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Entrepreneurial Traits and Entrepreneurial Success

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Abstract

This thesis reviews the entrepreneurship research literature regarding the traits of entrepreneurs identified as being important for entrepreneurial success. Different definitions of entrepreneurial success are identified and discussed. The traits most consistently related to success are identified. Connections between the traits and success are identified. Criticism of connecting traits and success are discussed. Finally, implications for entrepreneur, for policy, and for future research are presented.

Introduction

Academic research on entrepreneurship has exploded in recent years. Rauch et al. (2009) catalogs the growth of this research from 1980 to 2006. The number of studies on entrepreneurial traits and success factors increased more than five-fold in the past decade compared to the previous one. At the same time, the field struggles with establishing a common body of knowledge. This thesis reviews research on measures of entrepreneurial success, research on entrepreneurial traits, and the research reporting relationships between entrepreneurial traits and entrepreneurial success.

The definition of entrepreneurship itself is elusive. Through a survey, William B. Gartner (1990) learned that a consistent definition of an entrepreneur has yet to emerge. Yet, Gartner reflects, even “if no existing definition can be agreed upon by most researchers and practitioners ... it is important to say what we mean.” Bygrave (1993) describes entrepreneurship as the acquisition, combination, and redeployment of resources to provide new products and services through new organizations to new markets.

Entrepreneurship research focuses on those who provide new products, new processes, and new ways of organizing rather than on those who manage established businesses or those who manage businesses they did not create (Davidson, Low, & Wright, 2001; Shane & Venkataraman, 2000; Zahra, Ireland, & Hitt, 2000). Associating entrepreneurship with newness rather than with business in general provides a more homogeneous set of subjects and better represents the entrepreneurial essence (Timmons, 2000).

Throughout entrepreneurial literature we can find discussions about character traits that make an entrepreneur successful. Some of the literature examines the traits using empirical analysis, some use interviews, and some use case studies. This thesis catalogs character traits identified in the literature that contribute to an entrepreneurial success, and relates these traits to entrepreneurial success.

To relate traits to entrepreneurial success, one must have a measure of entrepreneurial success. This is problematic because different success measures have been used. The next section reviews measures of entrepreneurial success that have been used in academic literature.

Defining an entrepreneurial trait is also problematic. First, the word trait is not always the word used in the literature. The words qualities, characteristics, and attitudes of the entrepreneur are also used. To avoid ambiguity, the trait will consistently be used to describe what the entrepreneur might have that makes a difference in performance.

Second, the literature uses many different words to describe traits. Any one word used to describe one trait may have a partial or total synonym. Traits tend to be related. The approach used here is to focus on traits which are more consistently mentioned in the literature. The distinguishing personal quality or characteristic of the entrepreneur is described as the “trait.”

The way an entrepreneur behaves day to day provides a picture of his or her traits.

However, it is important to note that, while an entrepreneur’s traits may contribute to the

success of a venture, they are not the sole contributor. The success of a venture is also impacted by market conditions, industry evolution, and more.

This thesis concludes with some thoughts on the implications of this research for individual entrepreneurial success, for social policy, and for future research on entrepreneurship.

Entrepreneurial Success

Benzing et al. (2009) found researchers do not agree regarding how entrepreneurial success should be defined. In reviews of the entrepreneurial literature, Combs, Crook, and Shook (2005) and Venkatraman & Ramanujam (1986) each report a variety of success indicators.

Lumpkin and Dess (1996) propose that entrepreneurial success is multidimensional. This is significant because they also find that the relationship between entrepreneurial traits and entrepreneurial success depends upon the indicators used to assess success.

Murphy et al. (1996) performed a review of 51 articles of entrepreneurial success. They concluded that a majority of performance measures were related to one of eight performance dimensions, which we refer to as success measures (frequency is listed with each success measure): efficiency (30), growth (29), profit (26), liquidity (15), success/failure (9), market share (5), and leverage (3).

One success distinction made is between financial success and non-financial success. Non-financial success measures tend to be considered less tangible. For example, personal satisfaction has been cited as something entrepreneurs experience and seek

(Walker & Brown, 2004). Smith (1976) found financial success factors, such as sales growth or return on investment, to be considered a tangible success measure due to the ability to measure these metrics. However, the difficulty of measuring non-financial success makes it reasonable to assume the observable relationships should be greater for entrepreneurial traits and financial success than for entrepreneurial traits and non-financial success (Rauch et al., 2009).

Growth at the firm-level reflects personal and market performance gains (Kirzner, 1985). Covin and Slevin (1997) explained that the venture growth performance measure is considered the essence of entrepreneurship. Aldrich (1999) finds that the venture growth causes valued economic and social gains, including job creation. According to Kirzner (1985), venture growth is a well-understood financial success measure.

Man et al. (2002) cites many research studies where a firm's financial performance, such as sales growth and profitability, is considered beneficial success measure. Empirical studies (Barkham, 1994; Box et al., 1994; Combs et al., 2005; Dyke et al., 1992; Ibrahim and Goodwin, 1986; Learner et al., 1997) and theoretical studies (Herron and Robinson, 1993; Keats and Bracker, 1987; Hofer and Sandberg, 1987) use a financial performance measure of some kind.

Although, financial success measures are considered to be the most appropriate measure to use of business success, Walker and Brown (2004) conducted a survey of 290 small business owners and found that many small business owners are motivated on the basis of non-financial success measures. Non-financial measures could lead the entrepreneur to alternative measures of success, particularly in the small business sector. Their findings

are that although both financial and non-financial measures are used to judge business success, the non-financial are more important. They found that personal satisfaction and achievement, pride in the job and a flexible lifestyle are generally valued higher than wealth creation. Personal factors such as age and also business characteristics influenced perceptions on the importance of these factors.

Karpak and Topcu (2010) found that longevity is often used to indicate success for a firm, and thus is also a measure of entrepreneurial success. Rogoff et al. (2004) contend that although there is research that uses longevity as a surrogate for success, they argue that longevity by itself is not sufficient measure of firm success. One business might continue to exist yet yield minimum profits, disappointing its owners, whereas a liquidated business might leave its owners wealthy. Karpak and Topcu (2010) concur with this analysis.

In conclusion, research that links entrepreneurial traits to success factors most often use financial success as the measure of entrepreneurial success, rather than other types of performance (e.g., entrepreneurs' personal satisfaction, rate of commercialized innovation, or improvements in market efficiency). This is an intuitive finding due to the ability to quantifiably measure financial success. Cooper and Gascon (1992) suggest that future research needs pay more attention to the performance measures chosen and their implications.

Entrepreneurial Traits

The choice to start one's own business has been modeled as a utility maximizing trade-off between the best available employment on the job market and the best entrepreneurial opportunity that is available to an individual (Douglas and Shepherd, 2000). Particular traits may well be significant in determining the switch from the best available employment on the job market to the best entrepreneurial opportunity.

There has been research that shows an entrepreneur's traits contribute to a firm's ability to innovate and be successful in the start-up environment. Alam (2011) relates entrepreneurial traits to a firm's innovation capability. Zanakis, Renko, and Bullough (2012) focus on entrepreneurial traits and the way they relate to success. Both of the researches find significant positive results when relating entrepreneurial traits to success.

Of course, factors in addition to entrepreneurial traits affect success. Beugelsdijk and Noorderhaven (2005) and Bruderl et al., (1992) identify the structural characteristics of the start-up firm and the conditions of the economic environment as factors impacting firm survival.

Prior research indicates some traits do not impact entrepreneurial success, even though we might think they do. Carsrud and Krueger (1995) discounted the "need for achievement" researched by McClelland (1965) and "internal locus of control" researched by Sexton & Bowman (1986). Baum & Locke (2004) reviewed other traits (particular traits not listed in their research) and rejected those that had produced

indeterminate results in entrepreneurship or leadership studies. Due to the indeterminate results of these traits, we will not include them in detail.

A common set of broad entrepreneurial traits that are used in academic literature to link traits to success is “The Big Five”. The Big Five is a five-factor model of personality which includes Neuroticism, Extraversion, Openness to Experience, Agreeableness, and Conscientiousness (Rauch & Frese, 2007). There is research showing The Big Five personality factors have a genetic basis and that they are probably inherited (Digman, 1989; Jang, Livesley & Vernon, 1996). Zhao and Seibert (2006) addressed this in their meta-analysis by coding various personality traits into the five factors of the Big Five model. They found positive results linking the five personality categories to success due to the broad nature of the model.

Critiquing the Big Five model, many other authors suggest differentiating between broad and narrow traits (Barrick & Mount, 2005; Dudley, Orvis, Lebiecki, & Cortina, 2006; Tett, Steele, & Beauregard, 2003). Bandura (1997) argued against using broad and omnibus traits as sole predictors of action because they cannot be situationally specific. In his view, traits have the impact because of the effects they have on specific processes, such as self-efficacy. Those who passionately love their work, for example, are likely to acquire skill at it, which enhances their efficacy beliefs. Similarly, Baum and Locke (2004) found that tenacious striving improves capability. Although the Big Five is a widely used set of broad entrepreneurial traits, they are not examined in detail here because the broad nature of this model did not contribute to our research.

Baum and Locke (2004) found that vision, self-efficacy, and learning work in concert to affect performance. They find that the situationally specific concepts studied have strong direct effects on venture performance, and are fully consistent with previously applied psychology and social psychology research (Bandura, 1997; Baum et al., 1998; Locke & Latham, 1990). The positive effects for goals and self-efficacy are consistent with the results of hundreds of performance studies.

