

Entrepreneurial Motivations: What Do We Still Need to Know?

by Alan Carsrud and Malin Brännback

This paper attempts to renew interest in a line of research that largely has been ignored for two decades but which is critical to the study of entrepreneurial cognitions, intentions, and their conversion into entrepreneurial behaviors. That area is entrepreneurial motivation. This is not a comprehensive review of all areas of motivation research but rather a challenge a reinvigorate research efforts on an important aspect of the entrepreneurial process that has been examined only at the margins so far. It is an attempt to show how one very important topic, “entrepreneurial motivation,” still needs more study if we are to address the question of “have we learned anything at all about entrepreneurs?”

Introduction and Brief History

The International Council for Small Business and its *Journal of Small Business Management* are a half a century old. Yet, few of us look at the long history of earlier research for topics that were abandoned without being fully explored. This is the case with entrepreneurial motivations, which seems to have been rejected, along with the study of unique personality traits of entrepreneurs. However, motivations are not the

same as “uniquely entrepreneurial personality traits” and should not have suffered the same fate (Carsrud et al. 2009).

In the mid-1980s, two of the most influential volumes were the *Art and Science in Entrepreneurship*, edited by Sexton and Smilor (1986) and *Managing Take-Off in Fast Growth Firms* by Smilor and Kuhn (1986). These volumes include theory and empirical research on entrepreneurial motivations (Carsrud and Olm 1986; Carsrud, Olm, and Eddy 1986). A year later, the seminal work *Job Creation in America: How Our Smallest Companies*

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Put the Most people to Work (Birch 1987) was published with its very clear message: small entrepreneurial firms were the very engines of economies. Research attention moved rapidly toward understanding the entrepreneur, finding ways of discovering potential entrepreneurs, and fostering entrepreneurship. As a field of research, entrepreneurship was still in its infancy and closely associated with small business management. Neither research faculty nor courses in entrepreneurship existed in most universities.

Building on Other Disciplines

Fortunately, accumulated knowledge from social science disciplines could be built on, thus creating new knowledge specifically focusing on entrepreneurship. However, it seems entrepreneurship research borrowed, quite unsystematically and somewhat opportunistically, from other disciplines. It also stopped potentially productive lines of research prematurely, one of which was on motivation. Researchers assumed it was possible to identify personality traits that would *uniquely define an entrepreneur*; when this was not easily demonstrated, this line of research quickly was abandoned. It should be noted that management scholars had been occupied with similar attempts to defining managerial work and trying to distinguish managers from leaders and managers from entrepreneurs (Baumol 1968; Busenitz and Barney 1997; Mintzberg 1973; Mintzberg, Ahlstrand, and Lampel 1998). Subsequently, researchers shifted their focus of interest toward entrepreneurial processes and activities (Gartner 1989).

Defining the Entrepreneur

Nevertheless, over the years, the entrepreneur has been characterized as *innovator*, *creator* (Schumpeter 1934), *locator*, and *implementer* of ideas through *exerciser* of leadership (Baumol

1968). Others saw the entrepreneur as the actor in the process-conscious market theory who exhibit deliberate behaviors (Kirzner 1979, 1973), whereas others still saw the entrepreneur as the *possessor* of idiosyncratic knowledge enabling opportunity recognition (Eckhart and Shane 2003; Gaglio and Katz 2001; Shane 2003; Shane and Venkataraman 2000).

When research on unique personality traits was unable to reliably differentiate managers from entrepreneurs and was abandoned, research unfortunately failed to realize that personality traits, though not unique to entrepreneurs, could still be a way to understand entrepreneurial behavior. For example, what drives success in other professions could also drive success among entrepreneurs. That itself is important to know.

Shifting Focus: Intentions

With the demise of a search for unique entrepreneurial trait, some researchers turned to entrepreneurial intentions recognizing that understanding the link between ideas and action was critical for understanding the entrepreneurial process (Bird 1989; Krueger and Carsrud 1993). A general conviction, based on psychological research, emerged that measuring a person's intent toward an activity was the best predictor of that specific future activity occurring. Several models on entrepreneurial intentions emerged dominated by variations on Ajzen's (1991) theory of planned behavior (TPB). Krueger and Carsrud (1993) offered a complementary model based on the entrepreneurial event model of Shapero (1982). Both models are linear and unidirectional. Later research found no significant difference in predicting behavior between the two approaches (Krueger, Reilly, and Carsrud 2000). The robustness of intentions has consistently been demonstrated in various studies (Davidsson 1991; Krueger and Brazeal 1994; Krueger and

Carsrud 1993; Krueger, Reilly, and Carsrud 2000). These confirmed that intentions are driven by attitudes and perceived behavioral control also known as self-efficacy (Bandura 1989, 1986) with the impact of social norms not being as consistently shown.

