

# The Effect of Psychological Ownership on Corporate Entrepreneurship: Comparisons Between Family and Nonfamily Top Management Team Members

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## Abstract

Does family membership differentiate family and nonfamily top management team (TMT) members' ownership-based motivations to pursue corporate entrepreneurship? We adopt the concept of psychological ownership to answer this question. Based on a sample of 192 TMT members from 90 Korean companies, this study found that family and nonfamily TMT members do not differ in the levels of psychological ownership of the organization or that of the job, nor do the two groups differ in the emphasis they place on corporate entrepreneurship. Family involvement and nepotism mitigate this relationship, but only for nonfamily TMT members. These results help reconcile discrepant findings for family versus nonfamily TMT members' agency and stewardship behaviors.

## Keywords

psychological ownership of the organization, psychological ownership of the job, corporate entrepreneurship, family involvement, nepotism, agency theory, stewardship theory

## Introduction

I hope that you will work hard for Alpha (pseudonym of a company) as though you were an owner of this company. But you should keep in mind that I am the owner of Alpha Group.

The above quotation is from informal remarks made by the CEO and owner of Alpha during a reception to welcome new employees. Although family-controlled companies account for 75.1% of publicly traded companies in Korea (Park & Lee, 2012), ironically, owners tend to highlight the importance of employees' *psychological ownership*, which is “the state in which an individual feels that an object (i.e., material or immaterial) is experienced possessively” (Van Dyne & Pierce, 2004, p. 442). Owners believe that if employees have *psychological ownership* of the organization, even without *legal and/or financial ownership*, they will work harder

to ensure the firm's prosperity. A growing body of research has shed light on ownership as a psychological phenomenon (e.g., Avey, Avolio, Crossley, & Luthans, 2009; Liu, Wang, Hui, & Lee, 2012; Pierce, Kostova, & Dirks, 2001). For instance, O'Reilly (2002) argues that “when managers talk about ownership, what they typically want to instill is not financial ownership but psychological ownership” (p. 19). This line of research has examined whether psychological ownership of the organization can shape employees' positive attitudes and

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behaviors and whether appropriate practices help build psychological ownership (Avey et al., 2009; O'Driscoll, Pierce, & Coghlan, 2006; Van Dyne & Pierce, 2004). This stream of research raises several issues that are of interest to mainstream family business research.

First, legal and/or financial ownership may be one of the critical factors that researchers have assumed when they dichotomize family and nonfamily top management team (TMT) members into stewards and agents, respectively (Arthurs & Busenitz, 2003; Corbetta & Salvato, 2004; Eddleston, Kellermanns, & Zellweger, 2012). However, recent studies (e.g., De Massis, Frattini, & Lichtenthaler, 2013; James, Jennings, & Jennings, 2017) have reported mixed results with respect to family and nonfamily members' agency and stewardship behaviors based on such dichotomization, and researchers have questioned the validity of such assumptions. Thus, it is reasonable to propose the following question: Do family members have higher levels of psychological ownership of the organization than nonfamily members? Answering this question expands our understanding of psychological ownership as a continuous rather than a dichotomous construct and thus supports researchers' efforts to reconcile the agency and stewardship perspectives in family business research (Le Breton-Miller, Miller, & Lester, 2011; Schulze, Lubatkin, & Dino, 2003).

Second, researchers have found that legal and/or financial ownership may differentiate top-level managers' agency or stewardship behaviors, which may in turn affect organizational performance (e.g., James, 2006; Miller, Le Breton-Miller, & Lester, 2013). In a similar vein, we expect that TMT members' psychological ownership of the organization may contribute to organizational performance (Sieger, Zellweger, & Aquino, 2013). Furthermore, as TMT members invest time and effort in their organizations and also in their jobs for a long period, they may build their identities based on both the organization and the job (Hernandez, 2012; Pierce, Jussila, & Cummings, 2009; Ramos, Man, Mustafa, & Ng, 2014). If nonfamily TMT members are less likely to have psychological ownership of the organization because of the lack of legal and/or financial ownership but are more likely to have psychological ownership of the job, do the two types of psychological ownership differently determine family and nonfamily TMT members' contributions to organizational outcomes, and if so, how does this occur?

This study seeks to investigate the impact of psychological ownership of organization and job on *corporate entrepreneurship* (CE) for family and nonfamily TMT members. CE involves a firm's entrepreneurial activities, such as innovation, venturing, and strategic renewal (Zahra, 1996), and it requires TMT members' participation (e.g., Kroll, Walters, & Le, 2007; Phan, Wright, Ucbasaran, & Tan, 2009; Zahra, Neubaum, & Huse, 2000) in stewardship activities (e.g., Eddleston, Chrisman, Steier, & Chua, 2010; Memili, Misra, Chang, & Chrisman, 2013). More specifically, although CE enhances a firm's longevity (Kroll et al., 2007; Zahra et al., 2000), it requires that TMT members engage in ambiguous tasks and assume higher risks associated with innovation (Hornsby, Kuratko, & Zahra, 2002). Because of the conflicting nature of CE (increased firm survival but also increased employment risk), agency scholars have highlighted the role of TMT members' risk taking, whereas stewardship researchers have emphasized collective goal pursuit in the implementation of CE. Hence, CE may be an appropriate organizational outcome where both agency and stewardship theories are at play. Considering the aforementioned paradoxical situations that TMT members confront, we expect that when they act as agents, their motivations to pursue CE are driven mainly by self-interest (e.g., Kroll et al., 2007; Phan et al., 2009; Zahra et al., 2000); however, when they act as stewards, they are particularly motivated by organizational goals (Chrisman, Chua, Pearson, & Barnett, 2012; Eddleston et al., 2012).

This research contributes to recent family business research that attempts to reconcile the agency and stewardship perspectives by identifying the roles of family and nonfamily TMT members' psychological ownership in enhancing organizational sustainability and by revealing the duality of TMT members' roles as both agents and stewards. Particularly, upper echelon theory explains that an organization's performance, in part, depends on its TMT members' attributes (Hambrick & Mason, 1984). Thus, psychological ownership may explain the reasons why some organizations are more likely to effectively implement CE than others. Furthermore—as more recently, Madison, Holt, Kellermanns, and Ranft (2016) identified the inaccurate behavioral assumptions of managers as agents, stewards, or both, and as Madison, Kellermanns, and Munyon (2017) found that employees' agent and stewardship behaviors are behavioral outcomes of agency and stewardship governance,

respectively—this study may contribute to understanding family and nonfamily TMT members' agent and stewardship *motivations* while reconciling agency and stewardship theories that have been independently employed in family business research. This study also has implications for researchers and family business owners, providing a better understanding of how family-oriented organizational practices create contexts that may differently affect family and nonfamily members. Finally, the study contributes to the psychological ownership literature by extending the target of ownership from organizations to jobs while comparing its roles in enhancing CE between family and nonfamily TMT members.

## Psychological Ownership and Corporate Entrepreneurship

### *Theoretical Explanations for TMT Members' CE Behaviors*

CE is defined as the entrepreneurial activities that occur within an organization (Zahra, 1996). Organizations are likely to continuously pursue CE because it has the potential to contribute to a firm's competitive advantage, which can in turn ensure the growth of the firm's enterprise value (Phan et al., 2009). However, CE also poses risks and uncertainties that can undermine a company's success and value (Zahra et al., 2000). For instance, new product success rates are lower than 20% (Crawford, 1987), and 70% of international ventures fail (Geringer & Hebert, 1991). TMT members who thrust their firms into new international markets have to confront the market and governmental uncertainties of the markets (Acs, Morck, Shaver, & Yeung, 1997). Considering CE's dual nature, TMT members are likely to shoulder much of the responsibility for the implementation of a CE strategy (Ireland, Covin, & Kuratko, 2009). For instance, they must identify new opportunities, develop and diffuse entrepreneurial strategic visions (Ireland et al., 2009), and build an appropriate organizational culture that can support the implementation of CE (Dess, Lumpkin, & McKee, 1999; Kuratko, Montagno, & Hornsby, 1990).

