

Exploring the Youth Entrepreneurial Risk Behaviour from a Cognitive Perspective

Gayathri Ranasinghe
Saskia de Klerk

Abstract

Youth entrepreneurship is defined as the recognition of an opportunity to create value, and the process of acting on this opportunity. However, previous studies find that youth fail to capitalize the opportunities even when they are widely available. Furthermore, previous literature supports the relationship between risk behaviour and opportunity identification. Thus, risk behaviour can be considered as a determinant of youth entrepreneurship. However, what determines risk behaviour is not sufficiently discussed in current literature and this paper attempts to address this lacuna. Consequently, based on Individual Opportunity Nexus Theory, firstly, the current researchers conceptualize social networks as a determinant of risk behaviour of entrepreneurs. Secondly, the researchers, drawing from the Social Cognitive Theory argue that cognitive biases mediate the relationship between social networks and risk behaviour. These arguments are presented as a conceptual model with supportive propositions. Finally this paper concludes by providing some direction for the validation of the proposed conceptual model empirically

Keywords: Social Networks, Cognitive Biases, Risk Behaviour, Social Network Theory, Social Cognitive Theory, Individual Opportunity Nexus Theory, Youth Entrepreneur, Risk Perception, Risk Propensity.

Introduction

Over many decades the word entrepreneurship research has referred to the entrepreneurial research primarily concerned with adult entrepreneurs (Newbert

Ms. Gayathri Ranasinghe is a Senior Lecturer, School of Business, Informatics Institute of Technology, Sri Lanka. E-mail: gayathri.ranasinghe81@gmail.com

Dr. Saskia de Klerk is a Senior Lecturer, School of Business, University of New South Wales, Canberra, Australia. E-mail: S.DeKlerk@adfa.edu.au

and Tornikoski, 2013; Welter, 2011). However, recent evidence indicates a need for differentiating youth and adult (general) entrepreneurship (Thornton et al., 2011; James and Pauline, 2014), since each group differs in their experience, financial status, commitment and levels of expectation. Entrepreneurship has been defined as the study of “how, by whom and with what effects opportunities to create future goods and services are discovered, evaluated and exploited” (Shane and Vinkataraman, 2000: p.218). Taking a similar perspective, youth entrepreneurship is defined as the “recognition of an opportunity to create value, and the process of acting on this opportunity, whether or not it involves the formation of a new entity” (Australian Family and Community Services, 2003) by youth within the age range of 15-34 years (Nelson Mandela, May 1999 as cited in Oseifuah, 2010). Hence, it is evident that entrepreneurship opportunities play a crucial role in the establishment of entrepreneurship despite the age of the entrepreneur. Further, the exploitation of these opportunities is considered vital, in part because it is often the first step in the entrepreneurial process (Baron and Shane, 2005).

According to Individual Opportunity Nexus theory, opportunities alone will be insufficient in determining entrepreneurial behaviour. The individual is also vital. For an individual to participate in such entrepreneurial activity the element of “willingness” (Shane, Locke and Collins, 2012; Segal, Borgia and Schoenfeld, 2005) is considered essential. Very few authors have related “willingness” as a concept triggering entrepreneurship not only for youth but even for adult entrepreneurs (Segal, Borgia and Schoenfeld, 2005) while only one study conducted by Shane, Locke and Collins (2003) acknowledges that human “willingness” will influence decisions. Thus, the discrepancy observed across a wide range of people in terms of the level of “willingness” will in turn influence the grasping of entrepreneurial opportunities. Such a variation of willingness could be directly related to risk behaviour as failure of new ventures will greatly affect an entrepreneur’s financial well-being, career opportunity and personal well-being (Das and Teng, 1998). Further, an entrepreneurial activity itself requires extensive financial and person investment (Das and Teng, 1998) while being an entrepreneur is often viewed as an adverse career choice where one is faced with everyday life and work situations that are fraught with increasing uncertainty (Segal, Borgia and Schoenfeld, 2005). However, previous studies have not directly established the reasons for such discrepancy across peoples in terms of their willingness while the question as to how such variations can be influenced by risk behaviour has not yet been theorized. However, Segal, Borgia and Schoenfeld (2005) have indicated that self-employment intentions are significantly influenced by the

tolerance of risk. Further, many studies also indicate the fact that entrepreneurship behaviour is significantly influenced by risk behaviour (Das and Teng, 1998; Segal, Borgia and Schoenfeld, 2005), however, the reason for only a small proportion of youth apprehending the risk pertaining to entrepreneurship while the majority of others not doing so, has not been identified in the literature. Therefore, the research question can be established as: What are the factors that impact on risk propensity in youth when exploiting entrepreneurial opportunities?

One view of entrepreneurial opportunities is that they exist independent of entrepreneurial actions, just waiting to be discovered and exploited by unusually alert individuals. This is referred to by different names, including the “individual/opportunity nexus perspective” (Shane and Venkataraman, 2000). Further, Individual Opportunity Nexus Theory indicates that opportunities are real and independent of the entrepreneur who perceives them (Shane, 2003). However, these opportunities’ being real does not mean that everyone will perceive them. Only individuals with appropriate qualities will perceive them (Shane, 2003). Hence, the purpose of the study is to theorize the cognitive factors that influence youth risk behaviour in an endeavour to answer the question as to why 95% of Sri Lankan youth do not take the risk of exploiting entrepreneurial opportunities. Therefore, the main purpose of the study is to theorize youth entrepreneurial risk behaviour.

Further, few scholars have examined how entrepreneurs make sense of the world to imagine, identify and design new products, services or business models from a cognitive perspective (Gregoire et al., 2015; Cornelissen and Clarke, 2010), and how they evaluate such opportunities (Gregoire et al., 2015; Wood and Willams, 2014; Mitchell and Shepard, 2010). Evaluation of opportunities is considered a risk-laden activity while (Das and Teng, 1998) such risk taking behaviour appears to be one of the most trivial features of entrepreneurship (Dai et al., 2014; Das and Teng, 1998) since the creation of new ventures, particularly in the context of youth participation is extremely risky. Among their most uniquely defining characteristics, entrepreneurial pursuits routinely involve high levels of information overload, uncertainty, novelty and strong emotions (Baron, 1998). Although risk and risk behaviour is considered a vital element within entrepreneurship research, and the trait and cognitive approaches attempt to explain such risk behaviour, findings do not adequately explain the differentiation of entrepreneurs from non entrepreneurs based on their risk behaviour, nor does it adequately explain why entrepreneurs could be specified based on risk behaviour (Das and Teng, 1998). Taking into consideration youth aged

15-34 years, these risk factors become higher since these young men and women will be embarking on an unknown journey which may lead to a loss of income, self-esteem and maybe even higher consequences of failure. Further, potential entrepreneurs need to involve others in the development of their business opportunities, while they themselves incur risk (Zeffane, 2015; Gordon, 2006).

