


## articles

# The Role of Socioemotional Wealth in Entrepreneurial Persistence Decisions for Family Businesses

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Many factors may influence entrepreneurial persistence in various contexts. For example, scholars find that family business entrepreneurs are more persistent than other entrepreneurs. However, the reasons why they are more persistent are not as well known. Utilizing a conjoint experiment with 64 entrepreneurs and 376 decisions, this paper examines the influence of socioemotional wealth (SEW) on persistence decisions in a family business context. The results of the Hierarchical Linear Modelling show that the expected financial returns, expected non-financial benefits, expected switching costs, and probability of expected outcomes influence entrepreneurial persistence decisions. Further, family business entrepreneurs with higher levels of SEW focus more on non-financial benefits when facing alternative opportunities. This study also provided empirical evidence for different dimensions of SEW. The results show that the emotional attachment of family members and the renewal of family bonds to the firm are effective indicators, which provide a direct measurement of SEW. The findings of this study increase scholarly understanding of both entrepreneurial persistence literature founded in threshold theory and SEW literature.

### INTRODUCTION

Persisting with an entrepreneurial venture rather than exiting a venture is an important and complex strategic decision that involves the entrepreneur and the environment (Ferreira et al., 2019; Holland & Shepherd, 2013). As such, persistence with one's entrepreneurial venture could be influenced by various environmental factors. The expected financial returns, expected non-financial benefits, probability of expected outcomes, and expected switching costs of alternative lucrative opportunities are some of the factors theorized to influence entrepreneurial persistence (Gimeno et al., 1997; Holland & Shepherd, 2013; Ma et al., 2019; Puhakka, 2007). An additional factor that could influence entrepreneurial decisions, such as persisting with

one's venture, is the unique family business context (Dyer et al., 2014). For example, there is evidence that family business entrepreneurs are more persistent and focus more on the non-financial benefits provided by their venture compared to non-family business entrepreneurs (Ma et al., 2019). Further, scholars find that family businesses have lower thresholds of performance and thus less likelihood of exit compared to non-family businesses (Symeonidou et al., 2021). In addition, there is evidence that family businesses are more persistent in pursuing strategic decisions compared to non-family businesses, especially for family businesses that are controlled by founding family members and those with a family chairman and/or CEO (Fang et al., 2021). Finally, the roles of entrepreneurs influence their persistence decisions; for example, family role pressure

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negatively influences entrepreneurial persistence for family businesses (Zhu et al., 2021).

Although some main effects of family businesses on persistence decisions are established in the recent literature (e.g., Zhu et al., 2021), very little is known about how the family business context alters which information from the environment family businesses give more weight to in their persistence decisions. Threshold theory's main constructs—expected financial returns, expected non-financial benefits, expected switching costs, and probability of expected outcomes—are the established predictors of persistence in the extant literature (Holland & Shepherd, 2013). However, how the family business context affects persistence decisions among entrepreneurs is still unclear because the mechanism that underlies the moderating effect of family business entrepreneurs on the influence of the main predictors of threshold theory on persistence decisions is not yet established in the extant literature. This study investigates the factors that contribute to these differences in decision making. Holland and Garrett (2015) note that it is important for future studies to help identify factors that play a role in individuals' psychological attachment to their current firm given that such attachment likely plays a meaningful role in persistence decisions. Similarly, Mattingly et al. (2020) call for future research that examines the relationships between cognitive constructs and constructs important to entrepreneurial decisions. This study answers this call and posits that socioemotional wealth in a family business context influences entrepreneurial persistence. *Socioemotional wealth* (SEW) is a general extension of behavioural agency theory common in management research (Berrone et al., 2012). In a family firm context, SEW superficially focuses on the non-financial aspects of the family businesses that meet the family's affective needs (Gómez-Mejía et al., 2007). Scholars agree that SEW is likely to influence entrepreneurial decision making in a family business context (Basly & Hammouda, 2020; Berrone et al., 2010, 2012; Gómez-Mejía et al., 2007). Scholars have also found that family business entrepreneurs focus more on non-financial benefits than non-family business entrepreneurs when they are making entrepreneurial persistence decisions (Ma et al., 2019). Therefore, we posit that the preservation of SEW will influence family business entrepreneurial persistence. The broad research objective of this work is to extend the research on entrepreneurial persistence by investigating the mechanisms through which the family business context influences persistence decisions.

The research question of this study is: does SEW influence persistence decisions among family business entrepreneurs? Specifically, we are interested in the association between SEW and threshold theory's explanation of persistence decisions, with a particular interest in the association between non-financial returns and persistence, and finally the moderating effect of SEW to the latter association. Answering this research question contributes conceptually to both the persistence as well as the SEW literatures by integrating the two. Persistence is a complex decision because it is affected by factors relating to both the entrepreneur and the environment (DeTienne et al., 2008). Although research has established that the attractiveness of alternatives influences persistence decisions in

general (DeTienne et al., 2008; Gimeno et al., 1997), it is not yet known how these factors act in the unique context of family businesses. Further, this study makes an important conceptual and methodological contribution to the academic conversation on SEW. The SEW approach is a potential dominant paradigm in the family business field and is an important differentiator of the family business as a unique entity. The SEW approach is an umbrella under which it is possible to group all existing theories and evidence related to explaining why family firms behave in a distinctive fashion (Berrone et al., 2012). However, it is a relatively new approach in family business research and, as a result, it lacks enough empirical studies to improve the understanding of SEW and its influence on individuals' decisions. For example, scholars argue that 'the empirical validation of the SEW construct represents a tremendous challenge in itself since it has never been tested directly' (Cennamo et al., 2012, p. 1166). This study provides such empirical evidence.

The balance of the paper proceeds as follows. First, this paper presents the relevant literature and develops the hypotheses grounded on SEW. Second, this paper outlines the details of the conjoint experiment and data collection. Next, this paper reports the results of the analysis that are based on hierarchical linear modelling (HLM) and provides a discussion of the findings. Finally, this paper offers conclusions and insights into future research on SEW and the persistence of family business entrepreneurs.

## THEORETICAL DEVELOPMENT

According to the US Census Bureau, family firms comprise 90 percent of all business enterprises in North America, half of the nation's employment, and half of its Gross National Product (Inc, 2021). Therefore, family firms are an important business area to study. However, family and business are two competing and complementary systems in family businesses and paradoxes between them are often the driver of family businesses' decisions (McAdam et al., 2020). Therefore, family businesses differ from their non-family business counterparts in several important ways and often face certain unique challenges that are not as common in non-family firms (Basly & Hammouda, 2020; Chrisman et al., 2010; Kammerlander, 2021; Mahto et al., 2010; Santoro et al., 2021). Most importantly, family businesses typically have broader goals and emotional attachments that affect entrepreneurs' behaviour relative to non-family firms (Chrisman et al., 2010; Lindahl et al., 2015; Mahto et al., 2010). For example, scholars find that family businesses are more persistent than non-family businesses (Fang et al., 2021; Ma et al., 2019; Symeonidou et al., 2021).

While research in the family business tradition is becoming more prevalent, most research on family business entrepreneurship focuses on firm-level analysis and covers a variety of topics, such as sales and employment changes in entrepreneurial ventures with family ownership (Colombo et al., 2014), the role of technology in entrepreneur-led family businesses (Davis & Harveston, 2000), and the 'entrepreneurial' family (Uhlener et al., 2012). With all the focus on firm-level phenomena, extant research has overlooked important individual-level questions, such as questions relating to how family business entrepreneurs make

decisions and to whether there is heterogeneity in decision making between family business and non-family business entrepreneurs (Santoro et al., 2021).

Contending that family business is a unique context that alters how theories apply to entrepreneurship research, it is important to test established theories in this context. This study is designed to fill this gap by examining the effects of threshold theory when applied to the unique family business context.

