

Competitive Research Article

Yunxi Yang* and Sharon M. Danes

Resiliency and Resilience Process of Entrepreneurs in New Venture Creation

Abstract: The purpose of this longitudinal study of 94 married entrepreneurs starting new businesses was to investigate protective mechanisms creating resiliency (capacity) in entrepreneurs and entrepreneur-assessed spousal commitment to new venture goals as a key element of the resilience process experienced within their couple decision context. Controlling for business demand, the effect on new venture sustainability as measured by breakeven point and business success was analyzed. Patterson's FAAR theory, a family resilience theory, was applied because it clearly conceptualizes the components and influencing factors within the process of resilience and because the couple is the primary decision context of entrepreneurs. Spousal commitment (negative) and business demand (curvilinear) were significantly associated with breakeven point. Entrepreneur's business confidence (positive), life outlook (positive), and business demand (curvilinear) were associated with business success.

Keywords: business confidence, life outlook, spousal commitment, resilience, business performance

DOI 10.1515/erj-2013-0076

Introduction

Starting a new business is a demanding and stressful process creating significant changes in an entrepreneur's life. In order to survive and thrive in such pursuits, entrepreneurs need to access resources that enable them to adapt to change in both their business and family lives (James and Gudmundsson 2011).

***Corresponding author: Yunxi Yang**, Family Social Science Department, University of Minnesota, Saint Paul, MN, USA, E-mail: yang3005@umn.edu

Sharon M. Danes, Family Social Science Department, University of Minnesota, Saint Paul, MN, USA, E-mail: sdanes@umn.edu

The ability to adapt to change is conceptually labeled as resilience. Within the entrepreneurship literature, there is agreement that resilience is important when people consider starting a new business venture (de Vries and Shields 2006). However, Hedner, Abruzecden, and Klofsten (2011) suggested that the perspective that views resilience as a process might be valuable in understanding the dynamics of utilizing one's resources to create resilience capacity resulting in productive outcomes. This study contributes to that call.

Resilience within the entrepreneurship literature has been primarily conceptualized as either a trait or a state of entrepreneurs (Bates 1990; Begley and Boyd 1987; Brockhaus and Horwitz 1986; Bullough and Renko 2013; Carter et al. 2003; Oughton and Wheelock 2003; Unger et al. 2011). The assumption being made with this perspective is that when a stock of resilience exists, it is utilized to contribute to the greater demands on physical and psychic energy that need to be addressed when adapting to change. That, however, is not always the case. The process perspective on resilience indicates that unless a person's internal resources as well as social resources from their immediate decision context are accessed and utilized, serving as protective mechanisms against the stressors of change, the probability of achieving productive outcomes decreases. The process of resilience is mainly the result of individuals interacting within their environment (Hedner, Abouzeedan, and Klofsten 2011; Zautra et al. 2010). When entrepreneurs perceive those interactions as supportive and productive, their personal well-being is promoted which, in turn, increases their resiliency that protects them against the liability of newness of venture creation.

Patterson's FAAR (Family Adjustment and Adaptation Response 2002a, 2002b) theory, which incorporates the resilience process perspective, undergirds this study. Applying FAAR's theoretical propositions to entrepreneurs creating new business ventures is appropriate because the propositions not only consider an individual's intrapersonal traits but also place those individuals within the interactions of their immediate family decision context. The theory's main focus lies in how individuals interact within a family decision context and the resulting outcomes of those interactions. That process of interactions creates protective mechanisms that then result in a greater degree of resiliency. That resiliency protects the well-being of its members and its interests, in this case, the sustainability of the new business venture. The effect of protective mechanisms maintains higher levels of psychic and physical energy to devote to business management and tackling the liabilities of newness in venture creation.

The important influence of the family context on venture creation and sustainability have increasingly been recognized in recent years (Anderson and Reeb 2003; Danes et al. 2009; Dyer 2003, 2006; Schulze et al. 2001). The particular influence of spousal commitment to new venture goals has also been

found to have effects on new venture sustainability (Danes 2013; Danes and Jang 2013). FAAR theory more precisely defines resilience as a process involving the assessment of the stock of resources internal to an individual and consideration of an individual's access and use of resources within their immediate decision context while taking into account the demands encountered by the stressful event(s). As part of the theory, it is then important to assess system outcomes resulting from the interactions surrounding decisions about that resource use. Investigating these components of the resilience process by entrepreneurs creating a new business venture is the study purpose, with the outcome of focus being new venture sustainability a year after its initiation.

FAAR theory is further applicable because it addresses conditions of change events that induce stress in an individual. It considers the demands created by stressor events that allow a person to be described as resilient. Some researchers believe that a major, adverse event must have been experienced to evaluate the resiliency of an entrepreneur (e.g. Hmieleski and Carr 2008). However, FAAR frames resiliency as relevant not only in overcoming major adversity but also in adapting in the face of more normative stressors. For entrepreneurs, such normative stressors are ongoing insidious tensions created by the extraordinary number of hours that needs to be devoted to a new venture to address liabilities of newness and, yet, which are needed to meet their business expectations and motivations.

Furthermore, a balancing act often ensues because entrepreneurs need to devote sufficient number of hours to their family lives, which is both a goal in itself and a condition for ongoing family support to the new venture. Lack of balance between work and family may create added stress. Business owners have reported that lack of work–family balance is the greatest tension producer for them and remains so over time, and therefore this study addresses the issue of the number of hours devoted to the business, as it is a crucial factor in the resilience process (Danes 2006; Fletcher 2010).

Across disciplines, there is a lack of conceptual distinction between resiliency (capacity) and resilience as a process of adapting and functioning competently (Patterson 2002b). That is also true within the entrepreneurship literature. In FAAR theory, Patterson indicates that outcomes differ depending on whether the focus of concern is resiliency (capacity) or resilience (process). Patterson (2002b) further distinguishes between protective mechanisms contributing to capacity and system competence as an outcome of the resilience process. In applying Patterson's FAAR theory to new venture sustainability, this study includes two outcome variables, perceived business success, an outcome of resiliency of the entrepreneur, and breakeven point, an outcome of the owning couples' adaptation to the liability (a key element of the resilience process of entrepreneurs) (Danes and Jang 2013; Fletcher 2010).

Theoretical framework

Although FAAR theory (Patterson 2002a) is not an entrepreneurship theory, it is a theory addressing an individual's appraisal of their internal resources and of resources obtained through interactions within the immediate decision context. Accessing and using these resources combine to operate as protective mechanisms against the demands of stressor events. Protective mechanisms (Patterson 2002a) can be specified as (a) tangible and psychosocial resources (what individuals have) and (b) coping behaviors (what individuals do). The dynamics of this resource use by individuals within a system creates resiliency in the individuals within that system and if the resources composing this resilience capacity of individuals in a system are accessed and used through decision context interactions within the system, that resilience process results in productive outcomes for the system (Patterson 2002a).

Family is the immediate decision context for most entrepreneurs in the initial stages of venture creation because of the often much-needed family capital input during venture creation (Aldrich and Cliff 2003; Anderson and Reeb 2003; Danes et al. 2009; Danes, Matzek, and Werbel 2003, 2006, 2010; Fletcher 2010; Schulze et al. 2001). Based on existing research, spousal commitment (a component of the resilience process for owning couples) is a key ingredient of the resilience process of owning couples in new venture creation (Danes and Jang 2013). For example, spouses can influence new venture sustainability whether they work directly in the business or not (Danes and Brewton 2012) because with their commitment to new venture goals, the entrepreneur is able to access and use family resources made accessible by that commitment (Danes et al. 2009). Family tensions over new venture issues may adversely affect an entrepreneur's business functioning, while protective mechanisms generated from spousal commitment can create resources for meeting business demands (Danes and Brewton 2012; Danes et al. 2009). For example, copreneurial identity within new venture owning couples and couple goal congruence about the new venture within those couples were found to be important to new venture sustainability (Danes and Jang 2013; Jang and Danes 2013). Using the conceptual language of Patterson's FAAR theory (2002b), spousal commitment to new venture goals elicits regenerative power within the resilience process while lack of spousal commitment creates vulnerability.

FAAR considers the nature of stressor events and the demands that are created by those stressors along with the entrepreneur's resiliency. The FAAR proposition most applicable for this study is that resilience in individuals is created during stressful times by how they appraise available resources and

situational demands. FAAR states that desirable outcomes are indicative of resilience. Thus, from utilization of available resources considering situational demands, productive outcomes result from the resilience process of accessing and using the resources of individuals within the system that protect against vulnerabilities that stressors create.