In this context, this particular conceptual approach (Dew et al., 2015; Gregoire et al., 2015) focuses on acts of feeling and thinking, hence, conceiving of affect and cognition as verbs indicating something people do by understanding the dynamic interactions between mind and environment (Fiske and Taylor, 2013). Although some emergent work on situated and embodied cognition has been conducted (Gregoire et al., 2015) they remain at the infant stage. Although entrepreneurship scholars (Baldacchino, Ucbasarn, Cabantous and Lockett as cited in Gregoire et al., 2015) have described intuition as the seed of entrepreneurial activity, the specific cognitive construct of intuition has attracted comparatively limited attention. According to Mitchell et al., (2010) cognition cannot be boxed in while several authors (Clarke and Cornelissen, 2014; Cornelissen, 2013; Mitchell et al., 2011, 2014) also argue that cognition is not located inside an individual's head, but is rather shaped and influenced by key aspects of the social and cultural milieu.

Therefore, if the domain of entrepreneurship is "... the nexus of two phenomena: the presence of lucrative opportunities and the presence of enterprising individuals" (Shane and Venkataraman, 2000), then this research proposes an elucidation of this nexus by exploring how the external and internal factors of risk behaviour affect the decision to exploit opportunities. However, this research study will only consider social network dimensions in terms of identification and establishment of the relationship between the social network and cognitive biases as illustrated in social cognitive theory (Cahill, 1987; Gibbons and Shoffner, 2004). The trait 'approach to risk' will be considered beyond the scope of this study. Further, the research will not consider the influence of family income and the influence of role models, while risk behaviour within the study is considered a combination of risk propensity and risk perception.

The paper is structured as follows. Section two examines the literature pertaining to risk behaviour and the different approaches to risk behaviour where social cognitive theory and social networks theory are used to explain the cognitive approach to risk behaviour. Section three discusses the hypotheses and the conceptual model derived

from the literature, while section four demarcates the final section of the paper relating to practical and theoretical contributions, summarizations and identification of future research directions while setting down the limitations.

Literature Review

Youth Entrepreneurship

The youth population is seen as the primary driver of economic growth and development (Zeffane, 2013). The main assumption behind youth entrepreneurship is that young adults with a high entrepreneurial potential (EP) are more likely to start a business than those with a lower EP (Shinnar et al., 2009). Hence, EP is considered an essential precursor for entrepreneurial activities (Krueger and Brazeal, 1994). Further, the study conducted by Zeffane (2013) indicates that individuals who have capabilities and a desire to become entrepreneurs are also more inclined to start a business and become potential entrepreneurs. An individual with a greater EP is considered an innovative person and a risk bearer who works under uncertainty (Sahay and Rai, 2004). Further, Lumpkin and Dess (1996) in their seminal work indicate that EP represents an entrepreneurial process that addresses the question of willingness and likelihood to undertake new ventures, while this process includes innovativeness and risk taking. These characteristics are considered not as predictors of future entrepreneurial activities but are indicative of proclivity and abilities to successfully pursue entrepreneurial opportunities (Krueger, 2009), while potential entrepreneurs have emerged as a front-line national agenda capturing attention worldwide (Sobel and King, 2008).

For an entrepreneurial career choice there seems to be much that has to happen between the attitude and the activity itself, such as the integration of individual, social and contextual factors that play a vital role. Therefore, as per Nandamuri and Gowthami (2013) it is not only skills but also some other factors like family background, personal characteristics, entrepreneurial support, social recognition and risk taking capability that matter in nurturing a successful entrepreneur. These factors were broadly categorized into four groups: demographic, social, psychological and other factors. The demographic factors identified were age, marital status, gender, income level and education while the social factors encompass culture, society, family and religious values. The psychological characteristics considered were ability to take risks, desire to be successful and the stand against common apprehensions and leadership skills which were strongly associated with entrepreneurial success. Other

factors considered were economic features such as caste, parental background, technical and professional education, financial backup, location advantage and easy access to market.

As indicated by Oseifuah (2010) youth entrepreneurship could be categorized into three main categories consisting of pre-entrepreneurs, budding entrepreneurs and emergent entrepreneurs. Pre-entrepreneurs consist of teenagers aged 15-19 years who are novices and who have very limited knowledge of business ownership, and belong to a stage of transition from home to higher education or jobs, and who tend to engage in different activities prior to venturing into creation. Young adults in their mid 20s are considered budding entrepreneurs and they have some working experience, skills and capital with which to start their ventures, as opposed to the pre-entrepreneurs. Emergent entrepreneurs in their late 20s and early 30s (27-34 years) are more mature and are likely to have accumulated vital experience in business or other areas of life. Therefore, for the purpose of this study youth entrepreneurs are considered to be in the age range from 15-34 years (consisting of both the pre-entrepreneurs and emerging entrepreneurs) who recognize opportunities and create value by engaging in risk behaviour.

Risk Behaviour

Risk and risk behaviour are considered a vital element within entrepreneurial literature where it has been exploited mostly as a supportive element in the form of a moderator (Carolis and Saporito, 2006; Hamid et al., 2013). However, while establishing a significant moderator effect in relationships in relation to opportunities, risk behaviour has not been considered a prominent element as per previous research, one that is sufficient to warrant a research study of its own. However, a few works of research have clearly established the necessity for taking risk behaviour into account and the prominence such risk behaviour should be given (Das and Teng, 1998). Risk taking appears to be one of the most distinctive features of entrepreneurship (Das and Teng, 1998) since the creation of new ventures, particularly in the context of youth, is extremely risky. Therefore, risk behaviour should be considered the heart of entrepreneurial behaviour (Das and Teng, 1998), while the two main approaches considered within literature are the trait approach and the cognitive approach.

