



# Carry the past into the future: the effects of CEO temporal focus on succession planning in family firms

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## Abstract

In this study, the relationship between CEO temporal focus and family business succession planning is examined and the moderating effects of family interactions and environmental uncertainty are assessed. Based on data from 198 CEOs of family businesses and additional data from 15 semi-structured interviews in China, we find that CEO temporal focus (i.e., past, present, or future focus) is positively associated with succession planning. In addition, family interactions strengthen the relationship between CEO past focus and succession planning and weaken the relationship between CEO future focus and succession planning. Moreover, in uncertain environments, past-focused CEOs are more likely to plan for succession than present-focused CEOs. The theoretical contributions and practical implications of the study are also discussed.

**Keywords** Temporal focus · Succession planning · Environmental uncertainty · Family interaction · Family firm

Succession planning has become a topic of interest in the field of family businesses (e.g., Connelly, Ketchen, Gangloff, & Shook, 2016; Daspit, Holt, Chrisman, & Long, 2016). Transgenerational succession is central to family businesses because it requires a long-term vision (Lumpkin & Brigham, 2011). However, most family firms fail to

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transfer leadership to the next generation (Miller, Steier, & Le Breton-Miller, 2003) for various reasons, one of which is the lack of a clear succession plan (Eddleston & Powell, 2008; Ibrahim, Soufani, & Lam, 2003). Succession planning is defined as the deliberate and formal process that facilitates the transfer of management control from one family member to another (Sharma, Chua, & Chrisman, 2000). This captures the extent to which family firms engage in successor selection, train potential successors, communicate their successor decisions to family members, and clarify the role of the incumbent CEO during the succession process (Sharma, Chrisman, & Chua, 2003).

The benefits of succession planning are clear (Sharma et al., 2003), but the process is often fraught with tension and thus indefinitely postponed (Gilding, Gregory, & Cosson, 2015; Ip & Jacobs, 2006; Sharma et al., 2003; Zhang & Rajagopalan, 2004). Researchers have attempted to identify the antecedents of effective succession planning, highlighting the key role of incumbent CEOs in the process (Gilding et al., 2015; Sharma et al., 2003). Studies have focused on the effects of the demographic characteristics of an incumbent CEO, such as gender (Harveston, Davis, & Lyden, 1997) and age (Marshall et al., 2006), on succession planning. A CEO's perception of time can be viewed as a key predictor when making strategic decisions (Nadkarni, Chen, & Chen, 2016), but this has been largely overlooked in the literature on family business succession. Addressing this research gap can be beneficial, as succession planning is a future-oriented behavior that can determine the future of a family firm and is therefore influenced by temporality (Claessens, Van Eerde, Rutte, & Roe, 2004).

We consider upper echelon theory (Hambrick, 2007; Hambrick & Mason, 1984) and time perspective theory (Lewin, 1942; Zimbardo & Boyd, 1999) in this study and examine the effect of CEO temporality on family firm succession planning. Upper echelon theory suggests that organizational goals, strategies, and outcomes are initiated and executed to reflect the personality and characteristics of the business leader and other authoritative players in the firm (Finkelstein, Cannella, Hambrick, & Cannella, 2009; Hambrick, 2007). Succession decisions are often controlled by incumbent CEOs, especially in family firms (Lansberg, 1988; Rubenson & Gupta, 1996). Characteristics such as the subjective perception of time can help shape the perceptions and interpretations of an incumbent CEO in administrative situations, influencing succession planning.

The perception of time (Zimbardo & Boyd, 1999) influences people's emotions, cognitions, and actions, and understanding their psychological past, present, and future is central to the study of human behavior (Kauffman & Husman, 2004). Individuals' views of the past, present, and future have been found to influence goal setting and performance (Bandura, 2001), learning (Sanna, Stocker, & Clarke, 2003), affect (Wilson & Ross, 2003), and strategic choice in organizations (Das, 1987). Thus, CEOs' attitudes toward time can influence their expectations and assessments of decision-making situations and can be the basis for strategic choices, including succession planning (Ancona, Goodman, Lawrence, & Tushman, 2001; Bluedorn, 2002; Das, 1987; Nadkarni & Chen, 2014). In this study, the effect of CEOs' attitudes toward time on succession planning are examined through the concept of temporal focus, which refers to individual temporal differences that determine the extent to which people mainly focus on the past, present, or future (Bluedorn, 2002; Shipp, Edwards, & Lambert, 2009).

Temporal focus is particularly relevant to succession planning, as prior knowledge and experience (Grant, 1996), concurrent information (Eisenhardt, 1989), and future

expectations (Das, 1987) are considered important in decision-making related to succession. A CEO's prior knowledge and skills are considered to be part of a firm's specific knowledge assets and can be a factor in CEO dismissal and succession (Wang, Zhao, & Chen, 2017). A subjective orientation toward the present (e.g., the current environment) by the executives of a firm can influence their general view of the urgency of succession. Succession planning, along with a CEO's speculation about the future, can be deeply embedded in a firm's strategic plan (Das, 1987). Thus, we suggest that a CEO's reflection on his or her past experience, the analysis of the current situation, or the prediction of future situations (Liberman, Sagristano, & Trope, 2002) all have an effect on effective succession planning.

Upper echelon theory suggests that the effect of CEO temporal focus on organizational outcomes is bounded by the environment in which the CEO operates (Nadkarni & Chen, 2014). From a holistic perspective (Basco & Pérez Rodríguez, 2009), CEOs can be embedded in both family and business environments, which can simultaneously influence their decisions. However, most studies have focused on either family- or business-related factors (Colli, Howorth, & Rose, 2013; Jennings, Breitzkreuz, & James, 2014), and hence do not provide a comprehensive picture because family relations and business performance are essential to the long-term survival of family firms (James, Jennings, & Breitzkreuz, 2012). For instance, Basco and Pérez Rodríguez (2009) find that research on family firm succession should be conducted holistically, as the decisions taken during the succession process are both family- and business-related. Thus, we propose and test the moderating effects of family interactions and business environment uncertainty on the relationship between CEO temporal focus and succession planning.

This study makes three main contributions to the literature on family businesses. First, our analysis of the relationship between CEO temporal focus and succession planning identifies an important antecedent of succession planning in family businesses. Although the literature has explored various organizational phenomena through a "temporal lens" (Reinecke & Ansari, 2015), the effect of temporality on succession management in family businesses has not been addressed. Our study indicates that the temporal focus of the incumbent CEO (i.e., past, present, and future focus) has a significant effect on succession planning. Second, we consider the past, present, and future focus of the incumbent CEO as separate dimensions, and our test results show that CEOs are able to focus on more than one period simultaneously. Third, we find that the effect of CEO temporal focus on succession planning in family firms is contingent on both family interactions and environmental uncertainty. From a holistic perspective, our research model illustrates the importance of considering family and business contexts simultaneously when assessing how a CEO's psychological traits affect a family firm's strategies (James et al., 2012).

## Theory and hypotheses

### Succession planning in family firms

Succession planning is a topic of interest in the family business literature because of its importance for the continuity and success of a family business (Lee, Lim, & Lim,

2003). Christensen (1953) describes several key processes in succession planning, including identifying the pool of potential successors, selecting the successor, and notifying the designated successor and other managers of the decision once it is made. Long-term planning, clear rules, training programs, the progressive delegation of tasks, and effective communication among family members (Bigliardi & Dormio, 2009) are also necessary for successful succession planning. As a form of procedural rationality, formal succession planning can reduce the risk of a power struggle caused by the absence of a clear successor, ensure family harmony and leadership continuity, and lead to better decisions and performance (De Massis, Chua, & Chrisman, 2008). In addition, the lack of a professional succession plan is related to the low survival rate and poor continuity of family businesses (Cucculelli & Micucci, 2008; Royer, Simons, Boyd, & Rafferty, 2008), which can lead to leadership crisis (Santora, Sarros, & Cooper, 2011) and succession failure (Ibrahim et al., 2003). Thus, planning is likely to increase effective succession (Sharma, Chrisman, Pablo, & Chua, 2001; Ward, 1987).

However, succession planning in family firms is challenging (Gilding et al., 2015; Ip & Jacobs, 2006; Zhang & Rajagopalan, 2004). Specific factors that hinder effective succession planning have been identified, including the unwillingness of successors (Sharma et al., 2003), negative intergenerational relations (Becker, 1981), and financial constraints (Chittoor & Das, 2007), but our understanding of the effects of the individual characteristics of incumbent CEOs is still limited (Filsler, Kraus, & Märk, 2013). In particular, the influence of temporality on succession planning has been overlooked (Ferrer & Gill, 2013). Drawing on the psychological concept of temporal focus (Bluedorn, 2002; Shipp et al., 2009), we explore how CEOs' perceptions of time shape their succession planning, which is a type of strategic behavior central to family firms.

### CEO temporal focus and succession planning

Time perspective theory (Zimbardo & Boyd, 1999) suggests that an individual's perspective on various aspects of time affects his or her emotions, perceptions, and actions. Temporal focus can be defined as the extent to which people pay attention to the past, present, and future (Shipp et al., 2009), and is thus an important component of an individual's time perspective. This perspective can be viewed as a continuum, in which the individual focuses only on the past, the present, or the future (Nuttin Jr, 1985). However, the literature on temporal focus suggests that "classifying people into a single category imposes artificial boundaries between each type of temporal focus" (Shipp et al., 2009: 2). Nadkarni and Chen (2014) suggest that past, present, and future focus are separate dimensions rather than points on a continuum and find that they have different effects on the introduction of new production processes. Similarly, Shipp et al. (2009) conclude that a temporal focus profile is best characterized by the three influences of past, present, and future focus. A past focus involves reflections on the past and the repeated application of past experience in decision-making (Clark & Collins, 1993). A present focus involves a "here and now" orientation and can improve well-being if it encourages the person to seize new opportunities (Zimbardo & Boyd, 1999). A future focus involves thinking about what the future holds and predicting future events (Bluedorn, 2002; Wallace, 1956), and can therefore encourage goal setting and provide motivation.

Previous findings on the effects of individual temporal focus on individuals' behavioral outcomes are inconsistent. Some scholars have argued that past-focused individuals who positively evaluate past events are more likely to achieve their goals and to plan for the future (e.g., Sobol-Kwapinska & Jankowski, 2016; Zimbardo & Boyd, 1999). Conversely, others have identified negative influences of a past focus on positive acts (Kooij, Kanfer, Betts, & Rudolph, 2018; Nadkarni & Chen, 2014). Recent research has also shown that past and future focus both contribute to strategic change in organizations (Back, Rosing, Dickler, Kraft, & Bausch, 2020). Most of these studies used archival data (Nadkarni & Chen, 2014), and thus these researchers were unable to measure CEOs' perceptions of time directly, which potentially explains the mixed findings. Adding to this stream of the literature, our study used both survey and semi-structured interview data to examine the effects of three dimensions of CEOs' temporal focus on succession planning.

Temporal focus is a fundamental dimension of strategic decisions such as succession planning, because strategizing involves anticipating the future based on past and present circumstances (Das, 2004). CEOs' temporal orientation determines their expectations and how they evaluate their environment, which in turn affects their strategic decisions (Bluedorn, 2002; Das, 1987). Succession planning is a type of future-oriented behavior (Sharma et al., 2003) that is time-sensitive (Dyck, Mauws, Starke, & Mischke, 2002; Glauben, Petrick, Tietje, & Weiss, 2009) and therefore closely related to temporality. Succession planning is a complex strategy and is associated with an incumbent CEO's ideas and discoveries in different time frames, including their past experience and prior knowledge, their perceptions of the family firm's current stage, and their future goal setting (e.g., Meier & Schier, 2016). Thus, we propose that an incumbent CEO's past, present, and future focus are antecedents to the incumbent's plans for family business succession.