Subjective appraisals of resource use during venture creation play an important role in business sustainability (Dimov 2007; Gimeno et al. 2006). Although the subjective world of entrepreneurs is receiving greater attention in entrepreneurship research (Baron 2007; Baum and Locke 2004; Hayward et al. 2010), that research has been grounded in investigation of constructs such as optimism (James and Gudmundsson 2011), self-efficacy (Bullough and Renko 2013), or psychological capital (Hmieleski and Carr 2008; Luthans, Luthans, and Luthans 2004) without integrating an explicit theoretical framework. The current study contributes to the literature by grounding the study in a resilience theory. The study investigates the effect of a set of protective mechanisms representing the resiliency of entrepreneurs (life outlook and business confidence) and a key component of an entrepreneur's resilience process (the entrepreneurs' appraisal of spousal commitment to new venture goals) on new venture sustainability.

According to FAAR, demands are at the same time subjectively perceived and objectively defined (Patterson 2002a). The objective aspect can be commonly held conceptions about what constitutes demandingness, difficulty, and adversity. For example, the number of hours that entrepreneurs spend on business-related activities every week would be an objective measure of business demand. In addition, the entrepreneurs will have their individual, subjective appraisal of demands, which can also render him/her more or less vulnerable and therefore result in corresponding level of self-assessed stress and risk (Danes 2006). Ultimately, the appraisal of demands by entrepreneurs can influence their coping processes and business outcomes (Rauch and Frese 2000; Zhao, Seibert and Thomas Lumpkin 2010).

The entrepreneur's resiliency is greatly impacted by his or her appraisal of the resources available to build necessary protective mechanisms, which can reside both in the entrepreneur and in the decision context. The appraisal of one's resources is crucial in building the protective mechanisms required in the face of demands (Ardichvili, Cardozo, and Ray 2003). If entrepreneurs perceive that there are available resources that they can access, then they have the inherent ability to discover solutions and cope with challenges; it will then be easier for them to build protective mechanisms and thereby exhibit resiliency (Baum and Locke 2004). It is also necessary to point out that the perception of a lack of resources can constitute a stressor in itself. Actually, the appraisals of demands and protective mechanisms are closely interrelated in that when the

appraisal of protective mechanisms is positive, the demands will be perceived as less stressful or threatening. For example, the entrepreneur's life outlook can be a protective mechanism when it is more optimistic in nature, but it may also exacerbate stress when it is more pessimistic.

In applying FAAR to entrepreneurs, appraisal is important for several reasons. On one hand, no matter what resources are available, if entrepreneurs do not perceive themselves as having these resources or the ability to utilize them to meet business demands, they are less likely to be able to actually transform resources into desired business outcomes (Patternon 2002a; 2002b). On the other hand, when faced with a serious challenge or crisis during venture creation, entrepreneurs' appraisal of situational demands can also influence their resilience capacity. Entrepreneurs who are able to perceive challenges as opportunities hidden in adversity may be more motivated to turn it into an opportunity to make changes and achieve further growth. In contrast, entrepreneurs who view challenges as threatening and demoralizing can be ill-prepared to mobilize resources to confront challenges (Patternson 2002a; Rutter 1987). Further, an entrepreneur who appraises spousal commitment to new venture goals is able to garner more fuel in the resilience process of couple interactions to continually regenerate to a greater degree or for a longer period of time to meet the continuing challenges of new venture creation.

Business demands, then, emerge from the entrepreneur (e.g. entrepreneur's expectations and business goals), the interplay between the business and family system (e.g. lack of balance between family and business needs leading to increased stress that affects physical and psychic energy that can be devoted to new venture management) and the larger economy (e.g. being unable to make a profit due to economic conditions) (Gimeno et al. 2006; Major, Klein, and Ehrhart 2002; Voydanoff 1988). Because of these varied demands, entrepreneurs need to possess certain protective mechanisms that compose their resilience capacity in order to successfully navigate the entrepreneurial process. Accordingly, the analytic model of this study included a measure of how many hours per week the entrepreneur worked for the business in order to capture the aggregate amount of the different types of demands during venture creation.

This study emphasized three protective mechanisms during venture creation. The first was grounded in the entrepreneur's spousal interactions, which can generate both a tangible resource (in the form of spousal commitment to new venture goals) and a psychosocial resource (such as emotional support) (Danes et al. 2012; Danes and Jang 2013; Liang 2002). Supportive spousal interactions can be relied upon when needed to access other financial and human capital within the family during venture creation (Aldrich and Cliff 2003; Steier

and Greenwood 2000). Couple interactions are particularly relevant because a spouse's commitment to and investment in the new venture can be a vital resource to combat the liability of newness (Baines and Wheelock 1998; Fletcher 2010). Researchers have started to acknowledge that spouses assist in many different ways whether or not they work directly in the business (Danes, Teik-Cheok Loy, and Stafford 2008; Danes and Olson 2003; Poza and Messer 2001; Rowe and Hong 2000).

The second protective mechanism was the entrepreneur's confidence in his or her business capabilities (e.g. the ability to write business plans, organize, obtain financing and work effectively with suppliers and customers) (Unger et al. 2011). In order to function effectively in the midst of demands, entrepreneurs need to have sufficiently favorable appraisal of their own management capabilities. Past research has examined conventional human capital variables such as education or professional training (Bates 1990; Cooper, Javier Gimeno-Gascon, and Woo 1994; Unger et al. 2011). However, those experiences may not be as relevant to resiliency because business confidence is more content-specific (Bandura 1997). Two entrepreneurs might have the same education level, but one is more confident about their business management capabilities because of previous entrepreneurial experiences. Psychological factors also influence such appraisal in addition to actual levels of capability (Baum and Locke 2004). It is highly possible that two entrepreneurs who are equally capable might have varied levels of confidence about those capabilities.

The third was the entrepreneur's life outlook. This component of resiliency is about how entrepreneurs appraise their current lives on a continuum from positive to negative. How entrepreneurs frame the challenges that come with venture creation is crucial in determining their resilience capacity. Researchers have already begun to address the role of concepts similar to life outlook in entrepreneurial success, such as optimism and hope (James and Gudmundsson 2011; Hmieleski and Baron 2009). These studies recognize how realistic optimism about one's entrepreneurial prospect contributes favorably to business outcomes. This study, on the other hand, examines hope and optimism on a broader level as related to the entrepreneurs' life in general. An entrepreneur's life outlook is more representative of a protective mechanism (a core concept in FAAR theory). If entrepreneurs' overall appraisal of their lives is positive, then it may be easier for them to frame stresses and demands in venture creation more optimistically. If, by contrast, entrepreneurs feel negatively about their lives in general, then that negativity may spill over into their view of business transactions, making demands seem much more menacing and stressful than actuality. It is important to note that resiliency of entrepreneurs is an ongoing, often emergent process. It is similar to regenerative power, particularly when the

entrepreneur manages to achieve productive outcomes despite significant demand situations confronting the business (Patterson 2002a).

Business confidence and life outlook are psychosocial resources (Hmieleski and Carr 2008; Luthans, Luthans, and Luthans 2004), while spousal commitment, as part of the resilience process, may generate tangible resources in addition to providing psychosocial resources. All three protective mechanisms cannot function independent of the entrepreneurs' perceptual appraisal. They are either perceptual in essence (such as life outlook) or need to be perceived before being accessed and utilized (such as spousal commitment and confidence in one's business capabilities). Therefore, this study takes a step further beyond objectively defining resources, as has been the convention in previous entrepreneurship literature, to examine protective mechanisms through the entrepreneurs' subjective meanings. All three protective mechanisms are essential components of the resiliency of entrepreneurs or key ingredients in the complex interactions of the resilience process that are likely to induce productive business outcomes.

Hypotheses development

Spousal commitment

During venture creation, business sustainability can be impacted by capital transfers between family and business. Those cross-system transfers can help counteract the liability of newness of the new venture. Such transfers emanate out of entrepreneurs' strong family interactions, a type of social capital (Danes et al. 2012; Danes and Morgan 2004; Danes and Olson 2003; Liang 2002). Such healthy family bonds foster family members' commitment to and sense of identification with the entrepreneur's dream, thus making capital transfers possible (Van Auken 2003; Winborg and Landstrom 2001). Danes et al. (2009) studied family businesses that have been in existence for a substantial amount of time and measured their sustainability. Danes et al. (2009) found that access to and utilization of family human and financial capital through healthy family interactions (social capital) over time were more important for business sustainability than the level of family resources.