Risk behaviour, according to literature consists of two distinctive components (Keil et al., 2000; Hamid et al., 2013), namely, risk perception which is how individuals

asses and perceives risks (Keil et al., 2000) and risk propensity which is the manner in which individual may take or avoid the risk (Keil et al., 2000). Risk is conventionally defined as substantial variance in outcomes that are consequences (Yates and Stone, 1992). Therefore, according to the definition, both how the individual may perceive and how he/she acts on a risk are central characteristics of risk behaviour (Keil et al.,2000). Although, the components and the approaches of risk behaviour are identified within the literature no clear theorization of risk behaviour has been illustrated. Considering the dimensions of risk behaviour and the definition of risk for the purpose of this research, risk behaviour can be defined as how individuals assess, perceive, embrace or avoid variances in outcomes that are consequences. Further, it has been observed by many authors that people's willingness to take risks differ (Fishburn, 1977). Thus, according to the classification proposed by Sitkin and Pablo (1992) it is apparent that entrepreneurial opportunity seeking (Hamid et al., 2013) behaviour is a risk seeking behaviour consisting of risk propensity, risk perception and situational characteristics.

The Cognitive Approach to Risk

Previous research on personal attributes distinguishing entrepreneurs from others has hypothesized a positive relationship between venture creation and variables such as internal locus of control, need for achievement, personal optimism, preference for shaping one's own destiny, risk perception and tolerance for ambiguity (Shaver and Scott, 1991). Based on the Individual Opportunity Nexus Theory, the relationship between the individual and the opportunity can be further enhanced by incorporating the cognitive factors (Casson, 2005). Therefore, this research will consider the cognitive biases consisting of overconfidence, illusion of control, and representativeness. However, the term "bias" within this research will relate to the term objectively to identify an entrepreneur's cognitive and decision making processes that lead to an alternative assessment of his/her entrepreneurial opportunities, and not to indicate either the positive or negative state of an affair. Recent research suggests that some entrepreneurs perceive situations differently from others (Baron, 2004; Simon, Houghton, and Aquino, 1999, Carolis and Saporito, 2006). In terms of entrepreneurial studies specifically, this concept has been used in the theory of entrepreneurial alertness (Kirzner, 1973; 1979), which relates to risk behaviour and entrepreneurial opportunity exploitation. According to Social Cognitive Theory, cognitive elements would influence a particular human behaviour. Thus, considering

risk behaviour as a particular type of human behaviour, it is evident that cognitive factors will influence such behaviour.

The “failure to know the limits of one’s knowledge” results in the cognitive bias known as overconfidence (Bazerman, 1990). When individuals are overconfident, they will tend to overestimate the probability of being right. Overconfidence may occur due to the fact that the individual may ignore new information received after an initial decision has been made, or the inability to realize the extent to which his/her plans or estimates are inaccurate. Therefore, such overconfidence among the youth may have an implicit relationship to risk behaviour. The illusion of control is the “individuals’ overestimation of the extent to which they can affect the outcome of particular situations” (Duhaime and Schwenk, 1985; Carolis and Saporito, 2006). An illusion of control affects people’s assessments of their chances of success at a venture. As per Carolis and Saporito (2006), it differs from overconfidence which relates to overestimation of skills while illusion of control relates to inaccuracy. Estimation of the facets of a particular situation and one’s ability to cope and predict future events (Langer, 1975) was expressed as an expectancy of personal success. This illusion stems from the fact that individuals will seek out information that supports their opinions while ignoring any other contradictory information, that leading youth towards triggering risk behaviours.

Representativeness, also referred to in the literature as the “belief in the law of small numbers”, arises when individuals use only a limited number of information sources in order to make a decision (Carolis and Saporito, 2006). Youth who discuss business ideas with a limited number of other youth within the network are more likely to receive overly positive feedback (Kahneman and Lovallo, 1993). Further, research also reveals that people tend to remember successes more than failures (Golder and Tellis, 1993) which can in turn foster overly positive estimations of a situation. Therefore, while reliance on small samples may economize on information processing, it can potentially introduce serious biases within the information received (Kahneman and Lovallo, 1993). Therefore, in conclusion, there seems to be sufficient evidence to consider that representativeness is ubiquitous among potential youth entrepreneurs.

Entrepreneurs live and breathe uncertainty in relation to novel markets, approaches and technologies, unknown demand and unpredictable operating costs. Moreover, entrepreneurs may not even have the resources for the collection of information

required. In these situations, youth entrepreneurs might rely on small, non-random samples and personal experience to guide their decision making (Busenitz and Barney, 1997), indirectly triggering risk behaviour. Further, as cognitive biases influence the information that individuals notice and the process accommodated for the interpretation of that information, biases may also affect opportunities (Busenitz and Barney, 1997; Simon, Houghton and Aquino, 1999). Certain cognitive biases may even cause individuals to discount negative outcomes and uncertainties associated with such decisions (Shaver and Scott, 1991).

Social Capital and Risk Behaviour

Supplementing the Schumpeterian perspective by bringing in Knight's (1921) emphasis on risk taking as a quality of the entrepreneur, and synthesizing the Schumpeter-Knight insight, entrepreneurship can be defined as the "ability to create new combinations of production factors through experimentation and risk taking". This definition is based on the traditional way of regarding entrepreneurship as being an individual attribute. However, in modern entrepreneurship research, entrepreneurship has been considered as a (i) result of interaction and (ii) a social and a collective phenomenon based on mutual trust and obligations (Johannisson, 2000, p. 6; De Klerk, 2012). According to such an approach, entrepreneurship becomes a creator of social capital and human capital, which will change future supply costs.

Hence, for such a change in future supply cost to be accomplished, risk taking and experimentation is inevitable. Further, both risk taking and experimentation involve building on and breaking with prevailing norms and conventional wisdom relating to the existing social capital. This is Schumpeter's well-known "creative destruction" (Fukuyama, 1995). Expressed in network terms it means that the entrepreneur reshapes the networks by simultaneously (i) utilizing certain links of an existing network, (ii) abolishing other links to certain nodes of the network, and (iii) establishing new links to new nodes. The relationships among the three processes vary from case to case. The entrepreneur's ability to reshape or even defeat existing networks is of course affected by the costs entailed in doing so (supply costs) and by the knowledge and skill of the entrepreneur (human capital).