**CEO past focus and succession planning** A past focus can enhance knowledge creation and learning behavior through the analysis of previous experiences and actions (Shipp et al., 2009). Past-focused CEOs consider their experience and create knowledge based on that experience, which can further motivate them to plan their succession and pass on their knowledge to the next generation. Recent research on the role of legacy and history in shaping family business strategies highlights the power of the past when predecessors pass on family technology and knowledge to the next generation (Erdogan, Rondi, & De Massis, 2020; Weber & Dacin, 2011). From a cognitive perspective, the prior knowledge, skills, and experience of a CEO can be an important component of the specific assets of a family firm, which can be passed on to the next generation (Wang et al., 2017). The knowledge sharing process enables family business succession with the new generation entering the business and taking a leadership role (Hatak & Roessl, 2015). Incumbent CEOs always have a high level of intelligence and practical knowledge derived from their past experience in business management (Leonard & Swap, 2005), constituting a typical type of tacit knowledge (Nonaka & Toyama, 2007). A past-focused incumbent CEO of a family business is likely to continually devote his or her attention to past experience to create experiential knowledge (Shipp et al., 2009) that can be transferred to the next generation and thereby gain a competitive advantage. In addition, past-focused CEOs are more willing to keep their long-term and useful prior knowledge in the family (Cabrera-Suárez, De

Saá-Pérez, & García-Almeida, 2001; Miller, Steier, & Le Breton–Miller, I., 2016), which motivates them to make a succession plan.

Past-focused CEOs are also more likely to remember the past success of their business, which strengthens their emotional attachment to the business (Sharma & Irving, 2005) and increases their willingness to maintain cross-generational family control, thus motivating them to plan for succession. Maintaining family control across generations is essential to preserving the personal emotional attachment of a CEO (Berrone, Cruz, Gomez-Mejia, & Larraza-Kintana, 2010; Zellweger, Kellermanns, Chrisman, & Chua, 2012), as this control can symbolize the CEO's own continuity and therefore maintain affective meaning over time. A CEO's reflection on past glory and family tradition paves the way for continuity, through sharing stories with the next generation and motivating its members to inherit and continue the family business (Dacin & Dacin, 2008). Thus, a past focus intrinsically motivates incumbent CEOs to plan their succession and pass on their knowledge to their successors, thus ensuring the continuity of their family firm. Therefore, we propose the following hypothesis:

- 1a *Incumbent CEOs' past focus is positively associated with family business succession planning.*

**CEO present focus and succession planning** Present-focused CEOs are likely to be fully aware of the current resources available for knowledge transfer and potential successors and their capabilities, as this focus is associated with the realization and deployment of current resources (Shipp et al., 2009). This can provide a basis for succession planning. Present-focused CEOs are more likely to be aware of the current up-to-date technologies needed by their family firm and to realize that it may not be possible to adapt their old traditions to the tide of the time. In this case, present-focused CEOs are more likely to realize that the next generation can bring in new knowledge acquired through education, work, and experience outside the family firm (Cabrera-Suárez et al., 2001; Kellermanns & Eddleston, 2004). For instance, the next generation may have international study experience and higher education levels than the first generation, which will facilitate internationalization and growth expansion (Stieg, Hiebl, Kraus, Schüssler, & Sattler, 2017). Woodfield and Husted (Woodfield & Husted, 2017) also suggested that the next generation can bring a valuable knowledge base to the family business, which is different from the incumbent CEO's practical and tacit knowledge acquired through past management experience and tertiary education. Thus, a present-focused CEO who realizes the value of up-to-date knowledge in the next generation is more likely to initiate a succession plan.

Succession planning is associated with the age and retirement time frame of incumbent CEOs (Motwani, Levenburg, Schwarz, & Blankson, 2006). Present-focused CEOs are more likely to focus on their own health issues and age, thus realizing the urgency of succession planning. A present focus can benefit a family business by encouraging the incumbent CEO to seize the opportunities of the current environment (Zimbardo & Boyd, 1999; Zimbardo, Keough, & Boyd, 1997). CEOs with a strong present focus consider the “here and now” and emphasize the current time frame in their decision-making process (Nadkarni & Chen, 2014). Therefore, in family businesses, incumbent CEOs with a strong present focus are likely to analyze the

current situation (e.g., the urgency of succession planning) based on immediately available information (e.g., their age and health status). In China, most members of the first generation of family businesses are approaching retirement age, as most family firms were established when China launched its reform and opening-up policy in late 1978. Research has estimated that about 75% of family businesses will go through the succession process in the next 5 to 10 years (Gilding et al., 2015). Thus, a present focus can increase the sense of urgency felt by an incumbent CEO near retirement age with regard to succession planning. Therefore, we propose the following hypothesis:

- 1b *Incumbent CEOs' present focus is positively associated with family business succession planning.*

**CEO future focus and succession planning** A future focus can encourage goal setting, motivation, and goal pursuit (Fried & Slowik, 2004; Zimbardo & Boyd, 1999). Succession planning is intrinsically future-oriented. Future-focused CEOs envisage the future and plan ahead to make the most of resources. A strong future focus is associated with thinking mainly about what the future holds and envisioning future events (Nadkarni & Chen, 2014), which can raise the expectations of CEOs in terms of longevity in family firms. Future-focused CEOs are interested in what will happen and attach great importance to planning and achieving goals (Sobol-Kwapinska & Jankowski, 2016), such as successful intra-family succession and the longevity of the family business. Future-focused CEOs often look to their own future with hope, plan for it, and formulate goals (Zimbardo & Boyd, 2008). For many CEOs of family businesses, these goals involve dynastic thinking because they have a long-term vision of their firm and are concerned about its continuity (Bertrand & Schoar, 2006). Therefore, a future focus can lead incumbent CEOs to consider their own retirement plans and the future development of the family business after they leave, which accelerates the succession planning process. Thus, we propose the following hypothesis:

- 1c *Incumbent CEOs' future focus is positively associated with family business succession planning.*

### **A holistic perspective: Family interactions and environmental uncertainty**

Upper echelon theory provides an approach to jointly consider environmental factors and the individual characteristics of CEOs, analyzing their combined effects on strategic behavior and outcomes (Hambrick, 2007). Family firms are embedded in both family and business environments (Aldrich & Cliff, 2003). Jennings and McDougald (2007) emphasized the importance of considering family and business as situational factors that can affect CEO decisions. Most studies of family businesses have generally treated family and business as separate entities when they should be examined together as they are inextricably linked (Aldrich & Cliff, 2003). James et al. (2012) suggest that including family-related variables in family business research is necessary and argue that good



business performance is rarely enough to overcome poor family relationships. However, overemphasizing the role of the family while ignoring threats in the business system can be fatal for family businesses (Schulze & Kellermanns, 2015). Thus, it is essential to integrate both family and business factors into a family business research model, but most research has adopted either a business or family approach (Poza, 2007). As a family firm is defined as a combination of family and business systems that overlap and interact, we argue that considering family and business environments simultaneously from a holistic perspective can provide a more complete understanding of family businesses (Basco & Pérez Rodríguez, 2009). Therefore, we examine the moderating effects of family interactions and environmental uncertainty in the family and business systems, respectively, to develop a comprehensive research model of succession planning.

Family interactions and environmental uncertainty have been considered as two important factors affecting intra-family succession (De Massis et al., 2008). First, the literature on family businesses recognizes the key role played by family relationships in family business governance, arguing that poor family interactions and relationships are the main obstacles to succession (De Rosenblatt, Mik, Anderson, & Johnson, 1985; Lansberg, 1983). The quality of family interactions can facilitate or hinder succession planning and successor training (Lansberg & Astrachan, 1994). The interactions of incumbent CEOs with other family members shape their behavior and decisions (Smith, Hamon, Ingoldsby, & Miller, 2009). In the succession process, it is essential to identify the specific sources of positive interactions between family members (Rasbash, Jenkins, O'connor, Tackett, & Reiss, 2011). The family is an essential social unit that affects an individual's identity development (Jennings et al., 2014). By interacting with members of their closest social group, such as their families, incumbent CEOs can modify their behavior, decisions, and strategies based on the feedback they receive (Smith et al., 2009) and the shared understanding of family values established through family interactions (Handler, 1994; Smith et al., 2009).

Second, the family business literature proposes that the business context can influence succession, as uncertainty and contingencies in the business environment affect the distribution of power and incumbent CEOs' perceptions of the current needs of their business, in turn influencing successor selection and succession planning (Pfeffer & Salancik, 1978). Empirical studies also show that environmental uncertainty moderates the effect of CEO temporal focus on a firm's innovative strategies (Nadkarni & Chen, 2014). Therefore, we suggest that the influence of CEO characteristics on succession planning is also constrained by uncertainty in the business environment (e.g., Banalieva, Eddleston, & Zellweger, 2015; Chung & Luo, 2013). Taken together, we suggest that family interactions and environmental uncertainty are important factors moderating the relationship between CEO temporality and succession planning.

### **The moderating effect of family interactions**

Family interactions are a key mechanism for creating a shared vision in family firms and can facilitate the decision-making process (Sirmon & Hitt, 2003). Research suggests that parent-child interactions can influence how a successor runs a business (Kets de Vries, 1993). Close interactions between an incumbent CEO and his or her potential successor can facilitate knowledge transfer during the succession process (Cabrera-Suárez et al., 2001). Interactions between siblings, such as vying for control of a business, can also



influence decisions regarding the selection of a successor and the mode of succession (Lansberg, 1988; Lansberg & Astrachan, 1994). High-quality interactions between family members also create a harmonious environment for knowledge transfer, in which the incumbents share their experience and knowledge with potential successors.

Focusing on the past is useful for knowledge creation (Nadkarni & Chen, 2014). The continued success of a family business often relies on the unique experience and knowledge created by predecessors, which are essential strategic assets that enable a family firm to develop its competitive advantage (Cabrera-Suárez et al., 2001). Thus, tacit knowledge transfer is important to preserve and extend the competitive advantage of a family business. However, tacit knowledge created by past-focused CEOs is likely to be transferred through direct exposure and experience (Lane & Lubatkin, 1998). Therefore, effective family interactions provide a unique channel for this type of knowledge transfer, which can be seen by incumbent CEOs high in past focus as an opportunity to transfer their knowledge to their successor in the next generation.