Spousal context is an important source of family resources in venture creation. With the economic bonds of marriage, the decision context of owning couples is often one of negotiating shared decisions about such business decisions as obtaining financing, guaranteeing collateral, employing family

members (Danes 2013; Fletcher 2010). The way entrepreneurs and spouses interact and sustain one another influences sustainability of the new venture (Cramton 1993; Danes, Matzek, and Werbel 2010; Rogoff and Heck 2003). The interactions that occur in the spousal decision context are part of the resilience process from which entrepreneurs can benefit or in which vulnerabilities evolve for entrepreneurs. When couple interactions are strong and there is spousal commitment for new venture goals, the interconnectedness of and the utilization of the bundle of family capital types by entrepreneurs serve as a source of regenerative power that fuels their psychic and physical energy. Entrepreneurs then invest that regenerated energy into managing the liability of newness of the new venture.

That continual investment results over time in achievement of productive business outcomes such as decreasing the time to breakeven point. Although there is part of breakeven point over which entrepreneurs have little control, there is a part over which they do have control. Spousal commitment creates resources for entrepreneurs in its own rite within the resilience process, but it also has a multiplier effect creating further regenerative power by opening the door to other family and spousal resources (Danes et al. 2009; Grote 2003). Spousal commitment to business goals is grounded in good quality couple communication (Danes and Jang 2013). Commitment is defined generically as sufficient willingness to expend personal, temporal, or psychological resources toward a course of action (Meyer and Herscovitch 2001; Shaffer et al. 2001). Spousal commitment more specifically means the spouse's acceptance of and dedication to the new venture goals (Danes and Jang 2013).

Spousal commitment to business goals elicits a feeling of responsibility from the spouse leading to positive firm contributions such as personal sacrifice (Hall 2005). From spousal commitment flows active support such as spouses working in the new venture as well as more passive emotional support (Danes and Jang 2013). Research also has shown that the enterprising couple that is committed to business goals develops a copreneurial identity during venture creation, and the degree of actual and perceived spousal commitment is associated with satisfactory business communication between entrepreneur and spouse (Danes and Jang 2013). In sum, spousal commitment grants entrepreneurs access to spousal capital that is crucial to business sustainability. Based on these literature findings and FAAR theory propositions, these hypotheses were proposed:

H1a: Spousal commitment will be positively associated with business success.

H1b: Spousal commitment will be negatively associated with months to breakeven.

Business confidence

Traditionally, the human capital of entrepreneurs has been studied in terms of level of education, skills and prior work experience, all of which are hypothesized to influence entrepreneurial success (Bates 1990; Davidsson and Honig 2003; Rauch, Frese, and Utsch 2005; Unger et al. 2011). Existing research on entrepreneurs' human capital has found that, depending on the conceptualization of human capital, the context of the firm, and the choice of business performance measures, there is a significant relationship between human capital and successful business performance ranging from small ($r < 0.10$) to large ($r > 0.40$) (Unger et al. 2011).

On the other hand, some entrepreneurship research has investigated entrepreneurs in terms of who they are rather than what they know, and examined, in particular, the association between personality traits, psychological characteristics and entrepreneurial decision or outcome (Begley and Boyd 1987; Hmieleski and Carr 2008). In that research, it has been hypothesized that during venture creation, when the business is small in scale and has few employees, the entrepreneur's psychological characteristics will have a considerable impact on firm performance (Rauch and Frese 2000). "Psychological capital" represents this category of capital (Luthans, Luthans, and Luthans 2004). The current study recognizes and investigates the importance of entrepreneurs' psychological characteristics in influencing business sustainability as components of entrepreneurial protective mechanisms against the liability of newness of new ventures.

Many psychological characteristics of entrepreneurs have been recognized as significant factors influencing business performance either directly or indirectly. For example, Zhao, Seibert and Thomas Lumpkin (2010) conducted a meta-analytic review of literature on the relationship between entrepreneurs' psychological characteristics and entrepreneurial intention and performance and suggested that personality plays a role in the emergence and success of entrepreneurs. In particular, business confidence and life outlook, variables in this study, have been shown to be related to successful business opportunity identification (Ardichvili, Cardozo, and Ray 2003).

Business confidence is defined here as confidence in oneself to achieve specific business goals (Bandura 1997). This type of confidence is based on a firm belief in the abilities and knowledge of oneself rather than outside circumstances like serendipities. Business confidence is not just the sum of past experiences and attainments but also conclusions one draws from those experiences about one's capabilities (Danes, Matzek, and Werbel 2010). Therefore, business confidence is built on both mastery and positive self-evaluation, both of which are valuable qualities for entrepreneurs starting a new business

because of the intrinsically challenging nature of the process. Baum and Locke (2004) have found direct association between entrepreneurs' confidence about venture growth and subsequent venture growth. Based on this literature and the propositions of FAAR theory, these hypotheses were proposed:

H2a: Entrepreneur's business confidence will be positively associated with business success.

H2b: Entrepreneur's business confidence will be negatively associated with months to breakeven.

Outlook on life

Outlook on life indicated an entrepreneur's overall affective approach to life, an ongoing process of evaluation and expectation of life circumstances expressed in major affective dimensions, such as pleasure and displeasure, tension and relaxation, energy and tiredness (Ekkekakis 2003). Personal disposition and environment jointly determine the nature of one's overall outlook on life, therefore it can show temporary fluctuations within long-term stability (Campbell, Ernest Converse, and Rodgers 1976). One's overall outlook on life can be either an asset or constraint to the individual (Hedner, Abouzeedan, and Klofsten 2011; Masten 2001; Masten et al. 1988) and business depending on the nature of the life outlook, such as optimism or pessimism. This study incorporated entrepreneurs' outlook on life because one's general affective approach to life can have pervasive influence on different aspects of life, including how entrepreneurs perceive and deal with the beginning stage of business. Thus, these hypotheses were proposed based on this literature and FAAR theory propositions:

H3a: Entrepreneur's outlook on life will be positively associated with business success.

H3b: Entrepreneur's outlook on life will be negatively associated with months to breakeven.

Business demand

Business demands can emerge from the entrepreneur (e.g. entrepreneur's expectations and business goals), the interplay between the business and family system (e.g. balance between family and business needs), and the larger economy (e.g. making a profit in the current market environment) (Gimeno et al.

2006). In this study, business demand was measured by hours worked in the business per week. Using this measure was an attempt to capture the accumulation of business demand from the various sources where demand emerges. Such a measure is both an indicator of entrepreneurs' commitment (Brett and Stroh 2003; Pena 2002; Van de Ven, Hudson, and Schroeder 1984) and the drain on personal resources that this business commitment creates. Thus, the measure represents the accumulated amount of business demand experienced by the entrepreneur that implicitly underlays their entrepreneurial motivations.

The beginning stages of a business require significant time and energy investment from entrepreneurs. During this time, entrepreneurs need to be assured that the effort invested in it is sufficient for this particular stage of new venture development. However, when entrepreneurs invest too much time and energy in the business to the extent of being unable to meet family demands or even disrupting family dynamics, effort in the business can create tension in the family (Danes 2006; Danes and Lee 2004; Danes and Morgan 2004). Due to the inextricable link between new businesses and their families, this study hypothesizes that such tension in family dynamics at some point will create a kind of spillover effect on the business, thus impacting the entrepreneur's business performance negatively and, ultimately, reducing the productivity of the business. That effect indicates a potential curvilinear correlation between entrepreneurs' effort and business performance. Accordingly, the following hypotheses were proposed based on this literature and FAAR theory propositions:

H4a: Business demand will be curvilinearly associated with business success.

H4b: Business demand will be curvilinearly associated with months to breakeven.

Business outcomes

This study investigated two measures of business sustainability: perceived business success of the entrepreneur and breakeven point of the business system. Business success represents the outcome of the resilience capacity of entrepreneurs and reaching the breakeven point sooner than later is one potential outcome of the resilience process experienced through the interactions of entrepreneurs and their spouses. Both measures were included in this study because entrepreneurial motivations are both monetary and non-monetary (e.g. passion, sense of achievement; Alstete 2008; Cardon et al. 2009; Danes et al. 2009) and to investigate which protective mechanisms of entrepreneurs affect entrepreneurs' resilience capacity and which contribute to productive business outcomes due to the resilience process that entrepreneurs experience within the owning couple decision context.