Family business researchers have employed agency (e.g., Hayton, 2005; Kroll et al., 2007; Phan et al., 2009) and stewardship (e.g., Chrisman et al., 2012; Eddleston et al., 2012) theories to explain family and nonfamily

TMT members' motivations to engage in CE. These researchers dichotomously consider family and nonfamily members as stewards and agents, respectively, based on their level of legal and/or financial ownership. Both agency theory and stewardship theory commonly highlight the role of legal/financial ownership in understanding individuals' behaviors in organizations (Arthurs & Busenitz, 2003), although the two theories posit different mechanisms through which ownership can contribute to organizational performance. Researchers have argued that "being an owner" or "having ownership" stems from individuals' basic need for control and the ability to influence their environment as a result of their actions (McIntyre, Srivastava, & Fuller, 2009).

Agency theorists emphasize that because individuals are self-interested, conflict of interest and misalignment of goals occur between principals and agents in organizations (Eisenhardt, 1989). Owner-managed firms have insignificant agency costs because of the absence of conflict of interest (Fama & Jensen, 1983). As such, while considering nonfamily managers as agents, researchers underscore the importance of goal alignment between managers and owners to maximize organizational performance (Jensen & Murphy, 1990; Miller & Le Breton-Miller, 2006). In contrast, stewardship theorists argue that individuals act to attain organizational objectives and show self-actualizing behavior (Corbetta & Salvato, 2004; Henssen, Voordeckers, Lambrechts, & Koironen, 2014). They assume that because family members tend to strongly identify with their organization, they are likely to act as farsighted stewards of their businesses, to be willing to make sacrifices, and to invest in making the firm sustainable (James, 2006).

As CE may pose risks and offer benefits to organizations and as TMT members are likely to take responsibility for CE strategies, they often shirk responsibilities (Jensen & Meckling, 1976) and/or become risk averse and pursue suboptimal decisions (Meulbroek, 2001). This behavior may arise particularly among nonfamily TMT members because CE failure may be tied to personal risk to them and because they do not have the ability to hedge their personal risk (Hayton, 2005; Meulbroek, 2001). Thus, while viewing nonfamily members as agents, scholars (e.g., Balkin, Markman, & Gomez-Mejia, 2000; Hayton, 2005) state that firms must design compensation systems that can cover the personal risks related to CE. However, researchers have

also posited that nonfamily managers may also act as stewards and exert efforts in innovation activities to attain organizational goals (cf. Tabor, Chrisman, Madison, & Vardaman, 2018).

With regard to family members, although researchers view family members as stewards, they note that they may be more risk averse than their nonfamily counterparts because family members tend to have their wealth concentrated in the firm (McConaughy, Matthews, & Fialko, 2001). However, research findings do not strongly support this argument (Gomez-Mejia et al., 2014). Researchers whose work is based on behavioral agency theory attribute these results in part to socio-emotional wealth, which refers to the “non-financial aspects of the firm that meet the family’s affective needs, such as identity, the ability to exercise family influence, and the perpetuation of the family dynasty” (Gómez-Mejía, Haynes, Núñez-Nickel, Jacobson, & Moyano-Fuentes, 2007, p. 107). These researchers argue that decisions in family firms are made with socio-emotional wealth preservation as the key point of reference and family owners may choose strategic actions that can lead to financial losses if the decision results in the preservation of the family’s control over the firm (Gomez-Mejia et al., 2014).

The above review demonstrates that although researchers have traditionally assumed family members to be stewards and nonfamily members to be agents (cf. James et al., 2017), their findings strongly suggest that family and nonfamily TMT members may exhibit both agent and steward motivations and behaviors (Madison et al., 2016). That is, both groups may pursue personal and family welfare as well as organizational welfare while implementing CE. Thus, reconciling the traditional approaches, we make the following baseline assumption:

**Assumption 1:** Family and nonfamily TMT members have both agent and steward motivations. However, nonfamily TMT members are relatively more likely to think and act as agents, whereas family TMT members are more likely to think and act as stewards.

### *Theoretical Explanations of Psychological Ownership*

Employees perceive ownership targets as extensions of the self because the targets are deeply rooted within

their self-identity (Belk, 1988; Dittmar, 1992). Thus, they are likely to engage in marking or defending their territories to identify possessions as extensions of themselves (G. Brown, Crossley, & Robinson, 2014). Researchers consider that personal identification through psychological ownership is an intrinsic motivator that drives desirable behaviors for organizations that are not prescribed by specific jobs (Avey et al., 2009). Hence, psychological ownership of the organization can motivate individuals to engage in organizational commitment, stewardship behaviors, personal risk taking, and sacrifice (e.g., Mayhew, Ashkanasy, Bramble, & Gardner, 2007; Pierce et al., 2001, 2009). Interestingly, these attitudinal and behavioral outcomes have long been recognized as antecedents of individuals’ innovation activities (Miller & Breton-Miller, 2006; Ng, Feldman, & Lam, 2010) and CE participation (Kellermanns, Eddleston, & Zellweger, 2012).

Psychological ownership research can expand our understanding of (non)family TMT members’ motivation to contribute to CE. Two recent studies have proposed opposing theoretical mechanisms to explain how psychological ownership may influence organizational outcomes. Borrowing the traditional assumption of agency theory and prior studies that principals are more willing to exhibit entrepreneurial behavior and innovation than agents (Hill & Snell, 1989), Sieger et al. (2013) argue that psychological ownership of the organization may transform agents into psychological principals. More specifically, the authors state that “psychological ownership basically retains agency theory’s assumption of the self-interested manager, whereas the non-economic functions of ownership . . . align the interests of agents and principals” (p. 366). They further reason that psychological ownership can induce managers’ responsibility and empowerment perception and increase the need for control. These mechanisms may lead managers to invest great energy into targets, take greater personal risks, and pursue creativity and innovation. Based on the above, Sieger et al. identify the impact of psychological ownership of the organization on a firm-level outcome through entrepreneurial behaviors.

Unlike Sieger et al. (2013), Hernandez (2012) explains employees’ psychological ownership of the organization based on stewardship theory. Hernandez states that when employees perceive psychological ownership of the organization, their cognitive focus and emotional attachment to the organization are channeled through an internalized desire to personally act

in protection of collective interests and to subjugate their own interests to ensure the ongoing welfare of the organization. Of particular interest is that Hernandez expands the ownership targets, asserting that employees' cognitive construal of and affective connection to their beneficiaries tend to determine the ownership target and what they are motivated to protect. Based on the case of United Airlines' 2002 bankruptcy filing, the author suggests that employees are willing to subjugate their own interests and show stewardship behaviors such as sacrifice and changes in work rules because of their cognitive focus and emotional attachment to their jobs as well as to the organization.

These explanations indicate that psychological ownership of the organization and that of the job motivate TMT members to engage in territorial behavior, which can be related to pursuing organizational continuity and sustaining a competitive advantage. That is, psychological ownership of the organization and of the job has the potential to motivate TMT members to align the interests between agents and principals (Sieger et al., 2013) and pursue collective objectives (Hernandez, 2012), which may in turn contribute to CE. Thus, we make the second baseline assumption:

**Assumption 2:** Both psychological ownership of the organization and that of the job positively influence CE.

Although we considered Sieger et al.'s (2013) and Hernandez's (2012) arguments to arrive at the second assumption, there are theoretical points to be clarified in the two studies. Although Sieger et al. (2013) employ agency theory, the authors argue that identification with an organization—a key underlying factor in stewardship theory—would be a critical driver that facilitates employees' entrepreneurial behaviors. Thus, we posit that psychological ownership of the organization is a major source of stewardship motivation. This reasoning is in line with prior studies that suggest that organizations become an extension of steward employees' psychological structure through organizational identification (M. E. Brown, 1969). This identification allows managers to vicariously take credit for organizational successes and to experience frustration for failures (Davis, Schoorman, & Donaldson, 1997).