In addition, the skills and willingness of a potential successor to acquire the knowledge of his or her predecessor can be a major challenge in succession (Cabrera-Suárez et al., 2001). High-quality interactions between incumbent CEOs and potential successors can encourage organizational citizenship behavior in successors (Zhong, Lam, & Chen, 2011), such as a willingness to learn and participate in family business management, thereby improving their job performance (Chen, Lam, & Zhong, 2012). High-quality family interactions can also offer past-focused CEOs the opportunity to improve the quality of their potential successors and their willingness for succession (Cadieux, Lorrain, & Hugron, 2002), thereby strengthening the relationship between past focus and succession planning. High-quality interactions and social exchange between family members also reflect mutual emotional support between incumbent CEOs and other family members. The positive feelings of past-focused CEOs for their firm and their strong personal emotional attachment to the firm resulting from past success can be amplified by the emotional support of family members, as this can motivate CEOs to initiate a succession plan. Consequently, we propose the following hypothesis:

- 2a. *Family interactions positively moderate the relationship between CEO past focus and succession planning, such that this relationship is stronger when the level of family interactions is high.*

High-quality family interactions can be a knowledge transfer mechanism (Cabrera-Suárez et al., 2001) and a conduit for current information. High-quality family interactions in a family business can have the same functions as a CEO focusing on the present when developing a succession plan. We propose that a present-focused incumbent CEO will generally seize the opportunities of the current environment (Zimbardo & Boyd, 1999) by analyzing current information and deploying the resources currently available (Shipp et al., 2009), thus providing the foundation for succession planning. Family interactions can also respond to the need for current family and business information (Handler, 1994), thereby replacing incumbent CEOs' present focus and reducing the effect of present focus on succession planning. A present-focused CEO may realize the urgency of succession planning when approaching retirement age, and effective family communication can ensure that every family member is aware that the

CEO does not have the energy to manage the business due to his or her age. This communication then enables family members to discuss how to help the CEO identify current problems in the company or family, thereby encouraging the CEO to think about succession planning. High-quality family interactions thus become a substitute for the role of present focus. Studies also show that parent-child interactions (Kets de Vries, 1993) and sibling-sibling interactions (Lansberg & Astrachan, 1994) affect incumbent CEOs' interpretation of the current problems of their family business and their succession decisions. Effective interactions between incumbent CEOs and potential successors can provide a learning context through which family members can exchange ideas, information, and knowledge. This is a unique form of current family capital that acts as an alternative to a present focus. In addition, present-focused CEOs are more likely to consider external factors than focus on themselves because of their optimistic outlook. Frequent communication and interaction with other family members can also replace the effect of "paying attention to others."

CEOs who have a good understanding of their family members are better able to choose an appropriate family successor due to effective family interactions, which can be a substitute for CEOs' future focus. The knowledge acquired by successors through close interactions with incumbent CEOs can ensure that they are more effective in their future role. For example, CEOs can positively influence the development of their children and interest them in taking over the business through hands-on parenting. These family interactions lead to a better understanding of knowledge exchange and higher levels of cooperation between family members (Ingram & Simons, 2000). Michael-Tsabari and Weiss (2015) analyze the factors that hinder the succession process and find that open communication about future plans can reduce conflict and create a stable environment for succession. Thus, family firms with a high level of family interactions have an alternative to relying on their CEOs' subjective temporality and can plan for succession through knowledge exchange between family members, mutual understanding between incumbent CEOs and potential successors, and a cohesive environment for succession. As a result, a high level of family interactions can reduce the positive effect of CEOs' present or future focus on succession planning. Conversely, in a context with a low level of family interactions, CEOs may rely more on their temporal orientation, because poor communication and interaction between family members hinder the succession process. Therefore, we propose that family interactions reduce the effect of CEOs' present or future focus on succession planning.

- 2b *Family interactions negatively moderate the relationship between CEO present focus and succession planning, such that this relationship is stronger when the level of family interactions is low.*
- 2c *Family interactions negatively moderate the relationship between CEO future focus and succession planning, such that this relationship is stronger when the level of family interactions is low.*

### **The moderating effect of environmental uncertainty**

When making strategic decisions (Nadkarni & Chen, 2014), an executive's perception of environmental uncertainty or assessment of future changes that may occur in the

environment (Milliken, 1987) is important. An uncertain environment generates more adaptive tasks than a stable environment (Miller, 1991), which forces firms to gain new knowledge (Barkema & Vermeulen, 1998). By applying upper echelon theory, environmental factors and the individual characteristics of CEOs can be considered together, and their combined effects on strategic behavior and outcomes can be investigated (Hambrick, 2007).

Past-focused CEOs rely on their experience and knowledge, which are less likely to be of value in uncertain environments where changes occur rapidly (e.g., in technology, competition, the marketplace, and consumers). Thus, the feedback-based learning process valued by past-focused CEOs will not be beneficial in strategic decision-making (Eisenhardt & Tabrizi, 1995). Methods that have proven effective in the past quickly become useless when the environment is uncertain. An incumbent CEO high in past focus may fail to detect new product and market opportunities, which can make succession planning more urgent. A new CEO can bring new management skills and increase the likelihood of considering multiple alternatives and more flexible problem-solving (Datta, Rajagopalan, & Zhang, 2003), thereby alleviating problems related to the incumbent CEO's prior knowledge. Therefore, environmental uncertainty strengthens the relationship between past focus and succession planning. Thus, we propose the following hypothesis:

- 3a *Environmental uncertainty positively moderates the relationship between CEO past focus and succession planning, such that this relationship is stronger when environmental uncertainty is high.*

Uncertain environments can replace the role of CEOs' present or future focus in succession planning. A strong present focus can enable CEOs to maintain an up-to-date perspective on the current situation (Nadkarni & Chen, 2014), so present-focused CEOs are likely to carefully assess the current needs of their firm and realize their successor's capabilities to run the business. In uncertain environments, prior knowledge can be useless, therefore CEOs are more likely to rely on their potential successor's up-to-date knowledge and management skills (Miller et al., 2003), replacing the role of present focus in discovering or evaluating the capabilities of the next generation. For instance, in a highly turbulent and uncertain environment, family firms with rapidly changing technologies, methods, or customers may be encouraged to address succession planning to deal with environmental uncertainty, unlike firms in a highly predictable environment. CEO succession in family firms can serve as the basis for managing environmental uncertainty (Handler & Kram, 1988). Therefore, environmental uncertainty can substitute the positive effect of CEO present focus on succession planning, as both environmental uncertainty and present focus incite CEOs to develop a succession plan.

Future-focused CEOs generally plan ahead and are therefore more likely to implement succession planning. However, the effect of future focus on succession planning diminishes in uncertain environments, as incumbent CEOs must anticipate future technologies and market trends to cope with uncertainty, which in turn increases opportunities for succession planning. Successors represent the next generation, so they can often better anticipate future technologies and customer needs, helping organizations survive in uncertain environments (Finkelstein et al., 2009). Successors can also be more open-minded and creative in their strategic decision-making and

manage environmental uncertainty more effectively (Barkema & Vermeulen, 1998). Thus, the strategic measures generated by CEOs' predictions for the future in an uncertain environment will replace the effect of future focus. In contrast, in a stagnant or stable environment, incumbent CEOs tend to have conservative successors because there is little perceived or real need for change (Miller et al., 2003). In this case, incumbent CEOs' future focus can show its significant positive effect on succession planning because it intrinsically motivates CEOs to plan ahead rather than being guided by the external environment. In short, in uncertain environments, the positive effect of incumbent CEOs' present or future focus on succession planning will be weaker than in stable environments. Thus, we propose the following hypotheses:

- 3b *Environmental uncertainty replaces the positive effect of CEO present focus on succession planning.*
- 3c *Environmental uncertainty replaces the positive effect of CEO future focus on succession planning.*

## Methods

We conducted two studies to test our hypotheses. The aim of Study 1 was to test the main hypotheses: the relationship between CEO temporal focus and succession planning and the moderating effects of family interactions and environmental uncertainty. In Study 1, we tested our hypotheses using survey data collected from 198 family firms in mainland China. In Study 2, we conducted semi-structured interviews with 15 family business owners in Zhejiang, Jiangsu, and Shanghai provinces in China to check the robustness of the results of Study 1 and better understand the psychological processes involved in the relationship between CEO temporal focus and succession planning.

### Study 1: Sample and procedure

We recruited 580 family firms in East China based on a list provided by an entrepreneurship research center at a local university. Following the standard criteria for defining family businesses used in the literature, a firm was considered "family-owned" if the following two conditions were met: (1) two or more family members were directors or top managers, and (2) family members held a substantial block of voting shares (e.g., Allen & Panian, 1982; Daily & Dollinger, 1993; Deephouse & Jaskiewicz, 2013; Gomez-Mejia, Larrazza-Kintana, & Makri, 2003). Therefore, we used the level of family ownership of each business and the number of family members in the top management team to measure family involvement. If ownership remained in the family and at least two family members were employed as top managers, we considered this firm a family business.

We followed the translation/back translation procedure for the survey (Brislin, 1986) to convert the English items into Chinese. The Chinese questionnaire was then sent to three family business owners and two professors in human resource management to confirm the accuracy of the translation. Next, the questionnaires were delivered by hand by our research team or sent by e-mail to the CEOs of the 580 businesses. We received 239 responses, representing a response rate of 41.2%. We excluded 29

incomplete questionnaires and 12 questionnaires with inconsistent answers and obvious mistakes, reducing the sample size to 198 family firms. In our sample, 79 family firms (40%) did not select potential successors. The CEOs of the 198 family firms were on average 48 years old, indicating an age range close to retirement based on the expected retirement age of 60 in China. Among them, about 82% were men. Most CEOs had a high school certificate (55%) and many had a university degree (22%). Firm age ranged from 4 to 33 years, with 94 firms (47.5%) less than 10 years old and 83 firms (41.9%) between 11 and 20 years old. The sampled family firms came from a variety of industries, including sales, manufacturing, service (e.g., marketing and logistics), and consulting.

## Measures

**Succession planning** Following the study of Sharma et al. (2000), we measured succession planning as a combination of selection, training, and communication about the succession decision, on a 7-point Likert-type scale (1 = *strongly disagree*, 7 = *strongly agree*). A sample item was “A list of potential successors was developed.” According to the results of exploratory factor analysis, the Kaiser-Meyer-Olkin (KMO) was .85 ( $\chi^2 = 1227.24$ ,  $df = 21$ ,  $p < .001$ ). Cronbach’s alpha for the scale was .96.

**CEO temporal focus** We measured CEO temporal focus using the 12-item scale developed by Shipp et al. (2009), with 4 items for each focus (i.e., past, present, and future). Sample items for each dimension include “I replay memories of the past in my mind,” “I focus on what is currently happening in my life,” and “I think about what my future has in store.” These items were rated on a 7-point scale (1 = *strongly disagree*, 7 = *strongly agree*). Cronbach’s alpha values indicate high reliability for the three subscales (past focus = .91, present focus = .84, future focus = .91).

**Family interactions** We measured family interactions using the 6-item scale from Summers et al. (2005). A sample item is “My family enjoys spending time together,” measured on a 7-point scale (1 = *strongly disagree*, 7 = *strongly agree*). According to the results of exploratory factor analysis, the KMO value was .84 and the result of Bartlett’s test ( $\chi^2 = 804.79$ ,  $df = 15$ ,  $p < .001$ ) indicated an appropriate use of the factor model. Cronbach’s alpha for the scale was .90.

In terms of single source bias, we also interviewed 15 business families using snowball sampling and asked the first and second generations to rate the construct of family interactions separately. We calculated the Intraclass Correlation Coefficient (ICC) to measure the reliability of the measurement of family interactions in our study (McGraw & Wong, 1996; Shrout & Fleiss, 1979). The ICC is an effective method used to assess inter-rater agreement when there are two or more independent raters, and the outcome is measured on a continuous level. The results showed that the single measurement of the ICC was 0.87 (interval of 0.66 to 0.95 with 95% confidence), which indicates the high reliability of the relationship for a single rater (incumbent CEO and second generation). Therefore, there was no significant difference between the rating of CEOs and that of second-generation members for the construct of family interactions. We can conclude that to a large extent, the rating of family interactions by incumbent CEOs can represent the quality of family interactions.

