies related to HPWPs while comparing favourably to the typical 10–12% response rate of surveys among top managers (Geletkanycz, 1997). 97 companies in our final sample have between 10 and 50 empoyees, 135 have more than 50 employees.

5.2. Instrument design

The survey instrument was developed following a three-step process. First, the literature was reviewed for existing and tested scales for measuring the main constructs. The draft questionnaire was peer-reviewed by researchers with experience in the field of HRM. In line with the suggestion of Dillman et al. (2009), a pre-test was then conducted among approximately ten per cent of the target group (17 companies) following a similar process as the later main study. The purpose of the pre-test was to test the questionnaire, both regarding respondents' answering behaviour (e.g. break-up points) as well as regarding the internal consistency of the constructs. Following the pre-test and a preliminary factor analysis, the questionnaire was slightly adapted (some items that did not contribute to the factor loading were removed, others reformulated). In order to explore whether the items used appropriately contribute to the constructs they ought to measure, rotated principal component analysis (PCA) was conducted for each construct. As a general rule, items with factor loadings above 0.5 were kept. Following Backhaus, Erichson, Plinke, and Weiber's (2003) recommendation, we also tested whether the data was actually suitable for PCA. The results of Kaiser-Meyer-Olkin measure of sampling adequacy, Bartlett's test of sphericity, and the anti-image correlation matrix indicated that PCA was an adequate tool. Based on the findings from the test of the instrument, in particular regarding the internal consistency of the scales, the questionnaire was adapted with minor changes.

The instrument was originally developed in English. The final questionnaire was then translated into German and Hungarian. Standard back-translation procedures were used followed by small adaptations to ensure that the questions had the same meaning in all languages.

5.3. Variables

Employee retention was measured by the respondents' subjective assessment of their firm's relative performance in retaining what the top management considers as valuable employees over the last two years, compared to firms of similar sales volume in their industry on a five-point Likert-type scale ranging from 1 (significantly below industry average) to 5 (significantly above industry average). Although an objective measure for retention rates would be preferable, top managers are often unaware of the exact numbers at the time when they fill out the survey. Retention research commonly uses employee turnover as a measure for studying retention (Guthrie, 2001; Patel & Conklin, 2012). However, since there are several ways of calculating employee turnover, comparability could not be ensured. There are reports from prior research about significant correlations between objective and subjective measures of performance (Dess & Robinson, 1984). We therefore followed the example of other authors (Delaney & Huselid, 1996; Hau-siu Chow, 2004; Shaw et al., 2009) in using a subjective assessment of the firm's performance in retaining valuable employees over the last two years compared to similar firms in the industry. To establish the robustness of our results, however, we performed additional tests of our hypotheses employing the overall turnover rate as dependent variable (in the questionnaire, we also included a question about the percentage of employees who left the company during the previous year).

The adoption of *High Performance Work Practices* was assessed calculating the average values of the scores for six HPWP categories, obtained as averages of the equally weighted items that together constitute the individual categories. The selection of high-performance work practices items was based on the classification in: selective staffing, intensive training, career development, extensive compensation and benefits, performance appraisals, and employee participation. The individual items were adapted from prior HPWP studies of various authors (e.g. Patel & Conklin, 2012; Sels et al., 2006) (see the Appendix A for a detailed overview of the scales and their α-levels that range between $\alpha = 0.698$ and $\alpha = 0.836$) and were measured on a five-point Likert-type scale (from 1 = very little or no importance to 5 = very important).

Given the nature of our HPWPs and retention measures, we assessed the potential of common method bias in the data performing Harman's one-factor test (Harman, 1967; Podsakoff et al., 2003), which is regularly used in dealing with this issue also in family business studies (e.g. Sieger et al., 2013). We entered all the items of our study into a factor analysis, extracting an 8-factor solution, accounting for 65.48% of total variance. The first factor explained 14.85% of variance, suggesting that common method bias is not a major problem because no single factor accounts for the majority of variance.

Family firm status is a dichotomous variable assuming value 1 if a family is reported as the controlling owner of the company with the absolute majority of ownership stakes, and 0 otherwise (Andres, 2008). In the case of family firms, we also surveyed whether the CEO is a family member (dichotomous variable *Family CEO* assuming value 1 if a family member holds the CEO position and 0 otherwise) and whether the firm is in first generation or later generation family ownership (*First Generation*, dichotomous variable, assuming value 1 if the family is in the first generation of involvement in the company, and 0 otherwise).