Hernandez (2012) argues that stewardship behaviors may be motivated by psychological ownership of the job

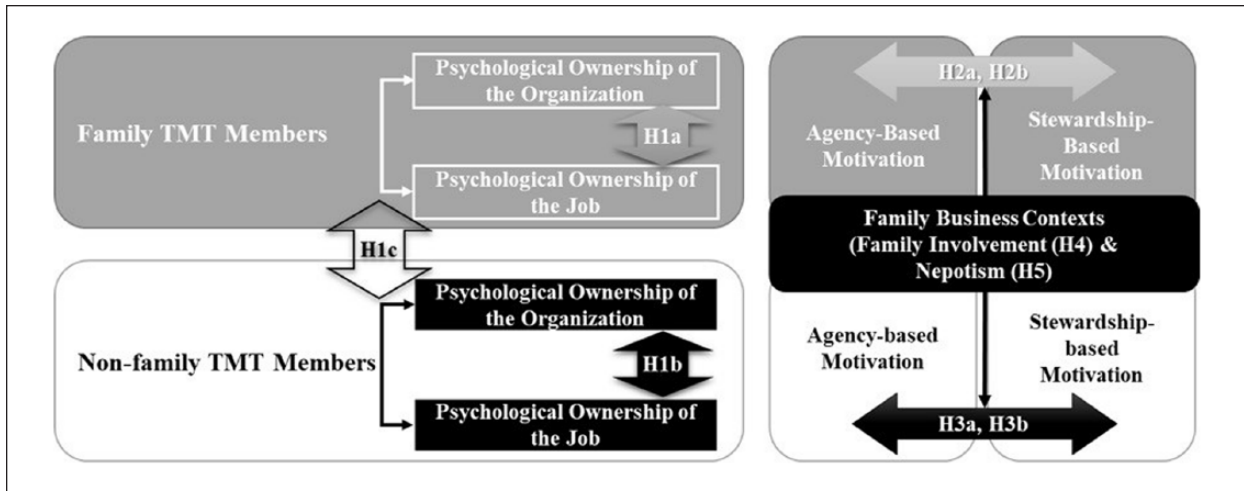
because employees perceive that the beneficiary of their stewardship behaviors is their job. However, this reasoning is contradicted by numerous agency-based researchers who argue that job security is one of the major reasons why employees, particularly executives, are reluctant to engage in risky projects (Wright, Ferris, Sarin, & Awasthi, 1996; Zahra et al., 2000). Thus, we posit that psychological ownership of the job may be a source of agency motivation, as individuals can fulfill their self-interest by aligning their interests with organizational goals rather than pursuing collective goals without self-interested extrinsic rewards, as assumed by stewardship theory (Hayton, 2005).

These delineations are in line with recent studies of psychological ownership (G. Brown et al., 2014; Pierce et al., 2009; Ramos et al., 2014) suggesting that individuals who possess high levels of psychological ownership of the job tend to show extra-role behaviors that focus more on job-related activities, such as looking after their work environment and helping colleagues with specific aspects of their own work. In contrast, individuals with high levels of psychological ownership of the organization may be more inclined to exhibit behaviors that serve to promote the welfare of the organization more broadly. Useful analogies are professionalism (Aranya & Ferris, 1984) and careerism (Gupta & Bailey, 2001). That is, when employees experience conflict between the values pervasive to professional communities and those in organizations, they are more likely to follow professional values (Aranya & Ferris, 1984). In addition, employees tend to focus more on labor market value-enhancing performance, even when it may conflict with shareholder interests (Gupta & Bailey, 2001). By adopting this attitude, employees can pursue boundary-less careers, that is, careers outside the current organization (Sommerlund & Boutaiba, 2007). Thus, we make the following assumption:

**Assumption 3:** Psychological ownership of the organization is more closely related to organizational collective goal pursuits, whereas psychological ownership of the job is more closely related to self-interested individualistic goal pursuits.

## Hypotheses

Figure 1 shows the research model of this study. Having articulated the above assumptions, we present a hypothesis



**Figure 1.** Research model.

that examines the assumptions about family and nonfamily TMT members' psychological ownership (Hypothesis 1). We then develop competing hypotheses to explore the differences in the roles of psychological ownership as they relate to CE between family and nonfamily TMT members (Hypotheses 2 and 3). We believe that competing hypotheses are appropriate when the hypothesized relationships could be explained in different ways by divergent streams of research. Finally, we specify the asymmetric responses of nonfamily versus family TMT members to two different family governance contexts (Hypotheses 4 and 5).

Following the literature on family business and psychological ownership, we assume that although family and nonfamily TMT members tend to have both agency- and stewardship-based motivations; family TMT members are more likely to behave as stewards, whereas nonfamily TMT members are more likely to behave as agents (Assumption 1). We also assume that psychological ownership of the organization may reflect an emphasis on organizational goal pursuits, whereas psychological ownership of the job may reflect individualistic goal pursuits (Assumption 3). Thus, family TMT members as stewards may be more likely to pursue collectivistic organizational goals and thus have higher levels of psychological ownership of the organization. However, nonfamily TMT members as agents may focus more on their self-interest and thus may have higher levels of psychological ownership of the job. This argument is similar to Ramos et al.'s (2014) finding suggesting that as compared with family employees,

nonfamily employees are more likely to perceive psychological ownership of the job but not psychological ownership of the organization. Furthermore, previous studies have suggested that the interests of family TMT members who act as stewards may be more likely to be aligned with organizational interests (Davis et al., 1997) than the interests of nonfamily TMT members who act as agents. Therefore, we propose the following hypotheses:

**Hypothesis 1a:** Family TMT members have higher levels of psychological ownership of the organization than nonfamily TMT members.

**Hypothesis 1b:** Nonfamily TMT members have higher levels of psychological ownership of the job than family TMT members.

**Hypothesis 1c:** The relationship between psychological ownership of the organization and that of the job is stronger for family TMT members than for nonfamily TMT members.

If family TMT members behave as stewards (James et al., 2017), they are more likely to identify themselves with their firms (Anderson & Reeb, 2003) and make decisions in their organization's best interest (Davis et al., 1997). These attitudes and behaviors seem to be similar to those shown by individuals with high levels of psychological ownership of the organization. Organizational goal pursuits may be interpreted as territorial behaviors to sustain one's own targets (Pierce et al., 2001). In a similar

vein, family business studies have emphasized that the family's psychological ownership of the firm (Corbetta & Salvato, 2004) and its shared sense of responsibility toward the firm (Eddleston & Kellermanns, 2007) can facilitate stewardship-based decision making in innovation processes. Hence, for TMT members who function as stewards, psychological ownership of the organization may positively influence CE.

Family TMT members may also act as agents and be motivated to implement CE to sustain their family wealth by controlling their positions and jobs. In a similar vein, Gomez-Mejia et al. (2014) note that family members in making research and development (R&D) decisions are likely to consider their socio-emotional wealth, which is closely associated with the unrestricted exercise of the positional authority vested in family members (Jones, Makri, & Gómez-Mejía, 2008; Schulze et al., 2003). Similar to the consideration of socioemotional wealth, family TMT members' psychological ownership of the job may contribute to CE, which is necessary for the sustainability of their jobs. Although the explanations indicate that both psychological ownership of the organization and that of the job may influence CE, if family TMT members act more like stewards (agents), psychological ownership of the organization (that of the job) may more strongly influence CE. Hence, we propose the following juxtaposed hypotheses:

**Hypothesis 2a:** For family TMT members, psychological ownership of the organization has a stronger positive relationship with CE than psychological ownership of the job.

**Hypothesis 2b:** For family TMT members, psychological ownership of the job has a stronger positive relationship with CE than psychological ownership of the organization.

Nonfamily TMT members as stewards may be strongly identified with their organization (Vallejo, 2009), which is manifested in psychological ownership of the organization. Researchers have similarly identified that nonfamily TMT members are likely to have stewardship-based motivations even in family businesses (James et al., 2017; Vallejo, 2009). That is, when nonfamily TMT members have psychological ownership of the organization, as stewards, they pursue organizational goals (Henssen et al., 2014) and are motivated

to maximize organizational performance (i.e., sales growth, profitability, innovation) (Davis et al., 1997). This argument is also supported by Vallejo's (2009) finding that nonfamily TMT members' identification with the organization is positively related to organizational profitability and survival. Thus, if nonfamily TMT members act as stewards, their psychological ownership of the organization is more likely to positively influence CE.