**Environmental uncertainty** To measure environmental uncertainty, we used environmental complexity and environmental dynamism. Jurkovich (1974) suggested that the managerial perceptions of a simple vs. complex and static vs. dynamic environment reflect perceived environmental uncertainty. Thus, we measured the two dimensions of perceived environmental uncertainty using four items. For example, perceived environmental dynamism was measured by asking the CEOs to evaluate whether the socio-economic and political contexts of their firm were unpredictable and changing rapidly. We then conducted exploratory factor analysis using the KMO test, with a KMO value of .785 ( $\chi^2 = 568.70$ ,  $df = 6$ ,  $p < .001$ ). Thus, environmental uncertainty was calculated by a component factor analysis of four items with regression. Cronbach's alpha for this variable was .91.

**Control variables** We also included control variables in our model, including firm-level variables (i.e., age, size, performance, innovation rate), family-level variables (i.e., family ownership, family management), and CEO demographic variables (i.e., gender, age, education level, religion, birth order, number of siblings, expected retirement age, and health status). In addition, we included industry dummy variables to control for the effects of different industries.

For firm-level variables, we measured firm size with the logarithm of the number of employees (Guthrie & Olian, 1991). We also included firm performance, measured by current assets, to rule out the influence of firm performance on succession decisions (Dalton & Kesner, 1985). We also controlled for innovation rate, which reflects a firm's technological knowledge and can potentially affect succession planning.

In terms of family-level variables, the effects of family ownership and family involvement on succession issues have been identified and include the management succession process, succession and non-succession concerns (Chua, Chrisman, & Sharma, 2003), successor selection (Lee et al., 2003), and succession decisions (Bennedsen, Nielsen, Pérez-González, & Wolfenzon, 2006). Thus, we also controlled for two family involvement variables in our model. First, we measured family ownership by asking the CEOs to report the percentage of shares owned by the family, and second, we measured family management by the number of family members in managerial positions, which has previously been considered a good indicator (Smith & Amoako-Adu, 1999).

We also controlled for the demographic variables of incumbent CEOs, including age, gender (Harveston et al., 1997), education level, religion, and birth order. We controlled for the effect of the birth order of CEOs because research has indicated that first-child firms are more likely to pass on control to family members (Bennedsen et al., 2006). We also controlled for the number of siblings of the CEOs, due to the effect of sibling relationships on intergenerational succession. CEOs aged 55 to 64 have been found to be more likely than younger CEOs to view succession planning as an important issue (Motwani et al., 2006), as CEOs approaching their expected retirement age are more motivated to develop a succession plan. Thus, we controlled for CEO age and expected retirement age in our model. Finally, we controlled for the effect of the health status of incumbent CEOs, due to the influence of health on early retirement decisions (Bazzoli, 1985).



## Data analysis

**Validity test** We conducted confirmatory factor analysis with AMOS 17.0 to validate the different measures of CEO past, present, and future focus and our full model. The results indicated poor model fit for the one-factor model ( $\chi^2 = 652.51$ ,  $df = 54$ ; CFI = .64; TLI = .57; IFI = .64; RMR = .16; RMSEA = .23) and good model fit for our proposed five-factor model with CEOs' past, present, and future focus, family interactions, and environmental uncertainty ( $\chi^2 = 572.41$ ,  $df = 199$ ; CFI = .89; TLI = .88; IFI = .90; RMR = .07; RMSEA = .09).

We conducted additional tests to confirm the validity of our results. We calculated composite reliability (CR) and average variance extracted (AVE) to assess the convergent validity of our construct. Following Fornell and Larcker (1981), we tested the convergent and discriminant validity of the temporal focus construct. The CR and AVE values were greater than 0.6, indicating good construct reliability and adequate convergent validity. The factor loadings for past, present, and future focus ranged from .83 to .87, from .69 to .82, and from .81 to .88, respectively.

**Model test** We performed hierarchical regression analyses to test the hypotheses with SPSS 22.0. Temporal focus, family interactions, and succession planning were standardized before regressions. We added the variables to the regression models through four hierarchical steps: (1) the control variables; (2) the main effect variables: CEO past, present, and future focus; (3) the two moderators: family interactions and environmental uncertainty; and (4) the two-way interaction terms. The presence of multicollinearity was assessed in each regression model. The variance inflation factor (VIF) values were all below 10.0, ruling out multicollinearity (Neter, Wasserman, & Kutner, 1985).

## Results

Table 1 presents the descriptive statistics and correlations of the study variables. Table 2 shows the hierarchical regression results. Table 3 summarizes the marginal effect of CEO temporal focus on succession planning at high and low levels of family interactions, and Fig. 1 presents the interaction plots. Similarly, Table 4 reports the marginal effect of CEO temporal focus on succession planning in uncertain and certain environments, and Fig. 2 illustrates their interaction plots.

Hypotheses 1a, 1b, and 1c postulate that CEO past, present, and future focus are positively related to family business succession planning. As Table 2 shows, the main effects of CEO past focus ( $\beta = .28$ ,  $p < .01$ ), CEO present focus ( $\beta = .17$ ,  $p < .05$ ), and CEO future focus ( $\beta = .24$ ,  $p < .01$ ) on succession planning are significant and positive. Thus, the main effect hypotheses are supported. Regarding the interaction between CEO temporal focus and family interactions, we propose that family interactions positively moderate the relationship between CEO past focus and succession planning (Hypothesis 2a), negatively moderate the relationship between CEO present focus and succession planning (Hypothesis 2b), and negatively moderate the relationship between

Table 1 Descriptive Statistics and Correlations

|                              | Mean  | SD   | 1      | 2      | 3      | 4    | 5      | 6    | 7      | 8      | 9     | 10    | 11     | 12     | 13     | 14     | 15   | 16     | 17 | 18 | 19 | 20 |
|------------------------------|-------|------|--------|--------|--------|------|--------|------|--------|--------|-------|-------|--------|--------|--------|--------|------|--------|----|----|----|----|
| <b>Controls</b>              |       |      |        |        |        |      |        |      |        |        |       |       |        |        |        |        |      |        |    |    |    |    |
| 1. Firm age (log)            | 2.28  | .71  |        |        |        |      |        |      |        |        |       |       |        |        |        |        |      |        |    |    |    |    |
| 2. Number of employees (log) | 3.99  | 1.25 | .38*** |        |        |      |        |      |        |        |       |       |        |        |        |        |      |        |    |    |    |    |
| 3. Firm assets(log)          | 6.83  | 1.76 | .33*** | .77*** |        |      |        |      |        |        |       |       |        |        |        |        |      |        |    |    |    |    |
| 4. CEO gender                | .94   | .34  | -.09   | .03    | -.03   |      |        |      |        |        |       |       |        |        |        |        |      |        |    |    |    |    |
| 5. CEO age                   | 48.00 | 6.64 | .40*** | .37*** | .37**  | -.01 |        |      |        |        |       |       |        |        |        |        |      |        |    |    |    |    |
| 6. CEO education level       | 2.97  | .84  | .07    | .20**  | .14    | .09  | -.05   |      |        |        |       |       |        |        |        |        |      |        |    |    |    |    |
| 7. Role of CEO               | 1.23  | .52  | .19**  | .24**  | .34*** | -.01 | .14    | .08  |        |        |       |       |        |        |        |        |      |        |    |    |    |    |
| 8. Number of siblings        | 3.66  | 1.60 | .22**  | .16*   | .21**  | -.07 | .46*** | -.10 | .12    |        |       |       |        |        |        |        |      |        |    |    |    |    |
| 9. Birth order of CEO        | 2.26  | 1.28 | .06    | -.03   | .06    | -.10 | .11    | -.04 | .05    | .61*** |       |       |        |        |        |        |      |        |    |    |    |    |
| 10. Belief condition         | .44   | .49  | .08    | .04    | .11    | -.10 | -.03   | .16* | .02    | .05    | .16*  |       |        |        |        |        |      |        |    |    |    |    |
| 11. Health condition         | 4.31  | .73  | .01    | -.14   | -.18*  | -.01 | .01    | .12  | -.07   | .03    | .05   | .16*  |        |        |        |        |      |        |    |    |    |    |
| 12. Expected retire age      | 60.22 | 4.78 | .25*** | .27*** | .24*** | .01  | .43*** | .14  | .09    | .11    | -.02  | .16*  | .13    |        |        |        |      |        |    |    |    |    |
| 13. Innovation rate          | .15   | .19  | .06    | .12    | -.06   | .04  | .08    | .10  | .07    | .06    | -.09  | -.10  | .17*   | .14*   |        |        |      |        |    |    |    |    |
| 14. Family ownership         | .76   | .32  | -.11   | -.05   | .08    | .08  | -.01   | -.04 | -.18** | .02    | .02   | -.16* | -.07   | -.04   | -.08   |        |      |        |    |    |    |    |
| 15. Family management        | 3.69  | 3.54 | .12    | .27*** | .24*** | -.01 | .16*   | .05  | .15*   | .22**  | .09   | .03   | .21**  | .29*** | .26*** | -.05   |      |        |    |    |    |    |
| <b>Study variables</b>       |       |      |        |        |        |      |        |      |        |        |       |       |        |        |        |        |      |        |    |    |    |    |
| 16. CEO past focus           | 4.94  | 1.03 | -.01   | .03    | -.13   | -.07 | .06    | -.01 | -.05   | .06    | -.10  | -.06  | .26*** | -.03   | .17*   | -.19** | .03  |        |    |    |    |    |
| 17. CEO present focus        | 5.13  | .84  | -.01   | .01    | -.11   | .04  | .01    | .02  | -.14   | -.01   | -.15* | -.07  | .26*** | .07    | .26*** | .00    | .14* | .57*** |    |    |    |    |

Table 1 (continued)

|                               | Mean | SD   | 1     | 2     | 3    | 4     | 5    | 6    | 7    | 8    | 9    | 10    | 11     | 12   | 13   | 14    | 15    | 16     | 17     | 18     | 19     | 20 |
|-------------------------------|------|------|-------|-------|------|-------|------|------|------|------|------|-------|--------|------|------|-------|-------|--------|--------|--------|--------|----|
| 18. CEO future focus          | 4.88 | 1.07 | -0.06 | .05   | -.12 | .04   | -.03 | .17* | -.07 | -.11 | -.12 | -.04  | .21**  | .04  | .14* | -.17* | .01   | .51*** | .52**  |        |        |    |
| 19. Family interaction        | 5.50 | .97  | .06   | -.02  | -.08 | -.14* | .07  | .11  | -.10 | .13  | .07  | .20** | .25*** | .05  | .15* | -.10  | .03   | .26*** | .14*   | .25*** |        |    |
| 20. Environmental uncertainty | 4.52 | 1.12 | .12   | .21** | .14* | .07   | .12  | .15* | .04  | .09  | -.08 | -.16* | .07    | .16* | .00  | .18*  | .23** | .30*** | .33*** | .26**  | -.02   |    |
| 21. Succession planning       | 4.85 | 1.02 | .04   | .10   | -.03 | .00   | .08  | .13  | -.04 | .05  | -.07 | .00   | .18*   | .04  | .15* | .03   | .20** | .50*** | .48*** | .29*** | .41*** |    |