## Persistence and Threshold Theory

Research has established that persistence is important for entrepreneurs (DeTienne et al., 2008; Gimeno et al., 1997; Schulte-Holthaus, 2019) because too many entrepreneurs give up on their ventures much too early and also because persistence motivates venture growth (Baum & Locke, 2004). Although historically persistence has been viewed as a trait (Baum & Locke, 2004), scholars recently have conceptualized persistence as a decision process affected by the conditions surrounding the business, its environment, and its founder(s) (Holland & Shepherd, 2013). In general, scholars have found that the decision to persist with one's current venture is driven to a large degree by economic considerations in the face of attractive alternatives (Gimeno et al., 1997; Holland & Garrett, 2015; Holland & Shepherd, 2013). Although research suggests that on average financial returns are the primary driver of persistence decisions (Holland & Shepherd, 2013), there are other relevant factors as well. Prior research suggests that family firms have certain characteristics that may make those other relevant factors particularly important (e.g., Randøy & Goel, 2003; Romano et al., 2001).

Deciding whether to persist or not involves comparing one's current venture to available outside options. Therefore, information about entrepreneurs' current businesses will influence persistence. For example, negative feedback about their current business can influence entrepreneurs to be less likely to persist (Holland & Shepherd, 2013). Further, information about an alternative could also influence persistence. For example, positive information about an alternative opportunity would make entrepreneurs less likely to persist in their current venture (Gimeno et al., 1997).

According to threshold theory, persistence is influenced by the attractiveness of alternatives which includes four decision attributes: (1) expected financial returns, (2) expected non-financial benefits, (3) probability of expected outcomes, and (4) expected switching costs (Gimeno et al., 1997). This study is consistent with prior research with regards to defining and operationalizing each attribute (Holland & Shepherd, 2013; Ma et al., 2019). *Expected financial returns* refer to the monetary gains derived from owning the business. *Expected non-financial benefits* refer to the non-monetary benefits of owning the business, such as recognition, autonomy, and family security. *Expected switching costs* refer to the expected financial or non-financial costs of switching from one venture to another, such as effort, resources, and time expended while finding another opportunity. *The probability of expected outcomes* refers to the likelihood of achieving the outcomes associated with the other three attributes. These attributes can be conceptual-

ized into three categories: monetary, non-pecuniary, and uncertainty. Expected financial returns and expected switching costs fall into the monetary category, expected non-financial benefits fit in the non-pecuniary category, and the probability of expected outcomes represents uncertainty.

This study tests a moderating effect on the relationship between the attractiveness of alternatives and persistence, which extends the research on threshold theory and persistence. As mentioned, this study examines the extent to which the direct relationship between alternative attributes and persistence is contingent on context; specifically, this study tests how SEW moderates which aspects of attractive alternatives family business entrepreneurs give the most weight to as shown in [Figure 1](#).

Consistent with Holland & Shepherd's (2013) hypotheses, this paper predicts that the attractiveness of alternatives is positively related to persistence. Specifically, this paper predicts that expected financial returns, expected non-financial benefits, and the probability of expected outcomes will negatively influence persistence. The higher the value of any of these three dimensions is for an alternative opportunity, the more attractive the alternative is for individuals, and the less likely they are to decide to persist with their current venture. Conversely, the higher the switching costs of an alternative opportunity, the less attractive it is, and the more likely individuals are to decide to persist with their current venture.

*Hypothesis 1a: Expected financial returns of alternative opportunities are negatively associated with persistence decisions.*

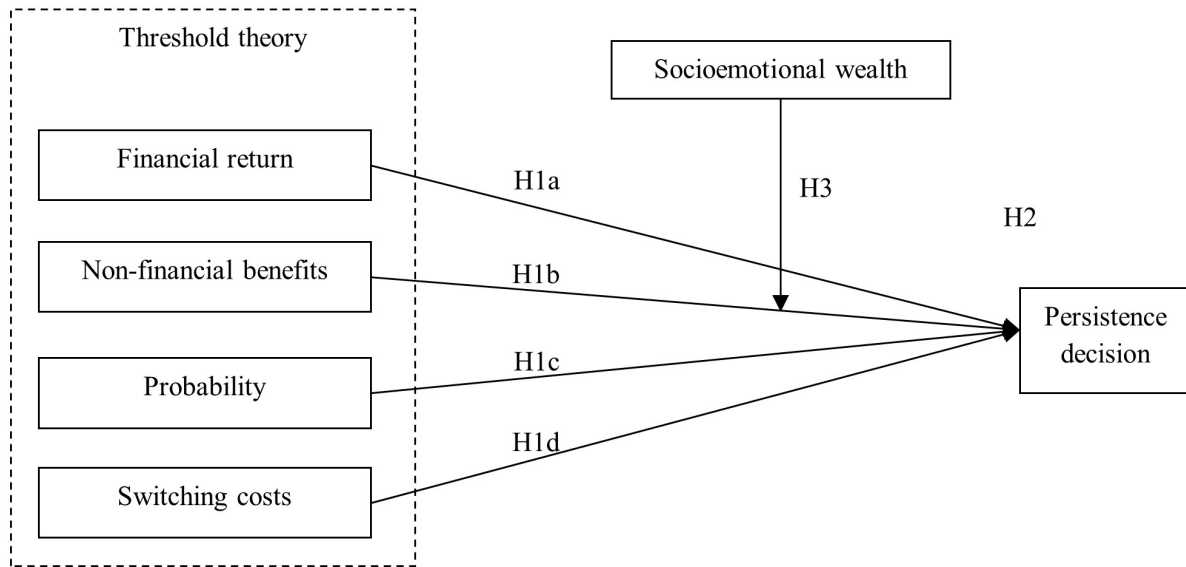
*Hypothesis 1b: Expected non-financial benefits of alternative opportunities are negatively associated with persistence decisions.*

*Hypothesis 1c: The probability of expected outcomes of alternative opportunities is negatively associated with persistence decisions.*

*Hypothesis 1d: Expected switching costs of exiting a current business to pursue an alternative opportunity are positively associated with persistence decisions.*

## Socioemotional Wealth and Persistence

The SEW approach is a potential dominant paradigm in the family business field and is the most important differentiator of the family business as a unique entity (Berrone et al., 2012). The SEW approach is an umbrella under which it is possible to group all existing theories and evidence related to explaining why family firms behave in a distinctive fashion (Berrone et al., 2012). Scholars argue that SEW is the reason that family businesses make different decisions with non-family businesses in management processes, firm strategies, corporate governance, stakeholder relations, and business venturing (Gómez-Mejía et al., 2011). For example, scholars have found that SEW influences the risky decisions of family businesses (Gómez-Mejía et al., 2007), R&D investments (Gómez-Mejía et al., 2014), and IPO (Kotlar et al., 2018). Family businesses usually face the trade-off between financial wealth and SEW (Gómez-Mejía et al., 2018; Kotlar et al., 2018). For example, when facing new opportunities, family businesses prefer the related targets over unrelated ones in acquisitions, because financial gains are



**Figure 1. Hypothesized Model**

uncertain but SEW losses are certain (Gómez-Mejía et al., 2018). However, we need more empirical studies to refine our understanding of SEW. To answer the call of finer-grained measures of SEW (Chua et al., 2015; Miller & Le Breton-Miller, 2014), we adopt the conceptual dimensions of SEW developed by Berrone et al. (2012): 1) family control and influence, 2) identification of family members with the firm, 3) binding social ties, 4) emotional attachment of family members (EA), and 5) renewal of family bonds to the firm through dynastic succession (RFB).