If nonfamily TMT members are more likely to behave as agents, they are more likely to engage in self-interested goals (Jensen & Murphy, 1990; Miller & Le Breton-Miller, 2006). Notwithstanding its importance for firm survival, CE involves high levels of risk and uncertainty, which can threaten nonfamily TMT members' job security and positions (Hornsby et al., 2002; Zahra et al., 2000). In such contexts, individual agents may be risk averse relative to principals because of their identification with their jobs (Pierce et al., 2009) and as a result of their inability to diversify personal risk (Eisenhardt, 1989). Nonfamily TMT members as agents may be more likely to behave opportunistically by supporting projects that can ensure their job security (Zahra et al., 2000) and salaried position (cf. Fama & Jensen, 1983). In a similar vein, Wright et al. (1996) identified that investments in new ventures tend to escalate nonfamily managers' personal costs as they must learn new skills or manage new uncertainties, both of which can intensify executives' anxieties about the pursuit of CE. In short, psychological ownership of the job may discourage nonfamily TMT members from contributing to CE projects that may put their salaried positions in jeopardy. However, because CE can increase firm performance and long-term survival, which may in turn increase the value and sustainability of their jobs, as Hernandez (2012) found in the United Airlines case, nonfamily TMT members may pursue CE to sustain their jobs. In sum, if nonfamily TMT members act as agents, psychological ownership of the job may influence CE in mixed (positive and negative) ways. That is, its negative influence on CE may be offset by the positive effect. Hence, we propose the following juxtaposed hypotheses:

**Hypothesis 3a:** For nonfamily TMT members, psychological ownership of the organization has a stronger positive relationship with CE than psychological ownership of the job.

**Hypothesis 3b:** For nonfamily TMT members, psychological ownership of the job does not have a stronger positive relationship with CE than psychological ownership of the organization.

### *Moderating Roles of Family Involvement and Nepotism*

Family involvement and nepotism are common management practices leveraged by family members to perpetuate their control over the firm and/or pass the leadership on to the next generation (Chrisman et al., 2012). Family involvement refers to the level of family participation in a firm's strategic decisions (Zahra, 2003). Nepotism is the human resource (HR) practice of placing one's relatives in higher-level positions and favoring family members' opinions while ignoring the opinions of others (Jaskiewicz, Uhlenbruck, Balkin, & Reay, 2013). We should note that although family involvement may be closely related to nepotism, family goals served by nepotistic behaviors (e.g., succession to the next generation) differ across organizations. Researchers have identified that the two management practices can impose *agency governance* experiences on nonfamily employees in family businesses (e.g., Corbetta & Salvato, 2004; Schulze et al., 2003; Steier & Ward, 2006). They reason that the two practices can cause nonfamily managers to feel that they are being monitored by family members and remunerated by performance-based incentives (James et al., 2017).

James et al. (2017) suggested that as family (nonfamily) managers are more likely to have stewardship-based (agency-based) motivations, agency (stewardship) governance mechanisms may make them experience misalignment between governance and motivation—although their findings seem to provide mixed support. Adopting James et al.'s arguments to this research context, we expect that family involvement and nepotism may influence the role of nonfamily TMT members' psychological ownership of the organization in implementing CE. That is, although the two groups of TMT members (family and nonfamily) may simultaneously have both stewardship and agency motivations, nonfamily TMT members may have unique responses to family involvement and nepotism for the following reasons.

As family members may believe that family involvement and nepotism are needed to sustain their family goals (Chrisman et al., 2012) and protect socio-emotional

wealth (Gomez-Mejia et al., 2014), they may be less sensitive to the experience of such governance issues. Furthermore, individuals tend to engage in changing the status of their ownership targets when such changes are initiated by themselves and reinforce their need for control and self-enhancement (Pierce et al., 2001). In an organization in which family involvement and nepotism are salient, family members tend to make decisions about resource investments and new business formation (Schulze et al., 2003). Family members expect to fortify their job and position, as well as their organization, through their strong participation when CE is successful. Thus, the influences of psychological ownership of the organization and of the job on CE may remain intact under family involvement and nepotism for family TMT members.

Family involvement is more likely to provoke changes in nonfamily TMT members' attitudes and motivations. As stewardship-based motivations are manifested in psychological ownership of the organization (Hernandez, 2012), nonfamily TMT members' agency governance experiences stemming from family involvement may curb stewardship-based motivations (James et al., 2017). Furthermore, nonfamily TMT members may focus more on maintaining an acceptable level of short-term performance because of their agency governance experiences. This short-term perspective can lead nonfamily TMT members to withhold investment in new entrepreneurial activities and overlook new business opportunities (Zahra et al., 2000). Additionally, in an organization where family involvement is salient, family TMT members tend to initiate CE (Daily & Dollinger, 1991) but nonfamily TMT members have fewer opportunities to voice their opinions (Webb, Ketchen, & Ireland, 2010). That is, family involvement may provide nonfamily TMT members with organizational contexts that are in opposition to stewardship-oriented organizational practices such as empowerment (Davis et al., 1997) and self-enhancement (Pierce et al., 2001). Thus, the influence of psychological ownership of the organization on CE may be reduced in organizations in which family involvement is high. However, because psychological ownership of the job is related to agency-based motivation, nonfamily TMT members may be less likely to experience misalignment between governance and motivation mechanisms. Thus, because of the absence of misalignment perception among nonfamily TMT members, the influence of psychological



ownership of the job on CE may be intact in organizations in which family involvement is high. This argument is, in part, in line with Madison et al.'s (2017) finding that agency governance mitigates employees' destructive agency behaviors and stewardship governance increases stewardship behaviors. In sum, we expect that family involvement may negatively intervene in the relationship of psychological ownership of the organization (but not psychological ownership of the job) with CE only for nonfamily TMT members (but not for family TMT members). Formally, we propose the following:

**Hypothesis 4:** Family involvement negatively moderates the relationship between psychological ownership of the organization and CE only for nonfamily TMT members, such that the relationship between psychological ownership of the organization and CE is weaker when family involvement is high. However, family involvement does not moderate the relationship between psychological ownership of the job and CE for both family and nonfamily TMT members.

As nonfamily TMT members with high levels of psychological ownership of the organization are more likely to be stewardship oriented (Hernandez, 2012), nepotistic HR practices may lead them to perceive a misalignment between their governance experience and motivation mechanisms. In a nepotistic organization, an owner assigns a position to a family member without considering nonfamily candidates (Webb et al., 2010). Nonfamily members may perceive that the promotions of family members are the result of a birthright that nonfamily members cannot possess (Jaskiewicz et al., 2013). This class inequality triggers a frustration mechanism of status anxiety, which can lead to a continuous identity crisis (Berger & Luckmann, 1963). Considering that individuals with high levels of psychological ownership of the organization tend to exhibit stewardship behaviors stemming from their identification with the organization, their perception of inequality may diminish their stewardship behaviors and workplace support (Verbeke & Kano, 2010). In a similar vein, Welsh, Memili, Rosplock, Roure, and Segurado (2013) found that nepotism can impede nonfamily members' stewardship behaviors. Hence, we expect that nepotism may reduce the role of psychological ownership of the organization in implementing CE among nonfamily TMT members.

As nonfamily TMT members with high levels of psychological ownership of the job are more likely to be agency oriented, they may be less likely to experience misalignment between governance and motivation. As a result, because of the absence of misalignment perception, for nonfamily TMT members, the influence of psychological ownership of the job on CE may be intact. In sum, we expect that nepotism may negatively intervene in the relationship of psychological ownership of the organization (but not psychological ownership of the job) with CE only for nonfamily TMT members (but not for family TMT members). Formally, we propose the following:

**Hypothesis 5:** Nepotism negatively moderates the relationship between psychological ownership of the organization and CE only for nonfamily TMT members, such that the relationship between psychological ownership of the organization and CE is weaker when nepotism is high. However, nepotism does not moderate the relationship between psychological ownership of the job and CE for both family and nonfamily TMT members.

