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TO LEAVE OR TO STAY? THE DECISION CONTEXT, SELF-IMAGE, AND OWNER-MANAGERS’ PERSISTENCE DECISIONS

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THE DECISION CONTEXT, SELF-IMAGE, AND OWNER-MANAGERS’ PERSISTENCE DECISIONS

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ABSTRACT

In this paper we draw on social cognitive theory (Bandura, 1986) and examine the roles of the decision context (consisting of venture attachment, family time pressure, social approval pressure and the number of personal options) and one self-image (i.e., fear of failure) in SME owner-managers’ persistence decision making. We test our hypotheses using a metric conjoint experiment with 90 SME owner-managers and find the decision context and self-image interact in a complex way to influence owner-managers’ persistence decisions.

INTRODUCTION

Underperforming ventures are those the performance of which falls short of the owner’s expectations for a considerable period of time (D. R. DeTienne, Shepherd, & De Castro, 2008), yet the future of which is not a clear failure (Bourgeois & Eisenhardt, 1987). Persistence decisions about an underperforming venture indicate the extent to which an owner-manager, who owns, manages, and makes decisions for his or her venture (Dean A. Shepherd, Wiklund, & Haynie, 2009), wants to continue committing to the underperforming venture. Persistence decisions have important implications for owner-managers, the industry and the economy (DeTienne, Shepherd, & De Castro, 2008). Persistence is generally viewed as a positive, if not necessary, characteristic of successful entrepreneurs (Ma & Tan, 2006). However, persistence in the face of enduring underperformance can have negative consequences.

While research to date has investigated contextual factors (e.g., environmental munificence) and individual characteristics (e.g., human capital) as predictors of owner-managers’ persistence decisions (D. R. DeTienne, et al., 2008; Gimeno, Folta, Cooper, & Woo, 1997), gaps remain. First, though scholars have begun to explore the role of a finite set of individual characteristics (e.g., human capital and personal values) (Gimeno et al., 1997; Holland & Shepherd, 2011), there is much more that we have yet to learn. Individuals’ decisions and actions are shaped not only by the context but also by how individuals evaluate themselves (Franks & Marolla, 1976). Second, owner-managers assume multiple roles in society (e.g., business owner, family member, community member). The call for more research on the role of family conditions in entrepreneurs’ venture exit decisions (Justo & DeTienne, 2008) as well as the influence of social networks and social interactions on entrepreneurs’ decisions, behaviour, and new venture performance (Davidsson & Honig, 2003) suggests the importance of examining owner-managers’ persistence decisions in a broader social context.

To fill in the above two research gaps, we draw on social cognitive theory (Bandura, 1986) as the overarching theoretical framework for this research and aim to answer the following research question: how do the decision context and self-image jointly influence owner-managers’
persistence decisions? We further draw upon role theory and the mental simulation literature to conceptualize the decision context, and examine the impact of fear of failure, as one type of self-image, on owner-managers’ persistence decisions. By using a metric conjoint experiment with 90 small- and medium-business owner-managers, we find that the decision context and self-image interact in a complex way to influence owner-managers’ persistence decisions.

This research makes three contributions. First, we put persistence decisions in a broad context consisting of the influences of the venture, the family, the business community, and personal options. By examining the impact of these contextual factors, especially the interactions among them, our research contributes to persistence research by exploring the complexity of owner-managers’ persistence decisions. Second, this research extends previous research on the relationship between owner-managers’ venture attachment and persistence by providing empirical support for this relationship and by identifying some moderators for this relationship, such as family time pressure, the number of personal options, and fear of failure. Our research thus has answered the call for future research on the implications of the attachment-persistence relationship (Cardon, Zietsma, Saparito, Matherne, & Davis, 2005). Third, by examining the influence of fear of failure, we extend previous research on the effect of individual characteristics on owner-managers’ persistence decisions (D. R. DeTienne, et al., 2008; Holland & Shepherd, 2011) and enrich our knowledge in this field.

**Theory and Hypotheses**

Persistence generally refers to the continuance of business operations despite setbacks, impediments, or enticing alternatives (Gimeno, et al., 1997; Holland & Shepherd, 2011). Persistence emphasizes two aspects of such continuance: the actions taken in response to negative feedback from the environment (Gimeno, et al., 1997; Holland & Shepherd, 2011) and the continuance of a previously selected action despite other attractive options (Holland & Shepherd, 2011).