Path analysis confirmed that correlations between attitudes and behavior are fully explained by the attitude-intention and intention-behavior links (Kim and Hunter 1993). Whereas it was acknowledged that motivations were linked to behavior (Herron and Robinson 1993), empirical studies on entrepreneurial motivations linked to behavior was perceived as lacking (Kuratko, Hornsby, and Naffziger 1997) despite the earlier empirical work of Carsrud and Olm (1986) and Carsrud, Olm, and Thomas (1989) on entrepreneurial motivation and subsequent behavior, including firm performance.

Rediscovering Motivation

Research also has found support for different stages of intentions (Gollwitzer and Brandstätter 1997; Gollwitzer and Schaal 1998), which indicate that the entrepreneurial process may not be linear and suggests goal-directed behavior with different levels of goals that serve as external motivators (Lawson 1997). Bay and Daniel (2003) conceptualized the hierarchy of goals, which implicitly argues for differences in motivational intensity, as a requirement for a goal to be enacted upon. Finally, one critique toward entrepreneurial intentions studies argues that whereas intentions are the best predictors of future action, there is still insufficiently understanding of the intention-action link (Bagozzi 1992; Bagozzi and Warshaw 1992, 1990; Bird and Schjoedt 2009; Brännback et al. 2007; Edelman et al. 2010; McBroom and Reed 1992). That is, what triggers subsequent action and under what conditions? In this paper, we argue that the link is motivation.

General Overview of Motivation Research

Historically, motivation research can be traced to Freud's work on instincts (Freud 1924, 1915, 1900) and the research that followed (Deutsch and Krauss 1965; Maslow 1946). Instincts (motives) drive behavior where the goal is to survive, to succeed, and to avoid failure. Traditionally, motivation has been studied in order to answer three kinds of questions: what activates a person, what makes the individual choose one behavior over another, and why do different people respond differently to the same motivational stimuli.

These questions give rise to three important aspects of motivation: *activation*, *selection-direction*, and *preparedness of response* (Perwin 2003). Existing motivational theories can be divided roughly into *drive theories* and *incentive theories*. Drive theories suggest that there is an internal stimulus, for example, hunger or fear, driving the person and that the individual seeks a way to reduce the resulting tension. The need for tension reduction thus represents the motivation (Festinger 1957; Freud 1924; Murray 1938). On the other hand, incentive theories emphasize the motivational pull. There is an end point in the form of some kind of goal that pulls the person toward it, such as achievement motivation (Ach) in the entrepreneur (Carsrud and Olm 1986; Carsrud, Olm, and Thomas 1989) toward performance. In other words, in drive theories, the push factors dominate, whereas in incentive theories, the pull factors dominate.

In addition, there are essentially two schools of motivational theories: one based in economics and the other rooted in psychology (Fisher 1930) that have been in conflict with each other for decades. Steel and König (2006) and Wilson (1998) called for the use of *consilience*, which is the linking of facts and

fact-based theory across disciplines to create a common framework between these two schools. This approach has brought together various theories of motivation as applied in economics, management, and psychology (with a time dimension) into what they call Temporal Motivational Theory.

Motivations and Aspirations

One such fact-based theory is that of Ach, which was initiated by Atkinson (1964, 1957). First, a unidimensional approach was proposed by McClelland and Winter (1969), and later, a multidimensional approach was proposed by Spence and Helmreich (1978). The latter was used to study motivation in entrepreneurs (Carsrud and Olm 1986; Carsrud, Olm, and Thomas 1989). Interestingly, Atkinson (1964, 1957) builds his model of Ach on the theory of levels of aspirations. Other areas of fact-based motivation research include cognitive dissonance and risk (Cohen and Zimbardo 1969); work motivation (Pinder 1998, 1984), which is the combination of internal and external factors that initiate work-related behaviors and determine its form, direction, intensity, and duration (Ambrose and Kulik 1999). The notion of different levels of aspiration with respect to Ach can also be found in the theory of hierarchy of goals (Lawson 1997). Whether a goal leads to action is dependent on its level of abstraction. The more abstract the goal, the less likely it is to be enacted upon (Bay and Daniel 2003; Bagozzi and Warshaw 1992, 1990; Brännback et al. 2007).