## Methods

We collected survey data from member firms of a regional chamber of commerce in a metropolitan city in Korea. This organization is one of the largest representative associations of firms that operate in a wide range of industries in South Korea, and it is characterized by member firms with considerable variations in competitive dynamics and profitability. We explained to the chamber that the questionnaire data were part of a larger research project on the role of TMTs in innovation performance enhancement. The chamber sent a request to member firms to allow us to access their TMT members to complete the questionnaire. For this study, a family business was defined as a firm that is owned, managed, or controlled by more than one family member (Hollander & Elman, 1988). We asked the respondents whether they were a family TMT member and how many family TMT members were working in their company. If the respondent was a family member or indicated that at least one family TMT member was working for the organization, we considered the respondent's firm to be a family business.

Following the invitation from the chamber, 96 firms agreed to participate in the survey, yielding a response

rate of 5.9% (the number of participating firms/the total number of member firms in the chamber). One author and his assistants made appointments with the TMT members of the organizations and visited all the firms that agreed to participate in the survey. We asked each TMT member to invite other eligible TMT members of his or her firm. We solicited multiple TMT members in each company to evaluate TMT members' psychological ownership of the job and of the organization, to identify differences in psychological ownership between family and nonfamily TMT members in a field setting, and to reduce single-respondent bias for organization-level research constructs such as CE and nepotism. We obtained usable responses from a total of 192 TMT members (92 family members and 100 nonfamily members) representing 90 firms (2–4 responses per firm—on average, 2.13 responses per firm). The response rate was 94% (90 firms for which multiple TMT members completed the survey/96 firms that agreed to participate). We aggregated the responses for each company after determining that their consistency was satisfactory, as reported below.

In our sample, 82% ( $n = 192$ ) of the respondents were men. The respondents' functional areas were sales and marketing (36%), finance (7%), HR (11%), information systems (4%), operations management (40%), and others (3%). With regard to the respondents' age, 29% were younger than 40 years, and 65% were between 41 and 55 years. In terms of education and tenure, 95% of the respondents had an educational background above college level, and 72% had worked for the current organization for more than 10 years. The firms represented various industry sectors, such as electronics ( $n = 11$ ), machinery and equipment (14), motor vehicles (9), chemicals (10), and pharmaceuticals (11). With regard to organizational size, 3 firms had fewer than 10 employees, 23 had between 10 and 49, 21 had between 50 and 99, 22 had between 100 and 299, 16 had between 300 and 999, and the remaining firms had more than 1,000 employees. On average, R&D investment (measured as the rate of overall profit) was 0.23 (23%) (standard deviation = 0.15).

## Measures

We employed measures published in previous studies. We followed Brislin's (1970) guidelines to assess the equivalence of English and Korean items. We asked the

participants to respond based on their overall working experience in their current organization. The constructs were calculated as the mean of their constituent items after identifying reliability and validity. All the items used for the constructs in this study (except family involvement) were assessed using Likert-type scales in which 1 represented *strongly disagree* and 7 represented *strongly agree*. The final items are included in the online supplementary file.

We employed the data from the responses of the family and nonfamily TMT members to measure their psychological ownership of the organization and of the job. We adopted the scale developed by Pierce, Van Dyne, and Cummings (1992) to measure psychological ownership of the organization ( $\alpha = .93$ ). Of the seven items, five were used for the analysis owing to reliability concerns. We adopted the scale developed by Mayhew et al. (2007) to assess psychological ownership of the job ( $\alpha = .93$ ), which is a modified version of Pierce et al.'s (1992) organization-based psychological ownership scale.

Unlike the above two variables, we aggregated family and nonfamily TMT members' responses to measure family involvement, nepotism, and CE because these variables represent organizational characteristics and thus individual members' responses are more likely to be biased. For these three constructs, we averaged family and nonfamily TMT members' responses per firm. We adopted Abdalla, Maghrabi, and Raggad's (1998) scale ( $\alpha = .90$ ) to measure nepotism in the current organization. We adopted Zahra's (2003) measure to assess the level of family involvement ( $\alpha = .99$ ). To assess the construct validity and mitigate the possible limitations of a perceptual measure, we examined the correlation between the perceptual measure of family involvement and the number of family TMT members (Ward & Handy, 1988). The correlation was high and significant ( $r = 0.50, p < .05$ ). Hence, we concluded that this measure represents family involvement fairly well.

We used Zahra's (1996) 14-item scale, which broadly measures a firm's CE activities on three dimensions: innovation, venturing, and strategic renewal. While considering CE as a single, unidimensional construct, we included 7 items in the analysis because of reliability and validity issues ( $\alpha = .96$ ). More specifically, certain items significantly reduced the reliability of the constructs, whereas others were not significantly loaded onto their constructs or cross-loaded. Similar to Simsek and Heavey (2011), we believed that the deleted items

(e.g., divesting several unprofitable business units, changing the competitive approaches for each different business unit, acquiring many companies in very different industries, and entering many new industries) were less relevant to small- and medium-sized enterprises' (SMEs') CE activities, because we collected responses mainly from SMEs that experience lack of resources and capabilities.

We employed industry sector, organization size (measured as the natural logarithm of the number of employees), and R&D intensity (measured as R&D investment divided by overall profit) as covariates because these variables have been shown to influence CE (e.g., De Massis et al., 2013). We also used the respondent's status (i.e., only nonfamily member responses = 0, family and nonfamily member mixed responses = 1, only family member responses = 2) as a covariate because family governance has been found to influence R&D investment and organizational performance (De Massis et al., 2013).

### Response Aggregation

We aggregated the responses collected from multiple TMT members of each organization to measure CE, family involvement, and nepotism. We examined the statistical validity of aggregating multiple responses. The median ICC(1) (interclass correlation coefficient) value of the three constructs was 0.57, which is higher than the suggested median value of 0.12 reported by James (1982). The mean  $r_{wg}$  of the scales was 0.73, which meets the recommended value of 0.70 (e.g., Chen, Bliese, & Mathieu, 2005) and justifies aggregation at the organizational level.

### Examination of Bias

To examine the effect of common-method variances, we created a new data set. Rather than employing the aggregated responses for CE, we used the response from a randomly selected TMT member of each organization and employed the single response to measure CE. Then, we conducted an analysis and compared the results with those generated by the original data set. These analyses did not yield different results that could affect the acceptance of the hypotheses; only the levels of the coefficients were different. Thus, we can conclude that common-method bias is not a concern for the results of

this study (detailed results can be provided on request to the first author). We also conducted Harman's one-factor test (Podsakoff, MacKenzie, Lee, & Podsakoff, 2003) and found that the first factor explained 25.43% of the variance, indicating that no general factor emerged from method bias. We tested nonresponse bias by comparing the ages and sizes of participating and nonparticipating firms in the chamber's database. Analysis of variance results based on the two variables did not indicate that nonresponse bias is a concern in this study given the  $p$  values for the variables ( $p = .32$  for organization age, and  $p = .67$  for organization size).

### Reliability and Validity

We assessed reliability using Cronbach's alpha (Nunnally, 1978). As shown in the previous section, the minimum Cronbach alpha was .90 and the maximum was .99, confirming the reliability of the measures. Validity was tested through confirmatory factor analysis with R. All the items were loaded on predesignated constructs, and all the loadings were significant, with  $p < .01$  for both family and nonfamily TMT members. In terms of the fit indices, the proposed model had values of  $\chi^2 = 566.69$  (degrees of freedom = 327.00,  $p < .01$ ), comparative fit index (CFI) = 0.90, and standardized root mean residual (SRMR) = 0.08 for family TMT members and  $\chi^2 = 633.96$  (degrees of freedom = 378.00,  $p < .01$ ), CFI = 0.90, and SRMR = 0.07 for nonfamily TMT members. These results support the validity of our measures (Bentler & Bonett, 1980).

