

# On Entrepreneurial Self Efficacy and Entrepreneurial Success: A Conceptual and Theoretical Framework

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## ABSTRACT

This paper presents both conceptual and theoretical framework on entrepreneurial self efficacy with a conclusion that entrepreneurial self efficacy is a good predictor of entrepreneurial intention (venture start up self efficacy) and a robust predictor of business performance (venture growth self efficacy). In this paper entrepreneurial self efficacy refers to subjective self belief of an entrepreneur expressed in terms of optimism to start an enterprise and overconfidence to run it successfully. In conclusion, the paper proposes a modification to the New General Self Efficacy (NGSE) scale to measure entrepreneurial success.

**Keywords:** Self efficacy, optimism, overconfidence, New General Scale.

## 1.0 Introduction

The focus of any organization, be it small, medium or large, is to excel in all areas of its operations towards attainment of organizational goal but this objective is usually constrained by a number of factors (Covin & Slevin, 1989; Naman & Slevin, 1993; Zahra, 1996). Watson, Horgarth-Scott and Wilson (1998) and Dafina (2008) related entrepreneurial success with continued trading, and linked entrepreneurial failure to unrewarding or ceased trading. An extensive literature survey by Rogoff, Lee and Suh (2004) found that both internal and external factors are determinant of business success. Ogundeji (2014) attributed the internal factor mainly to entrepreneurial capability i.e. the capability of the entrepreneurs to set up and manage business successfully while external factor is environmental uncertainty occasioned by harsh economic environment in which the SMEs operate in Nigeria.

Many researchers have investigated entrepreneurial capability of successful entrepreneurs including self efficacy, opportunity recognition, perseverance and social skills (Markman, Balkin and Baron, 2002); self confidence (Hisrich and Gracher, 1995); and self efficacy (Nwankwo, Kanu, Marire, Balogun and Uhiara, 2012; Ayodele, 2013; Fitzsimmons and Douglas, 2005; Drnovsek, Wnisset, and Cardon, 2010).

Absence of these capabilities has been found to be the major factors responsible for failure of many small and medium-sized enterprises (Inyang and Enuoh, 2009). Regardless of the overall success of small enterprises especially regarding their role in job creation in developing countries, numerous small enterprises are closing per year. According to Kuratko (2009), the more accurate statement about business failure is that about half of all start ups last between five and seven years, depending on economic conditions following the start. In the United States, 595,600 businesses are faced with closures and 43,546 with bankruptcies in 2008 (Small Business Association, 2008). The same body noted in 2009 that seven out of 10 new employer firms survive at least two years, and about half survive five years. In Nigeria however, Owoseni and Akanbi (2011) observed that most new ventures do not survive the first two years of establishment. Oyelola, Ajiboshin, Raimi, Raheem and Igwe (2013) reported, based on a survey conducted by the Manufacturing Association of Nigeria (MAN) that a total of 834 companies closed their operations in 2009 across the country.

The importance of entrepreneurial capability has increased tremendously during the past few decades due to the strategic role of the entrepreneur in successful operation of a business enterprise. Behind the successful performance of an enterprise is the entrepreneur and the capabilities required to carry on his business successfully in a constantly changing or dynamic business environment remain his competency, orientation and self efficacy (Oyeku, 2014).

Lejarraga and Pindard-Lejarraga (2013); Fitzsimmons and Douglas (2005) and Hmieleski and Baron (2008) have related to optimism and overconfidence to entrepreneurial self efficacy, but the question is whether these characteristics of the entrepreneur expressed as entrepreneurial self efficacy could ensure his/her business success especially in harsh business environment in which SMEs operate in developing countries.

Although, the level of research work in entrepreneurship research is increasing by the day in Nigeria, literature is still very scanty on entrepreneurial success factors such as entrepreneurial self efficacy, entrepreneurial orientation, and entrepreneurial competency even in the face of increasing business failure in the country.

## **2.0 Conceptual Framework**

### **2.1. Entrepreneurial Self Efficacy**

Different approaches to defining entrepreneurial self-efficacy have been identified in the literature. Some researchers have described self-efficacy as entrepreneur's task-specific self-confidence (Boyd and Vozikis, 1994; Baron and Markman, 1999; Baum and Locke, 2004) while others have defined it as the ability to master the necessary cognitive, memory processing, and behavioural facilities to deal effectively with the environment (Segal, Borgia and Schoenfeld, 2002).