N = 198

\*p < .05

\*\* p < .01

\*\*\* p < .001

**Table 2** Regression Model

| Variables                                    | Model 1  |      | Model 2  |     | Model 3  |     | Model 4  |     |
|--|----------|------|----------|-----|----------|-----|----------|-----|
|  | B        | SE   | B        | SE  | B        | SE  | B        | SE  |
| <b>Controls</b>                              |          |      |          |     |          |     |          |     |
| Firm age                                     | .00      | .12  | .06      | .10 | .03      | .10 | .05      | .09 |
| Number of employees                          | .24*     | .11  | .13      | .09 | .10      | .09 | .10      | .09 |
| Firm assets                                  | -.16*    | .07  | -.07     | .06 | -.06     | .06 | -.04     | .06 |
| CEO gender                                   | .01      | .22  | .00      | .19 | .07      | .18 | .11      | .18 |
| CEO age                                      | .01      | .02  | .01      | .01 | .01      | .01 | .01      | .01 |
| CEO education level                          | .13      | .09  | .10      | .08 | .06      | .08 | .04      | .08 |
| Role of CEO                                  | -.09     | .15  | .02      | .13 | .04      | .12 | .09      | .12 |
| Number of siblings                           | .06      | .07  | .03      | .06 | .00      | .06 | -.01     | .05 |
| Birth order of CEO                           | -.08     | .08  | -.02     | .06 | -.01     | .06 | -.04     | .06 |
| Belief                                       | .07      | .16  | .17      | .13 | .16      | .13 | .18      | .13 |
| Health condition                             | .17      | .11  | -.06     | .10 | -.09     | .09 | .00      | .09 |
| Expected retire age                          | -.02     | .02  | -.02     | .02 | -.03     | .02 | -.03     | .01 |
| Innovation rate                              | .17      | .44  | -.13     | .38 | -.01     | .38 | -.15     | .37 |
| Family ownership                             | .20      | .24  | .51*     | .21 | .34      | .21 | .23      | .20 |
| Family management                            | .05*     | .02  | .05*     | .02 | .05*     | .02 | .05**    | .02 |
| <b>Main effects</b>                          |          |      |          |     |          |     |          |     |
| CEO past focus                               |          |      | .28**    | .09 | .21*     | .09 | .13      | .08 |
| CEO present focus                            |          |      | .17*     | .08 | .16*     | .08 | .14      | .09 |
| CEO future focus                             |          |      | .24**    | .08 | .17*     | .08 | .19*     | .08 |
| <b>Moderator</b>                             |          |      |          |     |          |     |          |     |
| Family interaction                           |          |      |          |     | .20**    | .07 | .22***   | .07 |
| Environmental uncertainty                    |          |      |          |     | .19**    | .07 | .17*     | .07 |
| <b>Two Interaction effects</b>               |          |      |          |     |          |     |          |     |
| CEO past focus ×Family interaction           |          |      |          |     |          |     | .20*     | .08 |
| CEO present focus ×Family interaction        |          |      |          |     |          |     | -.07     | .07 |
| CEO future focus ×Family interaction         |          |      |          |     |          |     | -.12*    | .06 |
| CEO past focus ×Environmental uncertainty    |          |      |          |     |          |     | .18*     | .08 |
| CEO present focus ×Environmental uncertainty |          |      |          |     |          |     | -.15*    | .07 |
| CEO future focus ×Environmental uncertainty  |          |      |          |     |          |     | -.11     | .08 |
| Industry dummy                               | Included |      | Included |     | Included |     | Included |     |
| Constant                                     | -.47     | 1.09 | -.07     | .92 | .59      |     | .36      | .87 |
| R square                                     | .20      |      | .45      |     | .50      |     | .56      |     |
| Adjusted R square                            | .08      |      | .35      |     | .40      |     | .46      |     |
| R square change                              | .20*     |      | .24***   |     | .05***   |     | .07***   |     |

N = 198

\* p &lt; .05

\*\* p &lt; .01

\*\*\* p &lt; .001

**Table 3** Split-sample Regression Analysis of Family Interaction

| Controls                  | Model 1: Family interaction<br>at high level ( $N=97$ ) |     | Model 2: Family interaction<br>at low level ( $N=101$ ) |     |
|---------------------------|---|-----|---|-----|
|                           | B   | SE  | B   | SE  |
| Firm age                  | .01   | .14 | .01   | .14 |
| Number of employees       | -.04  | .13 | .27   | .14 |
| Firm assets               | .11   | .10 | -.16  | .09 |
| CEO gender                | .22   | .32 | .23   | .25 |
| CEO age                   | -4.46E-5  | .02 | .01   | .02 |
| CEO education level       | .04   | .11 | -.09  | .13 |
| Role of CEO               | .22   | .20 | -.05  | .20 |
| Number of siblings        | -.02  | .08 | .03   | .09 |
| Birth order of CEO        | .02   | .09 | -.08  | .10 |
| Belief                    | .24   | .19 | .16   | .21 |
| Health condition          | -.01  | .13 | -.00  | .18 |
| Expected retire age       | -.06*   | .02 | .00   | .02 |
| Innovation rate           | -.06  | .51 | .18   | .69 |
| Family ownership          | -.20  | .28 | 1.16**  | .36 |
| Family management         | .05   | .03 | .05   | .03 |
| Environmental uncertainty | .14   | .09 | .21   | .14 |
| <b>Main effects</b>       |   |     |   |     |
| CEO past focus            | .35**   | .12 | .22   | .14 |
| CEO present focus         | .25*  | .11 | .01   | .16 |
| CEO future focus          | .02   | .12 | .30**   | .12 |
| Industry Dummy            | Included  |     | Included  |     |
| R square                  | .60   |     | .61   |     |
| Adjusted R square         | .45   |     | .40   |     |

$N=198$

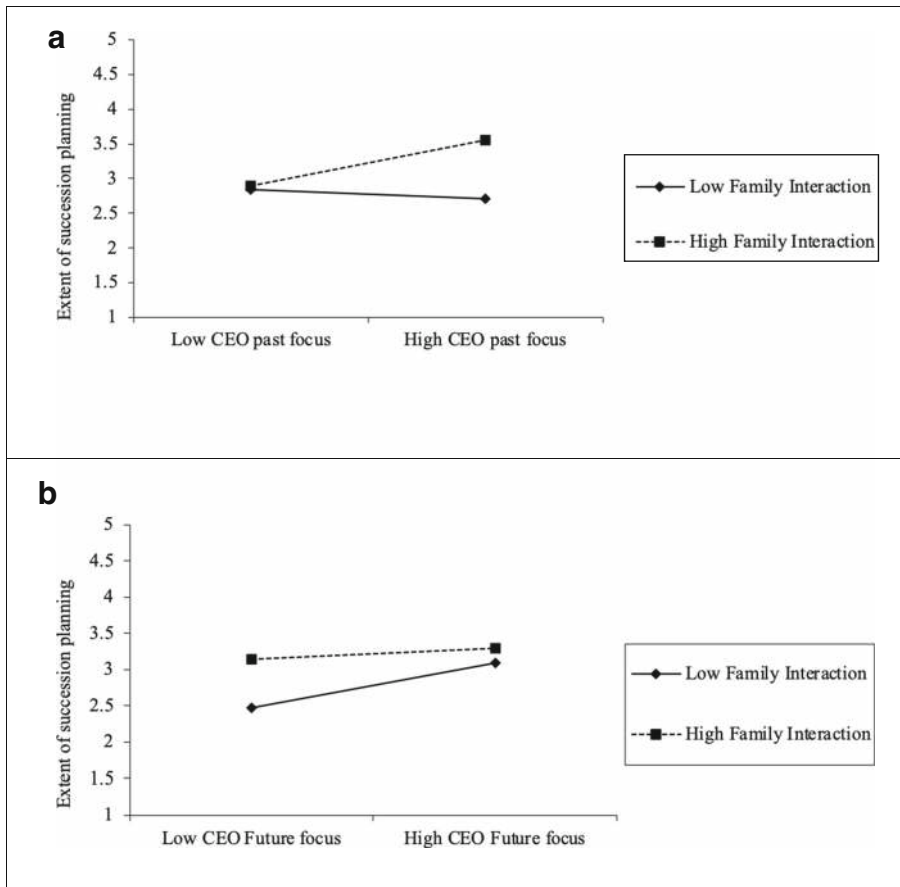
\*  $p < .05$

\*\*  $p < .01$

\*\*\*  $p < .001$

CEO future focus and succession planning (Hypothesis 2c). The interaction term CEO past focus  $\times$  family interactions in Table 2 is significant and positive ( $\beta = .20, p < .05$ ), so Hypothesis 2a is supported. The interaction term CEO future focus  $\times$  family interactions in Table 2 is significant and negative ( $\beta = -.12, p < .05$ ), supporting Hypothesis 2c. However, the interaction term CEO present focus  $\times$  family interactions is not significant, thus Hypothesis 2b is not supported.

The moderating effects can also be examined through a multi-group analysis. With our research model including two interaction factors, we tried to interpret the moderating effects of family interactions and environmental uncertainty separately (Zedeck, 1971). Using the dichotomization approach (MacCallum, Zhang, Preacher, & Rucker, 2002), we divided our sample into two subgroups based on the mean of family



**Fig. 1** Interaction Plots of CEO Temporal Focus, Family Interaction, and Succession Planning. **a.** Interaction plots of CEO past focus, family interactions, and succession planning. **b.** Interaction plots of CEO future focus, family interactions, and succession planning

interactions. In Table 3, consistent with Hypothesis 2a, the marginal effect of CEO past focus on succession planning is positive at a high level of family interactions ( $\beta = .35$ ,  $p < .01$ ), but not significant at a low level. Again, consistent with Hypothesis 2c, the marginal effect of CEO future focus on succession planning is positive at a low level of family interactions ( $\beta = .30$ ,  $p < .01$ ), but not significant at a high level. These results and the corresponding interaction plots in Fig. 1 suggest that family interactions positively moderate the relationship between CEO past focus and succession planning and negatively moderate the relationship between CEO future focus and succession planning. Thus, Hypotheses 2a and 2c are supported, while Hypothesis 2b is not supported.