Entrepreneurship scholars have adopted a variety of theoretical lenses to study persistence, for instance, Gimeno et al.’s (1997) performance threshold model suggests that entrepreneurs would not exit a venture as long as the venture performance is above their threshold. This model has been extended by DeTienne et al. (2008) through employing Staw’s (1981) escalation of commitment model and by Justo and DeTienne (2008) through using the family-embeddedness perspective. These researchers found that entrepreneurs’ persistence decisions are influenced by environmental factors such as environmental munificence and individual factors such as personal investment, gender and marital status. Similarly, Holland and Shepherd (2011) argued that persistence decisions were a function of both the environment (e.g., adversity) and personal factors (e.g., personal values). Some researchers also theorize the roles of venture attachment (Cardon, et al., 2005), procrastination (Dean A. Shepherd, 2009; Dean A. Shepherd, et al., 2009) and founder role identity (Hoang & Gimeno, 2010) in entrepreneurial persistence.

Although existing research has provided insight into entrepreneurs’ or owner-managers’ persistence decisions, two gaps can be identified. First, although entrepreneurship scholars have researched the impact of some individual characteristics, such as human capital (Gimeno, et al., 1997), passion and attachment (Cardon, et al., 2005), and extrinsic motivation (D. R. DeTienne, et al., 2008), our knowledge of how the self may influence owner-managers’ persistence decisions is still limited. Second, inspired by Granovetter’s (1985) social-embeddedness perspective of human action, an increasing number of entrepreneurship scholars have begun to investigate how entrepreneurs act as social selves and how their decisions are influenced by their social networks extended by family.
and other social relations (Aldrich & Cliff, 2003; Fauchart & Gruber, 2011). It is valuable to further explore the complexity of owner-managers’ decision policies in a broader social context.

To address the aforementioned research gaps, we adopt social cognitive theory (Bandura, 1986, 1999) as the theoretical framework for the present research. Social cognitive theory suggests reciprocal relationships among the environment, individual cognitive, affective, and biological factors, and individual actions. Individual actions are influenced by the environment and individual characteristics (Bandura, 1986, 1999). To further conceptualize the decision context, we draw upon role theory (Kahn, Wolfe, Quinn, & Snoek, 1964) and the mental simulation literature (Taylor & Schneider, 1989) because individuals’ decisions and actions are influenced by the expectations of the multiple roles they assume in society (Kahn, et al., 1964) and opportunities to imagine a different being in the future (Markus & Nurius, 1986). We focus on four decision context factors: venture attachment, family time pressure, social approval pressure and alternative opportunities. Regarding individual characteristics, we choose to examine the impact of one self-image—fear of failure on owner-managers’ persistence decisions given that the different expectations coming from owner-managers’ various social roles may create pressure on owner-managers and make them suffer from fear of failure. Below we theorize how the decision context and fear of failure influence owner-managers’ persistence decisions.

**Venture Attachment and Persistence Decisions**

Venture attachment has been viewed either as an emotional bond between the entrepreneur and the venture (Cardon, et al., 2005; Dean A. Shepherd, 2003) or an extension of the personality of business owners (Stewart, Watson, Carland, & Carland, 1999). In this paper, we define venture attachment as the identity link between the owner-manager and the venture. Venture attachment may influence owner-managers’ persistence decisions through the intention to avoid losing part of the self. Because the venture is part of the self, losing the venture means losing part of the self and being left with an incomplete identity, which may lead to identity crisis (where owner-managers do not know how to define themselves after their ventures are gone) (Brockner, Houser, Birnbaum, Lloyd, & Deitcher, 1986) and arouse negative emotions (e.g., grief) (Dean A. Shepherd, 2003) and even pathological consequences (Pierce, Kostova, & Dirks, 2001). It is reasonable to expect that owner-managers choose to persist with underperforming ventures to avoid the loss of part of the self and the dysfunctional consequences associated with such losses.

**Hypothesis 1:** There is a positive relationship between venture attachment and the likelihood of persisting with an underperforming venture.

**Family Time Pressure and Persistence Decisions**

Work-family interface research suggests that work and family demands are mutually incompatible (Greenhaus & Beutell, 1985; Huang, Hammer, Neal, & Perrin, 2004). The incompatible nature of the two domains combined with individuals’ limited cognitive resources may result in pressure from the family domain, work-family conflict if one over-spends his or her effort in the business domain (Greenhaus & Beutell, 1985), and negative consequences such as divorce (Neider, 1987), decreased life satisfaction (Parasuraman, Purohit, Godshalk, & Beutell, 1996), and poor well-being (Burke, 1988; Edwards & Rothbard, 2000). These negative consequences are likely to spill over to the business domain and cause emotional exhaustion and job burnout (Jamal, 2007), which, in turn, may increase owner-managers’ likelihood of disengaging from the underperforming venture.
Hypothesis 2: There is a negative relationship between family time pressure and the likelihood of persisting with an underperforming venture.