Several studies support multi-dimensional measurement of business sustainability. For example, considering results from parallel analyses incorporating a bundling of family capital and its influence on gross revenue and business success, Danes et al. (2009) suggested that entrepreneurs have financial and nonfinancial business objectives and what contributed to those objectives varied. In that Danes et al. (2009) study, the qualitative differences (different statistical significance among variables or different variable signs) indicated that specific capital types had different effects on outcome types, thus, providing support that there were multiple objectives. Similarly, Oughton and Wheelock (2003) argued that microbusiness objectives are not limited to maximizing profits.

The motivation of entrepreneurs alone is not sufficient to ensure business sustainability (Fletcher 2010). For new business ventures in particular, the break-even point is a critical achievement that demonstrates workability of the business and the beginning of positive cash generation (Scott and Bruce 1987). Breakeven point is a conventional business performance benchmark indicating minimal profitability, but to the owning family, that benchmark also is an initial indicator that creates the anticipation that the new venture will be more financially stable. Entrepreneurs have a stronger sense of achievement if they perceive spousal commitment to new venture goals (Jang and Danes 2013). There appears to be a pile-up effect on management efforts of entrepreneurs when spousal commitment appraisal is added to their own commitment level (Danes and Jang 2013).

Increasingly scholars have argued that conceptualization of a purely opportunistic, profit-maximizing entrepreneur does not fit the complex, multi-dimensional framework of human needs, motivations and behaviors that underpin motivations of entrepreneurs. Apart from money, people strive for intrinsically satisfying achievement, responsibility and recognition (Lubatkin 2005). Applying Lubatkin's proposition to entrepreneurs, they are capable of a full range of actions, varying from self-serving to owner-serving to altruistic, depending on context. In addition to meeting the financial baseline to ensure business sustainability, entrepreneurs assess, consciously or unconsciously, how that venture meets other nonfinancial expectations, and such assessments influence entrepreneurs' commitment to and passion for the venture (Baum and Locke 2004). Thus, based on this literature, these hypotheses were proposed:

H5a: Life outlook and business confidence will statistically and positively affect the entrepreneur's resilience as measured by perceived business success, controlling for situational demands.

H5b: Spousal commitment as a key regenerating component in the resilience process of entrepreneurs will be statistically and negatively associated with months to breakeven.

Methods

Sampling procedure

The study sample came from a multidisciplinary research effort of two Midwestern universities with investigator expertise in family science, entrepreneurship, and organizational behavior. Researchers partnered with Small Business Development Center (SBDC) directors in their respective states to obtain a sample of recently started business ventures. Questionnaires were distributed to entrepreneurs and spouses and collected by the SBDCs from pre-venture counseling clients who had participated in at least five hours of start-up counseling. In the first wave, two mailings were sent to entrepreneurs and their spouses four weeks apart to increase participation. Out of those that could be delivered, 41% were returned. To ensure that new ventures met the study criteria, two sample restriction questions started the questionnaire. First, we asked entrepreneurs to indicate if the business had started in the last year; second, we asked entrepreneurs if they had a spouse. The total sample was composed of 132 start-up businesses. No differences were found in comparing the SBDC population and study sample by region of the state, gender, county, ethnic origin, North American Industry Classification System (NAICS) code, and the total counseling hours received. Questionnaires were sent to only to entrepreneurs one year after the first survey. In total, 94 entrepreneurs returned questionnaires in this second year of the study; that was an 86% response rate. These entrepreneurs were the study sample.

The two waves of data were collected over about a three-year time frame (2003–2005) with two mailings for each wave. In the first wave, information was collected about the nature of the new venture, parallel information on spousal involvement, commitment, and support from the spouse and the entrepreneur, and entrepreneurial confidence and outlook on life. In the survey from the second wave of data, there were repeated measures of spousal commitment and support, entrepreneurial outlook on life, and updated information on the new venture's progress.

Sample description

Table 1 presents information about the 94 entrepreneurs, their businesses, and their spousal relationships. Industries represented varied with 63% of the businesses in service and 37% in sales. Entrepreneurs' full-time work experience ranged from less than a year to 52 years with an average of 21 years.

Table 1: Characteristics of entrepreneurs and their businesses (*N* = 94)

Characteristic	<i>n</i>	%	<i>M</i>	<i>SD</i>
<i>Entrepreneur characteristics</i>				
Gender				
Male	48	51.1		
Female	46	48.9		
Age			42.5	10.3
Years of full-time work experience			20.9	10.7
Years of work experience in related industry			9.3	10.4
Hours worked for business per week			45.5	22.5
<i>Business characteristics</i>				
Business type				
Service	59	62.8		
Sales	35	37.2		
Spouse working in the business				
Yes	50	53.2		
No	44	46.8		
<i>Spousal relationship characteristics (entrepreneur-reported)</i>				
Having a deep sharing relationship with spouse			3.9	1.1
Satisfaction with quality of business communication			3.7	1.0
Spouse emotional closeness			3.9	0.9
Spousal social support related to business			3.8	0.9

Entrepreneurs’ work experience in a related industry ranged from less than a year to 50 years with an average of nine years. Entrepreneurs worked, on average, about 46 hours a week in the new business. Seven percent of spouses had no involvement in the business, 18% worked in the business only, 37% worked only outside the new business in other market employment, and 38% worked both in the new business and in other market employment.

Of spouses who worked in the new venture, they worked, on average, 26 hours per week. Of those who worked in other market employment, 51% carried health insurance for the family. Spouses who worked in market employment outside of the new venture earned \$36,711 (mean).

Variables

Business sustainability

Two dependent variables were measured in order to reflect the multi-dimensionality of business performance and to assess productive outcomes of the resiliency

of entrepreneurs and the resilience process they experience within their couple decision context. In Wave 2, entrepreneurs provided the number of months it took for the business to reach the breakeven point with more months to breakeven indicating less productive business operation ($M = 20.0$, $SD = 14.4$, range = 0 to 50.0). For business success, entrepreneurs were asked the question “Overall, how successful is your business to date?” on 5-point Likert scale (1 = *very unsuccessful*, 5 = *very successful*) to assess the degree to which business performance had met their expectations ($M = 3.5$, $SD = 1.0$, range = 1.0 to 5.0).

Spousal commitment

In Wave 1, entrepreneurs assessed their spouse’s commitment to the new business with three statements using a 5-point Likert scale (1 = *strongly disagree*, 5 = *strongly agree*, Cronbach’s $\alpha = 0.88$). The statements were adapted from Penley and Gould’s (1988) scale of organizational commitment, including: (a) My spouse is dedicated to the goals of this business; (b) My spouse feels it is her/his duty to support the goals of this business; (c) My spouse feels it would be his/her personal responsibility to help this business achieve its goals. Scores of individual questions were summed and averaged to get a composite spousal commitment score, higher scores representing stronger commitment ($M = 4.1$, $SD = 0.9$, range = 1.0 to 5.0). Because the data distribution was highly left skewed, scores were log-transformed to create the final spousal commitment variable to be analyzed.

It is important to note that, although we had other entrepreneur-assessed measures of spousal relationship and support that research indicated were elements of the regenerative power created within the resilience process experienced within entrepreneurs’ couple decision context (e.g. business communication satisfaction, emotional closeness, social support and instrumental assistance), these variables were highly correlated with spousal commitment (see Table 2). Spousal commitment to new venture goals, however, was found to be the most robust predictor among all the couple relationship and spousal support variables since when commitment was added to the model, other variables became insignificant.

Another point to note is that the entrepreneur, as the primary broker between family and business, was in a better position to provide information about the flow of spousal and family resources when spousal commitment led to the flow of resources between systems. Moreover, only the degree of spousal commitment actually perceived by the entrepreneurs can be a motivational force for entrepreneurs as indicated in FAAR. As a result, although we had a spousal

Table 2: Intercorrelations of entrepreneur-assessed spousal commitment with other entrepreneur-assessed couple decision context variables

Variable	1	2	3	4
1. Spousal commitment				
2. Satisfaction with quality of business communication	0.56***			
3. Emotional closeness	0.34**	0.38***		
4. Social support	0.57***	0.53***	0.74***	
5. Instrumental support	0.56***	0.37***	0.16	0.33**

Note: ** $p < 0.01$; *** $p < 0.001$.

report of spousal commitment, entrepreneur-assessed spousal commitment was used to better reflect the actual, perceived impact of spousal commitment on business sustainability by entrepreneurs.