In recent years, researchers have shown great interest in the concept of social capital and the concept is still considered an emerging phase, comprising of different uses and connotations from various scholarly perspectives (Adler and Kwon, 2002).

Social capital exists where people have an advantage because of their location in a social structure (Burt, 1992), and where this concept is clearly an attribute in terms of the youth entrepreneur. Thereby, social scientists have described two forms of social capital: “bonding” and “bridging” as illustrated in Carolis and Saporito (2006). The bonding social capital perspective “explores the impact of a collective’s internal ties and the substance of the network relationships within that collective group” (Adler and Kwon, 2002). In comparison with the bonding social capital approach, the bridging social capital concentrates on an individual’s external social ties and how that social capital, as a resource within the network, is used for the individual’s private benefit. Social capital helps in explaining youth entrepreneurs’ successes as they can develop their contacts and connections and start to consume resources that will bestow personal gain (Adler and Kwon, 2002). Therefore, Burt (1992) explains social capital as an investment by suggesting that social capital provides “the way in which social structure renders competition imperfect by creating entrepreneurial opportunities for certain players and not for others” (1992, p. 57). Indeed, both the entrepreneurship (Walker, Kogut and Shan, 1997; Carolis and Saporito, 2006) and social capital literatures (Adler and Kwon, 2002; Carolis and Saporito, 2006) have emphasized the importance of connections and networks in the creation of new ventures.

Further, in line with previous literature, this research will consider the bridging approach of network connections relating to social capital that is manifested through an individual’s external connections (Adler and Kwon, 2002). Within this bridging approach, social capital encompasses the goodwill and resources that emanate from an individual’s network of social relationships and its effects in terms of flow from the information, influence, and solidarity available to the entrepreneur. Therefore, such a consideration of social capital provides three vital benefits to entrepreneurs: (i) resources (ii) information and (iii) influence. Social capital can facilitate access to information, which is a critical component of youth entrepreneurial opportunities (Shane and Venkataraman, 2000), while enhancing the timing, relevance, and quality of information (Adler and Kwon, 2002; Burt, 1992) received by the youth entrepreneur. As for the influence factor, individuals accumulate obligations from others in their network and leverage these commitments at a later time. These networks of communication are explained through the use of Social Network Theory. Further, Burt (1992) has also discussed the influence and power elements of entrepreneurs in traditional disconnected networks as applicable in the context of the adult entrepreneur. These entrepreneurs ascertain who will gain from

the disconnection by establishing themselves in a favourable position during negotiations.

While the structural dimension refers to the “overall pattern of network connections”, the relational dimension refers to the “nature of the personal relationship that develops between specific people” (Nahapiet and Ghoshal, 1998; Carolis and Saporito, 2006) as manifested in “strong” versus “weak” ties. The “strength” of a tie is a reflection of the combination of the amount of time, emotional intensity, intimacy, and reciprocal services that characterize that tie (Granovetter, 1985). According to Burt (1992) structural holes are created from weak ties. These structural holes create competitive advantages for entrepreneurs whose network spans the holes. These holes, according to Burt (1992), act as buffers where people on either side of the network tend to circulate different kinds of information. Therefore, it is an advantage for an opportunity seeking youth entrepreneur to act on such structural holes containing non redundant information flow between people and control the projects that bridge people from either side.

Trust has been conceptualized severally as a willingness to be vulnerable by placing one’s welfare in the hands of others; a feeling of positive expectations; an individual’s confident beliefs that another will behave in a beneficial manner (Rousseau, Sitkin, Burt and Camerer, 1998). Being embedded in a network gives rise to a form of trust known as relational trust (Nahapiet and Ghoshal, 1998). Relational trust refers to a trustor’s confident beliefs that a trustee will act beneficially because the trustee cares about the trustor’s welfare (Rousseau, Sitkin, Burt and Camerer, 1998). This emerges from repeated interactions between youth over time that yield feelings of reliability and positive expectations. Relational trust is based on continual reciprocity, the notion that “I’ll do this for you now, but you will do something for me later” (Adler and Kwon, 2002). The cognitive dimension of social capital also refers to “shared representations, interpretations, and systems of meaning among parties” (Nahapiet and Ghoshal, 1998, p. 244) that enable individuals within a network to make sense of information and to classify it into perceptual categories (Carolis and Saporito, 2006). These shared systems of meanings and language facilitate the exchange of information; facilitate learning and knowledge creation that allows individuals to share each other’s thinking processes. This common means of looking at the world would aid individuals to make sense of new information and knowledge (Nonaka, 1994).

Hypotheses and Conceptual Framework

Social Capital and Cognitive Biases

In line with the Social Network Theory, structural holes or disconnections between networks of groups (Burt, 1992) provide a rich social context that influences cognition. Youth who are involved in a web of diverse relationships through participating in different social committees and group events can have early access to a diverse set of information (Burt, 1992; 1997). These connections and access to various information sources can increase information absorption and acceptance of beliefs with relation to the level of knowledge in a particular area (Cohen and Levinthal, 1990). Thus, if the diverse relationships are present early, then a broad set of information may be accessible to the youth causing inexperienced youth entrepreneurs to overestimate their knowledge-base. Further, the exploitation of new opportunities will also be loaded with uncertainty. Therefore, structural holes facilitate access to information while also impacting the timing when that information should be utilized, and providing a sense of control. Thus, structural holes may “heighten the occurrence of overconfidence because they bring with them information access and timing” (Burt, 1992, 1997). Additionally, to reduce the uncertainty, individuals may rely on this network of resources as a “cushion” or a “buffer” (Carolis and Saporito, 2006). Therefore, pursuing a new opportunity becomes more appealing as potential youth entrepreneurs may believe that they can control the unknown through continued reliance on their network positions and the information benefits they may obtain.