When family businesses are facing attractive alternatives, they have to make decisions regarding persisting with their current family businesses or pursuing new opportunities. Their psychological attachment will influence their persistence decisions (Holland & Garrett, 2015). Among the different dimensions of SEW, EA (which refers to the role of emotions in the family business context) and RFB (which refers to the intention of handing the business down to future generations), are particularly likely to play a role in family business entrepreneurs' persistence decisions because they indicate the psychological attachment between the family and the business. Deciding whether to exit one's business is an emotional experience (DeTienne & Chirico, 2013). Exiting a business undermines EA and has ramifications for the ability of a family to pass the business on to future generations. Therefore, this study focuses on these two aspects of SEW in the investigation of family business persistence decisions.

Ma et al. (2019) have already established that family business entrepreneurs are more persistent in general than non-family business counterparts and identified that the expected non-financial benefits are the main drive among the four attributes of the attractiveness of alternatives. Extending their study, this paper considers whether SEW is a driving force behind family business entrepreneurs' ten-

dency to be more persistent. Current scholarly understanding of SEW and family firms suggests EA, ramifications for undermining EA, and strong preferences to pass on a focal family business to posterity without explicit consideration of what alternative opportunities a family business entrepreneur faces (Ma et al., 2019). Scholars find that these factors as described constitute emotional attachments (Berrone et al., 2012). Scholars also find that persistence decisions are, at least in part, emotional decisions (DeTienne & Chirico, 2013). It follows that if emotions related to family firm attachment and passing on a firm to posterity are present, they will likely play a role in persistence decisions. Scholars find such emotions are present in family firms (Berrone et al., 2012). Scholars also find that family business owners' identities are 'inextricably tied to the organization' (Berrone et al., 2010, p. 87). The identity link between SEW and family business entrepreneurs influences the family to engage in what is known as a 'loss mode' if threats to their SEW arise (Berrone et al., 2012). Berrone et al. (2012, p. 260) utilize behavioural agency theory to explain that such a 'loss mode' involves the family making 'strategic choices that will avoid these potential SEW losses even if achieving this objective might come at the expense of other[s]' such as institutional investors. In short, identities are so strong that behavioural agency theory suggests the family will make strategic decisions that protect that identity regardless of other influences. One influence on strategic decisions is outside opportunities, as discussed. In short, attractive alternative opportunities can be thought of as threats to SEW and might motivate a family business entrepreneur to engage in 'loss mode'. If so, family business entrepreneurs with stronger identities built through higher levels of SEW have higher levels of persistence, thereby protecting their identities from the threat the attractive alternatives pose. Therefore, this study predicts a positive re-

relationship between family business entrepreneurs' level of SEW and their likelihood of persisting with their current ventures in the face of attractive alternatives.

*Hypothesis 2: When family business entrepreneurs face alternative opportunities, their Socioemotional Wealth positively influences their persistence decisions with their current businesses.*

### The Moderating Effect of Socioemotional Wealth

Although this study predicts SEW to positively influence persistence behaviours generally, it also considers whether SEW is particularly influential through moderating the impact of non-financial benefits on persistence. Specifically, if family business entrepreneurs have higher levels of SEW with respect to EA, then they will be particularly influenced by non-financial benefits. That is, there are strong emotional ties among family members. They are comfortable with their current situation because it supports their emotional ties with family members, a non-financial benefit associated with owning a family business. When they make decisions about whether to persist in the current business or pursue an alternative, their affective considerations might overwhelm their economic considerations. If the attractive alternative project can provide a higher level of non-financial benefits, (by providing more autonomy, time, feelings of independence, etc. to the entrepreneur) providing an even stronger form of support to maintain emotional bonds among family members, the family business entrepreneurs are more likely to switch to the new projects. As a result, they can preserve a higher level of SEW. On the other side, if the attractive alternative project cannot provide a high level of non-financial benefits, the family business entrepreneurs will be more comfortable to persist in their current businesses.

If family business entrepreneurs have higher levels of SEW with respect to the RFB through dynastic succession, then they will be particularly influenced by non-financial benefits. That is, the ability to leave a business to your family is a benefit that varies in importance to family business entrepreneurs. When this dimension of SEW is important to family business entrepreneurs, they will strategize to preserve this benefit within their family. The benefit can be retained by either persisting with the family business or by pursuing an alternative that has non-financial benefits embedded in it. As such, higher levels of this dimension in SEW will lead individuals to highly value business opportunities (whether the one they are currently pursuing or an alternative) that have significant non-financial benefits. Therefore, SEW's EA and RFB dimensions will influence the persistence of family business entrepreneurs by increasing the importance of non-financial benefits when they are facing alternative opportunities and must decide whether to persist with their current ventures.

*Hypothesis 3: The negative association between expected non-financial benefits of attractive alternatives and persistence decisions is moderated by the levels of socioemotional wealth, such that the relationship is stronger for family business entrepreneurs that have higher levels of socioemotional wealth.*

## METHODS

### Research Design

This study utilizes a conjoint experiment design that is effective for studying decision making (Louviere, 1994). It is particularly useful for studies that examine the extent to which decisions are contingent upon individual-level constructs (Haynie et al., 2012; Holland & Shepherd, 2013). In a conjoint experiment, participants make a series of decisions based on a set of orthogonally-balanced scenarios (Hahn & Shapiro, 1966). This procedure allows for the decomposition of decisions into parts to reveal the underlying structure of decision policies which allows the researcher to study the effects of the decision attributes on constructs of interest. Conjoint analysis also provides internal validity for the relationship between attributes built into the conjoint scenarios and the decisions made based on the choice scenarios (Fischhoff, 1980). Specifically, scholars note that 'as a real-time method that examines actual choice behaviour, conjoint experiments overcome many of the potential problems associated with *post hoc* methods, such as introspection and recall biases (Holland & Shepherd, 2013, p. 341).

Similar to previous studies (Holland & Shepherd, 2013; Ma et al., 2019), participants in this study were presented with a series of scenarios that include information about attractive alternatives. Scenarios measured the expected financial returns, expected non-financial benefits, expected switching costs, and the probability of expected outcomes of attractive alternative opportunities. We manipulated the four attributes at two levels, high and low, which under an orthogonal fractional factorial design (Hahn & Shapiro, 1966) resulted in eight scenarios for participants to rate. The design of the scenarios used in the experiment for the main effects of threshold theory (H1a through H1d) is based on the instruments used in prior studies (e.g., Holland & Shepherd, 2013; Ma et al., 2019). After completing the scenarios, the participants were presented with a post-experiment questionnaire that measured the higher-level independent and control variables as well as demographic variables. Further, it measured variables related to family business ownership, such as whether the business is considered a family one and the length of time owned.

### Sample

Both a hard copy and an online survey were sent to the clients of the Centre for Entrepreneurship of a university in the Midwest of the United States. We identified a participant as a family business entrepreneur when the participant had founded at least one family business and was running that business. We identified a business as a family business when the business is under control by the family and the next generation of the family is willing to take over in the future. Family businesses are very prevalent in the United States and are an important part of the economy. Furthermore, many extant studies of entrepreneurial persistence, using conjoint experiments and threshold theory, were conducted with United States samples (e.g., Holland & Shepherd, 2013; Ma et al., 2019; Mattingly et al., 2016). Utilizing a similar sample for our study helps control for other unmeasured contextual influences to ensure our

SEW predictions are reliably tested with methods similar to those used in the extant persistence literature. There were 96 participants total in the survey (32 hardcopy and 64 online). After checking the validity of the answers, 64 participants provided valid data (28 hardcopy and 36 online). Among them, 47 participants were family business entrepreneurs (21 hardcopy and 26 online) resulting in a final sample size of 376 persistence decisions nested within 47 family business entrepreneurs. The sample size is similar to other studies utilizing conjoint experiments (e.g., Priem & Rosenstein, 2000, sample of 33; Zacharakis & Meyer, 1998, sample of 50). We checked the differences between hardcopy surveys and online surveys and between two different orders of scenarios. There was no significant difference between hardcopy and online surveys. Additionally, there was no significant difference between the two different orders of scenarios. Therefore, they were combined into a single dataset. The average age of participants is 38 with a range of 18 to 71 years old. Participants varied in race as follows: 42.6 percent Caucasian, 4.3 percent African American, 46.8 percent Hispanic, and 6.4 percent identified as 'other'.