Business confidence

In Wave 1, entrepreneurs reported their business confidence using eight items on a scale from 1 (*not at all confident*) to 10 (*very confident*), Cronbach’s $\alpha = 0.78$. Items covered a range of firm management attributes needed for business operation developed in a similar manner as used in other studies (Matsui and Tsukamoto 1991) including: (a) Write a business plan; (b) Get money to start a new business; (c) Create the time that it takes to start a new business; (d) Have the organizational abilities to carry out a business plan; (e) Have the abilities to work effectively with customers; (f) Have the abilities to work effectively with suppliers; (g) Have the record keeping abilities to run a business; (h) Have the abilities to work effectively with employees. Answers for individual items were summed and averaged to get a single business confidence score ($M = 8.6$, $SD = 1.1$, range = 5.4 to 10.0).

Life outlook

In Wave 2, entrepreneurs’ outlook on life was assessed using the Index of General Affect (Campbell, Ernest Converse, and Rodgers 1976). Outlook on life from Wave 2, rather than Wave 1, was used. The reason was that since outlook on life is jointly determined by disposition and environment, entrepreneurs’ outlook on life may change in the process of starting a business, and this study tried to capture entrepreneurs’ life outlook after they had run business

for a while, rather than at the beginning of business creation. Entrepreneurs rated themselves regarding their feelings toward life on eight semantic differential items from 1 (*most like the first word*) to 7 (*most like the second word*), Cronbach's $\alpha = 0.90$, including: (a) Boring/Interesting; (b) Enjoyable/Miserable; (c) Useless/Worthwhile; (d) Friendly/Lonely; (e) Full/Empty; (f) Discouraging/Hopeful; (g) Disappointing/Rewarding; (h) Brings out the best in me/Doesn't give me much of a chance. Items were reversed when necessary and then summed and averaged to get a single entrepreneur outlook on life score, higher score indicating more positive outlook on life ($M = 5.7$, $SD = 0.9$, range = 3.0 to 7.0).

Business demand

This variable measured how many hours entrepreneurs devoted to the new venture per week. Entrepreneurs' answers to the question "How many hours do you work for the business, on average, per week?" in Wave 1 were used as an approximate for the amount of effort they put in the new venture creation to address all the demands of the new venture ($M = 45.5$, $SD = 22.0$, range = 0 to 102.0). In order to test the curvilinearity of the association between effort and business performance, the squared term of effort was included.

Analytical procedures

Descriptive statistics (frequencies, means, and standard deviations) were examined for all variables before any transformation. The numbers of missing values were generally within normal range (5% or below) and therefore mean substitution was performed in those cases. For missing values in months to breakeven, hot deck imputation was used. Hot deck imputation involves matching determined categories of other cases in the data set with the case with missing values to determine the most appropriate score (Andridge and Little 2010; Hawthorne and Elliott 2005). In so doing, for the breakeven variable, for example, such variables as industry type, entrepreneur's industry work experience, and business location were utilized.

Factor analyses were conducted on measures with multiple items, all of which proved to contain single factors with satisfactory internal reliabilities. The multiple items in each measure were averaged to create a single indicator for each independent variable, and the data distribution of each variable was checked to meet the criterion of normality. Spousal commitment had a

significantly left-skewed distribution due to the fact that most spouses were highly committed to the new venture, therefore this variable was log-transformed to reduce skewness. When testing the assumption of linear relationship between each of the independent variables and the dependent variables, we found that business demand had curvilinear relationships with both dependent variables, therefore the squared term of business demand was added to both models.

To compare the effects of entrepreneurs' protective mechanisms on new venture sustainability, we developed two parallel regression models with months to breakeven and business success as dependent variables. Independent variables in both models include log-transformed spousal commitment as assessed by the entrepreneur, entrepreneur's business confidence, entrepreneur's outlook on life, and business demand and its squared term. Conventional control variables such as education level, years of work experience, or years of experience in related industry were not significantly correlated with business sustainability measures in preliminary correlation analysis; therefore those control variables were not included in the models for the sake of parsimony. As a result, this study was an exploration of several protective mechanisms that contribute to create entrepreneurs' resiliency and effect the resilience process they experience within their couple decision context. We set the α at 0.10 in order to lower the probability of making a type II error, considering the exploratory nature of the study. We also calculated the turning points at which the relationships between business demand and business sustainability measures reversed direction in both models.

Results

The correlation matrix for the variables in both regression models is presented in Table 3. The results indicate that multicollinearity was not a concern. The regression model results for both dependent variables are found in Table 4.

Months to breakeven

The overall model for months to breakeven was significant, accounting for nearly 29% of the total variance explained, $R^2 = 0.286$, $F(5,88) = 7.066$, $p < 0.001$. In particular, spousal commitment and business demand and its squared

Table 3: Correlation matrix for variables in both regression models

	1	2	3	4	5	6
1. Months to breakeven	–					
2. Business success	–0.16	–				
3. Entrepreneurs' business confidence	0.02	0.31**	–			
4. Spousal commitment	–0.45***	0.10	0.11	–		
5. Entrepreneurs' life outlook	0.02	0.33**	0.28	0.16	–	
6. Business demand	0.02	0.14	0.07	–0.01	–0.08	–
7. Business demand ²	0.11	0.07	0.06	–0.04	–0.12	0.95***

Note: ** $p < 0.01$; *** $p < 0.001$.

Table 4: Multiple regression analysis summary for variables predicting break-even point and business success ($N = 94$)

Predictor	Months to breakeven			Business success		
	<i>B</i>	<i>SE B</i>	<i>Beta</i>	<i>B</i>	<i>SE B</i>	<i>Beta</i>
Business demand	–0.558	0.197	–0.852**	0.030	0.014	0.700*
Business demand ²	0.006	0.002	0.918**	0.000	0.000	–0.579†
Entrepreneurs' life outlook	1.819	1.528	0.114	0.258	0.106	0.246*
Entrepreneurs' business confidence	0.553	1.277	0.041	0.197	0.089	0.221*
Spousal commitment ^a	–15.662	3.196	–0.449***	0.046	0.222	0.020
R^2	0.286			0.208		
$F(df)$	7.066 (5,88)			4.634 (5,88)		
p	< 0.001			< 0.001		

Notes: † $p < 0.10$; * $p < 0.05$; ** $p < 0.01$. *** $p < 0.001$; ^aLog-transformed, base = 2.

term were significant factors associated with months to breakeven. For break-even point, Hypotheses 1 and 4 were supported. Since spousal commitment was a log-transformed variable, the result suggested that an increase in spousal commitment was exponentially related to months to breakeven ($B = -15.662$, $\beta = -0.449$, $p < 0.001$), meaning that holding business demand constant, a doubling of spousal commitment was associated with an average of 15 fewer months to breakeven. The significance of squared business demand indicated a curvilinear correlation between hours worked in the business per week and months to breakeven ($B = 0.006$, $\beta = 0.918$, $p < 0.01$). This means more hours worked was related to fewer months to breakeven up to a certain point after which the relationship reversed direction where putting more time in the business was actually related to increased months to breakeven. By calculating the axis of symmetry for the quadratic association between business demand and

break-even point, we found the turning point at which the relationship reversed to be 43.7 hours. Entrepreneur's business confidence and outlook on life were not significantly associated with months to breakeven; thus, Hypotheses 2 and 3 were not supported.

Business success

The model for business success was overall significant, accounting for nearly 21% of the total variance explained, $R^2 = 0.208$, $F(5,88) = 4.634$, $p < 0.001$. Specifically, entrepreneurs' business confidence, outlook on life, business demand, and business demand squared were significantly associated with business success. Both business confidence and outlook on life were positively associated with business success ($\beta = 0.221$ and 0.246 , $p = 0.027$ and 0.015 respectively), meaning that higher business confidence and a more positive outlook on life for entrepreneurs were associated with a more positive entrepreneurial assessment of business success. Business demand had a marginally significant quadratic relationship with the business success ($\beta_{\text{square}} = -0.579$, $p = 0.072$), suggesting that controlling for other variables in the model, working more hours was related to more positive assessment of business success up to a certain point, after which the more hours that were put in, the more negative the assessment. These results provide support for Hypotheses 2, 3, and 4 in relation to business success. The exact turning point was found to be 56.8 hours. Spousal commitment was non-significant in this model. No support was found for Hypothesis 1.