Trust is yet another component considered vital within the relational dimension of social capital, and it is a concept that has been constantly discussed within the context of social networks by previous authors (Uzzi, 1999; Granovetter, 1985; Nahapiet and Ghoshal, 1998). Trust, indicates “assured reliance on the character, ability, strength, or truth of someone or something” (Aldrich and Fiol, 1994). Later variants stress that trust is a belief, in the absence of any evidence, which indicates that things will “work out” (Gartner and Low, 1990). The role of trust is considered central to all social transactions where there is ignorance or uncertainty about actions and their outcomes. In terms of new venture creations the recognition and persuasion of new business ideas are considered risk-laden and they may also involve substantial investment in terms of time, money and other resources, particularly for a potential youth entrepreneur. Starting a new venture may also involve reliance on others for various resources ranging from social and emotional support to concrete assets. Thus, trust can be considered an “exceptional asset” (Knez and Camerer, 1994) which

may aid the creation of confident expectations about the future (Rousseau, Sitkin, Burt, and Camerer, 1998) especially with relation to potential youth entrepreneurs.

Apart from trust, the strength of the ties within a network structure is also considered important within the relational dimension (Nahapiet and Ghoshal, 1998). Strong network relationships require extra effort and intimacy. Thus, strong ties are relatively difficult to create and to maintain which decreases their occurrence (Uzzi, 1999). Strong ties may create issues for the potential youth entrepreneur as he/she may seek more dynamism and change in relation to their networks as opposed to an established adult entrepreneur. However, there may be a small number of strong ties within a network. Further, strong ties enhance the transfer of tacit knowledge that is not easily codified. Therefore, potential youth entrepreneurs embedded in strong ties may be exposed to richer but less diverse information.

Membership in a network or group can shape an individual's consciousness (Carolis and Saporito, 2006). Potential youth entrepreneurs' resources and opinions may integrate with the necessary resources and opinions of their close contacts within the network in order to develop relationships with others similar to themselves (Burt, 1992). Social Information Processing Theory (Salancik and Pfeffer, 1978) discusses the role of social influence in the development of individual attitudes and behaviours. This theory addresses the effects that individuals have on others who come into contact with them. Interpersonal Attraction Theory (Carolis and Saporito, 2006) posits that individuals with similar beliefs are attracted to each other, thus reinforcing a shared set of attitudes and behaviours. Both these theories predict that potential youth entrepreneurs will have attitudes and behaviours similar to those with whom they interact. Applying the implications of these theories to social networks, it can be argued that, shared codes and languages will foster similar world views, opinions and attitudes within a potential youth entrepreneur's network.

Information and knowledge sharing is facilitated by shared meaning among network members (Inkpen and Tsang, 2005). Shared meanings and understandings can act as a bonding mechanism between members of a network. These bonding mechanisms allow members within a network to feel comfortable sharing resources and knowledge (Inkpen and Tsang, 2005). These networks in terms of the potential youth entrepreneur will be more socialized based on their life cycle stage. Additionally, knowledge creation rests in its ability to combine and exchange various pieces of information (Nahapiet and Ghoshal, 1998) and to show the importance of a shared

vocabulary in the ability of potential youth entrepreneurs to combine information. Therefore, the following proposition is advanced:

Proposition 1: Potential youth entrepreneurs' social networks have an influence on their cognitive biases.

Further, it is also evident that individuals conform to attitudinal and behavioural norms of their reference groups or social networks while such norms are also considered a potent source of social influence (Fisher, 1988). Conversely, if a value or behaviour is consistent with a central belief in a group's assumptive system, it tends to be supported more vigorously than a non-consistent belief. Therefore, social networks could impact the risk aversion and risk propensity of an individual. Group influence is considered to be extremely powerful due to the universal desire to be liked and accepted by significant others. These social networks tend to share resources, information and influence which act as drivers in personal behaviours (Hoang and Antoncic, 2003). According to this view the image of the entrepreneur has changed from a traditional view of an autonomous and rational decision maker to an entrepreneur who is embedded in social networks (Klyver, Hindle and Meyer, 2008). Hence, many researchers have established that social networks influence instrumental behaviour, opportunity recognition, and in turn, even the decision to become an entrepreneur (Klyver, Hindle and Meyer, 2008). Based on this the following proposition was derived:

Proposition 2: Potential youth entrepreneurs' social networks will be positively associated with their risk behaviour for a given situation.

Cognitive Biases and Decisions to Exploit Opportunities

Recent research suggests that some entrepreneurs perceive situations differently than others (Baron, 1999; Simon, Houghton, and Aquino, 1999). However, there are many cognitive biases that affect an individual's thinking, and in particular, his/her perception of risk. Recent research in the field of entrepreneurship also suggests several specific cognitive biases that influence risk perception as they relate to entrepreneurs: overconfidence, illusion of control, and representativeness (Busenitz and Barney, 1997).

Furthermore, “failure to know the limits of one’s knowledge results in a cognitive bias” known as overconfidence (Bazerman, 1990; Carolis and Saporito, 2006). When potential youth entrepreneurs are overconfident, they tend to overestimate the probability of being right. The psychological basis for this bias appears to be people’s refusal to explore any unsubstantiated assumptions they might hold (Carolis and Saporito, 2006). Overconfidence occurs in potential youth entrepreneurs who may ignore the new information they receive after an initial decision has been made or they may not realize the extent to which their plans or estimates are inaccurate. Considering potential youth entrepreneurs this may be critical as they may tend to overestimate their potential as they are embarking on uncharted territory. This overconfidence may cause these potential youth entrepreneurs to treat their assumptions as facts and believe that certain actions are less risky than they really are.

Because cognitive biases influence the information that individuals process and how they interpret such information, biases may be considered to have an impact on decisions to exploit opportunities (Carolis and Saporito, 2006). Certain cognitive biases may cause potential youth entrepreneurs to disregard the negative outcomes and uncertainties associated with decisions (Shaver and Scott, 1991). Previous empirical studies have also suggested that overconfidence and illusion of control are related to risk perception (Simon, Houghton and Aquino, 1999), which in turn leads to opportunity identification. Further, studies have also shown that entrepreneurs may be more susceptible to overconfidence than other individuals (Busenitz and Barney, 1997), and may often be over optimistic in their assessments of business situations (Busenitz and Barney, 1997). When an entrepreneur is overconfident, the initial optimistic assessments may not be further tested. Further, overconfident potential youth entrepreneurs would overestimate the probability of being right in their optimistic assessments of business situations (Bazerman, 1990; Carolis and Saporito, 2006). Therefore, potential youth entrepreneurs who are overconfident are more likely to treat their assumptions as facts and may perceive less risk associated with actions than there actually are, (Bazerman, 1990) thereby affecting the final decisions with regard to the exploitation of opportunities. Thus,

Proposition 3: Potential youth entrepreneurs’ overconfidence will be positively associated with their risk behaviour for a given situation.