## Measurements

### ***Dependent Variable (level-1): the decision to persist with a current business***

The dependent variable in this study is the entrepreneur's decision to persist with his or her family business venture despite facing enticing alternative opportunities. The variable is measured using a 9-point Likert scale, anchored by (1) not likely to continue, (5) moderately likely to continue, and (9) very likely to continue. It is a decision-level variable (level 1). Similar to previous research (Holland & Shepherd, 2013; Ma et al., 2019), we treat the persistence decision as one of comparison. In other words, the participants were presented with a set of decision attributes for an alternative opportunity and were asked the question 'What is the likelihood that you will continue with your current business?' before being asked to compare the current opportunity with the next best alternative (Holland & Shepherd, 2013).

### ***Independent Variables (level-1): the attractiveness of alternative decision attributes***

The independent variables are the four decision attributes first theorized by Gimeno et al. (1997): expected financial returns, expected non-financial benefits, probability of expected outcomes, and expected switching costs. The formatting and presentation of these attributes are replicated from Holland & Shepherd (2013) in that each of them is measured at two levels (high and low) and is coded as 0.5 and -0.5 respectively.

### ***Moderating and Control Variables (level-2)***

The moderating variable reflects the level of SEW of family business entrepreneurs. Two different dimensions of SEW were used, EA and RFB (Berrone et al., 2012). We ran factor analysis in order to establish the importance of each underlying factor in relation to the two variables. The re-

sults showed that the six questions about EA had two underlying factors. The first question, 'Emotions and sentiments often affect decision-making processes in my family business,' had a different factor than the rest of the questions. Therefore, this study ruled out the first question of the study. The  $\alpha$  was .758 for the five relevant questions. The factor analysis also resulted in one factor for the questions about RFB, with  $\alpha$  of .784. The factor analysis shows discriminant validity for these two dimensions. The control variables were the participants' age and experience (how many firms they have founded). Both the moderating and control variables are measured at the individual level (level-2). Appendix A shows the details of the measures used in this study. Appendix B shows an example of scenarios.

## Data Analysis

Recently, entrepreneurship scholars have called for more multilevel modelling in entrepreneurship, arguing that most entrepreneurship problems involve multilevel phenomena, (Hitt et al., 2007; Zahra, 2018). Given that individuals repeatedly face persistence decisions as they encounter various outside alternative opportunities (c.f. Holland & Shepherd, 2013), the present research phenomena includes both variances within and across individuals, and is, therefore, best addressed using multilevel modelling. In this study, participants made 8 decisions. Therefore, the data includes variance in the dependent variable both within and between individuals (multilevel, nested data). Research on individuals each making multiple decisions constitutes multilevel modelling; specifically, extant research explains that multiple decisions by single individuals are likely auto correlated because individuals' unique decision models differ from person to person (Monsen et al., 2010). Indeed, for this very reason, research on decisions nested within individuals should not be examined with ordinary least squares (OLS) regression because it does not satisfy the independence assumption of OLS (Monsen et al., 2010). As a result, this study utilized Hierarchical Linear Modelling (HLM) (Raudenbush et al., 2011). HLM enables researchers to model variance both within and between individuals to facilitate deeper scholarly understanding (Mitchell & Shepherd, 2010). For these reasons, many studies rely on HLM to examine individual decision-making including decisions about: generational ownership dispersion (Eddleston et al., 2008), whether to act on opportunities (Haynie et al., 2009; Mitchell & Shepherd, 2010), whether or not to approve loans (Bruns et al., 2008), and consumer purchase decisions (Liu, 2007).

McCoach (2010) explains that HLM, in particular, offers substantial benefits over other statistical techniques, namely: higher accuracy with regard to type I error rates; variance that is proportioned across levels consistent with reality rather than the often false assumption that variance is attributable to one level; and assessment of the variability both between and within individuals. Additionally, in their paper explaining best practices for quantitative research, Echambadi, Campbell, and Agarwal (2006, p. 1810) explain that when researchers are trying to 'disentangle the unique effects of different variables at multiple levels or to



model the interactions of variables across multiple levels ... then the use of hierarchical linear models (HLM) becomes imperative' because estimates are unbiased and standard errors are accurate. They articulate a second reason that this study is not overly concerned about endogeneity or unobserved variables confounding the cause and effect relationships explained herein: 'another strategy to effectively eliminate endogeneity concerns is the use of an experiment' (Echambadi et al., 2006, p. 1805). The benefits of HLM are not just statistical (McCoach, 2010). HLM allows the relationship between independent variables and dependent variables to vary randomly across data that is likely auto-correlated (clusters of data that are similar because they are at the same level—not fully independent of one another) (McCoach, 2010). By doing so, HLM allows researchers to assess predictions about the impact of independent variables on dependent variables varying across these clusters (predicting moderation effects). So, perhaps the primary benefit of HLM is the ability to simultaneously model the impact of multiple levels on dependent variables as well as model the cross-level interactions between levels thereby providing a deeper understanding of how constructs moderate as is the case in this study.

## RESULTS

Given that this experiment focused on decomposing decisions into their parts to identify how SEW plays a role in the impact of threshold theory's decision factors on persistence decisions, the experiment resulted in nested data and some general results that correspond with modelling nested data. That is, the experimental data contains multiple lines of data for each participant and was analysed with HLM. Scholars note that one of the most important results multi-level modelling of linear data allows researchers to identify is entrepreneurs' 'theory in use' by capturing their preferences as they make actual decomposed decisions (Lohrke et al., 2010; Shepherd & Zacharakis, 2018). Generally, the results as outlined below show that family business entrepreneurs' 'theory in use' reflects increased weight given to non-financial benefits as a decision factor when SEW is high. In short, the family business entrepreneurs' 'theory in use' is consistent with the moderation relationship in our model showing that SEW influences family persistence through threshold theory's non-financial benefits rather than directly. Individual hypothesis results are outlined in more detail below.

Before considering results specifically related to individual hypotheses, it is imperative to assess the Intraclass Correlation Coefficient (ICC) when analysing nested data. Scholars explain that the ICC is 'theoretically meaningful'

because when the ICC is statistically significant, scholars can infer that group effects exist for the construct relationships in a focal model (Payne et al., 2014). The ICC for the data herein is statistically significant, which indicates that a multi-level model is necessary to study the proposed model. The ICC for this data is 10.74% providing a pseudo impact factor for the importance of moderating higher-level constructs in family business entrepreneurs' persistence decisions. [Table 1](#) shows the means, standard deviations, and correlations, and [Table 2](#) shows the results of HLM.

The results show significant direct effects between expected financial returns, expected non-financial benefits, and the probability of expected outcomes on the decision to persist. However, the direct effect of switching costs on persistence is only marginally significant ( $p = .086$ ). Hypothesis 1a, 1b, and 1c are supported; hypothesis 1d is marginally supported with a p-value below 0.10. These findings are consistent with previous research (Holland & Garrett, 2015; Ma et al., 2019). These findings are useful to establish the statistical significance and directional effect of these decision attributes at the decision level before proceeding to examine the relationships of primary interest here, the influence of higher-level SEW on persistence, and the interaction of SEW with these decision attributes. Even though the findings of these decision attributes effect on persistence are similar to those of extant studies, they also provide an important often-overlooked contribution to literature, replication. This study directly answers Holland and Shepherd's (2013) call to examine persistence decisions in different contexts. Furthermore, replicating the effects of these attributes on persistence decisions provides the basis for the more interesting predictions that follow, the moderation hypotheses. The effect sizes for the main effects were as follows: financial returns have a small effect (0.49), non-financial benefits have a medium effect (0.54), switching costs have a very small effect (0.11) and probability of expected outcomes has a very small effect (0.24).

