

UNDERSTANDING FEAR OF FAILURE IN ENTREPRENEURSHIP: A COGNITIVE PROCESS FRAMEWORK

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A COGNITIVE PROCESS
FRAMEWORK**

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ABSTRACT

There is a broadly held assumption within the entrepreneurship literature that fear of failure is always and only an inhibitor of entrepreneurial behavior. However, anecdotal evidence and psychological theory suggest that this assumption is flawed. If fear stimulates greater striving in some cases or situations, then perhaps it can be a friend as much as a foe. The motivating value of fear may have consequences for the reactions, decisions, health and well-being of the entrepreneur. Unfortunately, a lack of rigorous conceptualization of the construct is a barrier to understanding such consequences. We present a grounded theoretic framework of the antecedents, moderators and consequences of fear of failure with significant implications for theory and future research.

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INTRODUCTION

There is a broadly held assumption within the entrepreneurship literature – that fear of failure is always and only an inhibitor of entrepreneurial behavior. However, anecdotal evidence and psychological theory suggest that this prevalent assumption is flawed and in fact individuals may respond to fear perceptions by moving towards rather than away from the source of threat (Birney, Burdick & Teevan, 1969). If fear stimulates greater striving then perhaps sometimes it can be a friend as much as a foe (Martin & Marsh, 2003). However, motivation through fear rather than hope may have important negative consequences for the reactions, decisions, health and well-being of the entrepreneur. Unfortunately, a lack of rigorous conceptualization of the construct of fear of failure (FF) is a significant barrier to answering questions about such consequences.

Despite five decades of research on entrepreneurial motivation (e.g., Locke & Baum, 2007; Rauch & Frese, 2007; Shane, Locke & Collins, 2003), we know very little about the nature of FF in the context of entrepreneurship. Behavior motivated by the avoidance of harm can lead to approach as well as avoidance of the source of threat (i.e. fight or flight; Birney et al., 1969; Elliot, 1997). Which begs the question of who, when or how those desiring to engage in entrepreneurial pursuits may be stimulated by FF to approach rather than avoid. Furthermore, FF may not simply be the inverse of hope of success (Birney et al., 1969; Covington, 1992; Elliot & McGregor, 2001). In fact, these two motivating forces may not be mutually exclusive (Covington, 1992; Elliot & Church, 1997). Approach behavior does not require an absence of desire to avoid loss (Martin & Marsh, 2003), although FF may influence goals difficulty, effort, persistence, and reactions to failure (e.g., Dweck & Leggett, 1988). Therefore, achievement striving motivated by FF has adaptive and maladaptive outcomes.

The contribution of this research is to shine a brighter light on the FF phenomenon. We present phenomenological evidence that helps delineate

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the dimensions of the FF construct. Through grounded theorizing we propose a conceptual model, and offer some tentative propositions to guide future research. In our discussion we relate this conceptualization to other broad themes within the literature on the psychology of entrepreneurship.

LITERATURE REVIEW

Three theoretical perspectives have been used to explain the influence of FF in the context of entrepreneurship: economic, psychological and social psychological. The economic view is that FF is a perceptual variable, equivalent to risk aversion, that influences entrepreneurship as an occupational choice (Arenius & Minniti, 2005; Kihlstrom & Laffont, 1979). It is assumed that FF reflects the perceived risk of starting a new venture, and that a reduction in FF perceptions increase the probability of starting a new business (Weber & Milliman, 1997). Several studies suggest that FF exerts a negative impact on entrepreneurship (Arenius & Minniti, 2005; Minniti & Nardone, 2007; Langowitz & Minniti, 2007; Wagner, 2007; Morales-Gualdrón & Roig, 2005). These studies show that FF distinguishes nascent entrepreneurs from non-entrepreneurs (Arenius & Minniti, 2005) and that there is systematic variation in the degree of FF between males and females (Minniti & Nardone, 2007; Langowitz & Minniti, 2007; Wagner, 2007). A limitation of these studies is that they rely upon the GEM database where FF is measured by a single item: “fear of failure would prevent me from starting a business” (Bosma et al., 2008). The wording of this item assumes that avoidance is the only outcome, thus creating a serious threat to validity.

Research from a psychological perspective defines FF as a negative emotion affecting entrepreneurial action (Li, 2011; Welpe et al., 2011). Drawing on affect-as-information theory, Welpe et al (2011) report experimental evidence that emotions, including fear, moderate the decision to exploit entrepreneurial opportunities. Li (2011) suggests that FF is a feeling about expected outcomes, which influences people’s judgment on the value founding a new venture. However, Li proposes that it is a blend of

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negative emotions, and not only fear, which influence subjective judgments. FF is included in a set of other negative emotions (e.g. irritation, anger, contempt, sadness, shame, fear, and disappointment), which are operationalized using a combined scale to provide a single negative emotion score. In these studies, experimental decision scenarios are used to also induce emotions. Thus whether negative affect is antecedent or outcome cannot be ascertained. Research that focuses on FF as an emotion reports similar conclusions to the economics literature: FF serves to inhibit entrepreneurial behavior. However, the possible influence of FF on approach motivation and its consequences has not yet been examined.