Goals and Motivations

The importance and impact of goals has gained attention in motivational research (Locke and Latham 2004, 2002). Goals are mental representations of what the future could be, enabling individuals, such as entrepreneurs, not to give up (Perwin 2003). Goals activate

people in ways that often serve as the important link between intention and action (Nuttin 1984; Perwin 2003). In fact, being capable of changing goals and motives are a way for people to adjust to changing situations or contingencies. This notion is present in the conceptualization of effectuation, which has recently gained attention from entrepreneurship scholars (Sarasvathy 2008, 2001). This is consistent with Nuttin (1984) who distinguishes between two contextual modes of motivation: final and instrumental motivations. When a person pursues a certain goal, he or she has a final motivation. When they are doing something that indirectly leads to the final goal, it is instrumental motivation.

Motivations and Intentions

Finally, Ryan and Deci (2000) view motivation as the core of biological, cognitive, and social regulation. They stated that motivation involves the energy, direction, and persistence of activation as well as intention. This indicates that goals and motives play a role in predicting human behavior and that a link between intentions, motivations, and behavior indeed exists. This relationship is most likely neither linear nor unidirectional. First, there is a *time* effect. Intentions do not lead to immediate action. This time delay also has been found with respect to Ach (Helmreich, Sawin, and Carsrud 1986). Second, research has shown that reciprocity exists: attitudes influence behaviors and behaviors influence attitudes (Brännback et al. 2007; Kelman 1974). Motivations *may* be the spark that transforms a latent intention into real action and therefore, the missing link between intentions and action. However, this is by far an under-researched area within the entrepreneurship research territory, although some research is being performed in this area (Edelman et al. 2010).

Motivation and the Entrepreneur

Traditionally, reasons for starting a firm (the entrepreneurial goal) have been considered to be economic (Schumpeter 1934). In the 19th century, Jean Bertrand Say defined the entrepreneur as a person who does something for economic gain, and that notion has persisted since (Carsrud and Brännback 2009). Recent insights that there may be other motives for a person to create a venture have emerged in the area of social entrepreneurship. Here, the social gains are the primary motivators. It also is acknowledged that lifestyle entrepreneurs are driven by goals and motives, which may indeed be economic, but not necessarily to *maximize* economic gains.

We also know that whereas artists or craftsmen certainly hope to make a living based on their art or crafts, they may not define themselves as entrepreneurs but rather by what motivates them to do what they do (Elfving 2008). Take, for example, a musician who really wants to play music and is prepared to pursue this goal at any cost. As Elfving (2008) has shown, motivations and goals may change over time. The musician who initially would play his or her music at any cost may become motivated to play his or her music increasingly for economic reasons over time as a result of initial commercial success and acclaim by an audience. Initial success is the proof of “*I can do it,*” and that provides further encouragement to lift the aspiration level, thus changing ones goals.

Ach

As mentioned earlier, success may encourage an individual to lift his or her aspiration level, which is found in the motivational construct of Ach (Atkinson 1964, 1957). Whereas Ach is seen as an important element in entrepreneurial behavior, research results showed considerable variations (Brockhaus 1982,

1980; Carland et al. 1984; Carsrud and Olm 1986; Carsrud, Olm, and Thomas 1989; Gasse 1982; McClelland 1985, 1965, 1961; McClelland et al. 1953). Carland et al. (1984) argued that small business owner perceived their business as an extension of their personality, whereas the entrepreneur was characterized by innovative business behavior. McClelland and Winter (1969) found that Ach was the differentiating factor between small business entrepreneurs and other business leaders. Carsrud and Olm (1986) studied multiple dimensional Ach in samples of male and female entrepreneurs, finding patterns similar to others successful professionals. The role of Ach in entrepreneurial behavior has continued to attract interest among entrepreneurship scholars (Carsrud et al. 2009; Collins, Hanges, and Locke 2004; Hart, Stasson, and Mahoney 2007; Langen-Fox and Roth 1995; Lumpkin and Erdogan 2004; Steward and Roth 2007; Tuuanaen 1997), but there is still more research that needs to be performed.