Business outcomes

Support was found for Hypotheses 5a and 5b. The two intrapersonal protective mechanisms of entrepreneurs (business confidence and life outlook), reflective of their resilience capacity, were positively associated with perceived business success, controlling for situational demands. Those same two variables were not statistically significant in the months to breakeven model. Instead, spousal commitment to new venture goals, that past research has shown is a key element of the resilience process of entrepreneurs, was found to be negatively associated with months to breakeven. When spousal commitment to new venture goals was high, the new ventures reached their breakeven point sooner than in those new ventures where entrepreneurs have spouses with low commitment to new venture goals.

Discussion and implication

The purpose of this study of 94 married entrepreneurs was to examine three appraisal-based protective mechanisms of entrepreneurs controlling for business demand during venture creation and to assess their influence on perceived business success and months to break even. Business confidence and life outlook were intrapersonal indicators of the resilience capacity of entrepreneurs and spousal commitment represented a key element of the resilience process of entrepreneurs emanating from the couple decision context. FAAR theory (Patterson 2002a, 2002b) proposes that with resiliency (individual capacity) and a dynamic, regenerative resilience process occurring within couples (entrepreneur and spouse), productive outcomes result for the system over time (new venture sustainability) controlling for situational demands.

The study contributes to the venture creation literature by not only probing into the inner strengths of entrepreneurs during venture creation (life outlook and business confidence) but, additionally, considering appraisal of spousal commitment to new venture goals while controlling for the level of business demand. The access and use of intrapersonal resources and those of the couple decision context can be an asset or constraint to entrepreneurs' resiliency (capacity) and to the resilience process they experience; these resources differentially affect varied measures of new venture sustainability. Spousal commitment emanates from strong couple interactions (Danes, Matzek, and Werbel 2010) and traverses the family/business boundary through the entrepreneur's appraisal of interactions within the couple decision context (Patterson 2002a), thus affecting business sustainability. Entrepreneurs' business confidence and outlook on life are psychological resources residing within individuals that determine entrepreneurs' motivation and volition in managing businesses, thereby affecting business sustainability (Hedner, Abouzeedan, and Klofsten 2011; Masten 2001; Masten et al. 1988). Business demand, measured by the hours entrepreneurs invested in the business per week, represented stressors experienced by entrepreneurs. This variable indicated potential exhaustion and work–family imbalance and may be considered as one of the major risks during venture creation (Danes 2006; Major, Klein, and Ehrhart 2002; Voydanoff 1988). We constructed two parallel models to determine how entrepreneurs' appraisals of their protective mechanisms were associated with months to breakeven and perceived business success, two new venture sustainability measures.

Multiple regression results confirmed our hypotheses that entrepreneurs' appraisal-based protective mechanisms and business demand were related to either months to breakeven or self-assessed business success. The results

revealed that the independent variables were differentially associated with the two business sustainability outcomes with varying degrees of statistical significance and strength. Specifically, spousal commitment was negatively associated with months to breakeven, and entrepreneurs' business confidence and outlook on life were positively associated with business success perception; business demand was curvilinearly associated with both business sustainability measures.

These findings indicate that entrepreneurs' varied types of appraisal-based protective mechanisms should be further explored. Much research has been published about protective mechanisms of entrepreneurs that are keys to their resiliency (capacity). Although this research study provides insight into the resilience process of owning couples' decision context and its effect on new venture outcomes, it has only begun to scratch the complexity of the resilience process experienced by entrepreneurs through their couple decision context. Further, the study was theoretically grounded in Patterson's FAAR theory (2002a, 2002b) that has potential to guide future studies about the resilience process of new venture owning couples. The study findings also suggest that the two measures of business sustainability used in this study capture outcomes resulting from different aspects of resiliency and the resilience process and should not be used interchangeably. Study findings not only indicate that entrepreneurs have both financial and nonfinancial expectations for their businesses, but varied aspects of the resiliency of entrepreneurs and the resilience process they experience within their couple decision context differentially affects various measures of new venture sustainability.

In the months to breakeven model, spousal commitment and business demand were statistically significant predictors. These results suggest that, on one hand, entrepreneur-perceived spousal commitment contributes to business sustainability; couple resources such as spousal commitment have been shown in other research to be the door to access and use of other spousal and family resources (Danes et al. 2009). The use of this bundle of family resource capital is crucial in the beginning stages of venture creation, when entrepreneurs need to meet the various demands of a new business (Dyer 2006). When entrepreneurs perceive a high degree of spousal commitment, they may feel more supported in their business pursuits and, therefore, are more likely to cope successfully with the demands and challenges of starting a business (Danes and Jang 2013). Entrepreneurs' appraisal of spousal commitment is a pivotal dimension of entrepreneurs' resilience process because it generates both psychosocial and tangible resources that can be accessed and used by entrepreneurs to adjust to changes in business.

Business demand was curvilinearly associated with months to breakeven, indicating that resiliency of entrepreneurs can be compromised by too much

business demand that causes stress and exhaustion (Danes 2006). It is also possible that the excessive number of hours some entrepreneurs invested in the business was due to inefficiency in business management; therefore, it makes sense that less efficient entrepreneurs have less capacity to meet business demands due to the insufficient ability to access or utilize their own resources and those of their spouses effectively. Finally, excessive business demands necessarily mean that less time will be devoted to the family, or, in this study particularly, the couple relationship. The lack of work-family balance can negatively affect the couple relationship, reduce spousal support, and even become a stressor itself (Danes 2006; Olson et al. 2003). Therefore, business demand can also influence resiliency of entrepreneurs and new venture sustainability indirectly by putting stress on the couple relationship, thereby limiting the spousal commitment or capital available to the entrepreneur and the business.

In the business success model, entrepreneurs' outlook on life, business confidence, and business demand were statistically significant predictors. Specifically, outlook on life and business confidence were positively associated with business success and business demand was curvilinearly associated with business success. It is worth noting that since outlook on life from Wave 2 was used, it was a reflection of entrepreneurs' outlook at the time of their assessment of business sustainability. The positive association between outlook on life and self-assessed business success indicated that entrepreneurs' outlook on life was a powerful factor influencing their perception of business success. However, it can also be the other way around, indicating that an entrepreneur who sees life as hopeless and disappointing would be quick to emphasize the negative aspects of business success. In other words, a positive outlook on life may add to entrepreneur's resiliency and influence his/her subjective assessment of business success. In sum, there is a synergistic and reciprocal effect between outlook on life and business success.

Entrepreneurs' business confidence was positively associated with business success. It is interesting to note that business confidence was not associated with the months to breakeven meaning that more confident entrepreneurs did not actually breakeven faster than less confident ones; instead, they simply had more positive self-assessments of business sustainability. Relating back to the literature about nonfinancial measures of business performance, our tentative reasoning for the study finding is that entrepreneurs who started new ventures with more business confidence may have more internal motivation and perhaps put more emphasis on sense of achievement through enterprising (Ardichvili, Cardozo, and Ray 2003). As a result, regardless of whether the business was breaking even or not, they tended to assess business sustainability based on their own effort and sense of self-fulfillment. Entrepreneurs with low business

confidence may possibly have been less likely to regard starting a business as a major personal achievement and more likely to view the business as primarily fulfilling financial expectations. Therefore, they may be less likely to rate their businesses as “successful” when the business is not yet substantially profitable. In this sense, business confidence is related to resiliency of entrepreneurs in that it enables entrepreneurs to remain internally motivated through the initial stages of enterprising, when there is not yet much tangible financial return.

The statistically significant curvilinear relationship between business demand and success indicated that entrepreneurs’ assessment of business sustainability was positively associated with hours worked in the business until they reach a turning point (56.8 hours for our sample). After that turning point, the more hours worked, the less successful their businesses were perceived. This finding suggests that too much business demand leads to undesirable results, such as exhaustion or work-family conflict; those stressors interfere with entrepreneurs’ fulfillment of nonfinancial business expectations such as family well-being and sense of competency (Gimeno et al. 2006). In sum, within the business success model, it is clear that entrepreneurs’ appraisals of their internal resources (business confidence and positive outlook on life) were more important predictors of success than the indicator from their immediate decision context (spousal commitment). Entrepreneurs with more confidence in business management and a more positive outlook on life assessed their ventures to be more successful.