## Results

We conducted a series of analyses to examine the aforementioned hypotheses. To examine Hypotheses 1a and 1b, we conducted  $t$  tests to compare the perception of psychological ownership of the organization and that of the job between family and nonfamily TMT members. As shown in Table 1, there was no significant difference between family and nonfamily TMT members' psychological ownership of the organization (Mean<sub>family member</sub> = 5.22 vs. Mean<sub>nonfamily member</sub> = 5.07,  $t = 0.96$ ) and psychological ownership of the job (Mean<sub>family member</sub> = 5.46 vs. Mean<sub>nonfamily member</sub> = 5.48,  $t = 0.15$ ). These results do not support Hypotheses 1a and 1b. To test Hypothesis 1c, we compared the correlations between psychological ownership of the organization and that of the job for

**Table 1.** Correlations, Means, and Standard Deviations.

	1	2	3	4	5	6	7	8	9	10	11	12	13
1. Organization size		-0.10	0.16	-0.09	0.04	0.04	0.18	-0.06	0.02	0.01	0.15	-0.25*	-0.01
2. Electrical products (dummy)	-0.14		-0.20*	-0.16	-0.19	-0.22*	0.1	-0.09	0.01	-0.01	0.08	0.08	0.18
3. Machinery and equipment (dummy)	-0.02	-0.26*		-0.11	-0.13	-0.15	0.09	-0.20*	0.20*	0.21*	0.11	-0.01	0.21*
4. Motor vehicles (dummy)	0.13	-0.2	-0.16		-0.1	-0.12	-0.02	-0.06	-0.02	-0.01	0.16	0.30**	-0.04
5. Chemical products (dummy)	0.07	-0.18	-0.15	-0.12		-0.14	0.14	0.22*	0.25*	0.17	-0.17	-0.04	0.15
6. Pharmaceutical products (dummy)	0.04	-0.17	-0.15	-0.11	-0.1		0.26**	0.09	-0.01	-0.14	0.02	0.07	0.16
7. R&D investment (log)	0.34**	0.15	-0.27*	0.15	-0.03	0.17		-0.15	0.32***	0.11	0.15	0.12	0.63***
8. Family member respondents <sup>a</sup> (dummy)	0.44***	0.06	0.03	-0.05	-0.24*	0.18	0.2		-0.13	-0.05	-0.25*	-0.08	-0.23*
9. Psychological ownership of the organization	-0.11	0.21*	-0.22*	0.00	0.11	0.11	0.36***	-0.12		0.49***	0.27**	-0.07	0.52***
10. Psychological ownership of the job	-0.15	0.14	-0.01	-0.13	0.05	0.01	0.15	-0.17	0.65***		0.16	-0.08	0.37***
11. Family involvement	-0.09	0.02	0.05	0.24*	-0.15	0.09	0.19	0.01	0.08	0.08		0.36***	0.35***
12. Nepotism	-0.26*	0.19	-0.13	0.17	0.05	0.05	0.01	-0.08	0.07	0.06	0.27*		0.18
13. Corporate entrepreneurship	0.18	0.29**	-0.14	0.01	0.16	0.06	0.49***	0.00	0.42***	0.40***	0.26*	0.23*	
Family member													
M	2.99	0.23	0.18	0.11	0.10	0.09	1.27	1.47	5.22	5.46	5.10	3.16	5.12
SD	1.10	0.43	0.38	0.32	0.30	0.29	0.35	0.50	1.03	0.95	1.25	0.82	1.05
Nonfamily member													
M	3.39	0.23	0.12	0.08	0.11	0.14	1.25	2.60	5.07	5.48	4.58	3.04	4.81
SD	1.24	0.42	0.33	0.27	0.31	0.35	0.39	0.49	1.13	0.84	1.58	0.84	1.08

Note. The numbers in the upper diagonal represent correlations in a nonfamily member group ( $n = 100$ ), and those below the diagonal indicate correlations in a family member group ( $n = 92$ ). SD = standard deviation; R&D = research and development.

alf at least one of the respondents per company is a family member, we coded 1. If not, we coded 0.

\* $p \leq .1$ . \*\* $p \leq .05$ . \*\*\* $p \leq .01$ .

family and nonfamily TMT members. The results show that the correlation between psychological ownership of the organization and that of the job for family TMT members is 0.65 ( $p \leq .01$ ), whereas that for nonfamily TMT members is 0.49 ( $p < .01$ ). The difference between the two correlations is 0.16, with  $p \leq .1$ . Thus, Hypothesis 1c was marginally accepted. We should also note that post hoc analyses revealed that the level of psychological ownership of the job is not significantly different from that of the organization for family TMT members ( $\text{Mean}_{\text{psychological ownership of the organization}} = 5.22 < \text{Mean}_{\text{psychological ownership of the job}} = 5.46, t = 1.64, p > .1$ ), whereas psychological ownership of the job is greater than that of the organization for nonfamily TMT members ( $\text{Mean}_{\text{psychological ownership of the organization}} = 5.07 < \text{Mean}_{\text{psychological ownership of the job}} = 5.48, t = 2.91, p \leq .01$ ).

We conducted a series of hierarchical regression analyses to investigate the influences of psychological ownership of the organization and of the job on CE. Then, we compared the regression coefficients to test the competing Hypothesis 2a versus 2b and Hypothesis 3a versus 3b. Because psychological ownership of the organization and that of the job are correlated, the two variables were analyzed separately. Additionally, we mean-centered the constructs to reduce multicollinearity when examining the interactions. Table 2 shows the results. The research model has a maximum  $R^2$  of 42% for family TMT members and 56% for nonfamily TMT members, indicating high levels of explanatory power.

As shown in Models 2 through 7 and Models 8 through 14, both psychological ownership of the organization and that of the job positively influence CE for family and nonfamily TMT members. These results directly support Assumption 2, that both types of psychological ownership affect CE. For family TMT members, although CE is influenced by both psychological ownership of the job ( $\beta = 0.31, p \leq .01$ ; Model 5) and psychological ownership of the organization ( $\beta = 0.23, p \leq .05$ ; Model 2), the difference between the two coefficients is not significant ( $t = 0.57$ ). Thus, both Hypotheses 2a and 2b were not accepted. For nonfamily TMT members, CE is influenced by psychological ownership of the organization ( $\beta = 0.29, p \leq .01$ ; Model 9) and psychological ownership of the job ( $\beta = 0.28, p \leq .01$ ; Model 12). The difference is not significant ( $t = 0.09$ ). Thus, Hypothesis 3b was accepted, but Hypothesis 3a was not.

As shown in Models 3 and 10, family involvement negatively moderates the relationship between psychological ownership of the organization and CE for nonfamily TMT members ( $\beta = -0.45, p \leq .1$ ) but not for family TMT members ( $\beta = -0.27$ , nonsignificant). As shown in Figure 2, for nonfamily TMT members when organizations have a low level of family involvement (slope = 1.26,  $p \leq .05$ ), CE increases more sharply as psychological ownership of the organization increases than when organizations have a high level of family involvement (slope =  $-0.54, p \leq .05$ ). Model 10 has an  $R^2$  of .59, which is 5% higher than that of Model 9 ( $\Delta R^2 = 0.05, F = 5.92, p \leq .01$ ). Additionally, as shown in Models 6 and 13, family involvement does not moderate the relationship between psychological ownership of the job and CE for family TMT members ( $\beta = -0.56$ , nonsignificant) and for nonfamily TMT members ( $\beta = -0.54$ , nonsignificant). These results provide support for Hypothesis 4.

As shown in Models 4 and 11, nepotism negatively moderates the relationship between psychological ownership of the organization and CE for nonfamily TMT members ( $\beta = -0.67, p \leq .05$ ) but not for family TMT members ( $\beta = -0.27$ , nonsignificant). As shown in Figure 3, for nonfamily TMT members, when organizations have a low level of nepotism (slope = 1.92,  $p \leq .05$ ), CE increases more sharply as psychological ownership of the organization increases than when organizations have a high level of nepotism (slope =  $-0.76, p \leq .05$ ). Model 11 has an  $R^2$  of 0.56, which is 2% higher than that of Model 8 ( $\Delta R^2 = 0.02, F = 3.06, p \leq .05$ ). Additionally, nepotism does not moderate the relationship between psychological ownership of the job and CE for family TMT members ( $\beta = 0.45$ , nonsignificant) and for nonfamily TMT members ( $\beta = -0.56$ , nonsignificant), as shown in Models 7 and 14. These results provide support for Hypothesis 5.