Multidimensional Ach

Several studies have demonstrated that the quality and quantity of academic and vocational performance, including entrepreneurial performance, can be significantly predicted by varying combinations of multidimensional factors of Ach (Carsrud and Olm 1986; Carsrud, Olm, and Thomas 1989; Carsrud et al. 1982; Helmreich 1982; Helmreich, Sawin, and Carsrud 1986; Helmreich and Spence 1978; Helmreich et al. 1980; Helmreich et al. 1978; Spence and Helmreich 1978). These studies have also shown that multidimensional Ach may have a time delay in its impact. These studies indicate that the best performance is typically exhibited by those individuals scoring *high* in mastery needs and work orientation but *low* in interpersonal competitiveness. Moreover, interpersonal competitiveness, popularly considered a trait of entrepreneurs, is not related to actual

entrepreneurial success (Carsrud et al. 2009; Carsrud, Olm, and Thomas 1989; Carsrud and Olm 1986).

Whereas it is acknowledged that motivations differ between entrepreneurs and nonentrepreneurs, the connection of Ach to firm performance is still unclear despite the work of Carsrud, Olm, and Thomas 1989 and thus requires additional empirical analysis. It is possible that Ach is linked to entrepreneurial innovations and goals. However, to develop a deeper understanding of this connection, it is necessary to find a reliable and valid way to measure Ach that is appropriate to the study of entrepreneurs. We believe one already exists and has been shown to predict entrepreneurial behaviors.

Measuring Multidimensional Ach

A multidimensional measurement of Ach is found in the *Work and Family Orientation Inventory* (WOFO) (Helmreich and Spence 1978). The WOFO contains three subscales that have particular resonance with the study of entrepreneurship that go beyond the “lifestyle” concerns of the more unidimensional scales of Mehrabian (1968) and Komives (1972). The WOFO subscales refer to “mastery needs,” “work orientation,” and “interpersonal competitiveness.” These dimensions are assessed through questions such as “I like to work hard” (work orientation), “I prefer to work in situations that require a high level of skill” (mastery needs), and “I feel that winning is important in both work and games” (interpersonal competitiveness). These scales tap into some underlying motivational characteristics of the entrepreneur. The motivational concept of “mastery” has a great deal in common with the concept of self-efficacy, which is a key antecedent of entrepreneurial intentions (Bandura and Locke 2003; Krueger, Reilly, and Carsrud 2000; Wong, Lee, and Leung 2006; Zhao, Seibert, and Hills 2005). Self-efficacy is one example of

where motivation has been assumed in entrepreneurial intentions research but not directly and empirically studied.

Motivations: Necessity versus Opportunistic Entrepreneurs

A basic assumption is that entrepreneurs have the same motivations as anyone for fulfilling their needs and wants in the world. However, they use those motivations in a different manner—they create ventures rather than just work in them. Some become entrepreneurs even when other attractive options for employment exist. They recognize an opportunity and act. The opportunistic entrepreneur (Reynolds et al. 2002) is driven by the achievement of success through exploiting an opportunity for some form of gain, often believed to be economic. The intention of the entrepreneur and the pursuit of the recognized opportunity are critical but still require motivation to drive those intentions or exploit those opportunities. Commercially oriented entrepreneurs are working to earn money, power, prestige, and/or status, but these might not be the only motivations. For example, in biotechnology, the search for a cure for a disease may be a far more powerful motivator than personal wealth creation.

Whereas opportunistic entrepreneurs may be motivated by a need to achieve or to succeed (as measured in economic terms), other entrepreneurs are driven by what could be described as survival-oriented motivations. These are commonly known as necessity entrepreneurs (Reynolds et al. 2002). Necessity entrepreneurs are more concerned with avoiding failure, which could mean starvation. The central motivation is to earn enough money to be able to support one’s self and family. When focused on survival, one may ignore opportunities that have a longer payback period. Some necessity entrepreneurs simply can not afford to wait to achieve a bigger goal as they might starve to death waiting. Thus,

necessity entrepreneurship could inhibit opportunistic entrepreneurship rather than foster it. Failing could mean death, a risk not worth taking.