Following previous studies of HPWPs and employee retention, we included as control variables: (1) a binary measure accounting for companies belonging to *high technology industries*, (2) a measure of *financial performance* over the past three years (in terms of ROA), (3) *company size*, operationalized through a dichotomous variable assuming value 0 if the firm has a number of employees between 10 and 49, and value 1 if it has more than 50 employees), (4) *company nationality*, assuming value 1 if the company belongs to the sample from Austria and 0 if the company belongs to the sample from Hungary.

Descriptive statistics and correlation for all the study variables are reported in Table 1.

5.4. Estimation technique

We used hierarchical ordinary least squares regression models to test the hypotheses. In step 1 of each hierarchical model, we entered the control variables; in step 2 we added the HPWPs index. In step 3, we added the family firm status (in the model testing Hypothesis 1), presence of a family CEO (Hypothesis 3), and first generation family firm (Hypothesis 5). In step 4 we added the interaction terms between HPWPs and family status (model testing Hypothesis 2), HPWPs and family CEO (Hypothesis 4) and HPWPs and first generation stage (Hypothesis 6). We used the significance of the family firm status, family CEOs and first generation coefficients plus the explained variance changes from step 2 to step 3 to determine support for Hypothesis 1,Hypothesis 3, Hypothesis 5, respectively. The explained variance change, the significance of the interaction term and the plotted form of the interaction effect (if significant) were used to determine the support for Hypothesis 2, Hypothesis 4, Hypothesis 6.

Table 1
Means, standard deviations and correlations.

	Mean	SD	1	2	3	4	5	6	7	8	9
1 Retention	4.12	0.80	1.00								
2 HPWPs	3.64	0.62	0.33	1.00							
3 Past performance	3.43	1.05	0.35	0.28	1.00						
4 Size[b]	0.58	–	0.18	0.46	0.22	1.00					
5 High technology[b]	0.38	–	0.07	0.15	0.09	0.13	1.00				
6 Company nationality[b]	0.62	–	−0.08	−0.01	−0.15	−0.10	0.06	1.00			
7 Family firm[b]	0.52	–	0.02	−0.16	0.15	−0.12	−0.08	−0.12	1.00		
8 Family CEO[b]	0.39	–	−0.01	−0.16	0.08	−0.11	−0.13	−0.17	0.77	1.00	
9 First Generation[a,b]	0.48	–	0.02	0.01	−0.06	−0.07	0.35	0.30	–	0.06	1.00

N = 232; Correlations higher than 0.15 and lower than −0.14 are significant at 0.05 level. The mean in case of binary variables indicates the ratio of observations where the variable assumes value 1.

[a] N = 121.

[b] Binary variables.

6. Results

6.1. Descriptive analysis

After splitting our sample and breaking down the overall indicator of HPWPs in its single components (Table 2), we observe that: (1) family firms present a lower degree of adoption of HPWPs compared to their non-family counterparts; (2) the lower intensity of adoption is homogeneous across the different subsets of practices; (3) the index of valuable employees' retention is higher in family firms compared to non-family ones; (4) within family firms, companies led by a non-family CEO and companies where second or later family generations are involved exhibit a higher intensity of HPWPs use.

6.2. Regression analyses

6.2.1. Hypothesis 1 and Hypothesis 2

It was hypothesized that family businesses achieve better performances in the retention of valuable employees compared to non-family businesses, holding fixed the rate of HPWPs adoption. Table 3 presents the results of the hierarchical regression model with the retention of valuable employees as the dependent variable and the stepwise inclusion of the explanatory terms.

Our analysis shows that HPWPs are strongly and positively related with the retention of valuable employees ($\beta = 0.21$, $p < 0.001$). When we add the family firm status in step 3, we observe that the direct average effect of HPWPs remains substantially unchanged and the family business status has a positive and significant impact on the dependent variable ($\beta = 0.12$, $p < 0.05$). This provides support to our Hypothesis 1: after controlling for the intensity of HPWPs adoption, family firms on average exhibit a higher capacity to retain valuable employees. Hypothesis 2 stipulates that family firm status and HPWPs adoption interact in such a way that in family firms there is a lower sensitivity of valuable employees' retention to the increase of HPWPs. Step 4 in the hierarchical regression (Table 3) includes the interaction term between family firm status and HPWPs. The significant improvement of the R-squared indicates that the inclusion of the interaction term enhances the explanatory power of our model. The interaction term is also significant and negative ($\beta = -0.19$, $p < 0.10$), indicating that the effect of HPWPs is weakened by the family business status.