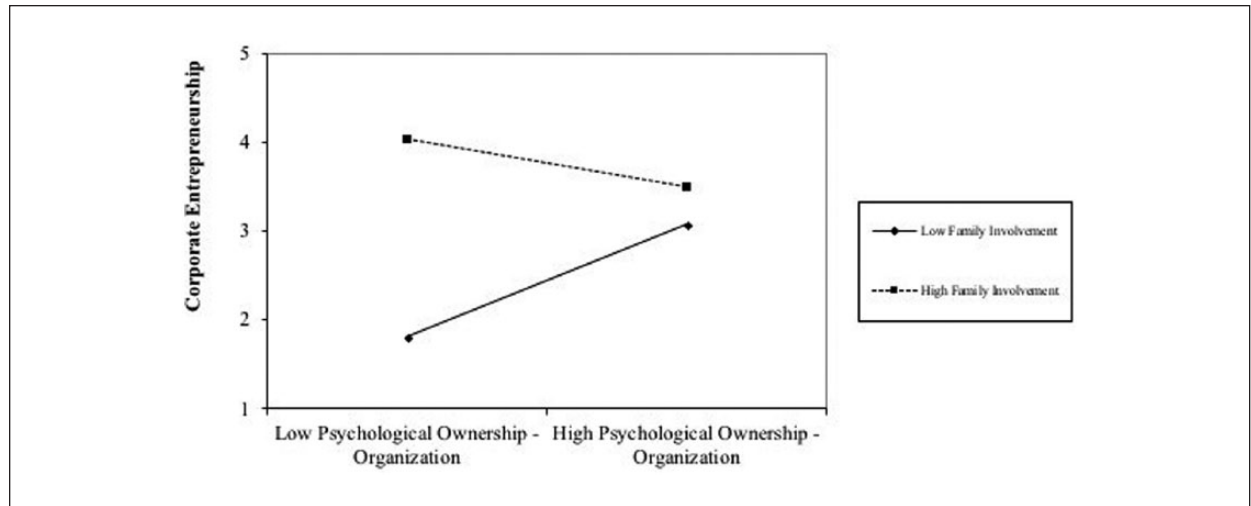
## Discussion

The purpose of this study was to shed light on the following questions. Does family membership differentiate family and nonfamily TMT members' psychological ownership? If so, how does family membership differentiate the role of the two groups' psychological ownership as it relates to CE? In answering these questions, we adopted two types of psychological ownership: psychological

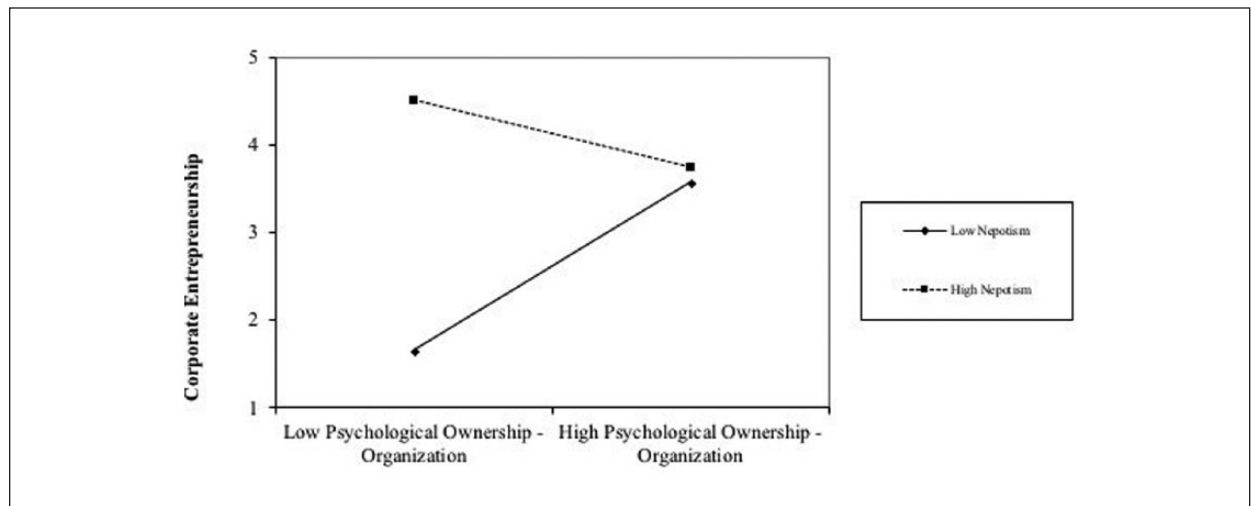
**Table 2.** Regression Results (Dependent Variable: Corporate Entrepreneurship).

	Family members (n = 92)							Nonfamily members (n = 100)						
	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6	Model 7	Model 8	Model 9	Model 10	Model 11	Model 12	Model 13	Model 14
Organization size	0.10	0.15	0.18	0.21	0.14	0.18	0.19	-0.13*	-0.11	-0.13*	-0.07	-0.12*	-0.15**	-0.09
Electrical products	0.36***	0.31***	0.29***	0.26**	0.32***	0.29**	0.26**	0.25**	0.23**	0.20**	0.19**	0.24**	0.19**	0.22**
Machinery and equipment	0.14	0.14	0.09	0.14	0.11	0.06	0.09	0.27**	0.20**	0.20**	0.17**	0.20*	0.19**	0.19**
Motor vehicles	0.06	0.06	-0.01	-0.02	0.10	0.02	0.06	0.06	0.05	0.01	0.00	0.05	0.01	0.01
Chemical products	0.24**	0.20**	0.20**	0.14	0.22**	0.21**	0.21**	0.23**	0.15*	0.17**	0.11	0.18**	0.19**	0.16*
Pharmaceutical products	0.12	0.09	0.07	0.05	0.11	0.08	0.09	0.19**	0.18**	0.16**	0.14*	0.21**	0.18**	0.18*
R&D investment (log)	0.44***	0.35**	0.29**	0.34**	0.36***	0.29***	0.36***	0.50***	0.43***	0.42***	0.41***	0.48***	0.48***	0.48***
Family member respondents (Dummy)	-0.12	-0.10	-0.09	-0.11	-0.07	-0.05	-0.08	-0.15*	-0.12	-0.09	-0.09	-0.15**	-0.10	-0.14
Psychological ownership of the organization (POO)		0.23**	0.23**	0.23**					0.29***	0.18**	0.29***		0.21***	0.27***
Psychological ownership of the job (POJ)					0.31***	0.31***	0.34***					0.28***	0.21***	
Family involvement (FI)			0.48			0.75				0.66**			0.77*	
Nepotism			-0.27	0.48			-0.25				0.76**			0.65
POO x FI										-0.45*				
POO x				-0.27							-0.67**			
Nepotism														
POJ x FI							0.45						-0.54	
POJ x														
Nepotism														
R <sup>2</sup> (adjusted)	0.30	0.33	0.37	0.36	0.38	0.42	0.41	0.47	0.54	0.59	0.56	0.54	0.59	0.57

Note. R&D = research and development.  
 \*p ≤ .1. \*\*p ≤ .05. \*\*\*p ≤ .01.



**Figure 2.** Interaction effect between family involvement and psychological ownership of the organization for nonfamily members.



**Figure 3.** Interaction effect between nepotism and psychological ownership of the organization for nonfamily members.

ownership of the organization and psychological ownership of the job. The results suggest that the levels of psychological ownership of the job and of the organization are similar between family and nonfamily TMT members. The research model has an  $R^2$  of 41% (family TMT members) to 57% (nonfamily TMT members), indicating high levels of explanatory power. We should note that although  $R^2$  for nonfamily TMT members is greater than that for family TMT members,  $\Delta R^2$  for nonfamily TMT members

( $\text{Max } R^2 [\text{Model 13}] - \text{Min } R^2 [\text{Model 8}]$ ) is 0.12, which is quite similar to  $\Delta R^2$  for family TMT members ( $\text{Max } R^2 [\text{Model 6}] - \text{Min } R^2 [\text{Model 1}]$ ). That is, psychological ownership of the organization and that of the job along with family management contextual factors consistently explain 12% of the variance for the two groups after controlling for covariates.