Social Approval Pressure and Persistence Decisions

Business communities can serve as a professional support network by providing owner-managers with information, advice and guidance (Hisrich, 1990). This professional support network may include other business associates, who can give constructive advice based on their own entrepreneurial experience, clients that help get the brand out of the door, and suppliers who can provide trade credits (Hisrich, 1990). Behaviour that is consistent with social norms can be rewarded, and this reward is social approval (Rege & Telle, 2004). Non-compliance with social expectations may result in loss of community support and a bad reputation for the owner-managers. Therefore, in a community that values persistence, owner-managers are likely to persist with underperforming ventures to avoid social sanctions.

Moreover, a business community that values persistence and that expects its members to be persistent with their ventures is likely to have a high tolerance for underperforming ventures. Owner-managers in such communities may be willing to listen to one another’s stories and encourage one another to confront and fight setbacks. Such tolerance and willingness to support may lower the performance thresholds of owner-managers of underperforming ventures and motivate them to persist with their ventures.

Hypothesis 3: There is a positive relationship between social approval pressure and the likelihood of persisting with an underperforming venture.

Number of Personal Options and Persistence Decisions

Personal options refer to the options an owner-manager has outside the current venture, such as alternative venturing opportunities and job offers from other organizations (D. R. DeTienne, et al., 2008). Individuals who imagine themselves performing a target behaviour are more likely to change their behavioural intentions than individuals who do not perform imagination exercises (Anderson, 1983). Owner-managers with many personal options have more opportunities than their counterparts to imagine different futures in which they are no longer the owner-manager of an underperforming venture but an owner-manager of a different venture, an employee in an organization or a volunteer for community events. Such imagination, therefore, may drive owner-managers to discontinue the current underperforming venture. In contrast, owner-managers with few personal options are unlikely to be able to imagine different futures through pursuing alternative options; therefore, they are likely to continue operating a poorly performing venture (Gimeno, et al., 1997) and strive to turn it around.

Hypothesis 4: There is a negative relationship between the number of personal options and the likelihood of persisting with an underperforming venture.

In addition to the direct impact of the individual decision context factors on owner-managers’ persistence decisions, we also investigate the interactions among different decision context factors.

Venture Attachment, Family Time Pressure, and Persistence Decisions

When family time pressure is high, owner-managers need to devote considerable attention and energy to spending time with family and meeting their expectations. Family time demands, however, are likely to collide with the time, attention, and energy demands of underperforming ventures, thereby causing work-family conflict (Burke, 1988; Greenhaus & Beutell, 1985) and
increasing intention to quit (Rothausen, 1994). When family time pressure is low, owner-managers are able to direct more psychological resources to the business domain to deal with the challenges and difficulties of underperforming ventures. Such extra psychological resources can function together with venture attachment and help amplify its positive impact on persistence. Therefore, the relationship between venture attachment and the likelihood of persistence will be strengthened when family time pressure is low. Accordingly,

**Hypothesis 5a:** The positive relationship between venture attachment and owner-managers’ likelihood of persisting with an underperforming venture is weaker when family time pressure is high than when it is low.

**Venture Attachment, Social Approval Pressure, and Persistence Decisions**

High social approval pressure from a business community that values persistence indicates that the business community highly expects the owner-managers in the community to be persistent with what they are doing. As owner-managers’ venture attachment can arouse an internal psychological force driving them to stay with their ventures, this internal drive will be externally validated by the high social approval pressure (Franks & Marolla, 1976). Therefore, the positive relationship between venture attachment and the likelihood of persistence will be amplified when social approval pressure is high. When social approval pressure is low, few people in the business community expect one to be persistent with an underperforming venture despite setbacks. Thus, owner-managers who are persistent with their ventures will find it difficult to identify with such a business community, thereby feeling lonely (Boyd & Gumpert, 1983) and lacking a sense of belonging (Baumeister & Leary, 1995). As a result, the relationship between venture attachment and the likelihood of persistence will be attenuated when social approval pressure is low.

**Hypothesis 5b:** The positive relationship between venture attachment and the likelihood of persisting with an underperforming venture becomes stronger when social approval pressure is high than when it is low.

**Venture Attachment, the Number of Personal Options, and Persistence Decisions**

When few personal options are available, owner-managers have limited ability to imagine different futures through other personal options. Therefore, they can only focus on the current underperforming venture (Gimeno, et al., 1997) and hope to turn it around to achieve the initial goal. This determination may strengthen the relationship between venture attachment and the likelihood of persistence. In contrast, owner-managers with many personal options may direct more attention to the options outside the current underperforming venture (Holak, Lehmann, & Sultan, 1987; Sherman & Anderson, 1987) and imagine different futures. As such, the relationship between venture attachment and the likelihood of persistence may be weakened.