Self-efficacy has been found to be a strong driver of goal-oriented behavior (Baum and Locke, 2004; Bandura, 1977) while Bandura (1982) also defined it as the conviction that one can successfully execute the desired behavior (e.g., successfully launch a business) required to produce an outcome. It has also been described as people's judgments regarding their ability to perform a given activity (Bandura, 1977; Bandura, 1982; Bandura, 1986) and is proposed to influence individual choices, goals, emotional reactions, effort, ability to cope, and persistence (Gist, Stevens & Bavetta, 1991). Bandura (1982) equally defined self-efficacy as the task-specific consideration of perceived fitness to perform a particular activity.

According to Wood and Bandura (1989) and Bandura, (1999), self-efficacy impacts how much stress, self-blame, and depression we experience while we cope with taxing circumstances, and the level of accomplishments we realize. It also influences our courses of action, level of effort, our reaction to failure, and whether our thoughts are self-hindering or self-aiding.

Individual's beliefs about his or her competencies and zeal/power to utilize such competencies in accomplishing a given task and situations are anchored on self-efficacy (Bandura, 1997, 1999). These beliefs, either accurate or not, is an estimation of how well one can marshal one's cognitive, physical and emotional resources to accomplish specific goals (Maddux and Gesselin, 2003).

Markman, Baron and Balkin (2005) opined that self-efficacy is central to most human functioning, but because actions are based more on what people believe they can do than on what is objectively true, self-efficacy might be a sound predictor of entrepreneurial pursuits.

In the case of entrepreneurship, entrepreneurial self-efficacy may be comprised of deliberation of those tasks that relate to the initiation and development of new ventures. Campo (2011) defined entrepreneurial self-efficacy as the degree to which one believes that he or she is able to successfully start a new business venture.

Segal, et al (2005) asserted that individual with high entrepreneurial self-efficacy has the tendency to become an entrepreneur later in life. Self-efficacy involves the belief that we can effectively organize and execute certain actions (Bandura, 1997).

### **2.2. Entrepreneurial Self Efficacy, Optimism and Overconfidence**

It is appropriate to consider the relationship between overconfidence, optimism and entrepreneurial self efficacy. Forbes (2005) suggested that overconfidence measures the accuracy of an individual's ability whereas entrepreneurial self-efficacy measures the individual's perception of their abilities. Forbes (2005) further suggests that an individual's entrepreneurial self-efficacy may vary, with some individuals having over-inflated opinions about their abilities therefore, in such situation, an individual is more likely to demonstrate overconfidence in their abilities. Similarly, experienced entrepreneurs may have a high entrepreneurial self-efficacy based on previous business success that subsequently leads to greater overconfidence (Fitzsimmons & Douglas, 2005). There are three main categories of overconfidence: 1) overconfidence in knowledge, 2) overconfidence in prediction, and 3) overconfidence in abilities (Hayward, Shepherd and Griffi, 2006).

Malmendier and Tate (2005b) are the pioneers in constructing proxies of overconfidence in a corporate framework. Ben, Baccar and Bouri (2013) present in a survey paper a literature review that includes all available measures of optimism and overconfidence biases including stock purchase and media portrayal of CEO.

Also, Parker (2006) argues that certain findings in the psychology literature suggest that entrepreneurs are particularly optimistic. Optimism has also been regarded as a functional characteristic of entrepreneurs, since highly confident individuals are better positioned to start subsequent businesses as they are more likely to cope with high failure rates and to endure the usually tough process leading to new venture success (Hayward, Forster, Sarasvathy and Fredrickson, 2010). Entrepreneurial experience has been found to inform entrepreneurial optimism of high chances of entrepreneurial success (Lejarraga and Pindard-Lejarraga, 2013). In an empirical study, Ucbasaran, D., Westhead, P., Wright, M., Flores, M. (2010) found that the nature of entrepreneurial

experience has diverging effects on optimism, such that experiences with business failure were associated with lower optimism as opposed to experiences with business success and this relation was moderated by whether entrepreneurs were sequential or portfolio entrepreneurs.