Cognitive Dissonance, Risk, Success, and Failure

Earlier, we stated that necessity entrepreneurs seek to avoid failure. Whereas Ach is high among entrepreneurs, opportunistic entrepreneurs also seek to avoid failure. The complexity of motivations is exhibited in cognitive dissonance and risk avoidance, both of which are strong motivators for entrepreneurs (Monsen and Urbig 2009). Research on cognitive dissonance and the need to avoid failure (Cohen and Zimbardo 1969) could be used to explain why entrepreneurs often do anything to avoid failure in their venture and why entrepreneurs show higher tenacity (Baum and Locke 2004; Baum, Locke, and Smith 2001). Moreover, research shows that individuals with high Ach and motivation for success will show greater cognitive dissonance the greater the probability of failure (Cohen and Zimbardo 1969). This insight may help to explain why some persons agree to commit themselves to a high-risk venture whereas others do not. This could explain the behavior of entrepreneurs but also the behaviors of investment bankers, venture capitalists, and angel investors.

Atkinson (1957) showed that failure and success motivations are separate and have different implications for behavior, and this distinction appears to have been omitted by entrepreneurship researchers. Risk-taking propensity was treated as a personality trait and not as two parts of a motivational paradigm that included dissonance. Even recent commentaries on risk-taking behavior in entrepreneurs (Segal, Bogia, and Schoenfeld 2005; Lumpkin and Erdogan 2004) have not applied this broader perspective (Carsrud et al. 2009). Building on Atkinson (1957) and Deci (1975), the relation-

ship between success and risk thus includes the motivation of success. Motivation of success is constant in an individual and has an incentive value. The incentive value is higher when a difficult goal is pursued and achieved (such as starting a new firm). Therefore, a person with a strong tendency to create a venture, which is considered moderately risky, will be the most pronounced in entrepreneurs with a high motive for success (Carsrud et al. 2009).

Fear of failure is the motive to avoid disappointment. For entrepreneurs, there are also expectancies about failure and an incentive value for failure as well as for success. The motive to avoid failure has been found to be relatively stable (Deci 1975) and the emotions of shame and embarrassment accompanying failure as an entrepreneur are greater the easier the task. In other words, the greater the shame, the greater the incentives to avoid failure as might occur in starting a new business (Carsrud et al. 2009). An additional discussion on risk taking can be found in Monsen and Urbig (2009).

Intrinsic and Extrinsic Motivation in Entrepreneurs

Motivation can be either *intrinsic* or *extrinsic*, or both. Intrinsic motivation refers to a personal interest in the entrepreneurial task as seen in studies on multidimensional Ach in entrepreneurs (Carsrud et al. 2009; Carsrud, Olm, and Thomas 1989; Carsrud and Olm 1986). Extrinsic motivation refers to an external reward that follows certain behavior. Intrinsic and extrinsic motivations are not mutually exclusive. One can be motivated by both to perform an entrepreneurial act (Elfvig 2008). Internally, entrepreneurs may be motivated to succeed and accomplish a goal, whereas externally, they may be motivated to obtain wealth and status. Whereas most entrepreneurial research assumes the entrepreneur is motivated by external

rewards such as money, power, status, etc. (an economic view of human motivation), one is left with the reality that some people engage in entrepreneurial activities as an end in themselves. This classic definition of intrinsic motivation could certainly play a role in why social entrepreneurs start social ventures even when there is not apparent reward for doing so other than some internally generated satisfaction.

The idea that an individual engages in entrepreneurial behaviors because of the need for stimulation (a form of intrinsic motivation) is not revolutionary, but the fact that serial entrepreneurs do this habitually may provide some interesting insights into such behavior. Once an entrepreneur has had the stimulation of starting a firm, they frequently return to that behavior because of intrinsic motivation and the internal and external rewards they received doing that behavior in the past. They might persist in trying for internal reasons even if they have never been rewarded externally through a successful venture. They reduce the cognitive dissonance of perceived possible failure by believing they can be successful this time. Finally, external motivations or rewards would include relatively intangible things such as status, power, social acceptance, etc., with the more tangible external rewards being money, stock options, and other forms of compensation (Carsrud et al. 2009).