Hypotheses 3a, 3b, and 3c postulate that environmental uncertainty positively moderates the relationship between CEO past focus and succession planning (Hypothesis 3a), negatively moderates the relationship between CEO present focus and succession planning (Hypothesis 3b), and negatively moderates the relationship between CEO future focus and succession planning (Hypothesis 3c). The interaction term CEO



**Table 4** Split-sample Regression Analysis of Environmental Uncertainty

| Controls            | Model 1: Uncertain environment ( $N=97$ ) |          | Model 2: Certain environment ( $N=101$ ) |          |
|---------------------|---|----------|--|----------|
|                     | B   | SE       | B  | SE       |
| Firm age            | .07                                       | .13      | .07                                      | .16      |
| Number of employees | -.03                                      | .13      | .24                                      | .14      |
| Firm assets         | .08                                       | .09      | -.18                                     | .10      |
| CEO gender          | .03                                       | .35      | .03                                      | .25      |
| CEO age             | .00                                       | .02      | -.00                                     | .02      |
| CEO education level | .05                                       | .10      | .15                                      | .14      |
| Role of CEO         | -.07                                      | .16      | .25                                      | .25      |
| Number of siblings  | .06                                       | .07      | -.06                                     | .11      |
| Birth order of CEO  | -.08                                      | .09      | .07                                      | .10      |
| Belief              | .42*                                      | .17      | -.06                                     | .23      |
| Health condition    | .11                                       | .16      | -.17                                     | .15      |
| Expected retire age | -.05*                                     | .02      | .01                                      | .03      |
| Innovation rate     | .23                                       | .48      | -.58                                     | .60      |
| Family ownership    | -.08                                      | .35      | .76                                      | .32      |
| Family management   | .06*                                      | .03      | .05                                      | .04      |
| Family interaction  | .09                                       | .11      | .34**                                    | .11      |
| <b>Main effects</b> |   |          |  |          |
| CEO past focus      | .20+                                      | .11      | .16                                      | .15      |
| CEO present focus   | -.04                                      | .15      | .33**                                    | .12      |
| CEO future focus    | .19                                       | .12      | .19                                      | .12      |
| Industry Dummy      |   | Included |  | Included |
| R square            |   | .59      |  | .58      |
| Adjusted R square   |   | .43      |  | .40      |

$N=198$

+  $p < .1$

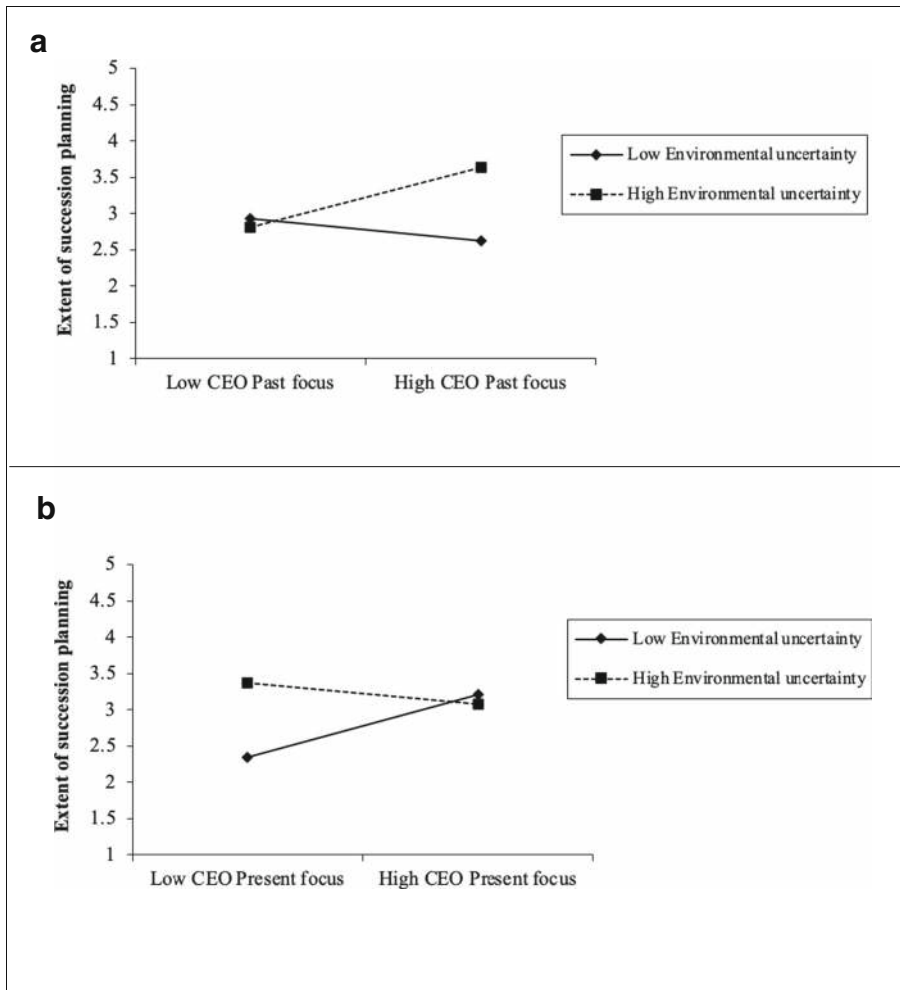
\*  $p < .05$

\*\*  $p < .01$

\*\*\*  $p < .001$

past focus  $\times$  environmental uncertainty in Table 2 is significant and positive ( $\beta = .18$ ,  $p < .05$ ), supporting Hypothesis 3a. The interaction term CEO present focus  $\times$  environmental uncertainty in Table 2 is significant and negative ( $\beta = -.15$ ,  $p < .05$ ), supporting Hypothesis 3b. However, the interaction term CEO future focus  $\times$  environmental uncertainty is not significant; Hypothesis 3c is therefore not supported.

Following the dichotomization approach (MacCallum et al., 2002), we divided our sample into two subgroups with high and low environmental uncertainty based on a mean split. The results are presented in Table 4. The effect of CEO past focus on succession planning is positive in an uncertain environment ( $\beta = .20$ ,  $p < .1$ ), but not significant in a certain environment, supporting Hypothesis 3a. In addition, the effect of CEO present focus on succession planning is not significant in an uncertain



**Fig. 2** Interaction Plots of CEO Temporal Focus, Environmental Uncertainty, and Succession Planning. a. Interaction plots of CEO past focus, environmental uncertainty, and succession planning. b. Interaction plots of CEO present focus, environmental uncertainty, and succession planning

environment, but positive in a certain environment ( $\beta = .33, p < .01$ ), supporting Hypothesis 3b. These results and the interaction plots in Fig. 2 suggest that environmental uncertainty positively moderates the relationship between CEO past focus and succession planning and negatively moderates the relationship between CEO present focus and succession planning. Thus, Hypotheses 3a and 3b are supported, but Hypothesis 3c is not.

### Discussion for study 1

The results of Study 1 supported most of our hypotheses. Although the moderating effect of family interaction on present focus ( $\beta = -.07, n.s.$ ) and the moderating effect of environmental uncertainty on future focus were not significant ( $\beta = -.11, n.s.$ ), the

directions of these two moderating effects were consistent with H2b and H3c. One possible reason for the non-significant results could be our small sample size. The low number of survey participants somewhat decreased the statistical power. However, the lack of statistical significance does not mean that there was no effect (Altman & Bland, 1995). Therefore, we suggest that future studies use larger samples to test the moderating effects of family interaction and environmental uncertainty with a temporal focus.

## Study 2: Semi-structured interviews

The results of our survey data support most of our hypotheses. However, a major limitation of this survey study is that it examines only the correlations between CEO temporal focus and succession planning, so we cannot determine the psychological processes involved. To check the robustness of the results of Study 1 and better understand the psychological processes involved in the relationship between CEO temporal focus and succession planning, we conducted semi-structured interviews. A qualitative research design was particularly appropriate for our research objective given the lack of studies and mechanisms to explain the relationship between CEO temporal focus and succession planning based on our focus on the “how” and “why” questions (Yin, 1994). To better understand under what conditions our survey results hold, we conducted semi-structured interviews with 15 family firm CEOs who completed our surveys, to provide qualitative descriptions of the relationship between CEO temporal focus and succession planning. We first obtained a complete list (Koiranen, 2002) of family business owners who completed the questionnaire in Study 1. We then collected the contact details of these family business owners via their official company website and the entrepreneurship research center. As a result, we collected contact information for 50 family firms. Next, we contacted the owners of these family businesses via phone and 15 agreed to participate in our study. During the interviews, we first asked the respondents to rate three types of temporal focus with 3 points (Low - Medium - High) based on their situation. Regarding their attitudes toward the past, present, and future, we asked them several questions: *What are the key factors influencing the succession planning decision of the family firm? How do different types of temporal focus shape their attitudes, cognitions, emotions, and motivations regarding succession planning? How does the family business participate in knowledge sharing from the incumbent CEO to the next generation?* In addition, we asked the CEOs about their rational and emotional responses to succession planning. Among the participants, 13 were men and 2 were women and their ages ranged from 37 to 64 years.

## Coding process

Based on the principles of grounded theory (Glaser & Strauss, 1967; Strauss & Corbin, 1990), we read and reread the textual data collected during the interviews and labelled the variables (the different dimensions of temporal focus and succession planning). Adhering to the grounded theory of qualitative research (Glaser, 1978), we conducted open coding on the data from the semi-structured interviews. We followed a two-step method (Mayring, 2014) to analyze our qualitative data. In the first step, we used line-by-line, sentence-by-sentence coding and logically structured the descriptions of each of the 15 family firms with relevant information on CEO temporal focus, the effects of

the family and business environments, and succession planning. Two independent coders read through the interview transcripts and identify “past focus,” “present focus,” and “future focus” as different constructs important for succession planning. Regarding succession, the responses of the interviewees were the main resources for understanding the process of developing a succession plan. Two coders independently read and coded the interview transcripts based on statements indicating a succession plan. Inspired by the literature on succession planning, we identified four succession planning tasks: successor selection, successor training, defining the role of the incumbent CEO during and after the succession process, and communicating the succession decision to the directors and family members. In the second step, we performed a cross-interview analysis to understand how the different types of CEO temporal focus were associated with succession planning. First, we hand-coded the interviews of all firms (Saldaña, 2012) with respect to the key constructs in our research model and classified the information into the different temporal focus categories. Table 5 provides several examples of quotes generated during this step. We then further categorized and identified the significant mechanisms linking the different types of temporal focus and succession planning (Miles & Huberman, 1994).

## Results

In Study 2, we investigated how CEO temporal focus affects family business succession planning. Upper echelon theory emphasizes CEOs’ affection, cognition, and motivation as the key factors affecting their decision-making process (Hambrick, 2007; Hambrick & Mason, 1984). In family businesses, incumbent CEOs may resist or initiate succession planning for lifestyle, economic, rational, psychological, and behavioral reasons (Sharma et al., 2003). From the knowledge or capability perspective, knowledge transfer between a family business owner and a successor is an essential task during the succession process (Bracci & Vagnoni, 2011; Cabrera-Suárez et al., 2001). Incumbent CEOs, as the key intangible knowledge holders (Sambrook, 2005), determine succession planning based on their perceptions of their experiences. From a motivational perspective, family-owned firms are organized around a set of emotionally charged interpersonal relationships. For succession to succeed, family CEOs must develop business practices and philosophy while balancing the relationship between family and business (Wee & Ibrahim, 2012). Therefore, we suggest that both cognitive and motivational processes might be important mediators of the relationship between CEO temporal focus and succession planning.

Table 6 provides an overview of the rating of the CEOs for the three types of temporal focus and the extent of succession planning initiated by each firm. Based on the patterns identified in our analyses, we propose a set of psychological processes that mediate the relationship between CEO temporal focus and succession planning, illustrated in Fig. 3.