Rauch and Frese (2007) used a meta-analysis to paint a different picture of the relationships between personality traits and entrepreneurial behavior. They found that business owners' personality traits were positively related to business creation and business success. While the size of these relationships are only moderate (Cohen, 1977), it is about the same size as the correlation between personality and performance in general (Barrick & Mount, 1991). The correlation between personality traits and both leadership emergence and leadership effectiveness (Judge, Bono, Ilies, & Gerhardt, 2002) are about the same as well. Thus, entrepreneurship research needs to analyze the entrepreneur's personality as seriously as those that have researched employees' personality (Rauch & Frese, 2007).

The traits selected for inclusion in this thesis are a set of relatively narrow entrepreneurial traits that are referenced repeatedly by researchers and entrepreneurship theorists as being important for success. The traits examined in detail in this thesis include:

- Learner;
- Autonomy;

- Vision;
- Communicative;
- Team Player;
- Risk Taker;
- Passion;
- Tenacity;
- Self-Efficacy; and
- Meticulous.

Learner

A learner is an individual who acquires knowledge, comprehension, or mastery by way of their own experience or studying.

When an entrepreneur has an eager desire to learn, they tend to obtain more understanding about the world around them. Jørgensen (2004) found that life-long learning involves a combination of tacit and explicit knowledge. The individual is the active creator of meaning by bridging theory and practice. Mezirow (2008) notes that continuous learning occurs as one regularly applies acquired skills, social networks and experience to create or capitalize on opportunities in a competitive business environment.

Being an entrepreneur allows an individual to develop their autodidacticism.

Autodidacticism is the desire to learn independently of others direction. Autodidacticism

is a contemplative, absorptive procession. Some autodidacts spend a great deal of time reviewing the resources of libraries and educational websites. One may become an autodidact at any point in one's life. Some focus their learning on a particular field, while many choose to inform themselves on many unrelated areas. Autodidacts learn in formal and informal spaces, in classrooms and in social settings. They seek instruction and guidance from experts, friends, teachers, parents, siblings, and the community. Seidman (2005) found that some students learn best independently. Some of these autodidactic learners may make for good entrepreneurs.

Learning for an entrepreneur is not delegable. Lobler (2006) finds that a teacher cannot learn for the entrepreneur. Lobler finds that all a teacher can do is support the entrepreneur's learning process and help develop the entrepreneur's learning capacity. Ardichvilia et al. (2003) concurs with Lobler's findings. Teachers often teach their students how to learn. By deepening the individual's learning capabilities, teachers enable entrepreneurship by helping the individual to better find where to gain knowledge in areas that eventually support an entrepreneurial venture.

Older individuals have been found to have a greater propensity to embark on entrepreneurship compared to younger individuals (Arenius and Minniti, 2005; Beugelsdijk and Noorderhaven, 2004; Walker and Webster, 2007; Weber and Schaper, 2004), and this may well be because older people have had more time to learn and obtain experience. Of course, older individuals will also tend to have more financial resources, which also help. Leader (2003) found that besides technical know-how, life-long learning also incorporates active network. Networking activities provide financial and business

contacts. Packer and Sharrar (2003) note that, to develop responsible networks, a chain of engaged participants are required to make this happen. This is to include parents, educators and community members. Older individuals have had the time to develop this engaged network of participants, and therefore, have a more complex network to participate in entrepreneurship.

Becker (1964) theorizes that work experience and learning each increase human capital, which in turn promotes the growth of a business. Davidsson and Honig (2003) found that individuals with greater human capital are better at perceiving and exploiting entrepreneurial opportunities. An entrepreneur possessing greater human capital has more resources to apply to both seeking out opportunities and exploiting them. Beyond the quantity of resources, the ability of the entrepreneur to effectively utilize the resources for overcoming business obstacles is important in explaining progress in the firm (Shane, 2003; Stevenson and Jarillo, 1990).

An entrepreneur's specialization helps the development of human capital by focusing the entrepreneur's experience and learning. This contributes to entrepreneur's financial and non-financial success by providing the entrepreneur with the ability to recognize entrepreneurial opportunities (Ardichvilia et al., 2003; Gimeno et al., 1997; Robinson and Sexton, 1994). The specialization provides a more complete understanding of the business climate, and this facilitates foresight, which is key to business success.

Autonomy

Autonomy is the capacity to make an informed, un-coerced decision.

Christman (2011) found that the individual's autonomy is an idea that is generally understood to refer to the capacity to be one's own person, to live one's life according to reasons and motives that are taken as one's own and not the product of manipulative or distorting external forces in their lives. In moral and political philosophy, autonomy is often used as the basis for determining moral responsibility for one's actions. Autonomy is also used to refer to the self-government of the people.

Croson and Minniti (2011) found that entrepreneurs who start businesses are primarily motivated by independence and work flexibility rather than financial wealth. Douglas and Shepherd (2000) model the individual as constantly evaluating opportunities, potentially switching jobs when better options arise. Douglas and Shepherd found that employers that allow a high degree of autonomy and an entrepreneurial role within the company provide their employees an avenue to satisfy the need for autonomy. This would prevent entrepreneurs from leaving the workforce to seek independence and work flexibility.

Hamilton (2000) found that entrepreneurship is a career choice that does not, on average, offer improved financial remuneration compared to alternatives. He showed that, except for the highest 25% of entrepreneurial incomes, remaining in a wage-producing job makes more economic sense than starting a new business. Croson and Minniti (2011) agree with Hamilton, concluding that utility-maximizing individuals who voluntarily and deliberately switch from employment to self-employment must have something in exchange for the income they forgo. The usual benefit identified is "autonomy."

Motivation for autonomy has been identified as powerful in understanding the development of an entrepreneur and creation of a start-up (Diochon et al., 2008;

Townsend et al., 2010). Research on entrepreneurial motivation has suggested that a key factor in influencing individuals' willingness to start-up new businesses is a need for autonomy (Birley and Westhead, 1994; Scheinberg and MacMillan, 1988). Theoretical justification for flexibility as a driver of start-up motivation is based on the need for independence (Cherrington, 1991).

The autonomy trait is associated with desire to avoid restrictive environments. Rauch and Frese (2007) find that entrepreneurs prefer to make decisions independent of supervisors, to set their own goals and develop their own plan of action, and to control goal achievement themselves. Brandstatter (1997) and Cromie (2000) found that people high in need for autonomy want to be in control; they avoid the restrictions and rules of established organizations, and thus, choose the entrepreneurial role. These researchers found that the restrictive environment limits the entrepreneurial innovation and when the entrepreneur is surveyed in an environment where they feel autonomous in their actions; it is found that after five years their business displays success in terms of longevity and growth.

Vision

Vision is an image of what the entrepreneurial leader wants to achieve (Bass and Stogdill, 1990).

Collins and Porras (1991) defined vision, in part, as an image of the future based on general, long-term goals. Bird (1989) also found that vision is a distant general goal of the entrepreneur, thus, vision is motivational.

Baum et al. (1998) describes the history of vision research in great detail. They found that in the entrepreneurship and business strategy literatures, the importance of vision and its effects on organization-level performance has been stressed in theoretical discussions (Bird, 1992; Fillion, 1988; Isenberg, 1987; Maccoby, 1981; Mendall & Gerguoy, 1984; Peters, 1988; Slater, 1993; Timmons, Smollen, & Dingee, 1990) and in empirical research (Fillion, 1991; Kotter, 1990; Larwood, Falbe, Rriger, & Miesing, 1995; Westley & Mintzberg, 1989). For example, case studies by Westley and Mintzberg and by Kotter suggest that vision is important for strategic change in mature organizations. Fillion used interviews with entrepreneurs and found that new venture vision content included imagery about products, markets, and organizations that were a function of the stage of venture development. He determined that vision process depended on the entrepreneur's values and energy.

Baum et al. (1998) also discusses research on Larwood et al. (1995), which published the first large sample empirical study of vision content. They asked executives to describe their vision in one sentence and to evaluate their visions along 26 content dimensions. The executives' self-ratings formed seven independent factors, including formulation of the vision, successful communication of such vision, and innovation using vision. Vision content ratings appeared in different clusters that were associated with degree of autonomy, rate of organizational change, and type of industry.

Research on entrepreneurial vision and how it relates to success is a more direct topic of interest in this thesis. Bird (1989) found that entrepreneurs have visions of the companies they want to build. Bird also found that during the start-up process, the entrepreneur's

vision determines the form and direction of an organization at its inception. House and Shamir (1993) echo this by finding that vision reflects the values of organization.

Bird (1989) defined entrepreneurial success in terms of a firm's sales growth. He found that vision affects a venture's success, especially when the vision is modified, elaborated, and transformed over time.

Baum et al. (1998) found that vision significantly affects organizational-level performance, and vision affects performance directly as well as indirectly through vision communication. These results support charismatic leadership theorists who consider vision as a key element of charismatic leadership theory (House & Shamir, 1993). This provides evidence that entrepreneurs are able to report their vision, and traits can be used to obtain a quantitative measure of business success.

Both Collins and Porras (1991) and Baum and Locke (2004) note that the entrepreneur's vision precipitates decisions and activities, which provide more information. The information about markets, resources, technology, and talents from the entrepreneur's vision feeds into decisions. In this way, they find positive effects of vision on success, sales growth in particular.

Baum and Locke's (2004) study showed that vision was independently and quantitatively related to performance in a field setting over a multiyear period. Visioning and goal-setting skills can be trained. Vision had not only an indirect effect on growth through specific goals but also a direct effect.