Since this study focuses on the two dimensions of SEW that, as previously discussed, are most likely to act as mechanisms that influence family business entrepreneurs' persistence decisions, EA and RFB; we run tests on these two measures first. The results show that the correlation of two measures of SEW is high, 0.54 ( $p < .001$ ), thus we ran two separate models to avoid multicollinearity. The direct effect between persistence and EA was not significant ( $p = .45$ ). The direct effect between persistence and RFB was also not significant ( $p = .59$ ). Therefore, Hypothesis 2 is not supported.

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

	Mean	SD	1	2	3	4	5	6	7	8
1. Persist	4.45	2.90								
2. Age	38.11	14.96	-0.03							
3. Experience	1.77	1.68	0.17***	-0.02						
4. Financial Return	/	/	-0.25**	0.00	0.00					
5. Non-Finance Benefits	/	/	-0.27**	0.00	0.00	/				
6. Probability	/	/	-0.12*	0.00	0.00	/	/			
7. Switching Costs	/	/	0.06	0.00	0.00	/	/	/		
8. Emotional Attachment	5.71	1.32	-0.04	-0.13**	-0.13**	0.00	0.00	0.00	0.00	
9. Renewal of Family Bonds	5.51	1.38	0.02	0.02*	-0.02	0.00	0.00	0.00	0.00	0.54***



**Table 2. HLM Results for Outcome Persistence**

		Direct Effect		Emotional Attachment (EA)			Renewal of Family Bonds (RFB)		
Fixed effects		Coefficient (SE)		Cohen's D		Effect size	Cohen's D		Effect size
Persistence, $\beta_0$									
Intercept, $\gamma_{00}$	4.45(0.17)***	4.45(0.15)***	4.45(0.15)***	4.45(0.15)***			4.45(0.15)***		
Experience, $\gamma_{01}$	0.29(0.06)***	0.29(0.06)***	0.29(0.06)***	0.29(0.06)**	0.10	Very small	0.29(0.06)**	0.10	Very small
EA, $\gamma_{02}$		-0.08(0.10) <b>H2</b>							
RFB, $\gamma_{02}$			0.06(0.10) <b>H2</b>						
For financial, $\beta_1$									
Intercept, $\gamma_{10}$	-1.42(0.39)*** <b>H1a</b>	-1.42(0.39)***	-1.42(0.39)***	-1.42(0.39)***	0.49	Small	-1.42(0.39)***	0.49	Small
For non-financial, $\beta_2$									
Intercept, $\gamma_{20}$	-1.57(0.34)*** <b>H1b</b>	-1.57(0.34)***	-1.57(0.34)***	-1.57(0.32)***	0.54	Medium	-1.57(0.32)***	0.54	Medium
Age, $\gamma_{21}$	-0.05(0.02)*	-0.05(0.02)*	-0.05(0.02)*	-0.05(0.02)*	0.02	Very small	-0.04(0.02)*	0.02	Very small
EA, $\gamma_{22}$				-0.43(0.20)*	0.20	Very small			
RFB, $\gamma_{22}$							-0.41(0.19)*	0.14	Very small
For probability, $\beta_3$									
Intercept, $\gamma_{30}$	-0.70(0.27)** <b>H1c</b>	-0.70(0.27)**	-0.70(0.27)**	-0.70(0.27)**	0.24	Very small	-0.70(0.27)**	0.24	Very small
For switching, $\beta_4$									
Intercept, $\gamma_{40}$	0.34(0.19)+ <b>H1d</b>	0.34(0.19)+	0.34(0.19)+	0.34(0.19)+	0.11	Very small	0.34(0.19)+	0.11	Very small
Age, $\gamma_{41}$	-0.02(0.01)*	-0.02(0.01)*	-0.02(0.01)*	-0.02(0.01)+	0.01	Very small	-0.02(0.01)+	0.01	Very small

+ $p < 0.10$ , \* $p < 0.05$ , \*\* $p < 0.01$ , \*\*\* $p < 0.001$ 

Cohen's D effect size scale: 0.00 to 0.29 = very small; 0.30 to 0.49 = small; 0.50 to 0.79 = medium, and over 0.80 = large.

The moderating effect of EA was tested in the first model and the moderating effect of the RFB was tested in the second model. The results of the first model show that EA significantly moderates the relationship between non-financial benefits and persistence. The effect size is significant and very small (0.20). The results of the second model show that RFB also significantly moderates the relationship between non-financial benefits and persistence. The effect size is significant and very small (0.14). Smaller effect sizes are consistent with cognitive psychology research (Szucs & Ioannidis, 2017). Both models capture the moderating effects of SEW on the relationship between non-financial benefits and persistence. Therefore, Hypothesis 3 is supported. Specifically, family business entrepreneurs who have a higher level of SEW will be more persistent than other family business entrepreneurs. The models for each level are each specified below.

### Level-1 Model

$$\begin{aligned} PERSISTENCE_{ij} = & \beta_{0j} + \beta_{1j} * (FINANCE_{ij}) \\ & + \beta_{2j} * (NON-FINANCE_{ij}) \\ & + \beta_{3j} * (PROBABILITY_{ij}) \\ & + \beta_{4j} * (SWITCHING_{ij}) \\ & + r_{ij} \end{aligned}$$

### Level-2 Model

$$\begin{aligned} \beta_{0j} = & \gamma_{00} + \gamma_{01} * (EXPERIENCE_j) + u_{0j} \\ \beta_{1j} = & \gamma_{10} + u_{1j} \\ \beta_{2j} = & \gamma_{20} + \gamma_{21} * (AGE_j) + \gamma_{22} * (EA_j) + u_{2j} \\ \beta_{3j} = & \gamma_{30} + u_{3j} \\ \beta_{4j} = & \gamma_{40} + \gamma_{41} * (AGE_j) + u_{4j} \end{aligned}$$

### Level-1 Model

$$\begin{aligned} PERSISTENCE_{ij} = & \beta_{0j} + \beta_{1j} * (FINANCE_{ij}) \\ & + \beta_{2j} * (NON-FINANCE_{ij}) \\ & + \beta_{3j} * (PROBABILITY_{ij}) \\ & + \beta_{4j} * (SWITCHING_{ij}) \\ & + r_{ij} \end{aligned}$$

### Level-2 Model

$$\begin{aligned} \beta_{0j} = & \gamma_{00} + \gamma_{01} * (EXPERIENCE_j) + u_{0j} \\ \beta_{1j} = & \gamma_{10} + u_{1j} \\ \beta_{2j} = & \gamma_{20} + \gamma_{21} * (AGE_j) + \gamma_{22} * (RFB_j) + u_{2j} \\ \beta_{3j} = & \gamma_{30} + u_{3j} \\ \beta_{4j} = & \gamma_{40} + \gamma_{41} * (AGE_j) + u_{4j} \end{aligned}$$

## DISCUSSION

To capitalize on the unique context of family businesses, scholars have developed the SEW approach based on agency theory and prospect theory (Gómez-Mejía et al., 2007). This approach is ‘an umbrella under which it is possible to group all existing theories and evidence related to explaining why family firms behave in a distinctive fashion’ (Berrone et al., 2012, p. 274). However, research on SEW is still in its infancy, specifically lacking a large body of empirical studies prompting scholars to argue that ‘the empirical validation of the SEW construct represents a tremendous challenge in

itself, since it has never been tested directly’ (Cennamo et al., 2012, p. 1166). This study addresses this gap in knowledge by empirically testing and validating two dimensions of SEW, EA and RFB. The results show that these two measures are good indicators of SEW.