The relationships proposed in Hypothesis 1 and 2 can be appreciated in the plot of Fig. 1 depicting the significant interaction. It can be observed that: (1) on average family firms have a higher capacity to retain valuable employees given a certain level of HPWPs, and this indicates that there is some kind of additive effect between formal practices and informal dimensions of the exchange, but (2) the effect of an increase in HPWPs on retention is lower in family firms compared to non-family firms, and this suggests that there is also a partial substitution effect that makes the combination between HPWPs and family firm status "sub-additive."

These results are robust across different specifications of the model. In particular, the effects remain unchanged if we use the percentage of overall employee turnover as our dependent variable (Table 5). The use of HPWPs and the family business status have a negative impact on the overall turnover rate, and the effect on the reduction of turnover rate of an increase in HPWPs adoption is lower in family firms. Further results in support of our hypotheses are found in additional analyses that assess the effect of each subset of practices in the family and non-family business subsample. In the family business subsample, the HPWPs especially aimed at increasing employee participation and involvement do not have an impact on the retention of valuable employees (Table 6).

6.2.2. Hypothesis 3 and Hypothesis 4

Hypothesis 3 suggests that, within family firms, companies led by a family CEO achieve a better performance in valuable employee retention compared to those where a non-family CEO is in charge (given a certain level of HPWPs). Regression results reported in Table 4 do not provide support to the hypothesis. The effect of HPWPs on retention is confirmed but there is no evidence of a "family CEO" effect ($\beta = -0.01$, not significant). However there is some evidence in support of a substitution effect (Hypothesis 4). The interaction term entered in step 4a is negative and marginally significant ($\beta = -0.13$, $p < 0.10$), and this suggests that HPWPs have a stronger incremental effect when a non-family CEO is in charge, although, on average there are no differences in the degrees of retention between family and non-family CEO family firms.

6.2.3. Hypothesis 5 and Hypothesis 6

We hypothesized (Hypothesis 5) that, within family firms, companies where the founding generation is involved achieve a higher retention of valuable employees compared to second and later generation family firms. We find some support to this hypothesis: the coefficient of the First Generation term entered at step 3b is significant at a borderline level ($\beta = 0.15$, $p < 0.10$). On the other hand, the substitution argument of Hypothesis 6 is not supported: the coefficient of the interaction term entered in the step 4b is of the expected sign, but not significant ($\beta = -0.13$, not significant).

7. Discussion

The literature on human resource management practices in family firms disagrees about the attitude of the owning family towards non-family employees: it is unclear whether family firms "care more" or "care less" about their personnel compared to non-family firms (e.g. Cennamo et al., 2012; Cruz et al., 2014).

Table 2
HPWPs and retention: descriptive analyses.

	Family firms		Non-family firms		Family CEO		Non-family CEO		First generation		Second or later generation	
	Mean	S.D.	Mean	S.D.	Mean	S.D.	Mean	S.D.	Mean	S.D.	Mean	S.D.
Selective staffing	3.46	0.91	3.86	0.91	3.44	0.57	3.52	0.63	3.55	0.61	3.53	0.56
Intensive training	3.58	0.76	3.76	0.85	3.52	0.92	3.74	0.87	3.46	0.92	3.46	0.90
Career development	3.65	0.73	3.84	0.80	3.62	0.77	3.73	0.71	3.63	0.76	3.53	0.75
Extensive compensation	3.23	0.82	3.43	0.89	3.23	0.72	3.21	0.76	3.28	0.78	3.66	0.67
Performance appraisals	3.65	0.76	3.83	0.84	3.59	0.79	3.79	0.91	3.68	0.76	3.16	0.85
Employee participation	3.70	0.68	3.79	0.69	3.69	0.77	3.74	0.68	3.61	0.72	3.60	0.75
Total HPWPs	3.54	0.58	3.75	0.65	3.54	0.76	3.62	0.74	3.61	0.67	3.79	0.62
Retention	4.19	0.81	3.88	0.85	4.17	0.83	4.20	0.76	4.23	0.78	4.11	0.78
N	121		111		30		91		59		62	

Table 3
OLS regression analysis with dependent variable *Retention of valuable employees*: comparison between family and non family firms.