Quinn (1982) and Shotter (1978) theorize that an entrepreneur's vision gives the entrepreneur motivation to evaluate the deployment of resources. This regular re-evaluation may increase the profitability short term and longevity over time.

Kirzner (2009) discusses short run and long run vision relative to pricing. Short run vision largely involves noticing price differentials. The long run vision allows the entrepreneur to see arbitrage opportunities in a market. Consider the following comment of Schrage (1965): "Successful performance of the entrepreneur depends on his ability to perceive things clearly and to take proper corrective action when necessary." This statement is intuitively appealing, relating success to vision.

In a study of entrepreneurs, Rockey (1986) found that visualization played an important role in helping entrepreneurs to clarify their organization's purpose, to dispel the negative thoughts of others, to plan facilities, to hire employees, etc. Reynolds (1987) and Star and Massel (1981) theorize that the entrepreneur's vision is thought to sustain the new venture during its early vulnerable years. This finding could provide evidence for an entrepreneur's visualization to enhance longevity during the vulnerable years of a new venture.

Locke (2000) examines vision in the sense of foresight. This involves seeing the potential of some market, technology, product, or service. It also includes strategic vision, or how the company can compete successfully in the market. Locke found business growth depends upon vision in the sense of forming and pursuing long-term goals.

Communicative

Communication is conveying information through the exchange of thoughts, messages, speech, visuals, signals, writing, or behavior. The communicative trait is the ability to convey.

Bandura (1986) found that communication of the entrepreneur's vision is as important as vision content alone for motivating venture growth. Larwood et al. (1995) performed a large scale study on vision. They found significant importance of the entrepreneur being able to communicate their vision to others.

Bandura (1986) found that entrepreneurs may communicate their vision through their behavior. However, the entrepreneurs can inspire more directly through speeches, pep talks, and written presentations (Tichy & Devanna, 1986). Baum et al. (1998) reported direct positive effects of communication alone on growth.

Baum et al. (1998) finds that entrepreneurs who carry strong visions are also strong communicators. They further find that this communication promotes growth because it engenders the support of employees, suppliers, and customers. Timmons (2000) agrees, claiming even the most introverted inventor must convince others to help with commercialization.

Legohérel et al. (2004) found that the quality of any business is influenced by the human element. The human resources, whether they are clients, employees or strategic partners, make up any business. Communication is what builds relationships with these key

people. Thus, the entrepreneur should work to hone communication skills, whether those are written, spoken, or non-verbal messages conveyed through body language.

Team Player

Teamwork is a dynamic process involving two or more individuals with complementary backgrounds and skills, sharing common goals and exercising concerted physical and mental effort in assessing, planning, or evaluation (Xyrichis A. & Ream E., 2008). The team player has the capacity to work well with others.

In Edmondson's (2011) review of the academic literature on teamwork, it was found that "there is no one unifying theory of exact dimensions of teamwork" and that the word "teamwork" has been used "as a catchall to refer to a number of behavioral processes and emergent states that happen when people work together."

An entrepreneur's social network may provide access to needed resources or help to establish the reputation of the start-up (Liao and Welsch, 2003; Shane and Cable, 2002). The supportiveness of a business, the legal environment, the state of financial markets, the overall cultural environment concerning entrepreneurship, and the business associates affect the propensity to undertake entrepreneurial activities (Luthans et al., 2000).

Cable and Shane (1997) used a prisoner's dilemma approach to looking at the relationships the entrepreneur develops. When the entrepreneur seeks capital during the growth of a start-up, the entrepreneur may seek a venture capitalist. Although a venture capitalist may not be able to affect the earnings of the entrepreneur's venture directly, he

or she can affect the payoff to co-operation as perceived by the entrepreneur, and thus increase the profitability the venture.

According to many entrepreneurs, the most important resources that a venture capitalist brings to the relationship are noneconomic, including networks with the financial community, business advice, and moral support (Fried & Hisrich, 1995). Thus, by investing more personal time in interactions with entrepreneurs, venture capitalists can increase cooperation by increasing the perceived payoff to the entrepreneur.

It's difficult for most business owners not to take a hands-on approach. They try to do as much as possible and tackle as many tasks as possible in their business. Highly successful entrepreneurs will tell you that from the time they started out, they knew what they were good at and what tasks to delegate to others (Legohérel et al., 2004). That is, they knew how to build a team.

Risk Taker

Risk is a type of uncertainty. A risk taker is a person who will act in spite of the fact that the outcome is uncertain.

A more general form of uncertainty is ambiguity, where the probabilities of the possible outcomes are not known at least to some degree. Events may be uncertain in the risky or ambiguous sense. Altinay et al. (2012) found that there is a positive correlation between tolerance of ambiguity and risk taking propensity.

Caliendo et al. (2010) found that the entrepreneur's tolerance for risk is higher than others. There has been other research showing that entrepreneurs share an affinity

towards risk taking behavior during the start-up phase of a new venture (Kirby, 2004; Mort et al., 2003; Nga & Shamuganathan, 2010). Knight (1921) found that entrepreneurs perform risk taking decisions during times of uncertainty, such as a start-up. Barsky et al. (1997) reported that higher risk tolerance has a positive effect on the probability of an individual selecting self-employment. This is supported by Stewart and Roth (2004) by showing that risk-taking propensity in entrepreneurs when making decisions in the start-up process.

Lack of information is one source of uncertainty. The uncertainty can have both negative and positive impacts on objectives. Burns and Stalker (1961) speak of the slew of other misfortunes that can befall a small business and the entrepreneur. Even if a product tests well, market conditions can change and the warehouse can burn down.

Steward and Ross (2001) use meta-analysis to mathematically cumulate literature concerning risk propensity differences between entrepreneurs and managers. The results indicate that the risk propensity of entrepreneurs is greater than that of managers.

Moreover, there are larger differences between entrepreneurs whose primary goal is venture growth versus those whose focus is on producing family income. Steward and Ross (2004) believe there is value in assessing the relationship between risk propensity and firm performance, specifically venture growth.

Steward and Ross (2001) also found that there has been research that suggests risk-taking is predisposition rather than simply situational (Jackson, Hourany, & Vidmar, 1972; Plax & Rosenfeld, 1976) and that this risk propensity influences the effects of situational characteristics on risky decision-making behavior (Sitkin & Weingart, 1995). This

position is consistent with Big Five personality theory, which suggests that risk propensity is a facet of the trait of extraversion (Mount & Barrick, 1995).

Steward and Ross (2001) review extensive research examining relative risk-taking propensities of entrepreneurs and managers. They find this literature contains conflicting findings and no consensus. This has led some authors (Brockhaus & Horwitz, 1986; Chell, 1985; Perry, 1990) to conclude entrepreneurs do not have a distinctive risk propensity compared with managers.

Passion

Passion is the love of one's work.

Passion for work has been measured in terms of emotions: love, attachment, and longing. However, passion can also be witnessed over time in the long hours worked during venture start-up and growth phases and in the tendency for entrepreneurs to experience their venture's successes and difficulties as personal events. Leadership researchers Bass & Stogdill (1990) and House & Shamir (1993) have claimed that passion for work is a characteristic of successful business leaders, and passion is relevant in the entrepreneurship setting because it drives entrepreneurs to face extreme uncertainty and resource shortages (Timmons, 2000).

Chen et al. (2005) discussed that passion is a strong indicator of how motivated an entrepreneur is in building a venture, whether she/he is likely to continue pursuing goals when confronted with difficulties, how well she/he articulates the vision to current and

future employees, and whether she/he will be able to influence, persuade, and lead people in growing the venture.

There have only been a few studies on the role of social competence and its influence on entrepreneurs' financial success. Baron and Tang (in press) demonstrated that entrepreneurs' expressiveness of passion of a particular interest was a significant predictor of financial results such as growth in sales, earnings, and employment in new ventures.

Baron and Markman (2000, 2003) found that an entrepreneur's tendency and ability to express their interests passionately was positively related to business incomes and sales revenues. They concluded that the perceived expressiveness of an individual's emotion in a social setting is a predictor of the financial success of entrepreneurial ventures (see also Spence, Donovan, & Brechman-Toussaint, 1999). Baron (2008) stated that high levels of passion not only made entrepreneurs more persuasive, but also contributed to the breadth of their social networks, which in turn increased their social capital. As a result of increased social capital, these entrepreneurs had a higher probability of achieving success in new ventures.

Elsbach and Kramer's (2003) study provided direct evidence supporting the notion that venture capitalists may consider perceived entrepreneurial passion when they make investment funding decisions. Elsbach and Kramer documented how studio executives and producers (investors, in this context) engaged in interviewing unknown screenwriters. What they found is that one of the most important attributes in the screenwriters was passion, which was mentioned frequently in all forms of their data.

These findings suggest that passion plays an important role in investment decisions for ventures that capitalize on innovativeness and creativity.

Passion has been identified by Locke (2000) as a core trait of great wealth creators.

Michael Bloomberg, Bill Gates, Ken Iverson (Nucor), and Mary Kay Ash (Mary Kay) have all been associated with passion. These entrepreneurs confronted opportunity and challenges with fervor and ardor. Their enthusiasm for a type of business—their zeal for work—was so intense that they worked through financial barriers (Gates and Iverson) and challenges to their new products and their new ways of marketing (Ash). Smilor (1997) suggested that passion is “perhaps the most observed phenomenon of the entrepreneurial process” (p. 342), and Bird (1989) noted that entrepreneurial behavior is “passionate, full of emotional energy, drive, and spirit” (pp. 7–8).