Studies taking a social psychological perspective define FF as a socio-cultural trait that influences attention to rewards in the social environment (e.g., Vaillant & Lafuente, 2007). This view holds that FF is significantly influenced by internalized cultural norms and behavioral responses minimize the risk of social punishment. This has led to the simplifying assumption that FF is equivalent to risk aversion. Many of these studies also rely upon the GEM data (Alon & Lerner, 2008; Vaillant & Lafuente, 2007; Pathak & Autio 2010; Hessels et al., 2011; Stueber et al. 2009). Unsurprisingly, the empirical findings using this data show that fear of failure at the national level is negatively correlated with entrepreneurial activity (Vaillant & Lafuente, 2007; Helms, 2003), entrepreneurial processes (Stueber et al., 2009; Hessels et al., 2011; Pathak & Autio, 2010), international entrepreneurship (Alon & Lerner, 2008; Helms, 2003), and entrepreneurial intention (Shinnar et al., 2012). However, FF is still assumed to exert only a negative influence on entrepreneurial behavior.

Two studies have taken a different perspective on the relationship between FF and entrepreneurial behavior (Mitchell & Shepherd, 2010; Mitchell & Shepherd, 2011). In these studies, FF is considered to be a moderator that shapes individuals' attitude and beliefs about themselves and consequently affects their decision to act entrepreneurially. Mitchell and Shepherd (2010) provide evidence that individuals maintain both positive and negative

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images of self (self-esteem and fear of failure) and that these exert distinct influences on the evaluation of opportunities. Mitchell and Shepherd (2011) report that FF moderates the relationships between human capital, self-efficacy and the likelihood of acting entrepreneurially. Importantly the direction of the effect varies, suggesting that some sources of fear (fear of devaluing one's self-estimate, fear of having an uncertain future) have an inhibitory influence, while the fear of upsetting important others has a positive influence. The latter study may be the first to suggest that FF can result in approach as well as avoidance.

In summary, extant research on FF is focused almost exclusively on its inhibitory effects. The conceptualization of the construct remains simplistic, one-dimensional and unidirectional. Measurement of the construct follows conceptualization in terms of being limited and of unknown validity. A significant weakness is a lack of organizing theoretical perspective.

RESEARCH DESIGN

We offer two reasons for taking a grounded theory approach in the present study. First, existing approaches do not accord well with everyday experience in which FF may promote greater striving (e.g., Birney et al., 1969; Martin & Marsh, 2003). Second, entrepreneurship represents a unique field where action has serious consequences for individual physical and economic well-being. Grounded theorizing helps to reflect the unique characteristics of this context. Grounded theory is defined as a systematic process that seeks qualitative data on a social anomaly, typically collected from a pool of research participants through open-ended, semi-structured qualitative interviews (Glaser & Strauss, 1967). The elicited data, which represent 'the stories that people tell,' (Gartner, 2007: 613) is analyzed for coherent, contextualized insights.

It is typically held that grounded theorists should have no a-priori thoughts about what will be found as a consequence of their research, but are informed by what research subjects say or do. We have followed this

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approach using two strategies. First, our review of the related psychological literature was undertaken subsequent to the collection of the first round of 36 interviews. This enabled us to ask questions and code the results of the data without excessive ‘contamination’ from existing perspectives. Second, we employed a ‘naïve’ interviewer: one of the authors, not trained in the field of entrepreneurship, but trained in ethnographic and phenomenological approaches to data collection. While one can rarely approach a phenomenon without some influence of prior knowledge or theory, we have attempted to do so with as clear a canvas as possible.

Data collection and analysis proceeded in two phases, both consisting of a set of interviews, which were then transcribed and coded following a process of thematic analysis. In the first phase the interview data were collected and analyzed to produce a preliminary conceptual framework. In the second phase, a further set of subjects was interviewed using the same interview protocol with additional questions raised from the first analysis to deepen and further clarify subjects’ descriptions of the phenomenon. The aim was to both triangulate and refine the initial framework. We first describe the sample and data collection strategy, and then our data coding and analysis strategy, followed by the results.

Sampling and Data Collection

For the first phase of data collection, we identified 36 subjects through engagement with four non-profit regional entrepreneurship support organizations. In addition we used a snowball sampling strategy by asking subjects to recommend other possible interviewees. We included individuals who are currently active entrepreneurs or nascent entrepreneurs, and individuals who indicated that at a recent time they had an entrepreneurial idea that they pursued and then dropped. Our logic was that if FF only inhibits entrepreneurship, then those who continue to engage in entrepreneurial actions might not experience FF. We sought diversity in the subject pool to allow for the possibility that those who have started a venture experience fear differently to those who have decided not to do so. The 36

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subjects, all from the UK, were divided into two categories. There were 14 respondents that had acted upon an entrepreneurial idea, and considered themselves entrepreneurs at the time of research. Nine were male and five were female. The level of entrepreneurial experience ranged from recently started entrepreneurial activities to established entrepreneurs with several decades of experience. There were 22 respondents who had developed entrepreneurial ideas but had ceased their initial entrepreneurial activities before a venture was established, 11 were male, 11 female. In phase two of the data collection, which followed the coding and analysis of the first round of interview data, we focussed only upon those who were emergent or established entrepreneurs, with a sample of 30 Canadian subjects. All the subjects in the Canadian sample have experience of starting a business and a mean age of 39 (38.7%). The majority are educated white males (Male 93.3%; Caucasian, 80%; education 33.3% bachelor degree, 26.6% master degree, and 10% PhD), with a significant proportion being married (46.7%). Subjects for phase two were all identified through a regional entrepreneurship support organization.