When facing attractive alternatives, family business entrepreneurs have to make the decision either to persist with committing resources to their current business or to take action to pursue a new opportunity. Entrepreneurs play an important role in persistence decisions. For example, their future growth expectations for the business, opportunity recognition abilities, and satisfaction with the business influence the persistence decisions (Murphy et al., 2019). Scholars also have found that family business content influences their persistence decisions (Ma et al., 2019). However, scholars have found a mixed result when they use family business content as an indicator for financial performance (e.g. Mahto et al., 2018; Martin & Javalgi, 2019). This study finds that family business entrepreneurs with higher SEW are more focused on non-financial benefits. This finding is consistent with the literature that SEW is a potential dominant paradigm in the family business field and is an important differentiator of the family business as a unique entity (e.g., Gómez-Mejía et al., 2018; Kotlar et al., 2018).

Scholars argue SEW is a primary driver of family businesses (Berrone et al., 2012; Gómez-Mejía et al., 2007; Kotlar et al., 2018). However, due to the lack of direct measurements of SEW, scholars usually use indirect measurements, for example, family ownership and management (Gómez-Mejía et al., 2018; Kotlar et al., 2018). This research advances the methodology for testing SEW. This study examined two measures of SEW, EA and RFB. The results demonstrate the validity of these two measures as good indicators of SEW. Further, this study has implications for future research on family business entrepreneurship showing that scholarly understanding can benefit from multilevel models; indeed, the significant ICC provides empirical support for the use of multilevel modelling and decomposed decision analysis for family business decisions.

## IMPLICATIONS

Given that family business entrepreneurs with higher SEW tend to give more weight to non-financial benefits when deciding whether to persist with or exit their venture, future research should assess whether SEW similarly influences other decisions and whether other family business constructs also moderate persistence decisions. Specifically, does SEW influence decisions related to resource allocation, hiring, rate of expansion, shared decision making, and decision-making speed, to name a few? Furthermore, do other important family business constructs with their different units of analysis, such as *essence of family business's* focus on family's vision and transgenerational intent (Chua et al., 1999), *familiness's* focus on a family business's unique bundle of resources (Habbershon & Williams, 1999), or any other human, social, organizational, or process constructs that are nuances of family businesses influence which threshold theory factors matter most to persistence decisions?

Other stakeholders would likely be very interested to know that family business entrepreneurs with higher SEW give more weight to non-financial aspects of persistence decisions. Specifically, the Small Business Administration (SBA<sup>1</sup>) documents concerns about whether emotional attachments in family businesses create hazard concerns related to child compensation, separating business from pleasure, and divergent goals of the family and any external capital providers such as banks. It seems reasonable that any capital provider would want to know when non-financial aspects of a decision are given more weight by decision-makers of one of their investments. Certainly, keeping resources and decisions associated with a business within the family can be a good thing, but there are some trade-offs that future policy researchers might examine.

### LIMITATIONS

Although the implications as outlined above are important for future research on family business decisions, it is equally important to frame them within some limitations of this study. First, decomposing a decision into fixed parts has benefits as explained above, but it also limits the study to only consider decision factors that are specified. However, in reality, there may be unaccounted for decision criteria that family business entrepreneurs consider when making persistence decisions. This reality limits the generalizability of the results but does not undermine the results. Indeed, a great deal of extant research shows that the internal validity of conjoint studies holds even when factors are fixed to a more narrow set than might be used in all contexts (cf. Shepherd & Zacharakis, 2018). Indeed, it is well established that conjoint studies have high predictive validity even when elements of a conjoint experiment emphasize internal validity considerations at the partial expense of external generalizability (Green & Srinivasan, 1978). Second, the present study only considers one potential moderator, SEW, but it is conceivable, as recommended in our future research suggestions above, that other family business constructs might moderate persistence decisions. Certainly, such a limitation is common especially when first specifying a model to empirically test for a relationship not previously established empirically. Nevertheless, plausible interactions between potentially influential, and unaccounted for, moderators are a limitation of the present study and an important consideration for future studies of persistence decisions within family business contexts. Third, the present study does not specify any normative relationships about whether it is economically good or bad that family business entrepreneurs with higher levels of SEW give more credence to non-financial aspects of persistence decisions.

Therefore, the findings of the present study mustn't be interpreted beyond their reach. Fourth, although the findings of our study are promising, more studies are needed to fully reveal the influence of SEW on persistence decisions. We call for more studies on SEW and entrepreneurial persistence, especially longitudinal studies, to improve our understanding in this field. Fifth, we only tested two dimensions of SEW in our study. In order to further improve our understanding of SEW, we call for more studies, especially studies on other dimensions of SEW. For example, family control and influence, identification of family members with the firm, and binding social ties (Berrone et al., 2012). We focus on persistence decisions within family businesses, but a good stream of future research could be looking at the intersection of family business persistence and motivations to enter markets/regions (Javalgi et al., 2018), marketing capabilities (Martin & Javalgi, 2019), strategic planning (Rigtering et al., 2017) and entrepreneurial orientation (Covin et al., 2020; Palmer et al., 2019; Rigtering et al., 2017). Finally, as noted in the sample description, our useable sample consists of slightly more minority respondents that might be expected which may or may not limit the generalizability of this study to other demographics of respondents. Our sample is based on members of one Center for Entrepreneurship at one university. The findings herein provide theoretical logic and empirical support for SEW influencing persistence through a moderation effect on non-financial benefits but are limited to that finding as a mechanism. Although important, establishing a theoretical basis for that mechanism does not allow for normative claims thereby limiting the findings of the study.

### CONCLUSIONS

The findings of this research show that family business entrepreneurs with higher levels of SEW are more sensitive to non-financial benefits when they make persistence decisions. While the intuition has existed that heightened concerns within family businesses likely drives decisions, how such concerns change decision processes had previously not been tested or theoretically specified. This study explicitly sought out and identified entrepreneurs that were in a family business and found that they indeed vary in SEW, and we decomposed their live decisions into parts to assess how SEW changes persistence decision frameworks. Specifically, family business entrepreneurs with higher SEW are relatively more sensitive to non-financial benefits.

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<sup>1</sup> Created in 1953, the U.S. Small Business Administration (SBA) continues to help small business owners and entrepreneurs pursue the American dream. SBA is the only cabinet-level federal agency fully dedicated to small business and provides counseling, capital, and contracting expertise as the nation's only go-to resource and voice for small businesses. <https://www.sba.gov/>