Recent studies have alluded to the importance of passion in venture performance. For example, Baum, Locke, and Smith (2001) empirically tested a multidimensional model of venture growth, with one of their main predictors being passion. The authors found that entrepreneurs’ traits, including tenacity and passion for work, exerted positive effects on venture growth. More importantly, passionate entrepreneurs also showed greater motivation and a higher propensity to grow their ventures when compared to others in their sample.

Tenacity

Tenacity is a trait that involves sustaining goal-directed action and energy even when faced with obstacles.

Tenacity is the ability to maintain action regardless of feelings. When an individual presses on even when they feel like quitting and giving up. When this individual works on any desired goal, their motivation may wane like waves hitting the shore. Tenacity allows this individual to keep taking action even when they don't feel motivated to do so and therefore keep accumulating results. Tenacity will ultimately provide its own motivation. By simply continuing to take action, eventually results will accumulate, and these results are motivating.

In addition to being associated with successful leadership (Bass & Stogdill, 1990; House & Shamir, 1993; Locke, 2000), tenacity has been identified consistently as an archetypical entrepreneurship trait because the business start-up process involves confrontation of formidable barriers to market entry (Gartner, Gatewood, & Shaver, 1991). Markman, Baron, and Balkin (2001) found that inventors who started new ventures have more tenacity than inventors who chose to be employees of established organizations. Entrepreneurs who hold stubbornly to their goals and who hate to give up increase their chances of start-up survival and financial success (Timmons, 2000).

Van de Ven et al. (1989) found that an entrepreneur's tenacity influences two aspects of the process of starting a business---the activities undertaken to start a business and success at new venture growth. They also found that one would assume that the more time and effort the entrepreneur devotes toward accomplishing a task, the more likely it is that the achievement of this task will occur. Yet, the start-up of a business appears to consist of problems and difficulties that are unforeseen at the outset and often become uncontrollable once the entrepreneurial activities are undertaken. Therefore, as also found

by Gatewood et al. (1995), success of a new venture is not only due to the amount of time and effort devoted to entrepreneurial activity, but also to some exercise of will toward achievement of this elusive goal.

Brockhaus and Horwitz (1986) theorize that individuals who believe they can control the environment through their actions will be more likely to persist in entrepreneurial activities when difficulties in the start-up process are encountered, thus, improving the success of the start-up due to increased longevity. Liu et al. (2007) found that the entrepreneur's motivation alone is not a sufficient predictor of new business activity. The notion of tenacity implies a firm and steadfast purpose in adhering to a course of action despite risks and difficulties.

Reynolds (2007) found that tenacity is especially relevant through the often uncertain 19–24 month start-up process. In addition, Townsend et al. (2010) found that making decisions under conditions of high uncertainty requires high levels of self-confidence. Self-efficacy has been found to be important for entrepreneurship in prior studies (Cassar, 2007; Chen et al., 1998), especially when the tasks at hand are difficult, hard to predict and lacking clear feedback (Fischhoff et al., 1977). In fact, previous research (Multon et al., 1991; Bandura, 1977) has demonstrated that a belief in one's ability to accomplish a task is closely related to tenacity in terms of effort expended on this task as well as how long effort will be sustained in the face of obstacles and aversive experiences. The research suggests that an entrepreneur's belief in his ability to face market challenges and the related tenacity are important for moving a venture past the start-up phase and improve financial growth.

Self-Efficacy

Self-efficacy is the belief one has in one's ability to execute actions, originally defined by Bandura (1977).

Self-efficacy is part social-cognitive learning theory. Central to this theory is the proposition that self-efficacy is affected by enactive mastery. That is, self-efficacy is obtained through practice (Bandura, 1997). An individual learns to believe that he or she can change the feelings and behavior of others so as to execute desired actions. This belief can then impact one's cognition, self-confidence, courses of action, and perceptions of control. Self-efficacy is beneficial to performance (Bandura, 1997), but overconfidence can be harmful when it is based on conditions and assumptions that no longer hold true (Audia, Locke, & Smith, 2000).

With the increasing interest in entrepreneurial cognition (Mitchell et al., 2002), self-efficacy has been portrayed as a distinct characteristic of entrepreneurs (Chen et al., 1998; Markman et al., 2001), as an important factor in the decision to become and persevere as an entrepreneur (Zhao et al., 2006), and as an important component of entrepreneurial decision-making (Krueger and Dickson, 1994).

Zanakis et al. (2012) finds that those who feel confident they can perform well in their current salaried employment are less likely to actually start new ventures than those who are less confident in their current positions. Individuals with relatively high levels of satisfaction with their current job are subject to a higher opportunity cost when it comes to the new business start-up, something emphasized by Gimeno et al. (1997).

Bandura (1997) finds that self-efficacy affects every area of the entrepreneur's endeavor. The beliefs of the entrepreneur regarding the power to affect the situation are fundamental to success. To face market challenges and competently make choices, one must believe in one's self.

Chen, Greene, and Crick (1998) found that entrepreneurs who are confident that they have the requisite entrepreneurship capabilities are more likely to choose an entrepreneurship career. They found that self-efficacy reflects the entrepreneur's past experience and attainment. Self-efficacy indicates feelings of capability, so it is a useful indicator of action in the entrepreneurship setting in which outcomes are highly uncertain. By extension, they believe that entrepreneurs who are more confident about their abilities will achieve greater venture growth.

Rotter (1966) found that internal locus of control is related to entrepreneurship due to entrepreneur's belief in their own actions determining business outcomes obtained. Rotter found entrepreneurs with high internal locus of control feel that they are able to control outcomes. Rotter suggests that entrepreneurs should exert more effort and persistence towards intended outcomes, which, in turn, should help to start an enterprise and to successfully maintain the longevity of the venture. In contrast, externally controlled people may be more passive. If one believes that one is not able to control outcomes, one has no reasons to actively change one's environment and to start a firm.

In Bandura's (1989) research, self-efficacy has emerged as an important predictor of venture success. The perception of stability in the environment and the entrepreneur's

ability to communicate and maintain self-control during the start-up lifecycle has a positive significant effect on the longevity of the venture (Legohérel et al., 2004).

In addition, Davidsson and Honig (2003) found that active encouragement from family and friends can also be an important factor behind entrepreneurial decisions. Parker and Belghitar (2006) found that the encouragement of the entrepreneur has positive direct effects in achieving a first sale or a profit.

Zanakis et al. (2012) findings have additional implications for research into entrepreneurs' cognition. They found that an entrepreneur's self-efficacy on markets have a positive impact on the likelihood of new firm birth within the population of entrepreneurs, which is in line with findings from other studies (Cassar, 2007; Townsend et al., 2010).

Margolis and McCabe (2006) theorized that entrepreneurs with a strong sense of efficacy are more likely to challenge themselves with difficult tasks and be intrinsically motivated. These individuals will put forth a high degree of effort in order to meet their commitments, and attribute failure to things which are in their control, rather than blaming external factors. Self-efficacious entrepreneurs also recover quickly from setbacks, and ultimately are likely to achieve their personal goals. They also found that those with low self-efficacy believe they cannot be successful and thus are less likely to make a concerted, extended effort and may consider challenging tasks as threats that are to be avoided. Thus, individuals with poor self-efficacy have low aspirations which may result in disappointing performances becoming part of a self-fulfilling feedback cycle.

Meticulous

Being meticulous is being extremely careful and precise.

A number of researchers (Llewellyn & Wilson, 2003; Yong, 2007) found that entrepreneurs are excessively concerned with details. They tend to stress the conformance with rules and procedures. They obsess over maintaining high standards of performance. Entrepreneurial tasks are performed carefully, accurately, and in accordance with specific instructions. The meticulous entrepreneur exhibits thoroughness in accomplishing a task through concern for all the areas involved, no matter how small (Nga & Shamuganathan, 2010). The entrepreneur monitors and checks work or information and plans and organizes time and resources efficiently.

Ciavarella et al. (2004) found that meticulous entrepreneurs are driven by a strong sense of responsibility, industriousness and need for achievement which promotes their dependability at work. Nga and Shamuganathan (2010) found that meticulous entrepreneurs also exert a positive influence on sustainability and financial returns.

Blakemore and Choudhury's (2006) research found that the average adult makes significantly more errors when working under the perception of another rather than performing in a system with a plan. Therefore, the entrepreneur establishes routines and systems for business activities. Small things such as creating a to-do list at the end of each business day, or for the week, will help keep the entrepreneur on top of important tasks that the business and market conditions present.

Chen et al. (2009) performed research by analyzing venture capitalists and studying which entrepreneurs they funded. They found that entrepreneurs who have accurate and detailed knowledge about their proposals (business plans) and who display a thorough understanding of the opportunities and challenges they face were in a better position to receive investment funding. The entrepreneur being meticulous facilitates the completion of a business plan. Other researchers (Shane, 2003; Stevenson & Jarillo, 1990; Shane & Delmar, 2004) have examined the importance and significance of problem solving during the business startup process and the significance of business planning to enhance the performance of new ventures. Campbell (1988) found that business plans are particularly useful when tasks become uncertain, and the decision maker cannot rely on previous experience, which is often the case in new business startups. The observed importance of preparing a business plan confirms the previous finding of Liao and Gartner (2006), which also used empirical evidence and found a significant effect for the completion of a business plan for increasing the likelihood of persistence through market challenges.

Limitations and Need for Further Research

The history of research on entrepreneurial traits begs a question, “ Should this research be further pursued?”