Overall, findings of this study contribute to the venture creation literature by demonstrating that besides entrepreneurs’ financial capital and conventional dimensions of human capital such as skills and experiences, the resilience process that entrepreneurs experience within their couple decision context is associated with new venture sustainability, controlling for situational demand. This study adapted FAAR theory to illustrate relevant aspects of resiliency of entrepreneurs and their resilience process, establishing a theoretical advancement in thinking about the resilience process of entrepreneurs creating a new business venture.

For professionals who guide or counsel couples starting businesses, this study offers useful insights. First, it is advisable to look at the family decision context of the entrepreneur in terms of spousal commitment to the new venture’s goals and entrepreneur’s recognition (or lack thereof) of that commitment, so as to make certain that the entrepreneur not only has that commitment but is also able to access and use that spousal resource to build their resiliency and garner those resources to fuel couple decision making about the new venture and to fuel management efforts resulting in venture sustainability. Second, assessing the entrepreneur’s psychological characteristics such as business confidence

and outlook on life will shed much light on the motivational and affective aspects of the entrepreneur's inner state, which are essential components of their resilience capacity. Providing information or training that increases entrepreneurs' business confidence or counseling that improves their outlook on life may help them build protective mechanisms which lead to a more positive assessment of their venture creation effort despite temporary setbacks. Finally, working with entrepreneurs on workload, time management and work–family balance in the face of excessive business demand will benefit the entrepreneur regarding resiliency and ultimately new venture sustainability.

References

- Aldrich, H. E., and J. E. Cliff. 2003. "The Pervasive Effects of Family on Entrepreneurship: Toward a Family Embeddedness Perspective." *Journal of Business Venturing* 18(5):573–96.
- Alstete, J. W. 2008. "Aspects of Entrepreneurial Success." *Journal of Small Business and Enterprise Development* 15(3):584–94.
- Anderson, R. C., and D. M. Reeb. 2003. "Founding-Family Ownership and Firm Performance: Evidence from the S&P 500." *The Journal of Finance* 58(3):1301–27.
- Andridge, R. R., and R. J. A. Little. 2010. "A Review of Hot Deck Imputation for Survey Non-Response." *International Statistical Review* 78(1):40–64.
- Ardichvili, A., R. Cardozo, and S. Ray. 2003. "A Theory of Entrepreneurial Opportunity Identification and Development." *Journal of Business Venturing* 18(1):105–23.
- Baines, S., and J. Wheelock. 1998. "Working for Each Other: Gender, the Household and Micro-Business Survival and Growth." *International Small Business Journal* 17(1):16–35.
- Bandura, A. 1997. *Self-Efficacy: The Exercise of Control*. New York: Freeman.
- Baron, R. A. 2007. "Behavioral and Cognitive Factors in Entrepreneurship: Entrepreneurs as the Active Element in New Venture Creation." *Strategic Entrepreneurship Journal* 1(1–2):167–82.
- Bates, T. 1990. "Entrepreneur Human Capital Inputs and Small Business Longevity." *The Review of Economics and Statistics* 72:551–9.
- Baum, J. R., and E. A. Locke. 2004. "The Relationship of Entrepreneurial Traits, Skill, and Motivation to Subsequent Venture Growth." *Journal of Applied Psychology* 89(4):587.
- Begley, T. M., and D. P. Boyd. 1987. "Psychological Characteristics Associated with Performance in Entrepreneurial Firms and Smaller Businesses." *Journal of Business Venturing* 2(1):79–93.
- Brett, J. M., and L. K. Stroh. 2003. "Working 61 Plus Hours a Week: Why Do Managers Do It?" *Journal of Applied Psychology* 88(1):67.
- Brockhaus, R. H., and P. S. Horwitz. 1986. "The Psychology of the Entrepreneur." In *Entrepreneurship: Critical Perspectives on Business and Management* 2, edited by N. F. Krueger, 260–83. New York: Routledge.
- Bullough, A., and M. Renko. 2013. "Entrepreneurial Resilience during Challenging Times." *Business Horizons* 56(3):343–50.

- Campbell, A., P. Ernest Converse, and W. L. Rodgers. 1976. *The Quality of American Life: Perceptions, Evaluations, and Satisfaction*, Vol. 3508. New York: Russell Sage Foundation.
- Cardon, M. S., J. Wincent, J. Singh, and M. Drnovsek. 2009. "The Nature and Experience of Entrepreneurial Passion." *Academy of Management Review* 34(3):511–32.
- Carter, N. M., W. B. Gartner, K. G. Shaver, and E. J. Gatewood. 2003. "The Career Reasons of Nascent Entrepreneurs." *Journal of Business Venturing* 18(1):13–39.
- Cooper, A. C., F. Javier Gimeno-Gascon, and C. Y. Woo. 1994. "Initial Human and Financial Capital as Predictors of New Venture Performance." *Journal of Business Venturing* 9(5):371–95.
- Cramton, C. D. 1993. "Is Rugged Individualism the Whole Story? Public and Private Accounts of a Firm's Founding." *Family Business Review* 6(3):233–61.
- Danes, S. M. 2006. "Tensions Within Family Business-Ownning Couples Over Time." *Stress, Trauma, and Crisis* 9(3–4):227–46.
- Danes, S. M. 2013. "Entrepreneurship Success; 'the Lone Ranger' Versus 'It Takes a Village' Approach?" *Entrepreneurship Research Journal* 3(3):277–28.
- Danes, S. M., and K. E. Brewton. 2012. "Follow the Capital: Benefits of Tracking Family Capital across Family and Business Systems." In *Understanding Family Businesses*, edited by A. L. Carsrud and M. Brännback, 227–50. New York: Springer.
- Danes, S. M., S. M. Craft, J. Jang, and J. Lee. 2012. "Liability of Newness: Assessing Couple Social Support When Starting a New Business Venture." *Journal of Marital and Family Therapy* 39(4):515–29.
- Danes, S. M., and J. Jang. 2013. "Copreneurial Identity Development During New Venture Creation." *Journal of Family Business Management* 3(1):45–61.
- Danes, S. M., and Y. G. Lee. 2004. "Tensions Generated by Business Issues in Farm Business-Ownning Couples." *Family Relations* 53(4):357–66.
- Danes, S. M., A. E. Matzek, and J. D. Werbel. 2010. "Spousal Context during the Venture Creation Process." *Advances in Entrepreneurship, Firm Emergence and Growth* 12:113–61.
- Danes, S. M., and E. A. Morgan. 2004. "Family Business-Ownning Couples: An EFT View into Their Unique Conflict Culture." *Contemporary Family Therapy* 26(3):241–60.
- Danes, S. M., and P. D. Olson. 2003. "Women's Role Involvement in Family Businesses, Business Tensions, and Business Success." *Family Business Review* 16(1):53–68.
- Danes, S. M., K. Stafford, G. Haynes, and S. S. Amarapurkar. 2009. "Family Capital of Family Firms: Bridging Human, Social, and Financial Capital." *Family Business Review* 22(3):199–215.
- Danes, S. M., J. Teik-Cheok Loy, and K. Stafford. 2008. "Business Planning Practices of Family-Owned Firms within a Quality Framework." *Journal of Small Business Management* 46(3):395–421.
- Davidsson, P., and B. Honig. 2003. "The Role of Social and Human Capital among Nascent Entrepreneurs." *Journal of Business Venturing* 18(3):301–31.
- de Vries, H., and M. Shields. 2006. "Towards a Theory of Entrepreneurial Resilience: An Analysis of New Zealand SME Owner-Operators." *The New Zealand Journal of Applied Business* 5(1):33–44.
- Dimov, D. 2007. "Beyond the Single-Person, Single-Insight Attribution in Understanding Entrepreneurial Opportunities." *Entrepreneurship Theory and Practice* 31(5): 713–31.
- Dyer, W. G. 2003. "The Family: The Missing Variable in Organizational Research." *Entrepreneurship Theory and Practice* 27(4):401–16.