Entrepreneurial Work Motivation and Venture Design

Hackman and Oldham's (1976) research on work design has not been applied to how entrepreneurs design their venture, yet it is clear that entrepreneurs are motivated by the kinds of firms they could build and are motivated to create firms in which they would ideally want to work. It is interesting that entrepreneurship researchers have largely avoided the extensive literature on work

motivation (Pinder 1998, 1984). Again, work motivation can potentially offer a viable link to the literature on intentions, goals, goal setting, leadership, job enrichment, and the design of a new venture. Management researchers (Gächter and Falk 2000; Quigley and Tymon 2006) have continued the work design research stream, but so far, entrepreneurship researchers have largely chosen to not explore it. However, popular media is full of stories of the unique organizational structures, perks, and incentives that entrepreneurs create for their new ventures to attract and keep employees.

Entrepreneurial Intentions, Goals, and Motivations

The importance of goals in motivational research is well-known (Bagozzi and Warshaw 1992, 1990; Bay and Daniel 2003; Locke and Latham 2002). Except for work by Carland and his colleagues and Carsrud and his colleagues in the 1980s, entrepreneurial motivation was largely ignored through the 1990s and early 2000s until recently (Carsrud et al. 2009; Edelman et al. 2010; Shane, Locke, and Collins 2003). In fact, being capable of changing goals, motives, and goal-specific intentions is a way for people to adjust to changing situations. This is frequently the case for entrepreneurs whose intentions, goals, and motives change over time. As Nuttin (1984) points out, motivation is shaped in the individual–environment context. The contextual impact on entrepreneurial motivations and intentions requires further exploration (Carsrud et al. 2009; Edelman et al. 2010; Elfving, Brännback, and Carsrud 2009).

Entrepreneurs and the TPB

Behavioral goals are neither entirely ignored nor explicitly included in the TPB of Ajzen and Fishbein (1977) on which most entrepreneurial intentions research is based. Essentially, all entre-

preneural behaviors could be labeled as goals in the TPB. Goals can be defined as every positive outcome that one seeks to gain through reasoned behavior (e.g., Ajzen and Fishbein 1977). For example, if an entrepreneur seeks to raise venture capital funding for his or her firm, the act of approaching the venture capitalist is planned behavior and the goal is the potential economic gain. However, Bagozzi and Warshaw (1992, 1990) would argue the TPB only explains performances, which are solely dependent on an intention and where no impediments prevent the implementation of the intention. This certainly would not be the case for an entrepreneur seeking venture capital or even angel financing.

This is certainly not the case with entrepreneurial behaviors where a number of barriers to implementation exist. For example, if the venture capitalist declines to invest, it does not necessarily mean the entrepreneur ceases to try to start the firm. He may choose to “boot strap” the operation. In another example, one may have the intention to start a venture, but the intention may not be acted upon because of any number of reasons such as lack of social support, insufficient skills, and cognitive dissonance. An entrepreneurial intention does not always lead directly to entrepreneurial behaviors. It is this time lag and how motivations can potentially shorten or prolong action that is not yet adequately understood within entrepreneurship research.

Entrepreneurs and the Theory of Trying

To explain the aforementioned type behaviors, Bagozzi and Warshaw (1990) developed the *theory of trying*. Whereas Ajzen and Fishbein (1977) treat action as a single performance, Bagozzi (1992) prefers to view action as an attempt, or a sequence of attempts, to reach the final performance. The theory of trying accommodates both intermediate goals

and end-state goals (Bagozzi and Warshaw 1990; Gollwitzer and Brandstätter 1997; Gollwitzer and Schaal 1998). With respect to entrepreneurial venture creation, sometimes, there is a significant time lag between when the decision is made to start a firm and an opportunity exists or when motivation is high enough to mandate action at least to *try* (Bagozzi, Dholakia, and Basuroy 2003; Shane 2008). Bagozzi and Warshaw (1990) also added the impact of past behavior and additional background factors to their model. In TPB, intentions and performance are influenced by past behavior only through background factors (Ajzen and Fishbein 2005; Ajzen and Madden 1986). However, Bagozzi and Warshaw (1990) argued that past behavior could make a substantial contribution to understanding future behavior and could also possibly influence behavior directly without impacting the formation of intentions. This insight may be useful in explaining the behavior and underlying motivations among serial entrepreneurs. The old adage that “the best predictor of future behavior is past behavior” once again has its place, even in entrepreneurship research.