	(1) Control Variables	(2) HPWP and Control Variables	(3) Direct Effect Family vs. Non-family Firms	(4) Two-way interaction
Previous Performance	0.21***	0.21***	0.20***	0.19***
	(0.05)	(0.05)	(0.05)	(0.05)
Size	0.00	0.00	0.00	0.00
	(0.05)	(0.05)	(0.05)	(0.04)
High technology industry	0.02	0.02	0.03	0.03
	(0.10)	(0.10)	(0.10)	(0.10)
Company Nationality	−0.06	−0.06	−0.06	−0.06
	(0.10)	(0.10)	(0.10)	(0.10)
HPWPs		0.21***	0.20***	0.32***
		(0.09)	(0.12)	(0.08)
Family firm			0.12*	0.21†
			(0.07)	(0.18)
HPWP × Family firm				−0.19**
				(0.12)
Constant	3.99***	3.95***	3.96***	3.96***
	(0.22)	(0.24)	(0.24)	(0.24)
N	232	232	232	232
R-sq	0.14	0.24	0.29	0.34
Adjusted R-sq	0.10	0.20	0.26	0.31
F statistic	7.38***	8.38***	7.93***	7.19***
R-sq change		0.10***	0.15***	0.20***
F for R-sq change		8.33***	4.21***	6.63***

Note: Standard errors in parentheses; ***p < 0.001, **p < 0.01, *p < 0.05, †p < 0.1.

Table 4
OLS regression analysis with dependent variable *Retention of valuable employees*: different types of family firms.

	(1) Control Variables	(2) HPWP and Control Variables	(3a) Direct effect Family CEO	(4a) Two-way interaction	(3b) Direct effect First Generation	(4b) Two-way interaction
Previous Performance	0.19***	0.19***	0.18***	0.18***	0.19***	0.18***
	(0.06)	(0.06)	(0.06)	(0.06)	(0.06)	(0.06)
Size	0.12	0.12	0.12	0.11	0.12	0.13†
	(0.08)	(0.08)	(0.08)	(0.08)	(0.08)	(0.08)
High technology industry	−0.04	−0.04	−0.04	−0.04	−0.09	−0.11
	(0.15)	(0.15)	(0.15)	(0.15)	(0.15)	(0.16)
Company Nationality	−0.01	−0.01	−0.01	−0.01	−0.06	−0.04
	(0.10)	(0.10)	(0.10)	(0.10)	(0.15)	(0.15)
HPWPs		0.20***	0.20***	0.14**	0.20***	0.18**
		(0.08)	(0.05)	(0.05)	(0.08)	(0.09)
Family CEO			−0.01	0.01		
			(0.12)	(0.16)		
First Generation					0.12†	0.15†
					(0.10)	(0.15)
HPWP * Family CEO				−0.13†		
				(0.10)		
HPWP * First Generation						−0.13
						(0.14)
Constant	3.82***	3.78***	3.78***	3.70***	3.96***	3.96***
	(0.24)	(0.24)	(0.24)	(0.24)	(0.24)	(0.24)
N	121	121	121	121	121	121
R-sq	0.08	0.19	0.21	0.21	0.19	0.21
Adjusted R-sq	0.06	0.15	0.16	0.16	0.14	0.16
F statistic	3.52***	5.52***	4.57***	4.46***	4.00***	4.30***
R-sq change		0.09	0.00	0.01	−0.01	0.01
F for R-sq change		6.32***	0.92†	1.01	0.54	0.88

Note: Standard errors in parentheses; ***p < 0.001, **p < 0.01, *p < 0.05, †p < 0.1.

Our results contribute at reconciling these opposing views, by observing the relationship between the adoption of HPWPs and the retention of valuable employees, through a social exchange framework. This perspective allows us to consider the actual response of non-family employees to the activation of certain human resource practices, and reveals that employees in family firms might benefit from the high quality of relationships enabled by the family influence (Barnett et al., 2012; Pearson & Marler, 2010), that combines with the formal HPWPs in stimulating retention. Therefore, the lower degree of adoption of HPWPs does not mean that family firms care less about their workforce.