## References

- Basly, S., & Hammouda, A. (2020). Family Businesses and Digital Entrepreneurship Adoption: A Conceptual Model. *The Journal of Entrepreneurship*, 29(2), 326–364. <https://doi.org/10.1177/0971355720930573>
- Baum, J. R., & Locke, E. A. (2004). The relationship of entrepreneurial traits, skill, and motivation to subsequent venture growth. *Journal of Applied Psychology; Journal of Applied Psychology*, 89(4), 587–589.
- Berrone, P., Cruz, C., & Gómez-Mejía, L. R. (2012). Socioemotional wealth in family firms: Theoretical dimensions, assessment approaches, and agenda for future research. *Family Business Review*, 25(3), 258–279.
- Berrone, P., Cruz, C., Gómez-Mejía, L. R., & Larrazza-Kintana, M. (2010). Socioemotional wealth and corporate responses to institutional pressures: Do family-controlled firms pollute less? *Administrative Science Quarterly*, 55(1), 82–113.
- Bruns, V., Holland, D. V., Shepherd, D. A., & Wiklund, J. (2008). The role of human capital in loan officers' decision policies. *Entrepreneurship Theory and Practice*, 32(3), 485–506.
- Cennamo, C., Berrone, P., Cruz, C., & Gómez-Mejía, L. R. (2012). Socioemotional Wealth and Proactive Stakeholder Engagement: Why Family-Controlled Firms Care More About Their Stakeholders. *Entrepreneurship Theory and Practice*, 36(6), 1153–1173. <https://doi.org/10.1111/j.1540-6520.2012.00543.x>
- Chrisman, J. J., Kellermanns, F. W., Chan, K. C., & Liano, K. (2010). Intellectual foundations of current research in family business: An identification and review of 25 influential articles. *Family Business Review*, 23(1), 9–26.
- Chua, J. H., Chrisman, J. J., & De Massis, A. (2015). A closer look at socioemotional wealth: Its flows, stocks, and prospects for moving forward. *Entrepreneurship Theory and Practice*, 39(2), 173–182.
- Chua, J. H., Chrisman, J. J., & Sharma, P. (1999). Defining the family business by behavior. *Entrepreneurship Theory and Practice*, 23(4), 19–39.
- Colombo, M. G., De Massis, A., Piva, E., Rossi-Lamastra, C., & Wright, M. (2014). Sales and Employment Changes in Entrepreneurial Ventures with Family Ownership: Empirical Evidence from High-Tech Industries. *Journal of Small Business Management*, 52(2), 226–245. <https://doi.org/10.1111/jsbm.12100>
- Covin, J. G., Rigtering, J. C., Hughes, M., Kraus, S., Cheng, C.-F., & Bouncken, R. B. (2020). Individual and team entrepreneurial orientation: Scale development and configurations for success. *Journal of Business Research*, 112, 1–12.
- Davis, P. S., & Harveston, P. D. (2000). Internationalization and organizational growth: The impact of Internet usage and technology involvement among entrepreneur-led family businesses. *Family Business Review*, 13(2), 107–120.
- DeTienne, D. R., & Chirico, F. (2013). Exit Strategies in Family Firms: How Socioemotional Wealth Drives the Threshold of Performance. *Entrepreneurship: Theory & Practice*, 37(6), 1297–1318. <https://doi.org/10.1111/etap.12067>
- DeTienne, D. R., Shepherd, D. A., & De Castro, J. O. (2008). The fallacy of “only the strong survive”: The effects of extrinsic motivation on the persistence decisions for under-performing firms. *Journal of Business Venturing*, 23(5), 528–546.
- Dyer, W. G., Nenque, E., & Hill, E. J. (2014). Toward a Theory of Family Capital and Entrepreneurship: Antecedents and Outcomes. *Journal of Small Business Management*, 52(2), 266–285. <https://doi.org/10.1111/jsbm.12097>
- Echambadi, R., Campbell, B., & Agarwal, R. (2006). Encouraging Best Practice in Quantitative Management Research: An Incomplete List of Opportunities. *Journal of Management Studies*, 43(8), 1801–1820. <https://doi.org/10.1111/j.1467-6486.2006.00660.x>
- Eddleston, K. A., Otondo, R. F., & Kellermanns, F. W. (2008). Conflict, Participative Decision-Making, and Generational Ownership Dispersion: A Multilevel Analysis. *Journal of Small Business Management*, 46(3), 456–484.
- Fang, H. “Chevy,” Chrisman, J. J., & Holt, D. T. (2021). Strategic Persistence in Family Business. *Entrepreneurship Theory and Practice*, 10422587211001806.
- Ferreira, J. J., Fernandes, C. I., & Kraus, S. (2019). Entrepreneurship research: Mapping intellectual structures and research trends. *Review of Managerial Science*, 13(1), 181–205.
- Fischhoff, B. (1980). *For Those Condemned to Study the Past: Reflections on Historical Judgment*.
- Jimeno, J., Folta, T. B., Cooper, A. C., & Woo, C. Y. (1997). Survival of the fittest? Entrepreneurial human capital and the persistence of underperforming firms. *Administrative Science Quarterly*, 750–783.
- Gómez-Mejía, L. R., Campbell, J. T., Martin, G., Hoskisson, R. E., Makri, M., & Sirmon, D. G. (2014). Socioemotional wealth as a mixed gamble: Revisiting family firm R&D investments with the behavioral agency model. *Entrepreneurship Theory and Practice*, 38(6), 1351–1374.
- Gómez-Mejía, L. R., Cruz, C., Berrone, P., & De Castro, J. (2011). The bind that ties: Socioemotional wealth preservation in family firms. *Academy of Management Annals*, 5(1), 653–707.
- Gómez-Mejía, L. R., Haynes, K. T., Núñez-Nickel, M., Jacobson, K. J. L., & Moyano-Fuentes, J. (2007). Socioemotional Wealth and Business Risks in Family-controlled Firms: Evidence from Spanish Olive Oil Mills. *Administrative Science Quarterly*, 52(1), 106–137.