Studies based on the theory of trying have been carried out on fairly low-level goals, such as losing weight or mastering a new piece of software. There is still a need for empirical studies involving higher level goals such as venture creation. It is important to note that various forms of goal-directed behavior can be placed on a continuum and that goals affect behavior differently depending on their position in the hierarchy.

Entrepreneurs and Goals

Goals are mental representations of what the future could be similar to, enabling individuals, to persist (Bagozzi and Dholakia 1999; Bagozzi and Kimmel 1995; Perwin 2003), a behavior observed in many entrepreneurs. Goals are central in Bandura’s (1989) social cognitive

theory where self-efficacy partly determines what people intend to achieve and what kind of goal they set for themselves. As noted earlier, goals activate people as they are directive, energizing, and impact persistence. Goals can lead to arousal, discovery, and emergence of strategies to achieve those goals (Locke and Latham 2002). However, the strength of the activation is determined by the strength of the motivation. Weak motivation will not transfer into real action especially if the task is perceived as difficult, not feasible (self-efficacy), or not desirable. This may explain some of the findings in the Panel Study of Entrepreneurial Dynamics (PSED) data where a significant portion of the samples continue to try without either succeeding or failing. Hence, we argue that motivation represents an important link between intention and action as noted by Bird and Schjoedt (2009) when discussing the linkage of entrepreneurial cognitions to entrepreneurial behaviors. This indicates that goals and motivations play a role in predicting human behavior, especially entrepreneurial behavior.

The existence of feedback is another important factor in goal theory. Entrepreneurs need to be able to check where they stand in relation to their goals so they can determine whether they need to make adjustments in their behavior in order to attain those goals (Lent and Brown 2006; Lent, Brown, and Hackett 1994; Locke and Latham 2002; Locke, Latham, and Erez 1988). Social cognitive theory also implies there is a reciprocal relation between self-efficacy, outcome expectations, and goal systems (Bandura 1986). This reciprocal relationship has yet to be fully explored in the entrepreneurial literature.

Linking Entrepreneurial Intentions, Motivations, and Behaviors

The work of Gollwitzer and Brandstätter (1997) illustrate the linkage between intentions, motivation, and goals by pre-

senting the ideas of *implementation intentions* and *goal pursuit*. They describe people's goal pursuits as a continuum, including four action phases. The first phase, the *predecisional phase*, is an awakening of desires and wishes (realizing one could be an entrepreneur). In the second phase, the *preactional phase*, goal-directed behavior is initiated (starting to look for opportunities or learning what it takes to be an entrepreneur). In the third phase, the *actional phase*, the goal-directed actions are brought to a successful ending (actually starting a firm). Finally, in the fourth phase, the *postactional phase*, the outcome is evaluated by comparing what has been achieved with what was originally desired (was the new venture a success or did it meet the expectations of the entrepreneur). It is important to remember that goals serve as motivators, the strength of which will increase as the goals are met or achieved and thus reinforced.

The four action phases are connected through crucial transition points. Gollwitzer and Brandstätter (1997) labeled the first transition point *goal intention*. A goal intention, for example, can be "I intend to become an entrepreneur." However, an intention is not enough to lead to an action as there might be several impediments along the way. There may also be different ways of achieving the goal that one may have to choose in order to avoid the risk of failing to seize a specific opportunity. An *implementation intention* can then function as a mediator and take the goal pursuit one step further. It serves to translate the goal state from a higher level of abstractness to a lower level and to link a certain goal-directed behavior to a situational context. An implementation intention could be, "I intend to start my own company when I have finished my studies." An implementation intention results in a commitment to perform a specified goal-directed behavior once a critical situation or step has occurred or

been achieved. Furthermore, people who have formed an implementation intention should possess the cognitive structures needed to recognize opportunities when they emerge. Gollwitzer and Brandstätter (1997) concluded that a goal is more likely to be achieved if an implementation intention exists. Though the idea of being or becoming an entrepreneur is a goal, the absence of an implementation intention will not result in entrepreneurial behavior (Elfving 2008).