All data were obtained through semi-structured interviews. Interview questions include items such as: When you first acted upon your idea and made it into a reality, did you experience any anxiety? After your early entrepreneurial action, at what point did further anxiety become a part of your project? What entrepreneurial activities proved to be a source of anxiety for you and your project? Describe when and how this anxiety related to your entrepreneurial behavior? How have your experiences of anxiety helped your entrepreneurial activity? How have your experience of anxiety hindered your entrepreneurial activity? The complete interview protocols are available from the authors. Each interview was recorded and transcribed. In each phase, the transcripts were coded by three of the authors. Coding of transcripts followed the process of thematic analysis, which we describe next.

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Thematic Analysis

For the purpose of coding the data, we adopted thematic analysis (Stirling, 2001; Boyatzis, 1998; Braun & Clarke, 2006). This involves the identification and coding of basic themes in the data. Basic themes are found in interviewee statements throughout the text. Higher level 'organizing themes' represent ideas, meanings, inferences, or actions recurring across multiple statements and respondents. These organizing themes are then themselves ordered into high level 'global themes' that reflect the principal categories in the interview texts (Stirling, 2001).

Data analysis proceeded in a sequence of steps. The data were analyzed in two rounds. The first (UK) interviews were analyzed and coded prior to undertaking the second round of interviews (Canada) and coding. The two rounds therefore provided an opportunity for initial exploration followed by refinement of both the data collection and coding into themes. The coding process began with a thorough reading of the transcripts by three coders. All statements that related to the phenomenon were identified and their relevance agreed upon by three of the authors, disagreements were resolved through discussion. Second, each statement was labeled by two of the authors (round 1; three in round 2) working independently as reflecting a specific theme. These labels were then discussed and disagreements resolved. Once these preliminary codes were agreed upon, the coding of themes proceeded by combing through the transcripts and assigning codes to each chunk of text. Next the second level, organizing themes, were identified. When basic themes occurred frequently, they were organized into these second level themes. In order to avoid constraining conceptualization at a preliminary stage, it was meaningful to include even infrequently occurring basic themes into organizing themes. In the final step, the organizing themes were grouped into global themes. In the first round of interview data the goal was to obtain complete agreement between the raters on the labeling of the themes. Therefore inter-rater agreement was not calculated for this stage, but is calculated in the second study.

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In order to enhance validity, the three coders for the second round of interview data included one of the authors who had not participated in the coding for study one. For the 30 interviews, the transcripts were first read thoroughly by three of the authors. Statements related to fear of failure were identified and listed independently by all coders. This data was then compiled into an initial list of 458 relevant statements. Next, the three coders independently coded these statements according to the thematic categories identified in study one. Where quotes could not be assigned to an existing category, new categories were suggested. During this process, the coding team met to refine and where necessary create new thematic categories. Once agreement was reached upon a final set of categories, the statements were re-coded. Disagreements were identified and reconciled through discussion until there was a unanimous agreement on the assignment for each quote to one or more categories. In some instances, statements could be assigned to more than one category (e.g., motivation and affect). In a few cases, statements that were adjacent in transcripts and were found to repeat the same basic meaning were combined. In other cases, the meaning of a quote was insufficiently clear and agreement was not possible. Those cases were deleted. We base our analysis only on the quotes for which the three coders reached unanimous agreement. In the final analysis, 391 quotes were retained from 30 interviews. Inter-rater reliability (IRR) is calculated as the number of unanimous agreements as a proportion of total number of quotes. IRR can be less than one where there were disagreements over secondary codes assigned to statements.

RESULTS

We very briefly summarize the initial exploratory stage, before turning to a more thorough report of the second round of interviews. The first round of analysis identified five global themes: the influence of FF on entrepreneurial action; the sources of fear; the psychological impact of FF; factors moderating FF; and evidence of the dynamic nature of FF. Ten interviewees made statements that FF had lead them either not to pursue an

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entrepreneurial idea, had in some way demotivated them, or motivated them to avoid putting effort in. Seven of those making the reference had not pursued their idea, suggesting that FF is one possible cause of the choice not to pursue entrepreneurship. Three of statements are in the negative, stating that FF did *not* inhibit their behavior. These are all from respondents who are involved in entrepreneurial actions. Furthermore, there were 15 independent references to fear being a motivator for entrepreneurial action, all made by eight respondents with startup experience.

The second global theme is the Psychological Impact of FF. In several instances, respondents made comments referring to internal mental states. The first organizing theme is feelings of stress or negative affect reported by respondents (3 statements). Two organizing themes reflect psychological responses. The first (3 statements) is to ignore fear perceptions because they are not sufficiently strong or salient. The second psychological response we observe as a theme in our data is labeled 'control' (3 statements). In this theme, statements indicated that fear perceptions were faced by taking control, focusing on aspects could be influenced, and consciously giving more effort. This theme was further refined in the second round, below.

The third global theme reflects the Sources of FF that are referred to by the respondents. We identify five organizing themes: threats to financial security (11 statements); concerns with personal ability (4 statements); threats to self-esteem (3 statements); concerns with the potential of the idea (7 statements); and threats to social esteem (8 statements). Statements were almost evenly distributed between the two categories of respondents, suggesting that whether or not individuals proceeded with their ventures, external threats and internal reflection and evaluation were both associated with FF perceptions.

The fourth global theme relates to statements about factors that moderate FF. This theme received only a limited number of statements (3 statements). However, the subject matter was deemed important enough to warrant

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inclusion. In round two, we added probing questions to better identify the moderators of fear perceptions, and the responses to those perceptions. Three moderators were suggested, by a single statement in each case: personal traits; learning and experience; and social support.