Our first observation is that CEO past focus plays an important role in shaping the strategies of all family firms investigated. Most respondents suggested that recalling past events (e.g., they mentioned “recalling days gone by,” “the golden age of the past,” “previous experience,” “remembering a younger life,” and “past mistakes”) motivated them to transfer their family business to the next generation and gave them more confidence for a successful transition. For example, Jun, 37 years old and the second-

**Table 5** Examples of Quotes

| Temporal focus           | Raw materials from the interviews  | Keywords related to temporal focus  | Keywords related to succession planning   |
|--------------------------|--|---|---|
| Strong focus on the past | <p>“My successful past experience is important for my strategies ... and it encourages and motivates me to continue the family business.” (Male, first generation, Firm 1)</p> <p>“I would like to make a succession plan because I have entrepreneurial experience to share with my children ... My successful experience and lessons from the past have given me more confidence for my succession.” (Female, first generation, Firm 14)</p> <p>“When I look back on my entrepreneurial process, my failed attempts have taught me the most about what works and what does not” (Male, first generation, Firm 3)</p> <p>“I am a nostalgic person and I created a small museum in our company to show the history of the growth of the company ... My family’s traditional methods of making Chinese-style ham and sausages have been passed down from two generations already. I hope that my children and grandchildren will continue to keep the family tradition.” (Male, second generation, Firm 5)</p> <p>“I reflect on what has happened in my life, it helps me find the right directions for new plans for the business and the family.” (Male, first generation, Firm 9)</p> <p>“I realize that innovation in a family firm is influenced by the organization and the traditional historical journey of the family ... Sharing stories across generations can positively affect a firm’s entrepreneurship and innovation.” (Male, first generation, Firm 7)</p> <p>“I get inspiration from my dad, when I don’t know how to make a decision, I always think about what he would do, his great value will also bring good fortune to my children.” (Male, first generation, Firm 11)</p> <p>“My father always told me his entrepreneurial stories when I was a child, he always talked about his entrepreneurial team and how he</p> | <p>Successful past experience;<br/>Traditional family method;<br/>Family history and tradition;<br/>Entrepreneurial stories</p> | <p>Motivation to continue the family business;<br/>Confidence for succession;<br/>Share experience and stories with the second generation</p> |

Table 5 (continued)

| Temporal focus              | Raw materials from the interviews  | Keywords related to temporal focus   | Keywords related to succession planning   |
|-----------------------------|--|--|---|
| Strong focus on the present | <p>seized opportunities at a difficult time. Now I do the same with my daughter." (Male, second generation, Firm 6)</p> <p>"The success of our company is probably due to our family's efforts to summarize and learn from our entrepreneurial experience of the past decades." (Male, second generation, Firm 15)</p> <p>"When I take the time to be present, I start to notice that I am 62 years old now and will retire soon. Succession is looming." (Male, first generation, Firm 7)</p> <p>"How to continue the successful transformation of firms is one of the biggest challenges facing most Chinese firms today ... New generations can bring professional management skills and advanced technologies to the business." (Male, first generation, Firm 4)</p> <p>"Retail e-commerce sales in China have increased significantly in recent years ... My child knows more about the needs of young consumers and Internet marketing. The involvement of the second generation helps us seize the opportunity of e-commerce." (Male, first generation, Firm 8)</p> <p>"Focusing on the changing needs of current customers is essential to succeed in the service industry. My son can quickly accept new ideas and better understand the needs of young customers than I do." (Female, first generation, Firm 12)</p> <p>"My daughter received her master's degree in fashion design in France this year. I would like to make a plan to pass my company on to her in the near future and we have discussed future plans to enter the European market." (Female, first generation, Firm 14)</p> | <p>Notice age and health status;<br/>Realize the importance of new technologies and management skills;<br/>Changing external environment</p> | <p>Urgency of succession;<br/>The second generation brings new knowledge</p>                    |
| Strong focus on the future  | <p>"I always think about my personal future and the future of our family business. I knew that my son would become a part of our company when he was born." (Male, second generation, Firm 6)</p>  | <p>Successful future;<br/>Future vision;<br/>Industry leader in the future</p>   | <p>Hope to continue the family business;<br/>Directions to educate the potential successor;</p> |



**Table 5** (continued)

| Temporal focus | Raw materials from the interviews  | Keywords related to temporal focus | Keywords related to succession planning               |
|----------------|--|------------------------------------|---|
|                | <p>“I believe that imagining a successful future is necessary because it helps me clarify what I want in the future. I imagine my son will lead my company to become one of the best lighting companies in the industry.” (Male, first generation, Firm 11)</p>    |                                    | <p>Expectations for the future growth of the firm</p> |
|                | <p>“Visions of the future can fuel your imagination and bring hope to your life. Focusing on the future helps me identify the directions to develop my company and how to educate my child to be a capable successor.” (Male, first generation, Firm 2)</p>        |                                    |   |
|                | <p>“I like to imagine my future life, which makes me feel positive, more energetic, and happier. Thinking about future business developments also increases my expectations regarding the longevity of the family business.” (Male, first generation, Firm 10)</p> |                                    |   |
|                | <p>“I have known since I was a child that I would be a crispy cake maker like my father and his father. I can even imagine that my son will inherit my job in the near future.” (Male, second generation, Firm 15)</p>   |                                    |   |

generation CEO of a kitchenware company, stated, “My dad always tells me his old startup stories (...) He likes to share his successful work experience and past achievements. He wants to inspire me to take over the family business with his fascinating stories.” In addition, family CEOs consider both their past successes and failures in entrepreneurship as a wealth of life and enjoy sharing their stories with their children. These transmissions from parents to children in family businesses are motivated by altruism (Van den Berghe & Carchon, 2003). Reflecting on the past also enables family CEOs to determine what they want in the future and force them to make future plans, such as a succession plan. In fact, about 67% of the respondents indicated that their past focus forced them to remember their entrepreneurship stories and motivated them to plan their succession. These qualitative results further support Hypothesis 1a.

In an effort to identify potential explanations as to why CEO present focus is positively associated with succession planning, we obtained additional evidence in our qualitative data set. We observe that family CEOs with a high score on present focus strongly focus on their age and health problems, their firm’s current needs, and the influence of the external environment. For instance, Yue, a second-generation manufacturer of Chinese ham and sausages, explained: “When I take time to be present, I start to notice that I am 62 years old now. Succession is looming.” Most first-generation entrepreneurs in China are currently facing or approaching retirement. Looking at the current landscape, including their personal characteristics, such as age, health status, and knowledge structure, and environmental factors, such as changing customer needs, the popularity of e-commerce, and industry innovation, force them to speed up their succession planning. Qing, the founder of a clothing company, explained the following: “My daughter has just completed her postgraduate studies in France in fashion design. She will bring new design concepts and the latest technologies and software to the company to cope with the changing needs of young customers and the fierce competition in the current market.” In other words, a strong present focus in CEOs helps them realize the importance and urgency of succession. This result further supports Hypothesis 1b.

Another important observation from Study 2 is the positive influence of CEO future focus on succession planning. In firms with a future-focused CEO, the decision to develop a succession plan is generally considered at an early stage. For instance, Jun’s succession plan started the day his son was born: “I always think about my personal future and the future of our family business. I knew my son would become a part of our company when he was born.” Xin, the CEO of a plastic manufacturing company, also stated, “A succession plan is a future strategic plan. Thinking more about children’s future career opportunities and the future of the family firm encourages me to think about succession planning.” These qualitative results further support Hypothesis 1c. In general, the results of Study 2 provide solid evidence to support our hypotheses.

## Discussion for study 2

The results of Study 2 further support H1, which posits that CEOs’ past, present, and future focus have positive effects on succession planning. CEOs’ past successful experiences and technological knowledge shape their cognition regarding knowledge sharing across generations and increases their confidence in succession and their willingness to initiate a succession plan. CEOs’ present focus enables them to realize the urgency of succession because they are more concerned about their current age and health status.

CEOs' future focus increases their expectations regarding the longevity of the firm and increases their concern about their children's future career choices. These findings help explain the psychological mechanism of CEOs' temporal focus on succession planning. We suggest that three dimensions of CEOs' temporal focus shape their cognition of and motivation for succession planning: individual experiences and knowledge, current analysis of the firm's development stage, and future expectations of children's career choices and the firm's growth (see Fig. 3). Our findings are also consistent with the upper echelon literature, which has shown that CEOs' cognitive frameworks and motivations affect their strategic decisions, including succession planning (e.g., Cho & Hambrick, 2006; Eggers & Kaplan, 2009). CEOs' temporal focus is a relatively stable cognitive characteristic (DesJardine & Shi, 2020; Gamache, McNamara, Mannor, & Johnson, 2015) and motivational factor regarding succession planning.

## Discussion

In this study, we integrate the construct of temporal focus derived from psychology (Bluedorn, 2002; Shipp et al., 2009) with upper echelon theory to examine the strategic effects of the subjective temporal orientations of CEOs. Based on a quantitative study and a qualitative study, we find that incumbent CEOs' past, present, and future focus have positive effects on succession planning. In addition, drawing on a holistic perspective of family businesses, we show that the effect of CEOs' temporal focus on succession planning is simultaneously moderated by family interactions and environmental uncertainty.

## Theoretical and practical implications

Our study provides a number of important implications for theory and research on temporality and family business succession management. First, to the best of our knowledge, this is the first empirical study of the role of family CEOs' temporal focus in predicting their succession planning, and it thus provides a new perspective for exploring the antecedents of succession in family firms. Although the literature has examined family business CEOs' characteristics, such as sense of attachment to the business (Miller et al., 2003) and age (Marshall et al., 2006), no study has examined how a CEO's subjective view of time determines succession planning. Drawing on the psychological concept of temporal focus (Gamache & McNamara, 2019; Nadkarni & Chen, 2014; Shipp et al., 2009), our study emphasizes the important role of CEOs' temporal orientation in determining time-sensitive strategic decisions such as succession planning (Glauben et al., 2009; Sharma et al., 2003). We found that incumbent CEOs vary in the degree to which they consider past, present, and future time frames, which can explain the additional variance in succession planning beyond the effects of other CEO demographic characteristics. Given family CEOs' ultimate control over succession decisions (Sharma et al., 2003), we highlight the importance of CEOs' individual subjective time in determining strategic decisions, such as family firms' long-term orientation (Le Breton-Miller & Miller, 2006; Lumpkin, Brigham, & Moss, 2010) and organizational longevity (Colli, 2012), rather than organizations' objective clock-based time. In addition, we considered past, present, and future focus as different