**Hypothesis 5c:** The positive relationship between venture attachment and the likelihood of persistence is stronger when there are few personal options than when there are many.

**Influence of Fear of Failure**

Fear of failure is a vulnerable self-image. Individuals experience fear of failure when they appraise the environment and anticipate the aversive consequences of failing (Conroy, Poczwardowski, & Henschen, 2001; Conroy, Willow, & Metzler, 2002). Fear of failure consists of five dimensions, also five aversive consequences of failure: fear of experiencing shame and embarrassment, fear of devaluing one’s self-estimate, fear of having an uncertain future, fear of important others losing
interest, and fear of upsetting important others. Some of these dimensions are intrapersonal (e.g.,
fear of shame and embarrassment) and may drive owner-managers to place emphasis on the impact
of intrapersonal decision factors (e.g., venture attachment) on persistence. Other dimensions of
fear of failure (e.g., fear of upsetting important others) are interpersonal, and may lead owner-
managers to place emphasis on the impact of interpersonal decision factors (e.g., family time
pressure) on persistence. We expect:

Hypothesis 6a: The positive relationship between venture attachment and the likelihood of
persistence becomes stronger when fear of failure is low than when fear of failure is high.
Hypothesis 6b: The negative relationship between family time pressure and the likelihood
of persistence becomes stronger when owner-managers are high in fear of failure than when
they are low in fear of failure.
Hypothesis 6c: The positive relationship between social approval pressure and the likelihood
of persistence becomes stronger when owner-managers are high in fear of failure than when
they are low in fear of failure.
Hypothesis 6d: The negative relationship between the number of personal options and the
likelihood of persistence will be amplified when owner-managers are high in fear of failure
compared with when fear of failure is low.

We also explore some three-way interactions of fear of failure and the contingent relationships
between some decision context factors and the roles of the individual components of fear of failure
in owner-managers’ persistence decisions.

**Methods**

**Sample**

The sampling frame for this research came from the Dun & Bradstreet (D&B) directory,
which has been widely used in existing entrepreneurship research (D. DeTienne & Cardon, 2012;
Hmieleski & Carr, 2007). To arrive at our sample, we chose companies within a two-hour driving
distance from our research site so that the researcher could be on site to enhance the quality of
responses (Bruns, Holland, Shepherd, & Wiklund, 2008; D. A. Shepherd & Zacharakis, 1997). We
further selected SMEs that were for-profit firms with fewer than 500 employees and less than $50
million annual sales revenue and that were less than 8 years old to ensure the owner-managers had
the authority and control to make decisions.

The above-mentioned criteria enabled us to identify 531 firms from the D&B directory. A
total of 421 out of the 531 firms had valid contact information. After an invitation letter was
sent and phone calls made to schedule appointments with the owner-managers, 90 out of the
421 owner-managers agreed to participate, resulting in a response rate of 21.4%. Among these
90 owner-managers, 3 owner-managers provided unreliable answers to the decision-making task
(their answers had low test-retest reliability), and thus were excluded from the final sample. As
a result, responses from 87 owner-managers’ were used for data analysis. Respondents and non-
respondents did not vary in the number of employees ($F=1.102$, $p>.1$) and firm age ($F=.034$, $p>.1$).

**Experimental Design**

We used metric conjoint analysis in this research and we used a fully crossed factorial design.
The four decision factors (i.e., venture attachment, family time pressure, social approval pressure,
and the number of personal options) resulted in 16 ($2^4$) decision profiles. The final experimental
instrument consisted of 33 profiles, including 1 practice profile (not included in the analysis) to
familiarize owner-managers with the experiment, 16 decision profiles, and 16 replicate profiles to test the reliability of owner-managers’ responses.

In order to avoid the factor order effects (Orme, Alpert, & Christensen, 1997), we developed four different versions of the experiment instrument that differed in both the order of the decision attributes within a profile and the order of the profiles within the experiment. The mean scores of the likelihood of persistence (the dependent variable) across the different versions were not significantly different ($p > .05$). Therefore, no order effects were found. A post-experiment survey was administered after the decision making task to collect information about owner-managers, their ventures, and their business environment.

**Manipulations and Measures**

The dependent variable in this research is owner-managers’ likelihood of persistence with an underperforming venture, measured by an 11-point Likert scale, anchoring from 1 (definitely leave the venture) to 11 (definitely remain in the venture).