In particular, in support of hypothesis 1, we show that at even very low levels of HPWPs adoption, the degree of retention of valuable employees by family firms is higher than that by non-family firms. This means that, notwithstanding the potential negative impacts of a number of familial discretionary practices

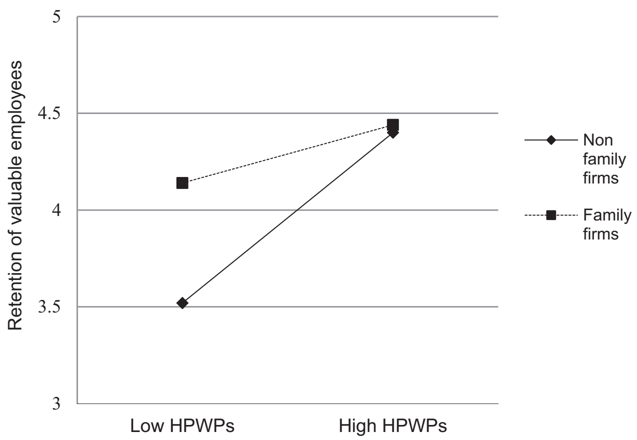

Fig. 1. Effect of HPWPs on the retention of valuable employees in family and non family firms.

highlighted by the literature, such as nepotism, familial scapegoating and so on, the positive ones connected with the Generalised Exchange Structures typical of family firms are even stronger (Long & Mathews, 2011). Therefore, although family firms rely less than their non-family counterparts on formal HPWPs (as also confirmed by our descriptive statistics), their rate of retention is not systematically lower but may be similar or even higher. By clarifying the causal link between HRM practices, family influence and employee retention in family firms, this result provides indirect support to the idea that the pursuit of socioemotional priorities and goals at the family level improves the quality of the social exchange with non-family employees, and this is in line with previous conceptual arguments on the social exchange in the family business context (Barnett et al., 2012; Long & Mathews, 2011; Pearson & Marler, 2010).

As a further specification of this argument, the empirical evidence in support of Hypothesis 2 shows that the impact of the adoption of HPWPs on retention is marginally lower in family businesses at any level of adoption of formal practices. This result can be interpreted by viewing family influence as a source of informal HRM practices that are committed in the social exchange process. In family firms the familial informal practices may account for the retention differential with non family firms at any given level of HPWPs adoption. While some informal practices may impact on retention also through skill-enhancing, motivation-enhancing, and participation-enhancing effects, the difference with non-family firms lies primarily in the reciprocation effects.

This depends on the strategic horizon adopted by family firms as a consequence of the goal of maximising the familial socio-emotional wealth and in the associated, close, trust-based and long-term relationships established with the employees. In light of social exchange theory, these type of investments by the employers may induce reciprocation behaviours in the employees. Indeed, the results show that as the intensity of HPWPs adoption increases, the difference in the extent of retention becomes lower. In family firms the effects arising from the reciprocation need are already satisfied by the informal dimensions of the social exchange and the employees in family firms will be less sensitive to an increase in HPWPs intensity compared to non-family firms' employees, who in turn are more likely to value formal mechanisms of involvement, as the informal ones are absent or less relevant. This observation corroborates the theoretical proposition advanced by Pearson and Marler (2010), according to which family firms are more likely to establish a stronger reciprocal stewardship culture compared to non-family firms.

A possible complementary explanation of our findings, in line with the theory of person-organization fit (Memili & Barnett, 2008; O'Reilly, Chatman, & Caldwell, 1991), could be that family firms attract people who have a motivational profile which is consistent with the culture and the value system of the family business organizational setting.

Regarding the differences among different types of family firms (Hypotheses 3–6), our arguments find only partial support. No significant "family CEO" effect has been observed in addition with HPWPs, and only marginal support is provided to the idea of a moderating effect of family CEO status on the impact of HPWPs. This suggests that the consequences of family businesses' informal HR practices on retention depend on family involvement, regardless of the family status of the organization's leader. This could be explained in light of the small to medium size of our companies. In such contexts, the proximity of the controlling

Table 5
Robustness check: OLS regression analysis with dependent variable *Overall turnover rate*.