- Gómez-Mejía, L. R., Patel, P. C., & Zellweger, T. M. (2018). In the Horns of the Dilemma: Socioemotional Wealth, Financial Wealth, and Acquisitions in Family Firms. *Journal of Management*, 44(4), 1369–1397. <https://doi.org/10.1177/0149206315614375>
- Green, P. E., & Srinivasan, V. (1978). Conjoint analysis in consumer research: Issues and outlook. *Journal of Consumer Research*, 5(2), 103–123.
- Habbershon, T. G., & Williams, M. L. (1999). A Resource-Based Framework for Assessing the Strategic Advantages of Family Firms. *Family Business Review*, 12(1), 1–25. <https://doi.org/10.1111/j.1741-6248.1999.00001.x>
- Hahn, G. L., & Shapiro, S. (1966). *A catalog and computer program for use with dymetric and symmetric fractional factorial experiments*. Annual Convention of the American Statistical Association, Los Angeles, CA.
- Haynie, J. M., Shepherd, D. A., & McMullen, J. S. (2009). An opportunity for me? The role of resources in opportunity evaluation decisions. *Journal of Management Studies*, 46(3), 337–361.
- Haynie, J. M., Shepherd, D. A., & Patzelt, H. (2012). Cognitive Adaptability and an Entrepreneurial Task: The Role of Metacognitive Ability and Feedback. *Entrepreneurship Theory and Practice*, 36(2), 237–265.
- Hitt, M. A., Beamish, P. W., Jackson, S. E., & Mathieu, J. E. (2007). Building Theoretical and Empirical Bridges Across Levels: Multilevel Research in Management. *Academy of Management Journal*, 50(6), 1385–1399. <https://doi.org/10.5465/AMJ.2007.28166219>
- Holland, D. V., & Garrett, R. P. (2015). Entrepreneur start-up versus persistence decisions: A critical evaluation of expectancy and value. *International Small Business Journal*, 33(2), 194–215. <https://doi.org/10.1177/0266242613480375>
- Holland, D. V., & Shepherd, D. A. (2013). Deciding to persist: Adversity, values, and entrepreneurs' decision policies. *Entrepreneurship Theory and Practice*, 37(2), 331–358.
- Inc. (2021). *Family-Owned Businesses—Encyclopedia—Business Terms*. Inc.Com. <https://www.inc.com/encyclopedia/family-owned-businesses.html>
- Javalgi, R. G., Martin, S. L., Young, R. B., Hart, C. T., & Van Dyke, K. A. (2018). Identifying Motivational Factors Impacting Entrepreneurship: Evidence from an Emerging Economy. *KnE Social Sciences*, 138–144.
- Kammerlander, N. (2021). Family business and business family questions in the 21st century: Who develops SEW, how do family members create value, and who belongs to the family? *Journal of Family Business Strategy*, 100470.
- Kotlar, J., Signori, A., De Massis, A., & Vismara, S. (2018). Financial Wealth, Socioemotional Wealth, and IPO Underpricing in Family Firms: A Two-stage Gamble Model. *Academy of Management Journal*, 61(3), 1073–1099. <https://doi.org/10.5465/amj.2016.0256>
- Lindahl, M., Palme, M., Massih, S. S., & Sjögren, A. (2015). Long-term intergenerational persistence of human capital an empirical analysis of four generations. *Journal of Human Resources*, 50(1), 1–33.
- Liu, Y. (2007). The long-term impact of loyalty programs on consumer purchase behavior and loyalty. *Journal of Marketing*, 71(4), 19–35.
- Lohrke, F. T., Holloway, B. B., & Woolley, T. W. (2010). Conjoint analysis in entrepreneurship research: A review and research agenda. *Organizational Research Methods*, 13(1), 16–30.
- Louviere, J. J. (1994). *Analyzing decision making: Metric conjoint analysis*. Sage.
- Ma, D., Mattingly, E. S., Kushev, T., Ahuja, M. K., & Manikas, A. S. (2019). Persistence Decisions: It's Not Just About Money. *The Journal of Entrepreneurship*, 28(1), 121–143.
- Mahto, R. V., Ahluwalia, S., Khanin, D., & Walsh, S. T. (2018). Financial performance enhancing strategies: Small family firms vs. small non-family firms. *Journal of Small Business Strategy*, 28(3), 18–30.
- Mahto, R. V., Davis, P. S., Pearce, J. A. I., & Robinson, R. B. J. (2010). Satisfaction with firm performance in family businesses. *Entrepreneurship Theory and Practice*, 34(5), 985–1001.
- Martin, S. L., & Javalgi, R. R. G. (2019). Explaining performance determinants: A knowledge based view of international new ventures. *Journal of Business Research*, 101, 615–626.
- Mattingly, E. S., Ahuja, M. K., Manikas, A. S., & Kushev, T. N. (2020). Is that an opportunity? Global versus local processing of technological and socioeconomic constraints. *Journal of Small Business Management*, 1–39.
- Mattingly, E. S., Kushev, T. N., Ahuja, M. K., & Ma, D. (2016). Switch or persevere? The effects of experience and metacognition on persistence decisions. *International Entrepreneurship and Management Journal*, 12(4), 1233–1263.
- McAdam, M., Clinton, E., & Dibrell, C. (2020). Navigation of the paradoxical landscape of the family business. *International Small Business Journal*, 38(3), 139–153.
- McCoach, D. B. (2010). Hierarchical linear modeling. *The Reviewer's Guide to Quantitative Methods in the Social Sciences*, 123–140.
- Miller, D., & Le Breton-Miller, I. (2014). Deconstructing socioemotional wealth. *Entrepreneurship Theory and Practice*, 38(4), 713–720.
- Mitchell, J. R., & Shepherd, D. A. (2010). To thine own self be true: Images of self, images of opportunity, and entrepreneurial action. *Journal of Business Venturing*, 25(1), 138–154.
- Monsen, E., Patzelt, H., & Saxton, T. (2010). Beyond Simple Utility: Incentive Design and Trade-Offs for Corporate Employee-Entrepreneurs. *Entrepreneurship Theory and Practice*, 34(1), 105–130.
- Murphy, G., Tocher, N., & Burch, T. (2019). Small business owner persistence: Do personal characteristics matter? *Journal of Small Business Strategy*, 29(1), 99–114.



- Palmer, C., Niemand, T., Stöckmann, C., Kraus, S., & Kailer, N. (2019). The interplay of entrepreneurial orientation and psychological traits in explaining firm performance. *Journal of Business Research*, 94, 183–194.
- Payne, G. T., Zachary, M. A., & LaFont, M. (2014). Configurational approaches to the study of social ventures. In *Social entrepreneurship and research methods* (pp. 111–146). Emerald Group Publishing Limited.
- Priem, R. L., & Rosenstein, J. (2000). Is organization theory obvious to practitioners? A test of one established theory. *Organization Science*, 11(5), 509–524.
- Puhakka, V. (2007). Effects of Opportunity Discovery Strategies of Entrepreneurs on Performance of New Ventures. *The Journal of Entrepreneurship*, 16(1), 19–51. <https://doi.org/10.1177/097135570601600102>
- Randøy, T., & Goel, S. (2003). Ownership structure, founder leadership, and performance in Norwegian SMEs: Implications for financing entrepreneurial opportunities. *Journal of Business Venturing*, 18(5), 619–637. [https://doi.org/10.1016/S0883-9026\(03\)00013-2](https://doi.org/10.1016/S0883-9026(03)00013-2)
- Raudenbush, S. W., Bryk, A. S., Cheong, Y. F., Congdon, R. T., & du Toit, M. (2011). *HLM 7* [English; Windows]. Scientific Software International, Inc.
- Rigtering, J. C., Eggers, F., Kraus, S., & Chang, M.-L. (2017). Entrepreneurial orientation, strategic planning and firm performance: The impact of national cultures. *European Journal of International Management*, 11(3), 301–324.
- Romano, C. A., Tanewski, G. A., & Smyrnios, K. X. (2001). Capital structure decision making: A model for family business. *Journal of Business Venturing*, 16(3), 285–310. [https://doi.org/10.1016/S0883-9026\(99\)00053-1](https://doi.org/10.1016/S0883-9026(99)00053-1)
- Santoro, G., Messeni-Petruzzelli, A., & Del Giudice, M. (2021). Searching for resilience: The impact of employee-level and entrepreneur-level resilience on firm performance in small family firms. *Small Business Economics*, 57(1), 455–471.
- Schulte-Holthaus, S. (2019). Passion and Performance in Entrepreneurial Contexts: An Interest-based Approach. *The Journal of Entrepreneurship*, 28(2), 201–222. <https://doi.org/10.1177/0971355719851895>
- Shepherd, D. A., & Zacharakis, A. (2018). Conjoint analysis: A window of opportunity for entrepreneurship research. In *Reflections and Extensions on Key Papers of the First Twenty-Five Years of Advances* (pp. 149–183). Emerald Publishing Limited.
- Symeonidou, N., DeTienne, D. R., & Chirico, F. (2021). The persistence of family firms: How does performance threshold affect family firm exit? *Small Business Economics*, 1–13.
- Szucs, D., & Ioannidis, J. P. A. (2017). Empirical assessment of published effect sizes and power in the recent cognitive neuroscience and psychology literature. *PLOS Biology*, 15(3), e2000797. <https://doi.org/10.1371/journal.pbio.2000797>
- Uhlener, L. M., Kellermanns, F. W., Eddleston, K. A., & Hoy, F. (2012). The entrepreneuring family: A new paradigm for family business research. *Small Business Economics*, 38(1), 1–11.
- Zacharakis, A. L., & Meyer, G. D. (1998). A lack of insight: Do venture capitalists really understand their own decision process? *Journal of Business Venturing*, 13(1), 57–76.
- Zahra, S. A. (2018). Entrepreneurial risk taking in family firms: The wellspring of the regenerative capability. *Family Business Review*, 31(2), 216–226.
- Zhu, F., Thornhill, S., & Hsu, D. K. (2021). When owner, family, and community roles intertwine: Examining entrepreneurs' persistence decisions and the gender effect. *Journal of Small Business Management*, 1–32.





Financial Returns	HIGHER	for your current business than the alternative.
Switching Costs	LOW	
Probability of Expected Outcomes	LOWER	for your current business than the alternative.
Non-financial Benefits	HIGHER	for your current business than the alternative.

Based on this scenario, how would you rate the likelihood that you would continue with your current business versus switching to the alternative?

Not Likely to Continue

Moderately Likely to Continue

Very Likely to Continue

Example Scenario (respondents evaluated a total of 8 such scenarios)