The last global theme reflects temporal dynamics in the experience. The experienced entrepreneurs in our sample frequently reported that the experience of fear was not consistent over time. Several statements (6 statements) indicate that fear perceptions increase as the level of commitments to the business increase, as the business became increasingly public, and as their obligations and responsibilities outside of the business grew. One respondent reported declining fear. In the second round, we took note of the areas in which we wished to further refine these codes, particularly the psychological impact and moderators of FF. The coding of the second therefore represents both a triangulation and a refinement of the thematic categories.

For the first global theme, Impact on Entrepreneurial Action, statements indicate that the experience of fear or anxiety related to failure influenced behavioral choices (e.g., continue, or not continue to pursue an idea, opportunity, or business venture). There are two underlying organizing themes, reflecting motivation and inhibition respectively: 20 statements (IRR .990) reflect behavioral inhibition resulting from fear (e.g., “where anxiety has been a hindrance has been more related to the rate of change or the rate of adoption or the rate of decisions. I think it slows you down.”); 64 statements (IRR .931) suggest FF was a motivator (e.g., “makes me more diligent and makes me work harder than I maybe would if I didn’t have that underlying fear”). For entrepreneurs, FF may be as much a motivator as an inhibitor of action.

The second global theme reflects a refinement of the study one theme of Psychological Impact. We distinguish two types of psychological impact: Affect reflects feelings, emotions, and related states associated with FF; Response strategies reflect responses to FF, which we describe later as a

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distinct category. There were 29 (IRR .964) statements reflecting the experience of negative affect (e.g., “it’s just daunting and horrifying”; “I got seriously depressed and had to go and see somebody.”). In addition, there were 12 statements (IRR .995) reflecting the experience of positive affect (“And you know, the anxiety turns into you know, positive feelings right.” the anxiety in fact of the matter is the reason becomes, you become sort of excited about it all”). A further four statements indicated that the experience of fear and anxiety was associated with related well-being issues (IRR 1.0) (e.g., “The stress can be pretty intense... And that can have a really negative effect on your health”; “Anxiety can be so high I break out into a skin rash”). Note that this subtheme contains information about the implications of FF on physiological well-being, and may be considered an outcome of FF.

The third global theme, Sources of FF, is consistent with study one. However, the sub themes were further refined through the coding of the second set of interviews. Threats to financial security remain a significant source of concern (38 statements; IRR .959; e.g., “It gets stronger as soon as I start thinking of sinking a lot of my own money into the project”). However, there was a related but distinct theme associated with concerns over funding the venture (11 statements; IRR .985; e.g. “I think there is a lot of anxiety of just trying to get the funds necessary to launch the initiative.”). Personal ability remained a significant source of fear (31 statements; IRR 0.926; e.g., “to figure out all the other things about running a business, that’s even scarier”). However, threat to self-esteem as a source was less apparent in this second study involving only active entrepreneurs (3 statements; IRR 0.990; e.g. “Now, it’s totally my problem, it’s all my problem. If I don’t succeed it’s completely my fault”). These two sources appear to reflect two sides of the same coin. Concerns over the potential of the idea remained evident (26 statements; IRR .944; e.g., “So you have to make it a design, and if it works then you know its right. And if it’s not right, it doesn’t work at all... from my point of view that’s where the anxiety has been”). Threats to social esteem remained a concern in study two (16 statements;

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IRR .982; e.g., “dealing with other people’s money, you have this level of anxiety of well I need to deliver, I need to perform, I need to get this for my customer”; “there’s so much hope and expectation behind it that I don’t want to be the one who made it collapse”). Five new organizing themes were identified in statements from the data of study two: fear arising from lack of control over outcomes (7 statements; IRR .995; e.g., “the stakes are high enough that a decision by somebody else that you can’t control, to you know, to steer something in your direction or away from your direction, you know when you don’t have the control of it that causes a lot of anxiety”); fear arising from awareness of opportunity costs (12 statements; IRR .990; e.g., “that was where the anxiety set in that the longer I continued to pursue this task, the more I’m kind of hurting myself in the long run”); concerns over uncertainty (8 statements; IRR .980; e.g., “it was the first time that I had opened up my own business per say and the anxiety was in all the unknowns”); the degree of commitment with respect to the venture or stakeholders (28 statements; IRR .987; e.g., “we were funded by CHR for that proof principle and then the real anxiety starts. We now committed to making this prototype a practical reality”); and concern over the venture’s ability to execute (10 statements; IRR .980; e.g. “how are we really going to force new ideas on an old, paperbound, workforce that, you know, that is learning to use computers but, quite frankly, it’s nowhere near where we are. So there’s a lot of anxiety from that”).

The fourth global theme, Moderators of FF, was further refined in the second round. The final list of themes includes reference to personal traits (24 statements; IRR .985; e.g., “I’m kind of a sure introvert so I find that you know, a lot of especially crowds of people, public speaking, things like that I find are very... anxiety tends to control me in those situations”; “I think is actually more of a personality trait than anything else. I’m a fairly stubborn person”); prior experience (25 statements; IRR .931; e.g. “I didn’t really have that much experience especially last year when I was just getting into it”; “It gives you a feeling of confidence because you have done things before and had them work out. It also gives you, it alleviates the anxiety”); the original

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theme of social support was subdivided into socio-emotional support (23 statements; IRR .980; e.g., “You feel less fear, like afraid of something and the risk if you know someone else is with you”) and instrumental support (21 statements; IRR .982; e.g., “It’s through that journey, you have some gray haired man telling you it’s going to be all right.”), and we found many statements referring to passion, or strong positive attitude, towards the idea or the opportunity (14 statements; IRR 1.0; e.g., “it’s a passion so I got to continue”). For traits, there were a number of different traits alluded to, some were positive (e.g., need for achievement) and some negative (e.g., introversion).