Venture attachment is manipulated using the identity link between the venture and the owner-manager. High venture attachment is manipulated as “This venture defines and reflects who you are. If you were describing yourself, this venture would be something you would mention.” Low venture attachment is manipulated as “This venture doesn’t define or reflect who you are. If you were describing yourself, this venture would not be something you would mention.”

Family time pressure was manipulated using the time demands of family. High family time pressure is manipulated as “Staying with this venture runs against what your family expects from you in your family life (e.g., spending time with your family, emotionally caring about them, fulfilling your household responsibilities). Your family insists that your meeting their expectations is critical.” Low family time pressure is manipulated as “Staying with this venture still allows you to meet your family’s expectations from you in your family life (e.g., spending time with them, emotionally caring about them, fulfilling your household responsibilities). Your family indicates that your meeting their expectations is desirable but not critical.”

Social approval pressure is manipulated by using the business community’s expectations of owner-managers’ persistence behaviour. The manipulation of high social approval pressure is “The venture operates in a business community where people are go-getters and non-quitters to support each other, to satisfy community needs, and to enhance community welfare. They also expect everyone in the community to do so.” The manipulation of low social approval pressure is “The venture operates in a business community where people decide and act to enhance their self-interest. There is no socially-held expectation as to what someone in the community should do.”

Following DeTienne et al. (2008), many personal options is manipulated as “Outside of this venture, many other opportunities that have attractive earning potentials are available for you (e.g., job offer, venturing opportunity).” Few personal options is manipulated as “Outside of this venture, few other opportunities that have attractive earning potentials are available for you (e.g., job offer, venturing opportunity).”

Fear of failure was measured by a 25-item 7-point Likert scale (Conroy, et al., 2001; Conroy, et al., 2002), anchoring from 1 (do not believe at all) to 7 (believe 100% of the time). This measure was highly reliable (Cronbach’s $\alpha = .911$). In addition to fear of failure, we also controlled for the factors below that were theorized or found in previous research to affect owner-managers’ persistence decisions (Gimeno, et al., 1997; Justo & DeTienne, 2008).
Gender was measured using a binary variable, with 0 indicating male. Human capital can be categorized into general human capital and specific human capital. In this research, general human capital was measured by age, education level (university degree versus no university degree), and the total years of work experience. Specific human capital was measured by industry experience (the total years of work experience both in the primary industry and in similar industries) (Mitchell, Shepherd, & Sharfman, 2011) and the total number of new ventures created at the time of the interview. Following Mitchell and Shepherd (2010), general human capital and specific human capital were calculated using an index of the standardized values of the variables. Ball & Tasaki’s (1992) possession attachment scale was adapted to the entrepreneurship context to measure owner-managers’ actual venture attachment. Sample items included: “My firm reminds me of who I am,” and “If I were describing myself, my firm would likely be something I would mention.” The reliability of the venture attachment scale was high (Cronbach’s α = .854). Family identity was measured by Aryee & Luk’s (1996) four-item family identity scale. The reliability of the family identity scale was .904. Community identity was measured using the 4-item identity scale of the collective self-esteem scale developed by Luhtanen and Crocker (1992). The reliability of the community identity scale was .860.

Personal investment was measured by the weekly number of hours that owner-managers had invested in their ventures and the percentage of personal wealth owner-managers had invested in their ventures. Environmental dynamism was measured by a 5-item, 7-point Likert scale developed by Miller and Friesen (1982), with 1 indicating strong disagreement and 7 indicating strong agreement with a series of statements regarding the competitive nature of the environment. The reliability of the scale is .690, which is acceptable.

Data Analysis

Given that persistence decisions are nested within individuals who make the decisions and that the decisions made by individuals are not independent of individuals, hierarchical linear modeling (HLM) was used to analyze the data because HLM accommodated the nested nature of the data by parceling out variance at the two levels—the decision level and the individual level (Raudenbush & Bryk, 2002). Because we had 87 owner-managers with reliable responses and each owner-manager made 32 decisions, the level-one analysis consisted of 2784 observations.

Results

Table 1 reports the means, standard deviations, and correlations of the level-two variables. We also computed the variance inflation factors (VIFs) to check for multicollinearity among level-two variables. The highest VIF among level-two variables was 1.470, which is well below the rule-of-thumb threshold value of 10. Therefore, there was no serious multicollinearity among level-two variables that may affect the precision of the fixed effect parameter estimates.