	(1) Control Variables	(2) HPWP and Control Variables	(3) Direct Effect Family vs. Non-family Firms	(4) Two-way interaction
Previous Performance	-1.19^{***}	-1.19^{***}	-1.25^{***}	-1.20^{***}
	(0.44)	(0.44)	(0.44)	(0.05)
Size	1.92^{***}	1.91^{***}	1.94^{***}	1.99^{***}
	(0.51)	(0.51)	(0.51)	(0.52)
High technology industry	$-1.75^{\dagger}$	$-1.75^{\dagger}$	$-1.71^{\dagger}$	-1.87^{*}
	(0.94)	(0.94)	(0.94)	(0.94)
Company Nationality	0.27	0.27	0.32	−0.06
	(0.93)	(0.93)	(0.94)	(0.10)
HPWPs		-1.43^{***}	-1.39^{***}	-2.12^{***}
		(0.52)	(0.52)	(0.69)
Family firm			0.51^{*}	$0.50^{\dagger}$
			(0.35)	(0.38)
HPWP × Family firm				1.54^{*}
				(0.81)
Constant	10.01^{***}	10.10^{***}	9.93^{***}	10.09^{***}
	(2.22)	(2.20)	(2.23)	(2.22)
N	224	224	224	224
R-sq	0.07	0.11	0.13	0.18
Adjusted R-sq	0.05	0.09	0.12	0.16
F statistic	4.44^{***}	5.62^{***}	4.72^{***}	4.49^{***}
R-sq change		0.04	0.03^{**}	0.07^{***}
F for R-sq change		2.89^{**}	1.21	3.63^{**}

Note: Standard errors in parentheses; $^{***}p < 0.001$, $^{**}p < 0.01$, $^{*}p < 0.05$, $\dagger p < 0.1$.

Table 6
Effects of the different practices on the retention of valuable employees in family and non-family firms.

	(1) Family Firms	(2) Non-family Firms
Previous Performance	0.17**	0.26***
	(0.06)	(0.08)
Size	0.10	−0.14†
	(0.08)	(0.08)
High technology industry	−0.06	0.06
	(0.14)	(0.16)
Company Nationality	−0.02	−0.01
	(0.17)	(0.17)
Selective staffing	−0.07	0.38***
	(0.11)	(0.13)
Intensive training	0.04	0.19†
	(0.14)	(0.14)
Career development	0.29**	0.14†
	(0.13)	(0.12)
Extensive compensation	0.07	0.10**
	(0.11)	(0.07)
Performance appraisals	0.11**	0.13**
	(0.06)	(0.07)
Employee participation	−0.02	0.13***
	(0.12)	(0.04)
Constant	2.35***	1.91***
	(0.59)	(0.59)
N	121	111
R-sq	0.23	0.25
Adjusted R-sq	0.17	0.17
F statistic	3.41***	3.34***

Note: Standard errors in parentheses; ***p < 0.001, **p < 0.01, *p < 0.05, †p < 0.1.

family is perceived independently from the formal positions occupied by family members.

The effect of the founding generation is positive as expected, but its magnitude is rather small, with a borderline significance level. This could be explained by the presence of family reputation concerns both in the first generation and in later generations. In first generation the "sense of dynasty" and the willingness to establish a family legacy might prevail, whereas family image and prestige of the family name become increasingly important in the later generations (e.g. Zellweger et al., 2013). Both these forces are positively related with the establishment of cohesive employee communities.

Overall our results add also to the human resource management literature, and in particular to the social exchange perspective in the study of HRM practices (Cropanzano & Mitchell, 2005; Jiang, et al., 2012), by suggesting that informal practices might have an important role in the social exchange between employers and employees and by showing how the ownership and leadership context may promote feelings of reciprocation that combine with the individual effects of formal practices on the employees to elicit positive organizational outcomes.

Moreover, as the existing literature on HPWPs has identified a prevalence of additive effects among sets of practices (Chuang et al., 2012; Delery, 1998; Jiang et al., 2012) even though earlier theoretical contributions had admitted the possibility of different types of relationships (for example synergistic or substitution) no study has considered that informal practices may combine with the formal ones to produce positive organizational outcomes. The analysis of the combination between the family effect fostering the establishment of informal practices and HPWPs thus allows us to extend the knowledge of the ways HRM practices interact.

Whereas Delery (1998) and others (e.g. Macky & Boxall, 2007) suggest that HRM practices interact either in an additive, synergistic or substitutive effect, with one alternative excluding the other, our results show that the interaction between HRM practices (in our case, formal and informal ones) could lead to both additive and substitutive effects. This combination of additive and interactive effects may generate super-additive or, as in our case, sub-additive effects.