The fifth global theme of Response Strategies represents a refinement of the ‘Psychological Impact’ theme from the first study. The distinction is that these statements reflect how interviewees had responded to FF. The organizing themes in this category are: repress/ignore/procrastinate (10 statements; IRR .990; e.g., “A lot of things didn’t happen because the anxiety of being alone and you just didn’t want to deal with it more or less”; “putting things off, because if you don’t address it then you can’t determine if it’s bad or good”); emotional self-monitoring (3 statements, IRR .985; “I’ve trained myself to take that positive news and amplify it and transfer it to myself”); seeking social support (4 statements, IRR .997; “fear of failure forces you to come up with, you know, better ideas and look for people that are going to give you constructive criticism along the process”); learning (6 statements, IRR .997; “no one likes to fail but I think it’s part of the process and it’s realistic, it’s how we learn, how we get better”); problem solving (38 statements; IRR .931; “anxiety helped in the sense that I would try and figure out every single flaw”).

The last global theme of Temporal Dynamics remained intact from study one, with one minor refinement. In addition to statements reflecting the general increase in fears over time (7 statements, IRR .964; “the closer you get to the fact that it is going to be real the higher the anxiety”; “Since I started having something to lose”), and statements referring to decrease in

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fear over time (1 statement, IRR .997; “over that six months the anxieties started shrinking and shrinking more and I felt more and more confident in our ability to deliver”), there were several statements relative to the dynamic nature of fear (2 statements, IRR .995; “at the time it seemed like high anxiety, but after thinking about it and the things I’ve gone through since it’s like, it wasn’t that bad at all”).

AN INTEGRATIVE FRAMEWORK

Prior research has not been very precise on the nature of the FF construct. It has been treated as a perception (e.g., Arenius & Minniti, 2005; Weber & Milliman, 1997), an emotion (Li, 2011; Welpé et al, 2011), and a socio-cultural value (e.g., Vaillant & Lafuente, 2007; Helms, 2003; Pathak & Autio, 2010). Rather than being one or other of these, the thematic analysis of interview data suggests that there are multiple aspects to the construct that need to be accounted for. Interviewees report affective states such as stress and negative emotions, as well as excitement and energy. Respondents report both awareness of specific external threat sources such as concerns with personal capacity and the validity of their business ideas, and fears related to internal evaluations of their abilities. They also report a number of factors that either alleviate or aggravate those fears, and a number of strategies for responding to these fears. Finally, it is clear that not only do fears provoke avoidance, but in many cases approach. Taken together, these observations suggest that FF is a complex of affect, cognitive, dispositional and behavioral factors. We could speak of affective, dispositional, attitudinal, and behavioral dimensions of the phenomenon of entrepreneurial FF. Each may be independently significant, but can be best understood when these dimensions are considered together. Here we connect the dots from our inductive data collection into a framework, depicted in figure 1, that helps clarify the construct and organize a research agenda.

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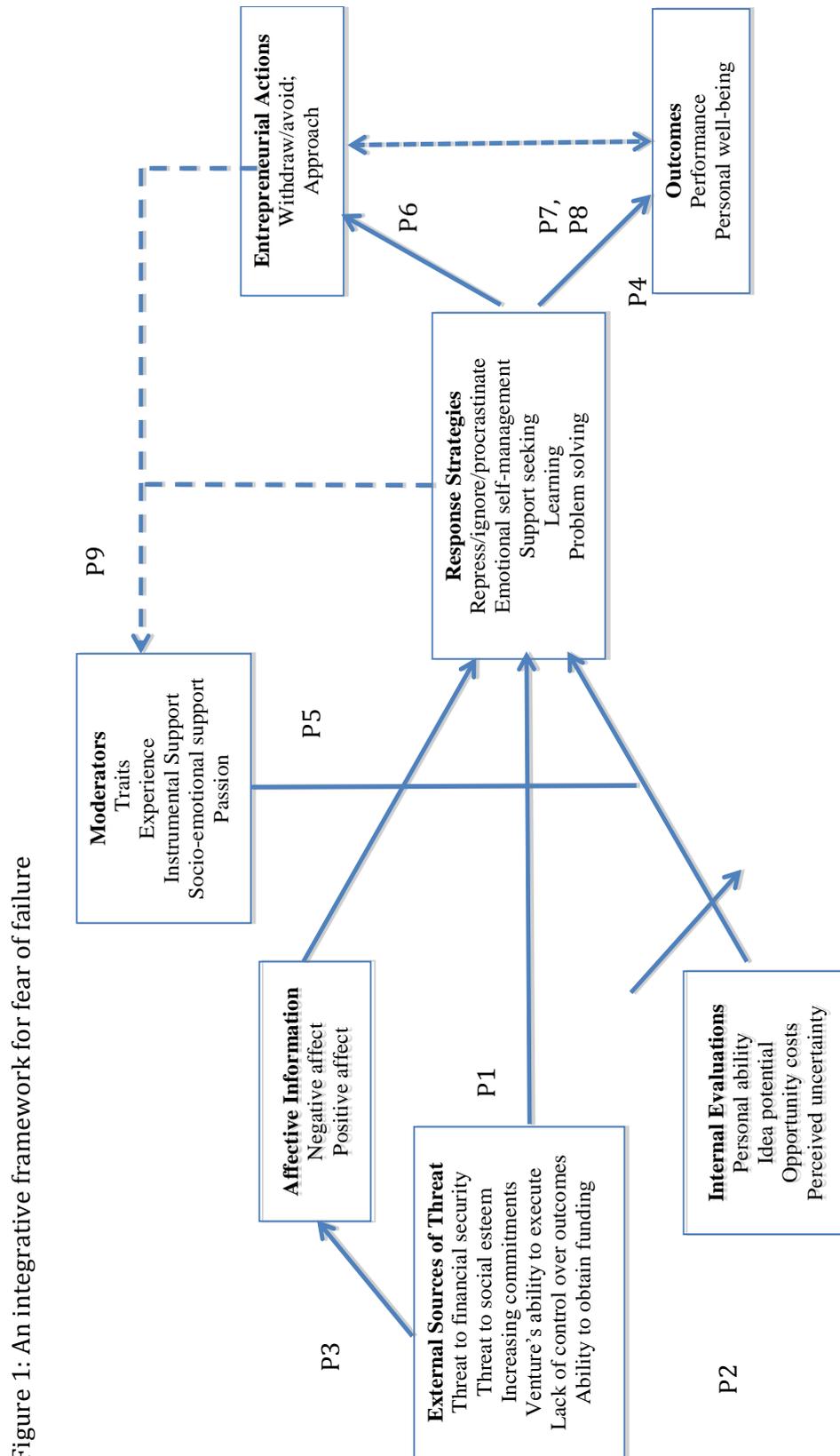