Aldrich (1999) claimed research on personal traits seems to have reached an empirical dead end. Some reviews conclude there is indeed a positive relationship between personality traits and both business creation and business success (Chell, Haworth, & Brearley, 1991; Cooper & Gimeno-Gascon, 1992; Rauch & Frese, 2000). Others

conclude there is no such relationship (Brockhaus & Horwitz, 1986; Gartner, 1989; Low & MacMillan, 1988).

Scholars who contend that there is no entrepreneurship without the entrepreneur believe it remains worthwhile to study entrepreneurship using a trait-based approach. Entrepreneurs are the energizers of the entrepreneurial process (Johnson, 1990). Poon, Ainuddin, and Junit (2006) concur with the view that dispositional characteristics be related to specific firm-level behaviors can explain and predict firm-level outcomes, and more research must be performed to obtain a more complete understanding of how the entrepreneurship process affects firm success.

Many new businesses fail shortly after inception (Baldwin, 1995; Dunne, Roberts, & Samuelson, 1988). Aldrich (1999) found that 50% of new ventures were terminated within 5 years. Personality traits have been studied as proposed causes of new venture success (Baum, Locke, & Smith, 2001). Research from 1961 to 1990 about entrepreneurial traits found only weak effects (Aldrich & Wiedenmayer, 1993). These results were surprising because new venture financiers and entrepreneurs themselves pointed to entrepreneurs' personal traits as dominant reasons for success (Sexton, 2001; Smith & Smith, 2000).

The Baum et al. (2001) study argues that earlier conclusions that personal traits are unimportant for new venture performance missed important indirect effects. They analyzed three environmental variables (dynamism, munificence, and complexity), four strategic management variables (strategic focus, low cost, innovation, and quality differentiation), and traits. What was found is that traits make up motivational and

organizational factors that have significant direct effects on new venture performance, while traits have significant indirect effects through these motivational and organizational factors.

Nga and Shamuganathan (2011) examine the influence entrepreneurial traits play in producing success. They note that this topic has remained unsettled, and conclude it is underexplored and under-researched. A cohort of psychology-based research has moved beyond the past focus on traits to study competencies, motivation, cognition, and behavior (Baum and Locke, 2004). More complex models, better research tools, and concepts that are closer to performance in terms of causality have been used (Baron, 1998; Baum, Locke, & Smith, 2001; Busenitz & Barney, 1997; Mitchell, Smith, Seawright, & Morse, 2000).

This analysis focuses on traits that have a higher frequency of analysis in the literature, but other traits are likely important. Rauch & Frese (2007) examine innovativeness, proactive personality, stress tolerance, desire for accomplishment, internal locus of control, and need for achievement. Ones and Viswesvaran (1996) argued that broad Big Five traits are better predictors of performance than more specific traits, because specific traits have low reliabilities and criterion related validity.

One problem hindering research is that lack of agreement on what constitutes entrepreneurship (Shane & Venkataraman, 2000). Measurements of key variables are also typically weak (Rauch et al., 2009). This often means researchers also fail to build upon each other's results (Davidsson & Wiklund, 2001).

Finally, one problem with research on traits is that traits that foster entrepreneurial success may simply be traits that foster success in general. For example, a person with all of the traits which here indicate will make for a successful entrepreneur might also make for a successful politician. Overall, research in entrepreneurship needs to become much more specific and controlled in order to determine with more confidence what traits are especially valuable and important for entrepreneurs.

Implications and Conclusion

This survey of the literature relating entrepreneurial traits to entrepreneurial success should provide insights of interest to all, but especially for aspiring entrepreneurs.

Students interested in performing further research may find value in the survey, as might teachers, law makers, venture capitalists, and even the family and friends of an entrepreneur. This concluding section highlights some of the key findings.

- .An entrepreneur's specialization helps the entrepreneur development human capital by focusing the entrepreneur's experience and learning. This contributes to entrepreneur's financial and non-financial success by providing the entrepreneur with an enhanced ability to recognize opportunities.
- The desire for autonomy is a key factor motivating new business start-ups, and key for business longevity.
- Vision significantly affects performance by precipitating decisions and activities, which in turn affects success, sales growth in particular. Vision impacts

profitability and longevity by motivating the regular re-evaluation of the deployment of resources.

- Communication affects growth by relating the company vision in a strong and clear manner.
- Team play affects profitability primarily by capturing payoffs made available through cooperation.
- An entrepreneur's tendency and ability to express their interests passionately is positively related to sales revenue. Passion adds breadth to the social network, which in turn increases social capital. The increased social capital provides a higher probability of profitability and longevity.
- Taking risks during times of venture growth yields positive results on average.
- Entrepreneurs who are more confident about their abilities will achieve greater venture growth.
- Entrepreneurs who hold stubbornly to their goals and who hate to give up increase their chances of start-up survival and financial success.
- Active encouragement from family and friends has found to have a positive direct effect on achieving a first sale.
- Entrepreneurs who have accurate and detailed knowledge about their proposals (business plans) and who display a thorough understanding of the opportunities

and challenges they face are more likely to receive investment funding and the success it can bring.

In conclusion, this study offers some confirmation for the interest financiers have shown in entrepreneurial traits. They do appear to explain venture performance to some degree.

For education and policy, the finding that traits can impact performance indicates there will be some value in developing particular entrepreneurial traits through training.

Vision-formation, communication and goal setting can be taught, for example. The entrepreneur should work to hone communication skills, whether those are written, spoken, or non-verbal messages conveyed through body language.

Traits less amenable to modification through training can at least be assessed, to provide the potential entrepreneur with feedback on where there are potential weaknesses and where there are potential strengths. Self-efficacy matters, so understanding how it can be developed is important. It may be influenced by experience and training, but many entrepreneurs just seem to believe in themselves, regardless of their level of training and in spite of bad experiences.

References

- Alam, S. S. (2011). "Entrepreneur's traits and firm innovation capability: an empirical study in Malaysia." *Asian Journal of Technology Innovation* 19(1): 53-66.
- Aldrich, H. E. (1999). *Organizations evolving*. London: Sage.
- Aldrich, H. E., & Wiedenmayer, G. (1993). From traits to rates: An ecological perspective on organizational foundings. In J. A. Katz & R. H. Brockhaus Sr. (Eds.), *Advances in entrepreneurship, firm emergence, and growth* (pp. 45–195). Greenwich, CT: JAI Press.
- Altinay, L., M. Madanoglu, et al. (2012). "The influence of family tradition and psychological traits on entrepreneurial intention." *International Journal of Hospitality Management* 31(2): 489-499.
- Arenius, P., Minniti, M., (2005). *Perceptual variables and nascent entrepreneurship*. Small Business Economics, in press
- Ardichvili A., Cardozo R., Ray S. (2003) A theory of entrepreneurial opportunity identification and development. *J. Bus. Venturing* 18:105–124.
- Altinay, L., Madanoglu, M., Daniele, R., & Lashley, C. (2012). The influence of family tradition and psychological traits on entrepreneurial intention. *International Journal of Hospitality Management*, 31(2), 489-499.
- Audia, P. G., Locke, E. A., & Smith, K. G. (2000). The paradox of success: An archival and a laboratory study of strategic persistence following radical environmental change. *Academy of Management Journal*, 43(5), 837-853.
- Bandura A. (1977) Self-efficacy: Toward a unifying theory of behavioral change, *Psycho/. Rev.* 84, 191-215
- Bandura, A. (1986). The explanatory and predictive scope of self-efficacy theory. *Journal of Social and Clinical Psychology*, 4(3), 359-373.
- Bandura, A. (1989). Human agency in social cognitive theory. *American psychologist*, 44(9), 1175-1184.
- Bandura, A. (1997). *Self-efficacy: The exercise of control*. New York: Freeman.
- Barkham, R.J., (1994). Entrepreneurial characteristics and the size of the new firm: a model and an econometric test. *Small Bus. Econ.* 6 (2), 117 – 125
- Baldwin, J.R., (1995). *The Dynamics of Industrial Competition* (Cambridge: Cambridge University Press).
- Baron, R. A. (1998). Cognitive mechanisms in entrepreneurship: Why and when entrepreneurs think differently than other people. *Journal of Business Venturing*, 13, 275–294.

Baron, R. A. (2008). The role of affect in the entrepreneurial process. *Academy of Management Review*, 33: 328–340.

Baron, R. A., & Tang, J. (In press). Entrepreneurs' social competence and new venture performance: Evidence on potential mediators and cross-industry generality. *Journal of Management*.

Baron, R. A., & Markman, G. D. (2000). Beyond social capital: How social skills can enhance entrepreneurs' success. *Academy of Management Executive*, 14(1): 106–116.

Baron, R. A., & Markman, G. D. (2003). Beyond social capital: The role of entrepreneurs' social competence in their financial success. *Journal of Business Venturing*, 18: 41–60.

Barrick, M. R., & Mount, M. K. (1991). The big five personality dimensions and job performance: a meta-analysis. *Personnel psychology*, 44(1), 1-26.

Barrick, M. R., Parks, L., & Mount, M. K. (2005). Self-monitoring as a moderator of the relationships between personality traits and performance. *Personnel Psychology*, 58: 745-768.

Barsky, R. B., Juster, F. T., Kimball, M. S., & Shapiro, M. D. (1997). Preference parameters and behavioral heterogeneity: An experimental approach in the health and retirement study. *The Quarterly Journal of Economics*, 112(2), 537-579.