An illusion of control is individuals' overestimation of the extent to which they can affect the outcome of particular situations (Duhaime and Schwenk, 1985). Illusion of control affects individuals' assessments of their chances of success at a venture. Estimation of the facts of a particular situation and one's ability to cope with and to predict future events, while some authors (Carolis and Saporito, 2006) found that some entrepreneurs expressed an expectancy of personal success much higher than objective probability would predict. This overestimation stems from the fact that potential youth entrepreneurs may willingly seek out information that sustains their opinions, while ignoring contradictory information.

Entrepreneurs are considered to be more prone to an illusion of control than other individuals (Duhaime and Schwenk, 1985). Entrepreneurs, especially the youth, may feel that they can control and predict outcomes, and are prone to evaluating the vulnerability inherent in situations in a manner favourable to themselves. A recent empirical finding has also established the effect of illusion of control on risk perception (Simon, Houghton and Aquino, 1999). Therefore, it could be concluded that illusion of control contributes to higher levels of risk behaviour in potential youth entrepreneurs which in turn leads to higher levels of decisions to exploit opportunities. Therefore,

Proposition 4: Potential youth entrepreneurs' illusion of control will be positively associated with their risk behaviour for a given situation.

Consequently, to economize on information processing, decision makers are willing to rely on small samples, which may not represent an accurate picture of a situation (Payne, Bettman, and Johnson, 1992). Individuals who may discuss business ideas with a limited number of advisors or colleagues are more likely to receive overly positive feedback (Kahneman and Lovallo, 1993; Carolis and Saporito, 2006). Considering the potential youth entrepreneur, it is evident that his/her colleagues will play a vital role in terms of the decision making processes they accommodate. Finally, research reveals that people tend to remember and recall successes more than failures (Golder and Tellis, 1993) which can, in turn, create overly positive estimations of a situation. Therefore, while reliance on small samples may economize on information processing, it can also potentially introduce serious biases within the information received (Kahneman and Lovallo, 1993; Payne, Bettman and Johnson, 1992). Therefore, in conclusion, there is sufficient evidence to believe that representativeness is prevalent among potential youth entrepreneurs. Entrepreneurs

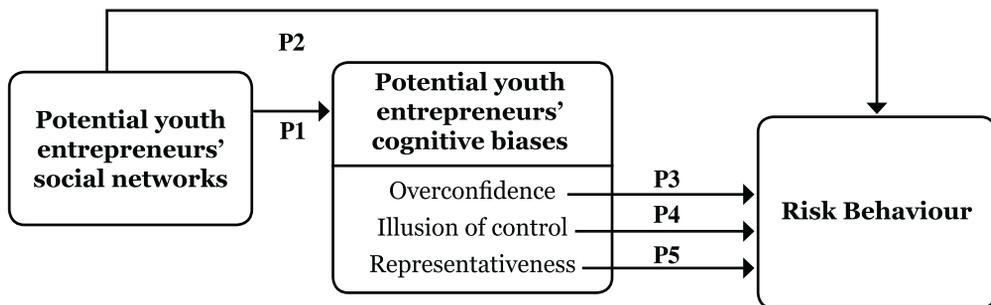
are said to “live and breathe uncertainty in new markets and technologies, unknown demand, and unpredictable operating costs” (Kahneman and Lovallo, 1993). Moreover, potential youth entrepreneurs, may be restricted in terms of having sufficient resources to collect the information required, while they also need to know how to access the resources they require (De Klerk, 2015). In these situations, these individuals might rely on small, non-random samples and limited personal experiences to guide their decision making (Busenitz and Barney, 1997)

Hence, entrepreneurs also have a tendency to use limited information in terms of decision making (Baron, 1998). Entrepreneurs typically find themselves in circumstances of information overload, high uncertainty, novel situations, strong emotions, time pressure, and fatigue (Baron, 1998). Further, potential youth entrepreneurs may focus (i) on limited amounts of information to gain support for risky actions and (ii) on recent success stories or positive outcomes that relate to the situation at hand. Thus, generalizing from a small sample can effectively reduce the perception of risk for a particular opportunity exploitation decision. Therefore,

Proposition 5: Potential youth entrepreneurs’ representativeness will be positively associated with their risk behaviour for a given situation.

The relationships established among social networks, cognitive biases and risk behaviour for the youth entrepreneur is depicted in Figure 1 below.

Figure 1: Conceptual Framework



Theoretical Implications

While it is unequivocally acknowledged that social capital enables new venture formation, there is a prominent gap in the literature in relation to how social capital

and personal factors such as cognitive biases, and risk perception can influence entrepreneurial behaviour (Bandura, 1986; Fiske and Taylor, 2013; Wood and Bandura, 1989; Das and Teng, 1998; Segal, Borgia and Schoenfeld, 2005). Risk and risk behaviour are considered as essential elements of entrepreneurship, while the trait and cognitive approaches attempt to examine them. However, findings fail to explain adequately the differentiation of entrepreneurs from non-entrepreneurs purely based on risk perception. Nor do they adequately explain why entrepreneurs could be specified based on risk behaviour (Das and Teng, 1998).

Hence, the original value of this paper is that (i) it fills the gap in understanding the risk behaviour of youth entrepreneurs, by bringing risk behaviour to the forefront as an element determining entrepreneurship (ii) it illustrates youth entrepreneurship opportunities, by linking social capital, cognitive biases and risk behaviour to the individual opportunity nexus, which is an incorporation of external and internal elements of entrepreneurial behaviour. Drawing from social cognitive theory this research paper attempts to advance this by suggesting that entrepreneurial decisions to exploit opportunities are influenced by risk behaviour, while establishing the factors that could theorize the risk behaviour of the potential youth entrepreneur. The impact of social networks on risk behaviour is also considered in the research. Therefore, this study broadens the scope of theories related to risk behaviour.