Figure 1: An integrative framework for fear of failure

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We have identified ten sources of FF. For clarity and parsimony, we separate these into two sets: a set of external or situational cues that may be appraised for their threat potential; and a set of internal evaluations.

The interviews indicate several important categories of situational cues that are attended to: the potential of financial loss; loss of social esteem; increasing commitments to the stakeholders; the ability of the venture, as distinct from the individual, to execute its major tasks (e.g., hiring, technological performance, product delivery etc.); perceptions of lack of control over outcomes; and the ability to obtain funding to maintain the venture. Fear is characterized by an aversive states that is related to specific identifiable threats (Öhman, 2008). These six factors represent external threats or cues that appear to be the subject of appraisals leading to fear perceptions. We propose the following:

P1: The appraisal of sources of threat lead to affective, cognitive, and behavioral responses, which include both approach and avoidance.

A second set of threat-related cognitions originates within the individual. Much research in entrepreneurial motivation has suggested that entrepreneurs engage in a process of evaluating feasibility and desirability of engaging in entrepreneurial action. The interview subjects commonly report engaging in assessments of personal ability, judgments about the potential of the idea reflecting the expectancy (feasibility) and instrumentality of actions for achieving desired outcomes. Subjects' reports of weighing opportunity costs and uncertainty reflect the cost-benefit analysis that is included in the cognitive calculus of expectancy-based motivation. We propose that these cues are endogenous with respect to the external threats: external threat cues trigger a appraisal of the feasibility and desirability of action choices.

P2: The appraisal of sources of threat influence the expectancy, instrumentality and valence calculations associated with entrepreneurial motivation.

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Affect represents an important source of information to which individuals pay attention (e.g., Clore & Huntsinger, 2007; Loewenstein et al, 2001). Feelings and anticipated feelings of negative and positive affect are incorporated into decision-making (Li, 2011; Welpé et al., 2011). Subjects reported both negative and positive affective states in association with the external cues. These are also expected to be associated with the motivational calculus since affect represents an information source that is included within assessments of valence, expectancy and instrumentality (e.g., Hayton & Cholakova, 2012). In general, the more perceived sources of threat the greater the stimulation of negative affect. However, in some cases it is clear that perception of threat can create real or anticipated positive affect. This suggests two propositions:

P3a: The appraisal of sources of threat will be positively associated with experience of negative affective states.

P3b: The valence of affective state will exert a consistent influence on internal evaluations (negative-negative; positive-positive)

The three categories of variables, external threats, internal evaluation, affective state, all represent antecedents in the framework. These factors are all expected to influence the action propensity of individuals. The data are very clear that threat perceptions, affect, and internal evaluations do not automatically imply a tendency to avoid engaging in entrepreneurial action. In many cases these antecedents are linked with the decision to approach even more vigorously. However, entrepreneurial action in the form of approach versus avoid is a broad and distal variable. The data also indicate more proximal outcomes of threat perceptions, which we label response strategies. The data suggest several possible responses that individuals engage in as a result of perceptions of threats. They may repress the feelings or perceptions, ignore them, or consciously or unconsciously procrastinate. Several participants indicated an awareness of the negative emotions that were associated with threat perceptions, and specified how they deliberately manage those feelings. Many respondents report seeking

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out social support, particularly mentors or informal advisors, in order to assuage their fears. Similarly, several respondents engage in deliberate learning and problem solving to directly attack the sources of threat and fear – i.e. approach the issue rather than avoid it.