Model 1 in Table 2 suggested that the likelihood of persistence varied significantly between individuals. An intra-class correlation (ICC) of 0.38 (p<.001) indicated that 38% of the total variance in the likelihood of persistence resided between individuals. Model 2 in Table 2 contains the main effects of level-one decision context factors. Compared with Model 1, Model 2 reduced the unexplained variance of the likelihood of persistence by 62%. Model 3 in Table 6 includes both the main effects and three interaction effects of the four decision factors. Compared with Model 1, this model reduced the unexplained variance in the likelihood of persistence by 69%. That is, Model 3 explained an additional 7% of the unexplained variance in the likelihood of persistence over and above Model 2.

The results show that owner-managers’ likelihood of persistence is positively associated with venture attachment (coefficient=3.385, p<.001), negatively associated with family time pressure...
(coefficient=-.790, p<.001), positively associated with social approval pressure (coefficient=.586, p<.001), and negatively associated with the number of personal options (coefficient=-1.135, p<.001). These findings provide support for Hypotheses 1, 2, 3, and 4, respectively.

Hypothesis 5a states that the positive impact of venture attachment on the likelihood of persistence becomes stronger when owner-managers experience low family time pressure than when they experience high family time pressure. The coefficient for the interaction of venture attachment and family time pressure is significant and negative (coefficient=-1.714, p<.001). When family time pressure is low, the relationship between venture attachment and the likelihood of persistence is stronger than when family time pressure is high. Therefore, Hypothesis 5a is supported.

Hypothesis 5b states that the positive relationship between venture attachment and the likelihood of persistence with an underperforming venture is stronger when social approval pressure is high than when it is low. Even though the interaction relationship is significant (coefficient=-.364, p<.01), Hypothesis 5b is not supported. The positive relationship between venture attachment and the likelihood of persistence becomes weaker when social approval pressure is high than when social approval pressure is low.

Hypothesis 5c states that the positive relationship between venture attachment and the likelihood of persistence becomes stronger when the number of personal options is few than when it is many. Even though the interaction relationship is significant (coefficient=.335, p<.05), Hypothesis 5c is not supported. The positive relationship between venture attachment and the likelihood of persistence becomes stronger when owner-managers have many personal options than when owner-managers have few personal options.

The cross-level results show that fear of failure (coefficient=.006, p>.1) does not explain owner-managers’ likelihood of persistence after averaging out the effects of decision context factors and their interactions. However, fear of failure interacts with venture attachment to influence the likelihood of persistence (coefficient=-.018, p<.1).

We further examined the influence of the individual components of fear of failure on the likelihood of persistence. The rationale behind these exploratory analyses is because these different dimensions are argued to have different regulatory foci (Higgins, 1997), which may influence individuals’ behaviour differently.

The coefficient for the interaction of venture attachment and fear of shame and embarrassment is significant and positive (coefficient=0.111, p<.01). The positive relationship between venture attachment and the likelihood of persistence becomes weaker when fear of shame and embarrassment is high than when fear of shame and embarrassment is low. Fear of devaluing self-estimate moderates the relationship between social approval pressure and the likelihood of persistence, but only with marginal significance (coefficient=-.043, p<.1). The positive relationship between social approval pressure and the likelihood of persistence is stronger when fear of devaluing self-estimate is low than when it is high. The coefficient for the interaction of venture attachment and fear of upsetting important others is significant and negative (coefficient=-.115, p<.05). The positive relationship between venture attachment and the likelihood of persistence becomes stronger when fear of upsetting important others is low than when it is high.

The coefficient for the three-way interaction among venture attachment, family time pressure, and fear of shame and embarrassment is significant and negative (coefficient=-.113, p<.01). When fear of shame and embarrassment is high, family time pressure attenuates the positive relationship between venture attachment and the likelihood of persistence to a larger degree compared with.
when fear of shame and embarrassment is low. The coefficient for the three-way interaction of venture attachment, social approval pressure, and fear of devaluing self-estimate is significant and positive (coefficient=.052, $p<.05$). When fear of devaluing self-estimate is high, there is no interaction between social approval pressure and venture attachment. When fear of devaluing self-estimate is low, however, social approval pressure changes the strength of the relationship between venture attachment and the likelihood of persistence in a manner that the relationship becomes stronger when social approval pressure is low than when it is high. The coefficient for the three-way interaction of venture attachment, family time pressure, and fear of an uncertain future is significant and positive (coefficient=.133, $p<.05$). When fear of an uncertain future is low, family time pressure moderates the positive relationship between venture attachment and the likelihood of persistence to a larger degree than when fear of an uncertain future is high.