Questions for Future Research

Building on the previous discussion on entrepreneurial motivation, we propose a number of potential research questions, which we believe have either been neglected or for which further research is required. These are not written as research hypotheses; those are for future researchers to propose. What we have performed is to take the aforementioned literature review and discussion to propose a set of interrelated questions. We have attempted to cluster these by major focus, but several bridge different issues and foci.

General Motivation Questions

The overview of motivational research and motivational research in entrepreneurs leads to a series of 13 questions:

- (1) Could aspiration level explain why some people chose to build high-growth firms and others choose lifestyle firms?
- (2) Could aspiration theory address the tendency of individuals to both achieve success and avoid failure?
- (3) What motivates different types of entrepreneurs (e.g., social, technology, lifestyle, opportunistic, or serial entrepreneurs)?
- (4) How does motivation impact the decision not to create a venture?
- (5) Do success, power, and status differentiate between growth-

oriented entrepreneurs and lifestyle entrepreneurs?

- (6) Does Ach impact intentions directly?
- (7) How does multidimensional Ach explain how entrepreneurs motivate others?
- (8) Which dissonance reducers do entrepreneurs enact and under what circumstances?
- (9) How do success and failure motives differ in those who have a successful firm and those who have a failed one?
- (10) How do motivations and goals for entrepreneurs change over time?
- (11) How do internal and external motivations impact entrepreneurial performance?
- (12) If environmental factors change, how do entrepreneurs alter their motives and behaviors to cope with new situation?
- (13) Does cognitive dissonance explain why entrepreneurs modify their success motivation or their motivation to avoid failure?

Motivation and Opportunity Recognition Questions

The review of the role of motivation in the opportunity recognition process led to two questions:

- (1) What motivations drive opportunity recognitions and how do they vary across different types of entrepreneurs?
- (2) How do motives, values, and skills interact to determine the behaviors of entrepreneurs, especially in opportunity recognition?

Motivational Context Questions

All behaviors, cognitions and motivations exist within a context. Thus, the following two questions:

- (1) How does context impact entrepreneurial motivation?

- (2) How do self-efficacy, outcome expectation, interest, goals, and contextual settings interact to impact entrepreneurial behaviors?

Linking Motivations to Intentions and Behavior Questions

Critical to understanding the importance of motivations is to look at the role motivations may play in linking cognitions, such as intentions, to actual behaviors. This leads to the following six questions for future research:

- (1) How does commitment on the part of entrepreneurs depend on the importance of the outcome?
- (2) How does the likelihood of success impact the entrepreneur's self-efficacy?
- (3) How does Ach impact self-efficacy in entrepreneurs?
- (4) How do goals activate entrepreneurs and how are goals linked to intentions and actions?
- (5) If the existence of feedback is important in goals, how do entrepreneurs use this to make adjustments in their behavior in order to attain success?
- (6) How do lack of social support, insufficient skills, and cognitive dissonance affect entrepreneurial opportunity recognition, intentions, and subsequent behaviors?

Motivation and Work/Firm Design Questions

The role that an entrepreneur's motivations and cognitions play in how they design and set up their new ventures remains largely unexplored. The review of the work design literature leads us to the following three questions:

- (1) Could entrepreneurs who set out with a particular vision of their future success be motivated through the goal of potential future rewards even though the present

work might not be as internally satisfying or externally rewarding?

- (2) How are intentions, goals, goal setting, leadership, and job enrichment tied together in the entrepreneurial firm?
- (3) How do an entrepreneur's motives impact how they design work within their venture?

Conclusions

In summary, this paper has explored various aspects of the underresearched role of entrepreneurial motivations. We have attempted to show that entrepreneurial motivations are important explanatory mechanisms for a variety of entrepreneurial behaviors. We have paid special attention on how such motivations may impact both intentions and subsequent behaviors. We have shown that motivation is implied, or assumed, in papers on entrepreneurial intentions, scripts, and cognitive maps to entrepreneurial behaviors (Brännback and Carsrud 2009; Carsrud and Brännback 2009; Krueger 2009; Mitchell, Mitchell, and Mitchell 2009) but remains largely underresearched (Carsrud et al. 2009) despite its critical importance to predicting and explaining entrepreneurial behaviors. Our hope in this paper is to provide sufficient rationale for entrepreneurship researchers to rediscover the rich complexity of motivations and explore in greater detail the role they play in entrepreneurial behaviors.

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