- Dyer, W. G. 2006. "Examining the "Family Effect" on Firm Performance." *Family Business Review* 19(4):253–73.
- Ekkekakis, P. 2003. "Pleasure and Displeasure from the Body: Perspectives from Exercise." *Cognition and Emotion* 17(2):213–39.
- Fletcher, D. 2010. "Life-Making or Risk Taking? Co-Preneurship and Family Business Start-Ups." *International Small Business Journal* 28(5):452–69.
- Gimeno, A., G. J. Labadie, W. Saris, and X. M. Mayordomo. 2006. "Internal Factors of Family Business Performance: An Integrated Theoretical Model." In *Handbook of Research on Family Business*, edited by P. Poutziouris, K. Smyrnios, and S. Klein, 145–64. Cheltenham, UK and Northampton, MA, USA: Edward Elgar Publishing
- Grote, J. 2003. "Conflicting Generations: A New Theory of Family Business Rivalry." *Family Business Review* 16(2):113–24.
- Hall, A. 2005. "Beyond the Legal: Psychological Ownership and Responsibility in the Family Business." In FBN 16th annual world conference, Brussels, Belgium.
- Hawthorne, G., and P. Elliott. 2005. "Imputing Cross-Sectional Missing Data: Comparison of Common Techniques." *Australian and New Zealand Journal of Psychiatry* 39(7):583–90.
- Hayward, M. L. A., W. R. Forster, S. D. Sarasvathy, and B. L. Fredrickson. 2010. "Beyond Hubris: How Highly Confident Entrepreneurs Rebound to Venture Again." *Journal of Business Venturing* 25(6):569–78.
- Hedner, T., A. Abouzeedan, and M. Klofsten. 2011. "Entrepreneurial Resilience." *Annals of Innovation and Entrepreneurship* 2:1.
- Hmieleski, K. M., and R. A. Baron. 2009. "Entrepreneurs' Optimism and New Venture Performance: A Social Cognitive Perspective." *Academy of Management Journal* 52(3):473–88.
- Hmieleski, K. M., and J. C. Carr. 2008. "The Relationship Between Entrepreneur Psychological Capital and New Venture Performance." *Frontiers of Entrepreneurship Research* 28(4):Article 1.
- James, N., and A. Gudmundsson. 2011. "Exploring the Impact of Entrepreneur Optimism on the New Venture Process." *Proceedings of the 8th AGSE International Entrepreneurship Research Exchange*, 1375–1384.
- Jang, J., and S. M. Danes. 2013. "Are We on the Same Page?: Copreneurial Couple Goal Congruence and New Venture Viability." *Entrepreneurship Research Journal* 3(4):483–504.
- Liang, Chyi-lyi. 2002. "My Love and My Business-Expectation and Reality of Couples Working Together in a New Venture Creation: The Entrepreneurs' Perception." *Academy of Entrepreneurship Journal* 8:53–77.
- Lubatkin, M. H. 2005. "A Theory of the Firm Only a Microeconomist Could Love." *Journal of Management Inquiry* 14(2):213–16.
- Luthans, F., K. W. Luthans, and B. C. Luthans. 2004. "Positive Psychological Capital: Beyond Human and Social Capital." *Business Horizons* 47(1):45–50.
- Major, V. S., K. J. Klein, and M. G. Ehrhart. 2002. "Work Time, Work Interference with Family, and Psychological Distress." *Journal of Applied Psychology* 87(3):427.
- Masten, A. S. 2001. "Ordinary Magic: Resilience Processes in Development." *American Psychologist* 56(3):2227–38.
- Masten, A. S., N. Garmezy, A. Tellegen, D. S. Pellegrini, K. Larkin, and A. Larsen. 1988. "Competence and Stress in School Children: The Moderating Effects of Individual and Family Qualities." *Journal of Child Psychiatry* 29(6):745–64.
- Matsui, T., and Shin-ichi Tsukamoto. 1991. "Relation between Career Self-Efficacy Measures Based on Occupational Titles and Holland Codes and Model Environments: A Methodological Contribution." *Journal of Vocational Behavior* 38(1):78–91.

- Meyer, J. P., and L. Herscovitch. 2001. "Commitment in the Workplace: Toward a General Model." *Human Resource Management Review* 11(3):299–326.
- Olson, P. D., V. S. Zuiker, S. M. Danes, K. Stafford, R. K. Z. Heck, and K. A. Duncan. 2003. "The Impact of the Family and Business on Family Business Sustainability." *Journal of Business Venturing* 18(5):639–66.
- Oughton, E., and J. Wheelock. 2003. "A Capabilities Approach to Sustainable Household Livelihoods." *Review of Social Economy* 61(1):1–22.
- Patterson, J. M. 2002a. "Understanding Family Resilience." *Journal of Clinical Psychology* 58(3):233–46.
- Patterson, J. M. 2002b. "Integrating Family Resilience and Family Stress Theory." *Journal of Marriage and Family* 64(2):349–60.
- Pena, I. 2002. "Intellectual Capital and Business Start-up Success." *Journal of Intellectual Capital* 3(2):180–98.
- Penley, L. E., and S. Gould. 1988. "Etzioni's Model of Organizational Involvement: A Perspective for Understanding Commitment to Organizations." *Journal of Organizational Behavior* 9(1):43–59.
- Poza, E. J., and T. Messer. 2001. "Spousal Leadership and Continuity in the Family Firm." *Family Business Review* 14(1):25–36.
- Rauch, A., and M. Frese. 2000. "Psychological Approaches to Entrepreneurial Success: A General Model and an Overview of Findings." *International Review of Industrial and Organizational Psychology* 15:101–42.
- Rauch, A., M. Frese, and A. Utsch. 2005. "Effects of Human Capital and Long-Term Human Resources Development and Utilization on Employment Growth of Small-Scale Businesses: A Causal Analysis." *Entrepreneurship Theory and Practice* 29(6):681–98.
- Rogoff, E. G., and R. K. Z. Heck. 2003. "Evolving Research in Entrepreneurship and Family Business: Recognizing Family as the Oxygen That Feeds the Fire of Entrepreneurship." *Journal of Business Venturing* 18(5):559–66.
- Rowe, B. R., and G. -S. Hong. 2000. "The Role of Wives in Family Businesses: The Paid and Unpaid Work of Women." *Family Business Review* 13(1):1–13.
- Rutter, M. 1987. "Psychosocial Resilience and Protective Mechanisms." *American Journal of Orthopsychiatry* 57(3):316.
- Schulze, W. S., M. H. Lubatkin, R. N. Dino, and A. K. Buchholtz. 2001. "Agency Relationships in Family Firms: Theory and Evidence." *Organization Science* 12(2):99–116.
- Scott, M., and R. Bruce. 1987. "Five Stages of Growth in Small Business." *Long Range Planning* 20(3):45–52.
- Shaffer, M. A., D. A. Harrison, K. Matthew Gilley, and D. M. Luk. 2001. "Struggling for Balance Amid Turbulence on International Assignments: Work-Family Conflict, Support and Commitment." *Journal of Management* 27(1):99–121.
- Steier, L., and R. Greenwood. 2000. "Entrepreneurship and the Evolution of Angel Financial Networks." *Organization Studies* 21(1):163–92.
- Unger, J. M., A. Rauch, M. Frese, and N. Rosenbusch. 2011. "Human Capital and Entrepreneurial Success: A Meta-analytical Review." *Journal of Business Venturing* 26(3):341–58.
- Van Auken, H. 2003. "An Empirical Investigation of Bootstrap Financing Among Small Firms." *Journal of Small Business Strategy* 14(2):22–36.
- Van de Ven, A. H., R. Hudson, and D. M. Schroeder. 1984. "Designing New Business Startups: Entrepreneurial, Organizational, and Ecological Considerations." *Journal of Management* 10(1):87–108.

- Voydanoff, P. 1988. "Work Role Characteristics, Family Structure Demands, and Work/Family Conflict." *Journal of Marriage and the Family* 50:749–61.
- Winborg, J., and H. Landström. 2001. "Financial Bootstrapping in Small Businesses: Examining Small Business Managers' Resource Acquisition Behaviors." *Journal of Business Venturing* 16(3):235–54.
- Zautra, A., J. Hall, S. John, and K. E. Murray. 2010. "Resilience: A New Definition of Health of People and Communities." In *Handbook of Adult Resilience*, edited by J. W. Reich, A. J. Zautra, and J. S. Hall, 3–29. New York: Guilford Press.
- Zhao, H., S. E. Seibert, and G. Thomas Lumpkin. 2010. "The Relationship of Personality to Entrepreneurial Intentions and Performance: A Meta-analytic Review." *Journal of Management* 36(2):381–404.