Bass, B. M., & Stogdill, R. M. (1990). *Bass & Stogdill's handbook of leadership: Theory, research, and managerial implications*. New York: Free Press.

Baum, J. R., Locke, E. A., & Kirkpatrick, S. (1998). A longitudinal study of the relation of vision and vision communication to venture growth in entrepreneurial firms. *Journal of Applied Psychology*, 83, 43–54.

Baum, J. R., Locke, E. A., & Smith, K. G. (2001). A multidimensional model of venture growth. *Academy of Management Journal*, 44, 292–303.

Baum, J. R. and E. A. Locke (2004). "The relationship of entrepreneurial traits, skill, and motivation to subsequent venture growth." *Journal of Applied Psychology* 89(4): 587-598.

Becker, Gary S. (1964) *Human Capital*. New York: Columbia University Press (for NBER).

Benzing, C., H. M. Chu, and O. Kara (2009). "Entrepreneurs in Turkey: A Factor Analysis of Motivations, Success Factors, and Problems," *Journal of Small Business Management* 47(1), 58–91.

Beugelsdijk, S., and N.G. Noorderhaven (2004). Personality characteristics of self-employed; An empirical study, *Small Business Economics*, forthcoming.

Bird, B. (1989). *Entrepreneurial Behavior*. Glenview, IL: Scott Foresman & Company

- Bird, B. (1992). The operation of intentions in time: The emergence of the new venture. *Entrepreneurship Theory and Practice*, 17, 11-20.
- Birley, S and P Westhead (1994). A taxonomy of business start-up reasons and their impact on firm growth and size. *Journal of Business Venturing*, 9(1).
- Blakemore, S. J., & Choudhury, S. (2006). Development of the adolescent brain: implications for executive function and social cognition. *Journal of Child Psychology and Psychiatry*, 47(3-4), 296-312.
- Box, T.M., White, M.A., Barr, S.H., (1994). A contingency model of new manufacturing firm performance. *Entrepreneurship Theory Pract.* 18 (2), 31 – 45.
- Brandstätter, H. (1997). Becoming an entrepreneur—a question of personality structure?. *Journal of economic psychology*, 18(2), 157-177.
- Brockhaus, R. H., & Horwitz, P. S. (1986). The psychology of the entrepreneur. In D. L. Sexton & R. W. Smilor (Eds.), *The art and science of entrepreneurship* (pp. 25 – 48). Cambridge, MA: Ballinger.
- Brüderl, J., Preisendörfer, P., & Ziegler, R. (1992). Survival chances of newly founded business organizations. *American sociological review*, 227-242.
- Burns, T., & Stalker, G. M. (1961). *The management of innovation*. University of Illinois at Urbana-Champaign's Academy for Entrepreneurial Leadership Historical Research Reference in Entrepreneurship.
- Busenitz, L. W., & Barney, J. B. (1997). Differences between entrepreneurs and managers in large organizations: Biases and heuristics in strategic decision-making. *Journal of Business Venturing*, 12, 9–30.
- Bygrave, W. D. (1993). Theory building in the entrepreneurship paradigm. *Journal of Business Venturing*, 8, 255–280.
- Cable, D. M., & Shane, S. (1997). A prisoner's dilemma approach to entrepreneur-venture capitalist relationships. *Academy of Management Review*, 142-176.
- Caliendo, M., Fossen, F., & Kritikos, A. (2010). The impact of risk attitudes on entrepreneurial survival. *Journal of Economic Behavior & Organization*, 76(1), 45-63.
- Campbell, D., (1988). Task complexity: a review and analysis. *Acad. Manage. Rev.* 13 (1), 40 – 52.
- Carsrud, A. L., & Krueger, N. F., Jr. (1995). Entrepreneurship and social psychology: Behavioral technology for the new venture initiation process. In J. A. Katz & R. H. Brockhaus, Sr. (Eds.), *Advances in entrepreneurship, firm emergence, and growth* (pp. 73–96). Greenwich, CT: JAI Press

- Cassar, G (2007). Money, money, money? A longitudinal investigation of entrepreneur career reasons, growth preferences and achieved growth. *Entrepreneurship and Regional Development*, 19(1).
- Chell, E. (1985). The entrepreneurial personality: A few ghosts laid to rest? *International Small Business Journal*, 5(3), 43—54.
- Chell, E., Haworth, J. M., & Brearley, S. (1991). *The entrepreneurial personality*. London: Routledge
- Chen, C. C., Greene, P. G., & Crick, A. (1998). Does entrepreneurial self-efficacy distinguish entrepreneurs from managers?. *Journal of Business venturing*, 13(4), 295-316.
- Chen, X. P., Yao, X., & Kotha, S. (2009). Entrepreneur passion and preparedness in business plan presentations: a persuasion analysis of venture capitalists' funding decisions. *Academy of Management Journal*, 52(1), 199-214.
- Cherrington, D. J. (1991). Need theories of motivation. *Motivation and work behavior*, 5, 31-44.
- Christman, J. (2011). Autonomy in moral and political philosophy. In *The Stanford encyclopedia of philosophy*, ed. E. Zalta. Available at: <http://plato.stanford.edu/archives/spr2011/entries/autonomymoral>
- Ciavarella, M. A., Buchholtz, A. K., Riordan, C. M., Gatewood, R. D., & Stokes, G. S. (2004). The Big Five and venture survival: Is there a linkage?. *Journal of Business Venturing*, 19(4), 465-483.
- Cohen, J. (1977). *Statistical power analysis for the behavioral science*. New York: Academic Press.
- Collins, J. C., & Porras, J. (1991). Organizational vision and visionary organizations. *California Management Review*, 34, 30–52.
- Combs JG, Crook TR, Shook CL. (2005). The dimensionality of organizational performance and its implications for strategic management research. In Ketchen DJ, Bergh DC (Eds.), *Research methodology in strategy and management* (Vol. 2, pp. 259–286). Oxford, UK: Elsevier.
- Cooper, A. C., & Gimeno-Gascon, F. J. (1992). Entrepreneurs, process of founding, and new firm performance. In D. L. Sexton & J. D. Kasarda (Eds.), *The state of the art of entrepreneurship* (pp. 301 – 340). Boston: PSW-Kent.
- Covin, J. G., & Slevin, D. P. (1997). High growth transitions: Theoretical perspectives and suggested directions. In D. L. Sexton & R. W. Smilor (Eds.), *Entrepreneurship 2000* (pp. 99–126). Chicago: Upstart.
- Cromie, Stanley. (2000) Assessing entrepreneurial inclinations: Some approaches and empirical evidence *European Journal of Work and Organizational Psychology* Vol. 9, Iss. 1,

- Croson, D. C., & Minniti, M. (2011) Slipping the surly bonds: The value of autonomy in self-employment. *Journal of Economic Psychology*. doi:10.1016/j.joep.2011.05.001.
- Davidsson, P. & Honig, B. (2003). The role of social and human capital among nascent entrepreneurs. *Journal of Business Venturing*, 18(3), 301–331.
- Davidson, P., Low, M. B., & Wright, M. (2001). Low and McMillan ten years on: Achievements and future directions for entrepreneurship research. *Entrepreneurship Theory and Practice*, 25, 5–16.
- Delmar, F., & Shane, S. (2004). Legitimizing first: Organizing activities and the survival of new ventures. *Journal of Business Venturing*, 19(3), 385-410.
- Digman, J. (1989). Five robust traits and dimensions: Development, stability, and utility. *Journal of Personality*, 57, 195-214.
- Diochon, M, TV Menzies and Y Gasse (2008). Exploring the nature and impact of gestation-specific human capital among nascent entrepreneurs. *Journal of Developmental Entrepreneurship*, 13(2).
- Douglas, E. J., and Shepherd, D.A. (2000) Entrepreneurship as a utility maximizing response. *Journal of Business Venturing* 15(3): 231-252.
- Dudley, N. M., Orvis, K. A., Lebiecki, J. E., & Cortina, J. M. (2006). A meta-analytic investigation of conscientiousness in the prediction of job performance: Examining the intercorrelations and the incremental validity of narrow traits. *Journal of Applied Psychology*, 91, 40-57.
- Dunne, T., Roberts, M.J., Samuelson, L., (1988). Patterns of firm entry and exit in U.S. manufacturing industries. *Rand Journal of Economics* 19, 495-515.
- Dyke, L.S., Fischer, E.M., Reuber, A.R., (1992). An inter-industry examination of the impact of owner experience on firm performance. *J. Small Bus. Manage.* 30 (4), 72 – 87.
- Edmondson, A. C. (2011) ‘Strategies for Learning from Failure’, *Harvard Business Review* 89: 48–55
- Elsbach, K. D., & Kramer, R. M. (2003). Assessing creativity in Hollywood pitch meetings: Evidence for a dual-process model of creativity judgments. *The Academy of Management Journal*, 283-301.
- Filion, L. J. (1988). The strategy of successful entrepreneurs in small business: Vision, relationships and anticipatory learning. Unpublished doctoral dissertation, University of Lancaster, England.
- Filion, L. J. (1991). Vision and relations: Elements for an entrepreneurial metamodel. *International Small Business Journal*, 9, 112-131.