Fredrickson (1998) reported that optimism is functional because it improves entrepreneurs' ability to maintain, sustain and build upon relationships with team members on prior ventures that may have been damaged by such failure. Under this viewpoint, optimism is considered a beneficial feature for entrepreneurs. However, high optimism can have detrimental effects for entrepreneurs (Hayward et al. 2006). Evidence from social psychology suggests that optimistic people discount negative information and avoid contradictions (Geers and Lassiter, 2002), which may impede the accurate assessment of entrepreneurial opportunities and potentially lead to excessive risk-taking. Similarly, recent evidence shows a negative and significant relation between optimism and new venture performance in terms of revenue growth and employment growth (Hmieleski and Baron, 2009), implying that optimism has an overall negative effect on performance. Males have been reported to have higher optimism than females across different activities (Puri and Robinson, 2007).

Based on the perspective above, in this paper entrepreneurial self efficacy refers to subjective self belief of an entrepreneur expressed in terms of optimism to start an enterprise and overconfidence to run it successfully.

### **2.3. Measurement of Entrepreneurial Self Efficacy**

Izquierdo and Buelens (2008) used the instrument developed by De Noble, Jung, and Ehrlich (1999) to measure entrepreneurial self-efficacy which consists of a set of items that asks the respondent to self-assess his or her capability to perform the required tasks for a target behavior. In this case, the target behavior is creating a new business. The questionnaire was divided into six constructs that include the following: 1) Developing new product and market opportunities; 2) Building an innovative environment; 3) Initiating investor relationships; 4) Defining core purpose; 5) Coping with unexpected challenges; and 6) Developing critical human resources. The variables were measured by using a seven-point Likert scale, being 1 "Strongly disagree" and 7 "Strongly agree." Sample items include "I can discover new ways to improve existing products" and "I can develop a working environment that encourages people to try out something new."

In Olarenwaju (2013), respondents were asked to rate their self-efficacy level on a 5-point Likert scale (1 = a lot worse; 5 = much better). Nwankwo, Kanu, Marire and Balogun (2012), assessed self-efficacy of employees through the New General Self-efficacy (NGSE) scale developed by Chen, Gully and Eden (2001). The questionnaire asked questions regarding self-efficacy in order to establish a qualitative measure of self efficacy. The scale contains 8 items measuring the participants perceived level of self-efficacy. The response categories on each self-efficacy item ranged from "strongly agree" to "strongly disagree", with numerical values of 1 through 5 assigned to each response.

Researchers within the field of entrepreneurship education have mainly used scales developed by Chen et al. (1998) and De Noble et al. (1999). Cox, Mueller & Moss (2002) and Mueller & Goic (2003) have taken the development a step further and anchored their entrepreneurial self-efficacy scale to Stevenson, Roberts & Grousbeck's (1985) entrepreneurial stage model. This model was later refined by McGee, Peterson, Mueller and Sequeira (2009). At Cambridge University, United Kingdom, researchers at the Faculty of Education have for many years used entrepreneurial self-efficacy scales developed by EHGI project (Cooper & Lucas, 2006; McLellan, Barakat & Winfield, 2010). The scales mentioned above are fairly biased towards a traditional view of entrepreneurial activity, though, and little of the latest advancements within the field have been included, with perhaps McLellan et al. (2010) as an exception. As a model, it thus remains empirically underdeveloped (Kolvereid & Isaksen, 2006), and little is known about which entrepreneurial self efficacy construct that relates to entrepreneurial intentions, behaviour and performance (Kickul, Gundry, Barbosa and Whitcanack, 2009).

### **3.0 Theoretical framework**

Entrepreneurial self efficacy has been explained using career-related behavior theories considering entrepreneurship as a career. For example, Bandura (1986) and Lent, Brown & Hacket (1994) have established that self-efficacy is the major influence on career-related behavior in social cognitive theory. Social cognitive career theory, an established theory of vocational psychology has been used extensively to explain individuals' career-related decision making behaviour. It is anchored in social cognitive theory and highlights the importance of self-beliefs and self thought in fostering an individual's motivation and subsequently guiding their behaviour (Segal, et al, 2005). With its foundation in Bandura's (1989) social cognitive theory, social cognitive career theory asserts that the psychological process underlying career decisions and behaviour is dictated largely by the interplay of three key constructs which are: self-efficiency; outcome expectations and goals (Bandura, 1986; Lent et al., 1994). This goal construct, moreover, encompasses an individual's intention to engage in a specific behaviour.