In answering the research question posed within the study, the present researcher proposes a framework of youth entrepreneurship opportunities which produces an overarching structure that can link different theoretical units into a coherent whole (theoretical triangulation). The theories of Individual Opportunity Nexus, Social Networks Theory and Social Cognitive Theory will be triangulated to provide an enhanced understanding of entrepreneurial risk behaviour. Theoretical triangulation creates theory from the real life situation, rather than forcing the data to fit into a particular theory (Hopper and Hoque, 2006), while providing the ability to look deeper and more broadly at a particular dimension or a phenomenon. Therefore, this research will contribute to the advancement of entrepreneurship literature by proposing that the influence of social networks and individual cognition on decisions to exploit entrepreneurial opportunities is a significant and a valuable element in comprehensively explaining entrepreneurial behaviour. The study also attempts to emphasize the role of risk behaviour consisting of risk perception and risk propensity in determining youth entrepreneurship. Therefore, if the domain of entrepreneurship is "... the nexus of two phenomena: the presence of lucrative opportunities and the

presence of enterprising individuals” (Shane and Venkataraman, 2000), then this research proposes to elucidate this nexus by exploring how external and internal factors affect the risk behaviour of the young entrepreneur.

Drawing from the research on entrepreneurial risk behaviour, this research focus not only allows us to better explain prior findings regarding potential youth entrepreneurs but also enables us to offer new predictions to explain the reasons behind why some youth and not others undertake entrepreneurship as a career option. However, the influence of family income, and role models within families are not considered in the research, but are represented as control variables. Therefore, these considerations should be addressed in future research studies so that a more comprehensive view of decisions to exploit opportunities is gained. Social network elements will be established using qualitative methods, while the social network dimension could be tested using quantitative mechanisms in future endeavours.

Practical Implications

From a practitioner’s perspective, the proposed model can help policy makers, youth entrepreneurship trainers and support agencies to identify, encourage and demonstrate distinctive entrepreneurial behaviours that will foster entrepreneurship within a nation. As the model indicates, the propensity to engage in risk behaviours might be associated with specific types of cognitive biases. Thus, understanding and encouraging such cognitive biases and encouraging adequate expansion and usage of social networks are likely to be crucial for a nation to encourage youth entrepreneurial participation in the workforce. Further, in an era where digital- based social networks is a fundamental necessity for the youth community, this research will provide insights into how these social networks could be capitalised on to enhance youth risk behaviour leading to identification of entrepreneurial opportunities.

Conclusion

This paper provides insights into the role of risk behaviour in enabling youth entrepreneurship. Having identified risk behaviour as a prerequisite for decisions to exploit entrepreneurial opportunities, the paper developed a model in order to theorize risk behaviour from a cognitive perspective. Accordingly, it is suggested that social networks consisting of structural holes, trust, strong ties, shared codes and languages along with cognitive biases consisting of overconfidence, illusion of

control and representativeness, will affect risk behaviour. Hence, it can be concluded that from a cognitive perspective social networks which are external factors and cognitive biases which are internal factors will determine risk behaviour.

References

Adler, P., & Kwon, S. (2000). Social capital: the good, the bad and the ugly. In E. Lesser (Ed.), *Knowledge and Social Capital: Foundations and Applications*. Boston: Butterworth-Heinemann, 80-115.

Australian Family and Community Services. (2003). Youth entrepreneurship scoping paper, Australian Government, Department of Family and Community Services, Canberra. Retrieved from http://www.facs.gov.au/internet/facsinternet.nsf/aboutfacs/programs/youthyouth_entrepreneurship.htm, accessed on: 13th April 2015.

Bandura, A. (1986). *Social foundations of thought and action: a social cognitive theory*. Englewood Cliffs, NJ: Prentice Hall.

Baron, R. A. (1998). Cognitive mechanisms in entrepreneurship: Why and when entrepreneurs think differently than other people. *Journal of Business venturing*, 13(4), 275-294.

Baron, R. A. (2000). Counterfactual thinking and venture formation: The potential effects of thinking about “what might have been”. *Journal of business venturing*, 15(1), 79-91.

Baron, R. A. (2004). The cognitive perspective: a valuable tool for answering entrepreneurship’s basic ‘why’ questions, *Journal of Business Venturing*, 19(2), 221–239.

Baron, R., & Shane, S. (2005). *Entrepreneurship: a process perspective*. Mason, OH: South-Western.

Bazerman, M. (1990). *Judgment in managerial decision-making*. New York: Wiley.

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(1), 9-30.

Carolis, D. M., & Saporito, P. (2006). Social capital, cognition and entrepreneurial opportunities: a theoretical framework. *Entrepreneurship Theory and Practice*, 30 (1), 41-56.

Casson, M. (2005). The individual: opportunity nexus: a review of Scott Shane: a general theory of entrepreneurship. *Small Business Economics*, 24 (5), 423-430, Springle. Available from <http://www.jstor.org/stable/40229436>, Accessed on: 13th Feb 2015.

Cohen, W. M., & Levinthal, D. A. (1990). Absorptive capacity: A new perspective on learning and innovation. *Administrative Science Quarterly*, 35, 128-152.

Coleman, J. S. (1988). Social capital in the creation of human capital. *American Journal of Sociology*, 94 Supplement, S95-S120.