**Discussion and Conclusion**

Persistence with underperforming ventures involves many obstacles, which demand significant investment of time, money, and energy, and have great psychological implications for many owner-managers who view their ventures as their babies (Cardon, et al., 2005; Dodd, 2002) or part of the self (Pierce, et al., 2001). Such investment may go against owner-managers’ family expectations (Justo & DeTienne, 2008) and may incur opportunity costs as well (Gimeno, et al., 1997). Persistence decisions become more than a business decision because they also involve considerations of other life domains. Moreover, owner-managers themselves played an important role in persistence decisions. Below we discuss the contributions made by this research, its practical implications, limitations, and opportunities for future research.

**Implications for Theory**

The current research contributes to entrepreneurial persistence research by putting persistence decision making in a broad social context to reveal the complexity of owner-managers’ persistence decision policies. The interactions of the decision context factors show that owner-managers’ persistence decision making is a balancing act to meet different expectations of existing roles, to gain social approval, and to avoid social sanctions (Kahn, et al., 1964). By examining the interactions of the decision context factors, we are able to capture the complexity of owner-managers’ persistence decision policies.

This research also contributes to entrepreneurial persistence research by showing how fear of failure, as a self-image, influence owner-managers’ persistence decision policies. Thereby, we answer the call from some scholars for further research on the implications of individual characteristics on entrepreneurial persistence (Hoang & Gimeno, 2010; Holland & Shepherd, 2011). This research shows that fear of failure makes a unique contribution to owner-managers’ persistence decisions after controlling for the effect of many other personal and environmental characteristics. More importantly, different dimensions of fear of failure interact with different level-one factors or interactions to affect the likelihood of persistence. This explains why fear of failure, in the form of a composite of different dimensions, has not been found to significantly interact with many level-one factors or interactions. By demonstrating the role of fear of failure in the entrepreneurial persistence context, this research also contributes to fear of failure research and affect research in the entrepreneurship context.

**Implications for Practice**

Our research also offers implications for practice. First, owner-managers should be aware of the positive and potential detrimental impact of venture attachment. Because the entrepreneurial
process involves numerous challenges and setbacks, it is necessary for owner-managers to have a strong motivation to sustain their entrepreneurial endeavours. This research demonstrates that owner-managers’ venture attachment is an important driving force that motivates owner-managers to continue committing to their ventures. From this perspective, owner-managers are suggested to start and build their ventures based on who they are. However, as venture attachment drives owner-managers to persist with underperforming ventures, owner-managers should also be aware that their venture attachment may be problematic in leading them to blindly stay with a venture that they should leave.

Second, owner-managers should be aware that staying with an underperforming venture could necessitate sacrifice of other important social relationships, such as family relationships. Owner-managers should note that family conditions can interfere with work. A low-quality family relationship can result in negative emotions (e.g., frustration) that can spill over to the business domain and that may impair owner-managers’ performance at work. Therefore, it is important to learn how to balance work and family so that owner-managers can perform well in both domains and maximize overall life satisfaction.

Third, owner-managers should be aware of the impact of fear of failure on their persistence decisions. On the one hand, fear of failure is an avoidance-oriented motivation and it drives owner-managers to make decisions about underperforming ventures in a manner to protect their self-image from failure. Fear of failure thus may lead owner-managers to exit their ventures early without realizing their full potential. On the other hand, early exit from underperforming ventures may save resources for owner-managers. Only by knowing both sides of fear of failure can owner-managers make sound decisions.

**Limitations and Future Research**

This research is not without limitations, which suggest avenues for future research. First, regarding family domain factors, this research only focuses on the impact of family time pressure on owner-managers’ persistence decisions and uses the work-family conflict literature to form the argument. Another important factor that may also influence owner-managers’ persistence decisions is family support, which may serve as a source of energy upon which owner-managers could draw to deal with business issues so that they could persist with their ventures despite difficulties. Future research could explore the role of family support in entrepreneurial persistence.

Second, we use family’s time demand to manipulate pressure from the family domain. This manipulation, however, may not be strong enough to induce pressure because owner-managers may not close down an underperforming venture simply because their families demand more time from them. However, some owner-managers are likely to leave their ventures because a family member is suffering from a serious illness. As such, future research could develop other manipulations of family pressure and explore how family pressure may interact with other decision factors to affect owner-managers’ persistence decisions. Such manipulations could be the health situation of close family members (e.g., disabled children) and children of different ages.