Social cognitive career theory further acknowledges that person and environment/contextual elements influence the career decision-making process, with self-efficacy, outcome expectations, and goals/intentions are predicted to mediate the relationships between individual and environmental experiences and outcome behaviour (Lent et al, 1994). Bandura (1982) contended that role model influence occurs primarily through mastery of experiences (repeated performance accomplishments), observational learning (observing rather than direct involvement), and social persuasion (convincing that tasks can be performed).

Self-efficacy is widely recognized as a key construct in social learning theory (Bandura, 1977), a perspective which assumes that behavior, cognitions, and the environment continually influence each other in the mindset of individuals (Bandura, 1977; Bandura,1986). Since social cognitive theory proposes that individuals choose to undertake tasks in which they are confident, comfortable, and perceive competence (Bandura, 1986), it is opined that individuals with high entrepreneurial efficacy will have high entrepreneurial success.

Palich and Bagby (1995), have observed that entrepreneurs are prone to cognitive biases in their decision making. This observation has however, raised a question of research interest in entrepreneurship regarding whether entrepreneurial individuals are more prone to cognitive biases than non-entrepreneurs (Buzenitz & Barney, 1997). While a number of cognitive biases have been explored, several in particular have received much attention in the literature. Fischhoff, Slovic & Lichtenstein (1977), have noted overconfidence as one of these cognitive biases where decision makers are somewhat over optimistic about their initial assessment of a situation and often do not incorporate new information in their decision making as it becomes available.

Simon, Houghton and Aquino (1999), noted that there is some evidence that the overconfidence bias plays an important role in entrepreneurship with studies such as Busenitz & Barney (1997) finding that entrepreneurs display greater overconfidence than managers. Of particular interest is whether an overconfidence bias can influence an individual's intention to behave entrepreneurially. If overconfident individuals perceive less risk in a new venture then this cognitive bias might subsequently lead to increased tendency for individuals to start ventures, whereas a less overconfident individual may not form this intention. Some evidence for this has been found by Simon & Houghton (2003) where they found managers who exhibited higher levels of overconfidence were more likely to make product introductions that were more risky and less likely to succeed.

Cognitive theory has also been used to explain entrepreneurial optimism. Related studies using a cognitive approach have explored how cognitive biases affect the perception of risk associated with new venture opportunities (Keh, Foo and Lim, 2002), finding that the presence of cognitive biases and the use of heuristics in entrepreneurial decision making reduce risk perception. However, the cognitive approach has focused on how individuals process the information they receive. There are contrasting arguments regarding the relationship between entrepreneurial experience and optimism. Jovanovic (1982) in his argument defends that through the experience of founding subsequent ventures, entrepreneurs learn to adjust their level of optimism and ultimately become less optimist than inexperienced entrepreneurs. Tversky and Kahneman (1992), however, noted in contrast, that experience can trigger biases that may result in increased optimism leading experienced entrepreneurs to display higher confidence in success than inexperienced ones.

#### **4.0 Entrepreneurial Self Efficacy and Entrepreneurial Success**

The issue of self-efficacy has been extensively investigated, and it has been clearly established in related literature that self-efficacy beliefs can contribute significantly to the level of performance in diverse fields of human functioning (Bandura and Locke, 2003), including work-related functioning (Stajkovic and Luthans, 1998).

In the field of entrepreneurship, several studies have revealed a positive relationship between the level of entrepreneurial self-efficacy and firm performance, measured by growth of revenues or of employment (e.g. Baum and Locke, 2004; Byrant, 2007; Hmieleski and Baron, 2008; Kickul, Barbosa, and Whitcanack, 2009).

Self-efficacy has been found to be a good predictor of start-up intentions (Krueger, Reilly and Carsrud, 2000; Nwankwo et al, 2012; Olarenwaju, 2013; Fitzsimmons and Douglas, 2005; Drnovsek, Whisett and Cardon, 2010). Markman, Balkin and Baron (2002) described self-efficacy as a key determinant of new venture growth and personal success, and Shane, Locke and Collins (2003) cite Baum's (1994) research to highlight that self-efficacy was the "single best predictor in the entire array of variables" utilized to study entrepreneurial outcomes for a group of founders in the architectural woodworking industry.