- Fischhoff, B., Slovic, P., & Lichtenstein, S. (1977). Knowing with certainty: The appropriateness of extreme confidence. *Journal of Experimental Psychology: Human Perception and Performance*, 3(4), 552.
- Fried, V., & Hisrich, R. (1995). The venture capitalist: A relationship venture capitalist. *California Management Review*, 37(2): 101-113.
- Gartner, W. B. (1989). "Who is an entrepreneur?" is the wrong question. *Entrepreneurship Theory and Practice*, 12(2), 47 – 68.
- Gartner, W. B. (1990). What are we talking about when we talk about entrepreneurship? *Journal of Business Venturing*, 5, 15-28.
- Gartner, W. B., Gatewood, E., & Shaver, K. G. (1991). Reasons for starting a business: Not-so-simple answers to simple questions. In G. E. Hills & R. W. LaForge (Eds.), *Research at the marketing/entrepreneurship interface* (pp. 90–101). Chicago: University of Illinois at Chicago
- Gatewood, E. J., Shaver, K. G., & Gartner, W. B. (1995). A longitudinal study of cognitive factors influencing start-up behaviors and success at venture creation. *Journal of Business Venturing*, 10(5), 371-391.
- Gimeno, J., Folta, T.B., Cooper, A.C., & Woo, C.Y. (1997). Survival of the fittest? Entrepreneurial human capital and the persistence of underperforming firms. *Administrative Science Quarterly*, 42(4), 750–783.
- Hamilton, B.H. (2000). Does entrepreneurship pay? An empirical analysis of the returns to self-employment. *Journal of Political Economy* 108: 604-631.
- Herron, L., Robinson, R.B., (1993). A structural model of the effects of entrepreneurial characteristics on venture performance. *J. Bus. Venturing* 8 (3), 281 – 294.
- Hofer, C.W., Sandberg, W.R., (1987). Improving new venture performance: some guidelines for success. *Am. J. Small Bus.* 12 (1), 11 – 25.
- House, R. J., & Shamir, B. (1993). Toward the integration of transformational, charismatic and visionary theories of leadership. In M. Chemers & R. Ayman (Eds.), *Leadership theory and research: Perspectives and directions* (pp. 81–107). San Diego, CA: Academic Press.
- Ibrahim, A.B., Goodwin, J.R., (1986). Perceived causes of success in small business. *Am. J. Small Bus.* 11 (2), 41 – 50
- Isenberg, D. J. (1987, March). The tactics of strategic opportunism. *Harvard Business Review*, 92-97.
- Jackson, D. N., Hourany, L., & Vidmar, N. J. (1972). A four-dimensional interpretation of risk taking. *Journal of Personality*, 40, 433-501.

- Jang, K. L., Livesley, W. J., & Vernon, P. A. (1996). Heritability of the Big Five personality dimensions and their facets: A twin study. *Journal of Personality*, 64, 575-591.
- Johnson, B. R. (1990). Toward a multidimensional model of entrepreneurship: The case of achievement motivation and the entrepreneur. *Entrepreneurship Theory and practice*, 14(3), 39-54.
- Jørgensen, C. H.: (2004), 'Connecting Work and Education: Should Learning be Useful, Correct or Meaningful?' *The Journal of Workplace Learning* 16(8), 455–465.
- Judge, T. A., Bono, J. E., Ilies, R., & Gerhardt, M. W. (2002). Personality and leadership: a qualitative and quantitative review. *Journal of applied psychology*, 87(4), 765.
- Karpak, B., & Topcu, I. (2010). Small medium manufacturing enterprises in Turkey: An analytic network process framework for prioritizing factors affecting success. *International Journal of Production Economics*, 125(1), 60-70.
- Keats, B.W., Bracker, J.S., (1987). Towards a theory of small firm performance: a conceptual model. *Am. J. Small Bus.* 12 (4), 41 – 58.
- Kirby, D. A. (2004). Entrepreneurship education: can business schools meet the challenge?. *Education+ Training*, 46(8/9), 510-519.
- Kirzner, I. M. (1985). *Discovery and the capitalist process*. Chicago: University of Chicago Press.
- Kirzner, I. M. (2009). The alert and creative entrepreneur: a clarification. *Small Business Economics*, 32(2), 145-152.
- Knight, Frank H. 1921. *Risk, Uncertainty, and Profit*. New York: Hart, Schaffner, and Marx
- Leader, G.: 2003, 'Lifelong Learning: Policy and Practice in Further Education', *Education + Training* 45(7), 361–370.
- Knight, D., Durham, C. C., & Locke, E. A. (2001). The Relationship of Team Goals, Incentives, and Efficacy to Strategic Risk, Tactical Implementation, and Performance. *Academy of Management Journal*, 44(2), 326-338.
- Kotter, J. P. (1990). *A force for change: How leadership differs from management*. New York: Free Press.
- Krueger, N., & Dickson, P. R. (1994). How Believing in Ourselves Increases Risk Taking: Perceived Self-Efficacy and Opportunity Recognition. *Decision Sciences*, 25(3), 385-400.
- Larwood, L., Falbe, C. M., Kriger, M. P., & Miesing, P. (1995). Structure and meaning of organizational vision. *Academy of Management Journal*, 38, 740-769.

- Legohérel, P., Callot, P., Gallopel, K., & Peters, M. (2004). Personality characteristics, attitude toward risk, and decisional orientation of the small business entrepreneur: a study of hospitality managers. *Journal of Hospitality & Tourism Research*, 28(1), 109-120.
- Lerner, M., Brush, C., Hisrich, R., (1997). Israeli women entrepreneurs: an examination of factors affecting performance. *J. Bus. Venturing* 12 (4), 315 – 339.
- Liao, J., & Welsch, H. (2003). Social capital and entrepreneurial growth aspiration: a comparison of technology-and non-technology-based nascent entrepreneurs. *The Journal of high technology management research*, 14(1), 149-170.
- Liao, J., & Gartner, W. B. (2006). The effects of pre-venture plan timing and perceived environmental uncertainty on the persistence of emerging firms. *Small Business Economics*, 27(1), 23-40.
- Liu, R., Bhattacharya, K., & Wu, F. Y. (2007). Modeling business contexture and behavior using business artifacts. In *Advanced Information Systems Engineering* (pp. 324-339). Springer Berlin Heidelberg.
- Llewellyn, D. J., & Wilson, K. M. (2003). The controversial role of personality traits in entrepreneurial psychology. *Education+ Training*, 45(6), 341-345.
- Lobler, Helge (2006). "Learning entrepreneurship from a constructivist perspective". *Technology analysis & strategic management* (0953-7325), 18 (1), p. 19. XYRICHIS A. & REAM E. (2008) Teamwork: a concept analysis. *Journal of Advanced Nursing* 61(2), 232–241 doi: 10.1111/j.1365-2648.2007.04496.x
- Locke, E. A., Latham, G. P., Smith, K. J., & Wood, R. E. (1990). *A theory of goal setting & task performance* (Vol. 21). Englewood Cliffs, NJ: Prentice Hall.
- Locke, E. A. (2000). *The prime movers*. New York: Amacom
- Low, M. B., & MacMillan, B. C. (1988). Entrepreneurship: Past research and future challenges. *Journal of Management*, 14(2), 139 – 162.
- Lumpkin, G.T., and Dess, G.G. (1996). Clarifying the entrepreneurial orientation construct and linking it to performance. *Academy of Management Review* 21(1):135–172.
- Luthans, F., Stajkovic, A. D., & Ibrayeva, E. (2000). Environmental and psychological challenges facing entrepreneurial development in transitional economies. *Journal of World Business*, 35(1), 95-110.
- Man, T. W. Y., Lau, T. and Chan, K. F. (2002) The competitiveness of small and medium enterprises: A conceptualisation with focus on entrepreneurial competencies. *Journal of Business Venturing* 17, 123–142.

- Margolis, H., & McCabe, P. P. (2006). Improving Self-Efficacy and Motivation What to Do, What to Say. *Intervention in school and clinic*, 41(4), 218-227.
- Markman, G. D., Baron, R. A., & Balkin, D. B. (2001). Adversity quotient: Perceived perseverance and new venture formation. Paper presented at the meeting of the Academy of Management, Washington, DC
- McClelland, D. C. (1965). N achievement and entrepreneurship: A longitudinal study. *Journal of Personality and Social Psychology*, 1, 389–392.
- Maccoby, M. (1981). *The leader*. New York: Simon & Schuster.
- Mendall, J. S., & Gerguoy, H. G. (1984, November-December). Anticipatory management or visionary leadership: A debate. *Management Planning*, 28-31.
- Mezirow, J., (2008), 'An Overview of Transformative Learning', in P. Sutherland and J. Crowther (eds.), *Lifelong Learning: Concepts and Contexts* (Routledge, London), pp. 24–38.
- Mitchell, R. K., Smith, B., Seawright, L. W., & Morse, E. A. (2000). Cross-cultural cognitions and the venture creation decision. *Academy of Management Journal*, 43, 974–993.
- Mitchell, R. K., Busenitz, L., Lant, T., McDougall, P. P., Morse, E. A., & Smith, J. B. (2002). Toward a theory of entrepreneurial cognition: Rethinking the people side of entrepreneurship research. *Entrepreneurship theory and practice*, 27(2), 93-104.
- Mount, M. K., & Barrick, M. R. (1995). The Big Five personality dimensions: Implications for research and practice in human resources management. *Research in Personnel and Human Resources Management*, 13, 153-200.
- Multon, K. D., Brown, S. D., & Lent, R. W. (1991). Relation of self-efficacy beliefs to academic outcomes: A meta-analytic investigation. *Journal of counseling psychology*, 38(1), 30.
- Murphy, G.B., Trailer, J.W., Hill, R.C., (1996). Measuring performance in entrepreneurship. *J. Bus. Res.* 36, 15 – 23.
- Nga, J. K. H. and G. Shamuganathan (2010). "The Influence of Personality Traits and Demographic Factors on Social Entrepreneurship Start Up Intentions." *Journal of Business Ethics* 95(2): 259-282.
- Packer, A. H. and G. K. Sharrar: (2003), 'Linking Lifelong Learning, Corporate Social Responsibility and the Changing Nature of Work', *Advances in Developing Human Resources* 5(3), 332–340.
- Parker, S. C., & Belghitar, Y. (2006). What happens to nascent entrepreneurs? An econometric analysis of the PSED. *Small Business Economics*, 27(1), 81-101.