The results indicate that the correlation between psychological ownership of the organization and that of the

job is marginally higher for family TMT members than for nonfamily TMT members, which indicates that family TMT members may have higher potential to align their goals for organizational and professional sustainability. Post hoc analyses indicate that nonfamily TMT members have higher levels of psychological ownership of the job than of the organization. Overall, these results indicate that family and nonfamily members have both agency and stewardship motivations and that classifications based on legal and/or financial ownership may have limitations in identifying their agency and stewardship motivations. However, it still holds true that family TMT members may have relatively higher potential to align individual goals with organizational ones, whereas nonfamily TMT members may focus more on agency motivations.

As posited, the results indicate that both psychological ownership of the organization and that of the job significantly contribute to CE. That is, as both family and nonfamily TMT members consider organizations and jobs as extensions of themselves, they are more likely to engage in CE as a territorial behavior to sustain both. Prior agency theorists (e.g., Chrisman et al., 2012; Jensen & Murphy, 1990) have implicitly agreed that financial ownership increases the feeling of ownership and thus leads to employees exerting greater effort to promote firm survival. The results consistently support this argument by showing that psychological ownership of the organization plays a role similar to that of legal and/or financial ownership. These results are in line with Sieger et al.'s (2013) finding that psychological ownership of the organization positively influences entrepreneurial behaviors and with the upper echelons theory (Hambrick & Mason, 1984), that psychological ownership as a characteristic of TMT members may determine organizational behaviors.

Previous psychological ownership researchers have tended to nomologically differentiate psychological ownership of the organization from that of the job by examining their heterogeneous outcomes, such as organizational welfare versus job-related extra-role behaviors, respectively (G. Brown et al., 2014; Mayhew et al., 2007; Pierce et al., 2009). However, the present results indicate that both types of psychological ownership that family and nonfamily TMT members possess can influence CE. Our interpretation is that because CE can help both groups maintain their jobs and positions, including socio-emotional wealth for family members and job security for nonfamily members, psychological

ownership of the job as well as that of the organization motivate family and nonfamily TMT members to contribute to an organizational outcome, namely, CE. These results are in line with Hernandez (2012), who argues that psychological ownership of the job and that of the organization may lead individuals to engage in organizational renovation.

Of particular interest is that for both family and nonfamily TMT members, psychological ownership of the organization influences CE as much as psychological ownership of the job. That is, although the two groups may have subtle differences in their motivations and goal alignments (as post hoc analysis results indicate), family TMT members are likely to contribute to CE to sustain their organization and their jobs as much as nonfamily TMT members. We believe that these findings are in line with prior studies (e.g., Eddleston et al., 2012; Vallejo, 2009; Zahra et al., 2000) that show that family and nonfamily TMT members tend to act as both agents and stewards while implementing CE. Thus, we believe that a single theory based on family membership dichotomization may not properly explain family and nonfamily TMT members' motivations for CE.

The two constructs representing family control—namely, family involvement and nepotism—negatively influence the relationship between psychological ownership of the organization and CE only for nonfamily TMT members. These results are also in line with recent findings that highlight the importance of governance mechanisms in family firms (e.g., James et al., 2017; Madison et al., 2017). Particularly, as James et al. (2017) noted the importance of governance symmetric to motivations for both family and nonfamily members, the results of the present study reveal that symmetry between motivation and governance may be more important for nonfamily TMT members. That is, as family TMT members may understand that their positions and their involvement in organizational decisions are their birthright, they may not be sensitive to family control issues in their actualizations of psychological ownership of the organization and that of the job. However, considering that nepotism and family involvement may provide the agency governance contexts (Schulze et al., 2003; Steier & Ward, 2006) that decrease stewardship behaviors among nonfamily TMT members (Madison et al., 2017) while psychological ownership of the organization represents a source of stewardship-based motivations (Assumption 3), negative interaction effects may be created by asymmetry between governance experience and



motivations, particularly for nonfamily TMT members, as shown in Figures 2 and 3. The insignificant moderation effect on the relationship between psychological ownership of the job and CE also supports this argument. That is, the agency governance contexts stemming from family control may make even nonfamily TMT members with stewardship-based motivations focus more on short-term performance (James et al., 2017).

As Figures 2 and 3 depict, CE levels are in general higher in organizations in which family involvement and nepotism are high, although the influence of nonfamily TMT members' psychological ownership of the organization on CE decreases in such organizations. Thus, the role of family TMT members' participation may become important, particularly when nonfamily TMT members have low levels of psychological ownership of the organization. Considering that research on family businesses (e.g., De Massis et al., 2013; Jaskiewicz et al., 2013) has revealed equivocal patterns in the relationships of family involvement and nepotism with firm innovation, our study sheds new light on these results. That is, for nonfamily TMT members, the equivocal results may be attributed to the paradoxical situation—positive direct effects of family involvement and nepotism on CE versus their negative moderation effects on the relationship between nonfamily TMT members' psychological ownership of the organization and CE.

Overall, we believe that this research contributes to family business studies by showing that family and nonfamily TMT members have similar levels of agency- and stewardship-based motivations and by explaining how both groups of TMT members are motivated to engage in CE in family businesses. These findings reconcile the two theoretical perspectives (Schulze et al., 2003) and highlight the duality of (non)family TMT members' roles as both agents and stewards, which can help recent efforts to synthesize the dichotomous understanding of agency and stewardship theories (Madison et al., 2016, 2017). Furthermore, this study offers new insights for family business studies by revealing that family involvement and nepotism may create a paradoxical boundary condition for family businesses because the two practices can enhance CE while mitigating the positive influence of nonfamily TMT members' psychological ownership of the organization on CE.

### *Limitations and Research Implications*

Despite the above contributions, this study has several limitations. First, we collected responses from TMT

members, who may be more likely to influence organizational decision making than middle managers. This research context may influence the role of nonfamily members' psychological ownership of the job in implementing CE. That is, because nonfamily TMT members are responsible for new business formation, their individual goals may already be more aligned with organizational goals. However, lower- and middle-level managers may have different behaviors pertaining to psychological ownership of the organization and that of the job. Future studies that include low- and middle-level managers can increase the generalizability of our findings regarding the roles of psychological ownership of the organization and that of the job by nonfamily members.

Second, the participating firms were mainly SMEs. Although we controlled for organizational size and the respondents' family member status, the power of family TMT members may also be contingent on their actual roles and positions in the organization. Large firms in which family members work in specific positions may provide different contexts from those of small firms in which an owner is the CEO. Thus, the results of this study may differ depending on the governance context as well as firm size. Accordingly, future studies should consider different types of family control to better understand TMT members' attitudinal and behavioral outcomes. Third, this study was conducted in Korea. Although we argue that Korea provides an ideal context in which to explore the relationships between psychological ownership and organizational outcomes, the results may differ in other cultural contexts because cultural values are closely associated with psychological ownership (Pierce & Jussila, 2010). For instance, as Korean organizations have high levels of collectivistic culture, nonfamily TMT members are more likely to identify with their organization. This cultural specificity should be considered in the interpretations of the results.

### *Implications for Practice*

This study suggests important actions for firms where family members tend to strategically participate in CE implementation. Although we collected data from Korean companies, our findings may hold in other contexts. Interestingly, the results indicate that nonfamily TMT members have psychological ownership of the organization whose levels are similar to those of family TMT members. Hence, psychological ownership of the organization may also have limitations in terms of

differentiating family TMT members' CE efforts from those of nonfamily TMT members. Instead, the family control issues experienced by nonfamily members may reduce the positive role of psychological ownership of the organization in implementing CE. That is, the efforts to enhance TMT members' perceptions of psychological ownership of the organization may not be an effective driver of CE if family members exercise strong control over the organization. Instead, if organizations want TMT members to effectively initiate and implement CE, they must adopt managerial practices that help TMT members feel empowered to participate in decision making, which will subsequently enhance employees' psychological ownership of the organization and self-identity. However, the results indicate that the influence of psychological ownership of the job on CE is intact in high levels of family involvement and nepotism and that psychological ownership of the job influences CE for nonfamily TMT members as strongly as for family TMT members. Hence, organizations where family members strongly control the organization should make efforts to increase nonfamily members' psychological ownership of the job by enhancing task identity, task significance, and skill variety (Pierce et al., 2009).


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