Throughout the existing body of work there is a strong view that self-efficacy is a good thing for entrepreneurs to have. For example, scholars such as Shane, et al. (2003) have argued that an entrepreneur who is high in self-

efficacy is likely to “exert more effort for a greater length of time, persist through setbacks, and develop better plans and strategies for the task (emphasis added).” In addition, the self-efficacy construct has also been closely linked to important entrepreneurial outcomes such as start-up intentions (Krueger et al., 2000) and new venture growth, as well as personal success of entrepreneurs (Markman et al., 2002).

Hmieleski and Corbett (2008) have identified a positive relationship between the self-efficacy of entrepreneurs and the growth of their firms. Similarly, Forbes (2005) and Anna, Chandler, Jansen and Mero (2000) have found a positive relationship between entrepreneurial self-efficacy and subjective measures of new venture performance. The findings of these studies suggest that entrepreneurs high in self-efficacy are likely to set challenging growth expectations for their firms and persist in their leadership efforts toward the accomplishment of those goals.

Hmieleski and Baron (2008) in their study on “When does entrepreneurial self efficacy enhance versus reduce firm performance”, observed that entrepreneurial self-efficacy has been generally considered to be a robust predictor of the performance of firms. Their results indicated that in dynamic environments, the effects of high entrepreneurial self-efficacy on firm performance were positive when combined with moderate optimism, but negative when combined with high optimism. In stable environments however, the effects of self-efficacy were relatively weak, and were not moderated by optimism. The overall results suggested that high self efficacy is not always beneficial for entrepreneurs and may, in fact, exert negative effects under some conditions.

Drnovsek et al (2010), observed that venture growth self-efficacy focused on entrepreneurs’ beliefs about successfully exploiting the market value of current products and services (for example, an item would read as: I am confident in my ability to grow the market of my current products and services) and that entrepreneurial self efficacy beliefs about one’s capability to successfully tackle business start-up processes is distinct from entrepreneurial self efficacy beliefs about one’s capability to successfully tackle business growth processes.

Torres and Watson (2013) in their study on an examination of the relationship between manager Self-efficacy and entrepreneurial Intentions and performance of Mexican small businesses observed that high performance requires higher belief levels of the owner or manager about his or her capacity to perform and high involvement tasks and roles as well as noting that only one of the three self efficacy factors i.e. expansion which involves more hard work and less knowledge, positively explains performance but negatively affects entrepreneurial intentions.

In sum, it appears that entrepreneurs are, on average, higher than others in self-efficacy, and entrepreneurs who are high in self efficacy tend to be higher performing. They are higher performing in that the firms they lead tend to grow more quickly and be more profitable than those led by entrepreneurs who are comparatively lower in entrepreneurial self efficacy (Hmieleski and Baron, 2008).

Optimism is a well documented bias in the economic and financial literature (Malmendier and Tate, 2005a). This bias is firstly introduced by Keynes (1936) in his general equilibrium theory. Cassar (2010) found that nascent entrepreneurs have overly-optimistic expectations of success, revealed by the overestimation of sales, number of employees, and likelihood of becoming an operating business after one year. According to Cassar (2010), over-optimistic expectations are higher for nascent entrepreneurs who resort to formal plans and financial projections.

Wu and Knott (2006) suggest that, whereas entrepreneurs might not be overconfident in assessing market demand, they do overestimate their ability to manage ventures successfully. Syed, Muhammed and Malik (2012) reported a positive relationship between overconfidence bias and perceived market efficiency. A psychological evidence favoring overconfidence is also grounded in controlled experiments carried out by Moore and Cain (2007) however, a survey carried out by Koellinger, Minatti and Schade (2007) documented a negative relation between self-reported levels of entrepreneurial confidence and the survival chances of new entrepreneurs across countries. Hayward, Forster, Sarasvathy and Fredrickson (2010) reported why highly confident entrepreneurs of focal ventures are better positioned to start and succeed with another venture; and therefore why overconfidence in one's capabilities functionally persists and pervades amongst entrepreneurs.

## 5.0 Conclusion

In conclusion, this paper assessed both the conceptual and theoretical frameworks on entrepreneurial self efficacy with empirical evidences that self-efficacy has been found to be a good predictor of start-up intentions and robust predictor of the performance of firms measured through different scales developed by researchers over the years including the New General Self-efficacy (NGSE) scale developed by Chen, et al (2001). It has

been observed however, that most researchers used the same measure for both venture start up and venture growth self efficacy which are distinct processes. This paper, therefore proposes a modification of NGSE scale to measure entrepreneurial success as distinct from entrepreneurial intention.

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