We propose that the three categories of antecedent factors trigger these response strategies directly, and in interaction with each other. That is, the influence of perceived external threats, affective information and internal evaluations all represent main effect influences on engaging in these diverse response strategies. They are also expected to interact with one another in their influence.

P4: External threats, affective information, and internal evaluations serve as triggers to one or more response strategies, which include both action and inaction.

The data also suggest a number of moderators of individual reactions to threats, affective information and internal evaluations: individual traits may moderate threat perceptions positively or negatively. Numerous statements suggest individuals felt their own personal traits reduce the effect of threats include self confidence, self belief, being 'logic driven', stubborn, risk accepting, energetic, challenge seeking, emotional stability. However, a few suggest personal traits that may amplify the perception of threat such as introversion and perfectionism. Other factors such as prior experience, and the presence of social support, both instrumental and socio-emotional, were frequently reported as factors that helped mitigate perceived threats and negative affect. Finally, many respondents made statements indicating that their positive attitude towards the entrepreneurial goal and/or idea was sufficient to mitigate fear perceptions. In general, these represent a range of intangible resources available to the individual which can dampen the negative influence of FF. The possession of these resources are expected to therefore reduce the influence of FF on avoidance, and increase the likelihood of engaging in approach oriented behaviors:

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P5: The effects of external threats, negative affective information, and internal evaluations on avoidance behavior are moderated by personal traits, experience, instrumental support, socio emotional support, and entrepreneurial passion.

With respect to the ultimate impact of FF on entrepreneurial action, it is clear that a large number of participants reported being spurred on, rather than withdrawing from, or choosing not to enter into entrepreneurial action. We label these more distal outcomes as simply withdraw/avoid, and approach to allow for a wide range of entrepreneurial actions and settings to be addressed from this framework (e.g., initiation of entrepreneurial action, continuation, cessation, follow-on entrepreneurship, and reaction to success/failures). In each case individuals might avoid a situation they have not yet entered, withdraw from a situation that they are already engaged with, reduce their efforts, or redirect them to easier objectives. Similarly, approach includes initial engagement, the commitment of renewed energy to a task, the maintenance of effort in a given direction, and the selection of a task of a particular level of challenge. Response strategies serve as a mediating process through which threat appraisals influence approach and avoidance behavior. To the extent that individuals engage in one of the response strategies, they are more likely to maintain or develop an approach orientation.

P6a: Entrepreneurial action in the presence of FF is a function of engaging in response strategies.

P6b: Engaging in response strategies is an intermediate process which will be positively associated with an approach orientation to entrepreneurial action.

P6c: Failure to engage in response strategies increases the likelihood of avoidance.

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In addition to promoting approach or avoidance, there is also evidence of a more direct influence of FF upon two entrepreneurial outcomes. The first of these is included within the theme we have labeled 'physical and emotional health' for which four statements (IRR = 1) indicate a negative impact of the presence of FF on well-being: e.g., "The stress can be pretty intense. If things aren't working and you're trying to fix them? You have to put a lot of time and man hours in. And that can have a really negative effect on your health"; "You get feelings of you know your body getting a little tired and I think part of that is anxiety"; "anxiety can be so high I break out into a skin rash"; "Oh, I have insomnia ya, there's no question".

P7: The experience of sustained fear and anxiety increases risks for the emotional and physical well-being of the entrepreneur.

The second aspect is the impact of FF on entrepreneurial performance. Several statements indicate that FF led to a focusing of attention on problems, threats or issues, at the expense of other considerations. While it cannot be stated categorically that this is dysfunctional for performance, it is hinted at in a number of statements as follows: "So instead of being on the phone trying to get a customer you are sitting there talking about why we need to call more customers or why we don't call customers anymore, why we should start emailing them. So you are talking about it and not doing it"; "the anxiety made me check, re-check, test, re-test too much and that uses up a lot of time"; "Anxiety would get to me when I was too focused on like I had to be perfect which in the big picture doesn't matter." Therefore, we propose the following:

P8: Fear of failure has negative as well as positive consequences for performance.

One global theme in our data that is not incorporated directly in the graphical framework is the temporally dynamic, changing nature of FF. While FF is commonly treated as a static variable, it is clear that in practice it varies. Our interviews suggest that it can increase with commitments being made over

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time (e.g., Yeah, I would say the fact that my anxiety level was fairly low to begin with... mid levels of anxiety in let's say maybe the product demo era and ... the higher level of anxiety at the delivery stage) but also can decrease with experience over time (e.g., "from over that six months the anxieties started shrinking and shrinking more and I felt more and more confident in our ability to deliver".. This is consistent with recent studies that have highlighted the dynamic aspect of FF across the different stages of the process (Hessels et al., 2011; Pathak & Autio, 2010; Stueber et al., 2009), and suggests the following:

P9a: The experience of FF varies over time within individuals.

P9b: Increasing commitments increase the potential to experience FF.

P9c: Increasing experience through learning, problem solving and action decreases the influence of FF.

This dynamic aspect of FF is indicated in figure 1 by the dotted feedback lines which connect action to moderators of fear.