**Table 6** CEO temporal focus and succession planning in the 15 family firms

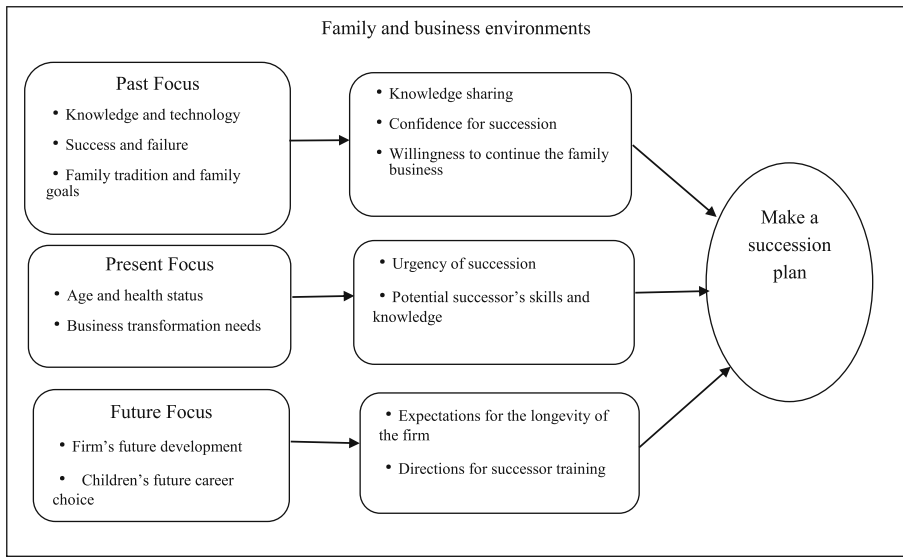
| Firm No. | CEO age | CEO gender | Industry                                 | CEO temporal focus |                   |                  | Psychological processes of succession planning   | Scope of succession planning |                            |                                     |                            |
|----------|---------|------------|--|--------------------|-------------------|------------------|--|------------------------------|----------------------------|-------------------------------------|----------------------------|
|          |         |            |  | CEO past focus     | CEO present focus | CEO future focus |  | Successor selection          | Successor training process | Defining the role the incumbent CEO | Communicating the decision |
| 1        | 56      | Male       | Manufacture of furniture                 | High               | Medium            | Medium           | Reflecting on successful past entrepreneurial experience motivates the continuation of the family business and the development of a succession plan (motivation)                               | Yes                          | Yes                        | Yes                                 | No                         |
| 2        | 42      | Male       | Construction                             | Low                | Low               | High             | Future focus brings hope and helps understand the directions for successor training (motivation & cognition)   | Yes                          | No                         | No                                  | No                         |
| 3        | 48      | Male       | Manufacture of fabricated metal products | High               | High              | Low              | Past successes or failures in business management can be shared with the next generation, to help them avoid making the same mistakes and develop their skills to run the business (cognition) | No                           | Yes                        | Yes                                 | No                         |
| 4        | 53      | Male       | Manufacture of motor vehicles            | Medium             | High              | High             | Present focus on business needs for technological innovation accelerates the succession process (cognition)  | Yes                          | No                         | Yes                                 | Yes                        |
| 5        | 64      | Male       | Manufacture of ham and sausages          | High               | Medium            | Medium           | Past focus on family tradition and goals increases the will and motivation for family succession and the continuity of the family  | Yes                          | Yes                        | Yes                                 | Yes                        |

Table 6 (continued)

| Firm No. | CEO age | CEO gender | Industry                                 | CEO temporal focus |                   |                  | Psychological processes of succession planning   | Scope of succession planning |                            |                                     |                            |
|----------|---------|------------|--|--------------------|-------------------|------------------|--|------------------------------|----------------------------|-------------------------------------|----------------------------|
|          |         |            |  | CEO past focus     | CEO present focus | CEO future focus |  | Successor selection          | Successor training process | Defining the role the incumbent CEO | Communicating the decision |
| 6        | 37      | Male       | Kitchenware manufacturer                 | High               | Medium            | High             | business across generations (motivation)<br>Future focus increases expectations for the growth of the family firm and motivates succession planning (motivation) | Yes                          | No                         | Yes                                 | No                         |
| 7        | 62      | Male       | Manufacture of traditional Chinese food  | High               | High              | Low              | Past focus on family tradition motivates to share past stories with the next generation (motivation)   | Yes                          | Yes                        | Yes                                 | Yes                        |
| 8        | 55      | Male       | Foreign trade                            | Low                | High              | High             | Present focus on the current business transformation needs helps realize the urgency and importance of succession planning                                       | Yes                          | Yes                        | No                                  | No                         |
| 9        | 53      | Male       | Manufacture of textiles                  | High               | Medium            | Medium           | Reflecting on past personal life helps find the right directions for new family (cognition)  | Yes                          | Yes                        | Yes                                 | No                         |
| 10       | 40      | Male       | Public relations                         | Medium             | Medium            | High             | Future focus increases expectations for the longevity of the family firm (motivation)  | Yes                          | Yes                        | No                                  | No                         |
| 11       | 47      | Male       | Manufacture of fabricated metal products | High               | Low               | High             | The strong effect of a parent's past experience and values motivates the transmission of family values between generations (motivation)                          | Yes                          | Yes                        | No                                  | No                         |

Table 6 (continued)

| Firm No. | CEO age | CEO gender | Industry                            | CEO temporal focus |                   |                  | Psychological processes of succession planning  | Scope of succession planning |                            |                                     |                            |
|----------|---------|------------|-------------------------------------|--------------------|-------------------|------------------|---|------------------------------|----------------------------|-------------------------------------|----------------------------|
|          |         |            |                                     | CEO past focus     | CEO present focus | CEO future focus |   | Successor selection          | Successor training process | Defining the role the incumbent CEO | Communicating the decision |
| 12       | 44      | Female     | Catering                            | Low                | High              | High             | Focus on current customer needs helps realize the knowledge and skills of the potential successor to satisfy young customers (cognition)    | Yes                          | Yes                        | No                                  | No                         |
| 13       | 57      | Male       | Manufacture of electronic equipment | High               | Medium            | Medium           | Present focus on his age and health problems helps the family business owner realize the urgency of succession (cognition)                  | Yes                          | No                         | Yes                                 | No                         |
| 14       | 46      | Female     | Clothing design and production      | High               | High              | Medium           | Reflecting on successful past entrepreneurial experience increases confidence for succession  | Yes                          | No                         | Yes                                 | Yes                        |
| 15       | 43      | Male       | Manufacture of crispy cakes         | High               | High              | High             | Past stories motivate the entrepreneur to continue the family business. Family imprints also influence the succession decision (motivation) | No                           | Yes                        | Yes                                 | No                         |



**Fig. 3** Relationship between CEO temporal focus and succession planning

dimensions of CEOs' time perspective, providing a new integrated view of how these time frames affect succession planning.

Our findings advance the literature on temporal focus in two ways. A key topic in this stream of the literature is the effect of individuals' chronic attention to the past, present, and future on their individual behaviors (Shipp et al., 2009). Research has shown the diverse effects of past, present, and future focus on CEOs' strategic decisions (e.g., Nadkarni & Chen, 2014). Some scholars have suggested that focusing more on the future can reduce a firm's concern about past and present issues (Yadav, Prabhu, & Chandy, 2007). Although previous studies have found that CEOs' past focus has a negative effect on new product introduction (e.g., Nadkarni & Chen, 2014), our results indicate that CEOs' past focus has a positive effect on succession in the family business context. One possible reason is that past-focused CEOs are more likely to consider their past experience as tacit knowledge, which can be transferred to the next generation as a competitive advantage (Wang et al., 2017). Recent research on family imprints has highlighted the power of founders' knowledge and family history in shaping firms' strategies and succession process (Erdogan et al., 2020; Weber & Dacin, 2011). Unlike non-family businesses, family firms' growth path is deeply rooted in their founders' prior knowledge and family history (Erdogan et al., 2020), which determines the significant positive role of CEOs' past focus during succession. Our findings suggest that considering CEO' specific experience and knowledge, current status quo, and business context can help reconcile inconsistent findings regarding how temporal focus can affect strategic plans. We also found moderately positive relationships between past, present, and future focus, indicating that focusing on one period does not preclude focusing on others (e.g., Shipp et al., 2009). Most of the CEOs (51%) in our main sample had high scores on more than one dimension, and 21% had high scores on all three dimensions. The results of the qualitative study showed that 53% of the respondents focused on two periods simultaneously, and two respondents had high

scores on all three dimensions of temporal focus. Our results suggest that focusing on one time frame does not preclude focusing on the other two (e.g., Back et al., 2020; Shipp et al., 2009). Our results thus add to the literature on temporal focus.

Additionally, from a holistic perspective (Basco & Pérez Rodríguez, 2009), we suggest that the effect of CEO temporal focus on succession planning in family firms is influenced by family and business environmental factors. We found that family interactions have a positive effect on knowledge transfer efficiency, which contributes to research on the effect of the family system on strategy formulation (Harris, Martinez, & Ward, 1994; Sharma, Chrisman, & Chua, J. H. (Eds.), 2012). Our results also indicate that the relationship between a CEO's temporality and subsequent activities is constrained by uncertainty in the business environment (e.g., Bingham & Eisenhardt, 2011; Nadkarni et al., 2016). Although the importance of the interplay between family and business systems has been noted (Colli et al., 2013; Jennings et al., 2014), little attention has been paid to owner families and family-related variables (Melin, Nordqvist, & Sharma, 2014). Therefore, the "reciprocal influence of family and business" (Zahra & Sharma, 2004: 333) should be considered. Adopting a holistic perspective (Basco & Pérez Rodríguez, 2009), our study emphasizes the importance of integrating both family and business environmental factors in assessing the boundary effect of CEOs' temporality in the family business context.

### **Practical implications**

This study provides a number of important practical implications. First, we suggest that CEOs' past focus can help them produce succession plans, especially for family CEOs who have achieved business success and have rich past entrepreneurial experience and knowledge. These findings may encourage successful CEOs to recall their past, which will enhance their motivation and make them more confident about developing their family firms' long-term vision and succession plans. Second, present focus may help CEOs who are close to retirement age recognize the urgency of succession planning. This finding may motivate middle-aged CEOs to plan for succession based on their analysis of current information. Third, we suggest that CEOs' future focus promotes goal setting, motivation, and efforts to achieve, as future focus encourages family CEOs to think about the future and plan ahead. This study also has important implications for family relationship management and transgenerational succession in family businesses. Effective family interaction improves the efficiency of knowledge transfer between incumbent CEOs and potential successors and facilitates succession planning. Family CEOs who want to improve succession efficiency are encouraged to enhance family interaction frequency and quality to attain the common goals of family firms (e.g., intra-family succession), enlarge the internal talent pool of successor candidates, and obtain family agreement on succession issues.

### **Limitations and suggestions for future research**

Despite the results and implications discussed above, our study has limitations that should be explored in future studies. First, using convenience sampling poses a problem of generalizability. However, as Highhouse and Gillespie (2009) suggest, the main concern of our research method is that our theory is applicable to the sample



used. Nevertheless, our results should be interpreted with caution, because family firms have different types of ownership structures and our data do not fully capture these differences. Incumbent CEOs' perceptions of family interactions cannot fully assess their actual interactions, because different family members may perceive the quality of these interactions differently. We suggest that future studies collect family-level variables from different family members to better understand the effect of the family on CEO temporal focus. In addition, we do not empirically test the mediators in our research model, although we argue that positive affect can mediate the relationship between CEO temporal focus and succession planning. Thus, we suggest that future studies follow an appropriate cross-lagged model procedure to test the exact order of CEO temporal focus, psychological processes, such as cognitive framework and positive affect, and succession planning (e.g., Law, Wong, Yan, & Huang, 2016). Regarding the influence of the family on the strategies (Chrisman & Patel, 2012) and performance (Miller, Breton-Miller, & Lester, 2013) of family firms, the effects of CEO temporal focus on diverse strategies (e.g., R&D investment, strategic alliance) and on the financial performance of family firms warrant further investigation.

## Conclusions

The literature has focused on organizational and family factors to explain succession planning behavior, while few studies have explored the psychological motives of incumbent CEOs. By integrating upper echelon theory and time perspective theory, we propose and empirically test the relationship between CEO temporal focus and succession planning. Our results show that incumbent CEOs' past, present, and future focus are positively related to succession planning. From a holistic perspective, we further reveal two boundaries (family interactions and environmental uncertainty) moderating the effects of temporal focus on succession planning. People have different attitudes toward temporal focus, so whether the temporal focus of family CEOs will affect their various strategies remains an open question. We also suggest that more research be conducted on the broader importance of temporal focus in strategic decision-making and its expression in the family business context.

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