- Perry, C. (1990). After further sightings of the heffalump. *Journal of Managerial Psychology*, 5, 22-31.
- Peters, T. (1988). *Thriving on chaos*. New York: Harper & Row.
- Plax, T., & Rosenfeld, L. (1976). Correlates of risky decision making. *Journal of Personality Assessment*, 40, 413—418.
- Poon, J. M. L., R. A. Ainuddin, et al. (2006). "Effects of self-concept traits and entrepreneurial orientation on firm performance." *International Small Business Journal* 24(1): 61-82.
- Quinn, J. B. (1982) *Managing strategies incrementally*. *Omega*, 10, 613-627.
- Rauch, A., & Frese, M. (2000). Psychological approaches to entrepreneurial success: A general model and an overview of findings. In C. L. Cooper & I. T. Robertson (Eds.), *International review of industrial and organizational psychology* (Vol. 15, pp. 101 – 141). New York: Wiley.
- Rauch, A. & M. Frese (2007). "Let's put the person back into entrepreneurship research: A meta-analysis on the relationship between business owners' personality traits, business creation, and success." *European Journal of Work and Organizational Psychology* 16(4): 353-385.
- Rauch, A., Wiklund, J., Lumpkin, G.T., Frese, M., (2009). Entrepreneurial orientation and business performance: An assessment of past research and suggestions for the future. *Entrepreneurship: Theory & Practice* 33 (3), 761–787.
- Reynolds, P. D. (1987) *New firms: Societal contribution versus survival potential*. *Journal of Business Venturing*, 2, 231-246
- Reynolds, P. D. (2007). *Entrepreneurship in the United States*. Series: *The future is now*, international studies in entrepreneurship, 15.
- Robinson, P.B. & Sexton, E.A. (1994). The effect of education and experience on self-employment success. *Journal of Business Venturing*, 9(2), 141.
- Rockey, E. H. (1986) *Envisioning new business: How entrepreneurs perceive the benefits of visualization*. In R. Ronstadt, J. Hornaday, R. Peterson, & K. Vesper (Eds.), *Frontiers of entrepreneurship research 1986* (pp. 344-360). Wellesley, MA: Babson College.
- Rogoff, E. G., Lee, M. S., & Suh, D. C. (2004). Who done it? Attributions by entrepreneurs and experts of the factors that cause and impede small business success. *Journal of Small Business Management*, 42(4), 364-376.
- Rotter, J. B. (1966). Generalized expectancies for internal versus external control of reinforcement. *Psychological monographs: General and applied*, 80(1), 1-28.

- Scheinberg, S and IC MacMillan (1988). An 11 county study of motivations to start a business. In *Frontiers of Entrepreneurship Research*, BA Kirchoff, WA Long, WE McMullan, KH Vesper and JWE Wetzal (eds.), 669–87. Wellesley, MA: Babson College.
- Schrage, H. (1965). The R. & D. entrepreneur: profile of success. *Harv. bus. Review* 43,56-69.
- Seidman, A. (2005). *College student retention*. Westport, CT : Praeger Publishers.
- Sexton, D. L., & Bowman, N. B. (1986). Validation of a personality index: Comparative psychological characteristics analysis of female entrepreneurs, managers, entrepreneurship students and business students. In R. Ronstadt, J. A. Hornaday, R. Peterson, & K. H. Vesper (Eds.), *Frontiers of entrepreneurship research* (pp. 40–51). Wellesley, MA: Babson College.
- Sexton, D. L. (2001). Wayne Huizenga: Entrepreneur and wealth creator. *Academy of Management Executive*, 1, 40–48.
- Sitkin, S. B., & Weingart, L. R. (1995). Determinants of risky decision making behavior: A test of the mediating role of risk perceptions and propensity. *Academy of Management Journal*, 38, 1573-1592.
- Shane, S., & Cable, D. (2002). Network ties, reputation, and the financing of new ventures. *Management Science*, 48(3), 364-381.
- Shane, S., & Venkataraman, S. (2000). The promise of entrepreneurship as a field of research. *Academy of Management Review*, 25, 217–226.
- Shane, S. (2003). *A General Theory of Entrepreneurship: The Individual-Opportunity Nexus*. Cheltenham, UK: Edward Elgar.
- Shane, S., & Delmar, F. (2004). Planning for the market: business planning before marketing and the continuation of organizing efforts. *Journal of Business Venturing*, 19(6), 767-785.
- Shotter, J. (1978) Action, joint action and intentionality. In M. Brenner (Ed.), *The structure of action* (pp.28-65). Oxford, England: Blackwell.
- Slater, R. (1993). *The new GE: How Jack Welch revived an American institution*. Homewood, IL: Business One Irwin.
- Smilor, R. W. (1997). Entrepreneurship: Reflections on a subversive activity. *Journal of Business Venturing*, 12, 341–346.
- Smith, B. A. (1976). 'The Supply of Urban Housing', *Quarterly Journal of Economics*, Vol. 90, August, pp. 389-405.
- Smith, J. K., & Smith, R. L. (2000). *Entrepreneurial finance*. New York: Wiley.

- Spence, S. H., Donovan, C., & Brechman-Toussaint, M. (1999). Social skills, social outcomes, and cognitive features of childhood social phobia. *Journal of Abnormal Psychology*, 108: 211–221
- Star, A. D., & Massel, M. Z. (1981) Survival rates for retailers. *Journal of Retailing*, 57(2), 87-97.
- Stevenson, H H & J C Jarillo. (1990). A Paradigm of Entrepreneurship: Entrepreneurial Management. *Strategic Management Journal*, 11: 17-27.
- Stewart Jr, W. H., & Roth, P. L. (2004). Data quality affects meta-analytic conclusions: a response to Miner and Raju (2004) concerning entrepreneurial risk propensity.
- Sullivan Mort, G., Weerawardena, J., & Carnegie, K. (2003). Social entrepreneurship: Towards conceptualization. *International Journal of Nonprofit and Voluntary Sector Marketing*, 8(1): 76–88.
- Tichy, N. M., & Devanna, M. A. (1986) *The transformational leader*. New York: Wiley
- Tett, R. P., Steele, J. R., & Beauregard, R. S. (2003). Broad and narrow measures on both sides of the personality–job performance relationship. *Journal of Organizational Behavior*, 24, 335–356.
- Timmons, J. A., Smollen, L. E., & Dingee, A. L. M., Jr. (1990). *New venture creation: Entrepreneurship in the 1990s* (3rd ed.). Homewood, IL: Richard D. Irwin.
- Timmons, J. A. (2000). *New venture creation: Entrepreneurship 2000* (5th ed.). Homewood, IL: Irwin.
- Townsend, DM, LW Busenitz and JD Arthurs (2010). To start or not to start: Outcome and ability expectations in the decision to start a new venture. *Journal of Business Venturing*, 25(2).
- Van de Ven, A. H., Venkataraman, S., Polley, D., & Garud, R. (1989). Processes of new business creation in different organizational settings. *Research on the management of innovation: The Minnesota studies*, 222-226.
- Venkataraman, N., & Ramanujam, V. (1986). Measurement of business performance in strategy research: A comparison of approaches. *Academy of Management Review*, 11: 801-814.
- Viswesvaran, C., Ones, D. S., & Schmidt, F. L. (1996). Comparative analysis of the reliability of job performance ratings. *Journal of Applied Psychology*, 81(5), 557.
- Walker, E., & Brown, A. (2004). What success factors are important to small business owners?. *International Small Business Journal*, 22(6), 577-594.
- Walker, E. A. and B. J. Webster: (2007), ‘Gender, Age and Self-Employment: Some Things Change, Some Stay the Same’, *Women in Management Review* 22(2), 122–135
- Weber, P. and M. Schaper: (2004), ‘Understanding the Grey Entrepreneur’, *Journal of Enterprising Culture* 12(2), 147–167

- Westley, R., & Mintzberg, H. (1989). *Visionary leadership and challenge: How to get extraordinary things done in organizations*. San Francisco: Jossey-Bass.
- Xyrichis, A., & Ream, E. (2008). Teamwork: a concept analysis. *Journal of advanced nursing*, 61(2), 232-241.
- Yong, L.: (2007), *Emotional Intelligence in the Workplace: Leonard Personality Inventory (LPI) Profiling* (Leonard Personality Incorporated, Malaysia)
- Zahra, A. Z., Ireland, R. D., & Hitt, M. A. (2000). International expansion by new venture firms: International diversity, mode of market entry, technological learning, and performance. *Academy of Management Journal*, 43, 925–950.
- Zanakis, S. H., Renko, M., & Bullough, A. (2012). Nascent Entrepreneurs And The Transition To Entrepreneurship: Why Do People Start New Businesses?. *Journal of Developmental Entrepreneurship*, 17(01).
- Zhao H, Seibert SE. (2006). The Big Five personality dimensions and entrepreneurial status: A meta-analytical review. *Journal of Applied Psychology*, 91, 259–271.