Our study has also significant managerial implications. Family firms are often criticised for not investing enough in HPWPs; our results, while not denying the need to establish management practices aimed at increasing procedural justice and reducing the perceptions of nepotism (Barnett & Kellermanns, 2006) suggest that HPWPs investments beyond a certain level would actually be superfluous, given that the informal mechanisms originating from the family influence may act as substitutes of various formal techniques.

8. Conclusions, limitations and future developments

In this study we examined to what extent High Performance Work Practices (HPWPs) contribute to the retention of valuable employees in family versus non-family firms and in different situations of family influence.

Overall the results indicate that: (a) the family firm status and the conditions strengthening the family influence on the firm have a positive impact on retention; (b) in the presence of HPWPs, the "family effect" combines with the formal practices to produce a positive influence on retention; and (c) some of the outcomes of the family influence and of the adoption of formal practices may be so similar that they produce substitution effects on retention.

With this research we add to the knowledge on human resource practices in family firms, a topic that is still in its infancy in the family business studies (Cruz et al., 2011), and in particular, as explained above, we shed new light on the contrasting arguments regarding HRM practices targeted at non-family employees. We also contribute to the social exchange perspective in the study of family firms and to the HRM literature concerning the ways HRM practices interact. Our study may suggest several issues for future research. First of all, we measured the intensity of use of HPWPs, but we make only conjectures about the use of informal and relational practices, assuming that a lower adoption of HPWPs corresponds to an higher reliance on social mechanisms. Future research should directly identify the informal dimensions of human resource management practices that leverage on family social capital.

A major limitation in our dataset is that we do not have accurate measures of different degrees of family involvement in the management (except for the CEO family status), and this is probably one of the main reasons why we did not find significant differences within the family firms subsample. Therefore, future studies should focus on more fine-grained differentiation within family firms according to various dimensions of family involvement. This could stimulate further contributions also to the general HRM literature, for example by exploring how different cognitive orientations of family versus non-family business managers impact on the adoption of HRM practices and on the employee-level outcomes.

Although statistical tests suggest that common method bias should not be a problem, the use of more objective measures and/or multiple respondents would improve the quality of empirical results. In particular, it would be interesting to measure directly the perceptions of the employees in connection as a mediator between HPWPs and turnover intentions.

Moreover, qualitative techniques could be more appropriate to investigate in-depth the phenomena under scrutiny, since they involve relational processes among family members and employees. For example, a qualitative analysis of configurations of practices could lead to the identification of trade-off effects between single informal and formal practices, shedding more light on the combinatorial dynamics of HR practices and offering suggestions to family firms about the most effective formal practices to be implemented.

Appendix A.

Items for measuring high-performance work practices (HPWPs).