DISCUSSION

On the basis of the inductive evidence from 66 interviews in two countries, we propose an integrative framework that connects threat cues, affect, cognitions, behavioral responses, moderators and outcomes of FF. Our propositions only outline the possible network of associations among these diverse dimensions of FF. We have begun to outline a description of the process through which these dimensions of FF are associated with entrepreneurial activity characterized in terms of approach versus avoidance. Our objective was to move away from a unidimensional and unidirectional perspective that has dominated the field of entrepreneurship up to now. Rather than starting with an imported theoretical perspective, we begin with direct engagement with our subject, the potential, nascent, emerging, and experienced entrepreneurs. Our research joins a growing

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canon of in-depth, interview-based research in entrepreneurship (Bhave, 1994; Greening, Barringer & Macy, 1996; Markman et al, 2004; Bruton & Ahlstrom, 2001; Holt, 1997; Marvel et al, 2007) at a time when there is an understated but certain increase in qualitative analysis of entrepreneurship (Gartner & Birley, 2002; Parrish, 2009). “If entrepreneurship is fundamentally experiential, we know surprisingly little about the nature of experience” (Morris et al, 2011: 11). Here, data on how entrepreneurs experience a fear of failure is used to inform grounded theory on the topic. We thereby address Cope’s challenge to the field that there “remains a conspicuous paucity of academic studies that seek to articulate failure at the level of lived experience and ground theoretical discussions in rich qualitative accounts” (Cope, 2010: 604).

Rather than examine the relationship between a variable identified as fear of failure, we have chosen to articulate FF as a process. This enables us to consider the multiple facets that are apparent in the experience of the phenomenon to actors in the entrepreneurial field. These facets include affect, disposition, situational cues, and expectancy components, as well as positive and negative thoughts about themselves and their ideas. Ultimately fears influence behaviors, but not always in the anticipated direction. Those who experience fear may dedicate more effort to achieving their goal rather than simply avoid engaging with it. Having outlined our framework what remains is to consider points of contact with the broader entrepreneurial literature and potential directions for research.

One of the longest standing areas of interest in the field, albeit one that has shown distinct variation in attention, is entrepreneurial motivation. It is somewhat surprising that within the domain of entrepreneurial motivation, avoidance motivations have received hardly any consideration at all (e.g, Locke & Baum, 2007; Shane et al., 2003). Such an oversight may be explained by the obvious fact that approach motivation is essential for entrepreneurial action to take place. However, it remains curious that the literature has only given cursory attention to factors that inhibit

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entrepreneurial action. Given the objective scarcity of entrepreneurial action, perhaps the dominant 'entrepreneurial motivation' in the population is an avoidance motivation. Our exploratory framework has begun to sketch a role for avoidance motivation. As such it might also explain variation in behaviors not accounted for by current approaches.

Our framework is consistent with recent calls for more process-oriented perspectives examining entrepreneurial cognitions (Gregoire et al., 2010). Through an inductive empirical study we have sought to uncover what actors in the entrepreneurial field think about, what concerns they have, what cues they attend to, and how they respond to those cues. Our resulting framework therefore focuses on disentangling the antecedents and consequences of entrepreneurial cognitions. This has enabled us to address an issue of obvious concern: how FF may motivate as well as inhibit behavior.

A third point of contact in our work is with the emerging body of work on the role of affect and entrepreneurial decision and action (e.g., Baron, 2008; Cardon et al., 2009; Hayton & Cholakova, 2011; Li, 2011; Shepherd, 2003; Welppe et al., 2011). Affect is an important source of information impacts decision-making and action (e.g., Baron, 2008; Damasio, 1994; Loewenstein et al, 2001). We treat affective information as distinct from situational cues, outcome expectancies and dispositions. A significant challenge within the emerging literature on the role of affect is to distinguish dispositional orientations from passing states. Affective traits and states are not perfectly correlated. Individuals with generally positive affective dispositions may still experience negative affect, and vice versa. It is important, therefore, to maintain the distinction between the two. Hierarchical models such as ours, which link traits and states independently through cognitions or behavioral strategies, offer one way to incorporate both state and trait in a single model (Rauch & Frese, 2007).

Having raised the topic of traits, it is important to highlight some possible connections with other research in the field of entrepreneurial personality. We have incorporated traits within our framework to as possible moderators

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of situational cues. There are several approaches to dispositions in the contemporary literature. Two important motive dispositions reflect the 'Big Two' of extraversion and neuroticism, which, within the broad traits included in the Big Five framework, reflect dispositional approach and avoidance. Our framework is quite consistent with those such as Rauch and Frese (2007), which suggest that these broad dispositions can only be expected to be distally related to specific behaviors. We propose that when examining behavior across situations and persons, such broad traits exert their influence by moderating the effects of situational cues on action strategies. Our framework therefore contributes to consideration of such linkages.

There are extensive opportunities for novel research in this domain. The first central need is for a valid measure of FF, or its sub-components as delineated here. Questions to be addressed include how FF varies over time within individuals, how FF varies across individuals and what the personal and situational correlates of that variation may be. The performance consequences and consequences for individual health and well-being need to be identified and explained. Furthermore, we have only outlined the existence of various conceptual dimensions and connected them through a logical rather than deep theoretical explanation. Such theoretical explanations will be an important step in developing testable hypotheses.

Our empirically grounded conceptual framework of the FF process offers an exploratory attempt to differentiate the elements of the construct. By relying upon extant theoretical perspectives and relevant evidence, we have attempted to both organize the reflexively reported personal data from our research participants, and to offer some propositions on the expected relationships among the variables identified. It remains for the framework to be subjected to further empirical examination. In order to do so, it is likely that new measures will need to be developed and validated. The scope of our propositions is broad. However, we hope that the impact in terms of understanding more about entrepreneurial motivation, including inhibition, will justify increased research attention in future.

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