Third, in this research we choose to examine the impact of social pressure from the business community. Social pressure, however, may come from other people, such as employees, friends who are self-employed and who can serve as a source of emotional and professional support (Hisrich, 1990), and even role models (Hisrich, 1990). Future research can manipulate social pressure in a different way and examine whether its impact on owner-managers’ persistence decisions is different from what has been found in this research.
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Notes

1. Cross level results are available from the corresponding author upon request.

References


Table 1. Means, standard deviations, and correlations at level two

<table>
<thead>
<tr>
<th>Variables</th>
<th>Mean</th>
<th>S.D.</th>
<th>Min.</th>
<th>Max.</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
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</thead>
<tbody>
<tr>
<td>1. Actual attachment</td>
<td>51.70</td>
<td>9.15</td>
<td>25.00</td>
<td>63.00</td>
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<td></td>
</tr>
<tr>
<td>2. Family identity</td>
<td>23.71</td>
<td>4.68</td>
<td>4.00</td>
<td>28.00</td>
<td>0.06</td>
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<tr>
<td>3. Community identity</td>
<td>13.86</td>
<td>6.49</td>
<td>4.00</td>
<td>28.00</td>
<td>0.20</td>
<td>-0.08</td>
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<td></td>
</tr>
<tr>
<td>4. Gender</td>
<td>0.60</td>
<td>0.49</td>
<td>0.00</td>
<td>1.00</td>
<td>0.18</td>
<td>0.19</td>
<td>-0.02</td>
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<td>5. General human capital</td>
<td>0.00</td>
<td>0.71</td>
<td>-1.40</td>
<td>1.55</td>
<td>-0.26*</td>
<td>0.19</td>
<td>0.09</td>
<td>0.01</td>
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<td>6. Specific human capital</td>
<td>0.00</td>
<td>0.68</td>
<td>-1.00</td>
<td>2.07</td>
<td>0.01</td>
<td>0.01</td>
<td>0.05</td>
<td>-0.22*</td>
<td>0.36**</td>
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<td>7. Environmental stress</td>
<td>20.23</td>
<td>6.26</td>
<td>6.00</td>
<td>33.00</td>
<td>0.23*</td>
<td>0.01</td>
<td>-0.10</td>
<td>-0.06</td>
<td>-0.29**</td>
<td>-0.09</td>
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<tr>
<td>8. Personal investment</td>
<td>0.00</td>
<td>0.76</td>
<td>-1.75</td>
<td>2.68</td>
<td>0.25*</td>
<td>-0.05</td>
<td>-0.16</td>
<td>-0.06</td>
<td>-0.29**</td>
<td>-0.11</td>
<td>0.22*</td>
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</tr>
<tr>
<td>9. Fear of failure</td>
<td>76.52</td>
<td>28.20</td>
<td>27.00</td>
<td>149.00</td>
<td>0.12</td>
<td>-0.17</td>
<td>0.17</td>
<td>-0.05</td>
<td>-0.06</td>
<td>-0.08</td>
<td>0.08</td>
<td>0.03</td>
</tr>
</tbody>
</table>

n=87, *p<.05; **p<.01

Table 2. Results of HLM estimation for likelihood of persistence (Hypotheses 1-4, 5a-5c)

<table>
<thead>
<tr>
<th>Variables</th>
<th>Model 1</th>
<th>Model 2</th>
<th>Model 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intercept</td>
<td>5.505*** (0.232)</td>
<td>5.505*** (0.230)</td>
<td>5.505*** (0.230)</td>
</tr>
<tr>
<td>Venture attachment</td>
<td>2.514*** (0.191)</td>
<td>3.385*** (0.275)</td>
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</tr>
<tr>
<td>Family time pressure</td>
<td>-1.647*** (0.143)</td>
<td>-0.790*** (0.095)</td>
<td></td>
</tr>
<tr>
<td>Social approval pressure</td>
<td>0.404*** (0.071)</td>
<td>0.586*** (0.118)</td>
<td></td>
</tr>
<tr>
<td>Number of personal options</td>
<td>-0.968*** (0.186)</td>
<td>-1.135*** (0.199)</td>
<td></td>
</tr>
<tr>
<td>Venture attachment × Family time pressure</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Business attachment × Social approval pressure</td>
<td></td>
<td>-1.714*** (0.195)</td>
<td></td>
</tr>
<tr>
<td>Venture attachment × Number of personal options</td>
<td></td>
<td>-0.364** (0.116)</td>
<td></td>
</tr>
<tr>
<td>Proportion of reduction in the unexplained variance compared to Model 1</td>
<td>–</td>
<td>62%</td>
<td>69%</td>
</tr>
</tbody>
</table>

n=2784 at the decision level (level one); n=87 at the individual level (level two).
Coefficient estimates are reported with robust standard errors in parentheses.
* p<.05; **p<.01; ***p<.001