Construct and resulting Cronbach's alpha level	Original items from previous literature	Adapted items
Selective staffing (α = 0.822)	'We have gone to great lengths to establish the best staffing procedures possible' (Patel & Conklin, 2012: 227).	SS1: "The selection of new staff follows a structured process."
	'Predictors with high predictive validity are used (work sample tests, assessment centre, biographical questionnaire)' (Sels et al., 2006: 330) 'Applicants undergo structured interviews [. . .] before being hired.' (Wright et al., 2005: 425)	SS2: "Techniques, such as structured interviews, work sample tests, or assessment centres, are used to assist in the selection process."
	'[. . .] the hiring criteria used to select employees in three categories [. . .]' (MacDuffie, 1995: 207)	SS4: "Hiring criteria are used to select new employees."
	'The recruitment and selection activities of the company are systematically evaluated' (Sels et al., 2006: 330)	SS5: "Recruitment and selection activities of the company are systematically evaluated."
Intensive training (α = 0.836)	'Is training a high priority?' (Patel & Conklin, 2012: 227)	IT1: "Training is a high priority."
	'[. . .] the level of training provided to newly hired production workers, supervisors, and engineers in the first six months of employment [. . .]' (MacDuffie, 1995: 208)	IT2: "Training is provided to newly hired staff."
	'Are different kinds of training available?' (Patel & Conklin, 2012: 227)	IT3: "The company offers different kinds of formal training to existing staff."
	'The company has a strategic training plan' (Sels et al., 2006: 330)	IT4: "The company has a strategic training plan."
	'Extent to which reactions, learning, behavioural and performance effects after company training are measured.' (Sels et al., 2006: 330)	IT5: "Reactions, learning, behavioural and performance effects after company training are measured."
Career development (α = 0.776)	'The company offers operational staff the possibility of attaining a higher hierarchical level' (Sels et al., 2006: 330)	CD1: "The company offers non-management staff the possibility of attaining a higher hierarchical level."
	'The company offers operational staff the possibility of becoming active in other functional domains at the same level' (Sels et al., 2006: 330)	CD2: "The company offers non-management staff the possibility of becoming active in other functional domains at the same level."
	'Appraisal system related to succession planning, concerned with what an individual will be capable of doing in the future' (Sels et al., 2006: 330)	CD3: "The appraisal system is related to succession planning and concerned with what an individual will be capable of doing in the future."
	'Employees have clear career paths in this organization' (Patel & Conklin, 2012: 227)	CD4: "In the organization different career models are available to employees."
Extensive compensation and benefits (α = 0.698)	'The level of employees' total compensation' (Kerr et al., 2007: 60), ranging from below, around, to above industry standard	EC1: "Employees receive a high level of total compensation (compared to the industry average)."
	'Part of the wage of blue and/or white-collar workers depends on individual performances or merit' (Sels et al., 2006: 330)	EC2: "Salaries and wages partly depend on individual performance or merit."
	'Number of extra benefits which the company offers its employees' (Sels et al., 2006: 330)	EC3: "The company offers funded extra benefits to its employees (e.g. childcare facilities, company cars)."
	'Profit sharing (or some other type of company based reward system)' (Patel & Conklin, 2012: 227)	EC4: "The organization has some form of company-based reward system (e.g. profit-sharing)."
Performance appraisals (α = 0.835)	'What proportion of the workforce receives formal performance appraisals?' (Huselid, 1995: 646) 'Employees in this job regularly (at least once a year) receive a formal evaluation of their performance.' (Wright et al., 2005: 425)	PA1: "The company regularly conducts formal performance appraisals with its employees."
	'Use of a system which specifies procedure and criteria for the appraisal process' (Sels et al., 2006: 330)	PA2: "Performance appraisals follow a specific procedure, and criteria for the appraisal process are available."
	'Appraisal procedure that relates to the allocation an attribution of awards, rewards and benefits' (Sels et al., 2006: 330)	PA3: "Appraisals are related to the allocation of awards, rewards, and benefits."
	'Appraisal procedure aimed at the development and motivation of staff by looking at how well he or she is doing' (Sels et al., 2006: 330)	PA3: "Appraisals are aimed at giving feedback on the development of employees."
	'Employee appraisals emphasize long term and group-based achievement.' (Patel & Conklin, 2012: 227)	PA5: "Employee appraisals emphasise an employee's past performance as well as their future potential."
Employee participation (α = 0.786)	'[. . .] degree of influence over tasks, tools, work methods, pace of work, schedules, vacations, and technology design [. . .]' (Batt, 2002: 591)	EP1: "Employees are free in organising their work (e.g. tasks, tools, speed of work, work schedules, holiday)."
	'Employee representation at board/senior management meetings' (Patel & Conklin, 2012: 228)	EP2: "Employees are represented at board/general management meetings."
	'Degree to which non-supervisory employees participate in "management" decisions regarding investment, work flow, product development, and productivity monitoring.' (Arthur, 1994: 495)	EP3: "Employees can influence management decisions on investments, work flows, product development, and productivity monitoring."
	'Extent to which, e.g. via consultation, consideration is given to employees' opinions' (Sels et al., 2006: 330)	EP4: "Consideration, e.g. via consultation or suggestion systems, is given to employees' opinions."
	'What is the proportion of the workforce who are included in a formal information sharing program (e.g., a	EP5: "The company regularly shares information on strategy, performance outcomes or the employment evolution with

(*Continued*)

Construct and resulting Cronbach's alpha level	Original items from previous literature	Adapted items
	newsletter)?' (Huselid, 1995: 646)	non-management employees."
	'Percentage of employees involved in training for group problem solving, quality circles, and labor-management committees.' (Arthur, 1994: 495)	EP6: "Employees take part in formal work teams, such as problem-solving groups, quality circles, or labour management committees."
	'Employees in this job have a reasonable and fair complaint process.' (Wright et al., 2005: 425)	EP7: "Employees have access to a fair complaint process."

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