- Cornelissen, J. P. (2013). Portrait of an entrepreneur: Vincent van Gogh, Steve Jobs, and the entrepreneurial imagination. *Academy of Management Review*, 38(4), 700-709.
- Cornelissen, J. P., & Clarke, J. S. (2010). Imagining and rationalizing opportunities: inductive reasoning and the creation and justification of new ventures. *Academy of Management Review*, 35(4), 539.
- Dai, L., Maksimov, V., Gilbert, B. A., & Fernhaber, S.A. (2014). Entrepreneurial orientation and international scope: the differential roles of innovativeness, proactiveness, and risk-taking. *Journal of Business Venturing*, 29(4), 511-524.
- Das, T. K., & Teng, B. (1997). Time and entrepreneurial risk behaviour. *Entrepreneurial Theory and Practice*, 22(2), 69-88.
- De Klerk, S. (2012). Establishing and developing business networks: The importance of trust. *African Journal of Business Management*, 6(18), 5845-5856.
- De Klerk, S. (2015). The creative industries: An entrepreneurial bricolage perspective. *Management Decision*, 53(4), 828-842.
- Duhaime, I., & Schwenk, C. (1985). Conjectures on cognitive simplification in acquisition and divestment decisions making. *Academy of Management Review*, 10(2), 287-295.
- Fishburn, P. C. (1977). Mean-risk analysis with risk associated with below-target returns. *American Economic Review*, 67 (2), 116-126.
- Fisher, D. F. (1988). Possible effects of reference group based social influence on AIDS-risk behaviour and AIDS prevention. *American Psychologist*, 43 (11), 914-920.
- Fiske, S. T., & Taylor, S. E. (2013). *Social cognition: from brains to culture*. Thousand Oaks, CA: Sage.
- Fukuyama, F. (1995). *Trust: the social virtues and the creation of prosperity*. London: Hamish Hamilton.
- Gibbons, M. M., & Shoffner, M. F. (2004). Prospective first-generation college students: meeting their needs through social cognitive career theory. *Professional School Counselling*, 8(1), 91-97.
- Golder, P., & Tellis, G. (1993). Pioneer advantage: marketing logic or marketing legend? *Journal of Marketing Research*, 30(2), 158-170.
- Gordon, S. R. (2006). The role of interpersonal trust and vigilance in the process of entrepreneurial opportunity recognition using social networks. In Gillin, L.M. (Ed.), *Regional Frontiers of Entrepreneurship Research 2006*. Swinburne University of Technology, Melbourne, Unitec and Auckland, pp. 42-61, Available from <http://eprints.qut.edu.au/3628/1/3628A.pdf> (accessed December 3, 2012).
- Gr'egoire, D. A., Cornelissen, J., Dimov, D., & van Burg, E. (2015). The mind in the middle: taking stock of affect and cognition research in entrepreneurship. *International Journal of Management Reviews*, 17(1), 125-142.

- Granovetter, M. (1985). Economic Action, Social Structure and Embeddedness. *American Journal of Sociology*, 91(3), 481-510.
- Hamid, F. S., Rangel, G. J., Taib, F. M., & Thurasamy, R. (2013). The relationship between risk propensity, risk perception and risk-taking behaviour in an emerging market. *International Journal of Banking and Finance*, 10 (1), 134-146.
- Hoang, H., & Antoncic, B. (2003). Network-based research in entrepreneurship—A critical review. *Journal of Business Venturing*, 18 (2), 165–187.
- Hopper, T., & Hoque, Z. (2006). Triangulation approaches to accounting research. In Hoque, Z. (Ed.), *Methodological Issues in Accounting Research: Theories and Methods*. Spiramus, London, pp. 477-486.
- Inkpen, A., & Tsang, E. (2005). Social capital, networks and knowledge transfer. *The Academy of Management Review*, 30 (1), 146-165.
- James, M. G., & Pauline W. M. (2014), Entrepreneurial intention, culture , gender and new venture creation: critical review. *International Journal of Business and Social Research*, 3 (2) , 112-132
- Johannisson, B. (2000). Modernising the industrial district - rejuvenation or managerial colonisation. In M. Taylor and E. Vatne (eds.), *The Networked Firm in a Global World: Small Firms in New Environments*. ch. 12.
- Kahneman, D., & Lovallo, D. (1993). Timid choices and bold forecasts: a cognitive perspective on risk-taking. *Management Science*, 39 (1),17-31.
- Keil, M., Wallace, L., Turk, D., Dixon-Randall, G., & Nulden, U. (2000). An investigation of risk perception and risk propensity on the decision to continue a software development project. *The Journal of Systems and Software*, 53(2), 145-157.
- Klyver, K., Hindle, K., & Meyer, D. (2008). Influence of social structure on entrepreneurship participation – A study of 20 national cultures. *International Entrepreneurship Management Journal*, 4(3), 331–347.
- Knez, M., & Camerer, C. (1994). Creating exceptional assets in the laboratory: coordination in “weakest weakest link games”. *Strategic Management Journal*, 15(1), 101-119.
- Knight, F. H. (1921). *Risk, uncertainty and profit*. New York: Houghton Mifflin.
- Krueger, N. F. (2009). Entrepreneurial intentions are dead: long live entrepreneurial intentions. In A. L. Carsrud & M. Brannback (eds.), *Understanding the Entrepreneurial Mind*. Springer, New York, 51-72.
- Langer, E. J. (1975). The illusion of control. *Journal of personality and social psychology*, 32(2), 311-328.
- Lumpkin, G. T., & Dess, G. G. (1996). Clarifying the entrepreneurial orientation construct and linking it to performance. *Academy of Management Review*, 21(1), 135-172.
- McEvily, B., Perrone, V., & Zaheer, A. (2003). Trust as an organizing principle. *Organization Science*, 14(1), 91-103.

- Mitchell, J. R., Mitchell, R. K., & Randolph-Seng, B. (eds). (2014). *Handbook of entrepreneurial cognition*. Cheltenham: Edward Elgar.
- Mitchell, J. R., & Shepherd, D. A. (2010). To thine own self be true: images of self, images of opportunity, and entrepreneurial action. *Journal of Business Venturing*, 25(1), 138–154.
- Mitchell, R. K., Randolph-Seng, B., & Mitchell, J. R. (2011). Socially situated cognition: imagining new opportunities for entrepreneurship research. *Academy of Management Review*, 36(4), 774–778.
- Nahapiet, J., & Ghoshal, S. (1998). Social capital, intellectual capital and the organizational advantage. *Academy of Management Review*, 23(2), 242-266.
- Nandamuri, P., & Gowthami, C. (2013). Entrepreneurial orientation and household income: a correlation analysis. *Asia Pacific Journal of Management & Entrepreneurship Research*, 2(1), 105-122.
- Newbert, S. L., & Tornikoski, E. (2013). Resource acquisition in the emergence phase: considering the effects of embeddedness and resource dependence. *Entrepreneurship Theory and Practice*, 37(2), 249-280.
- Nonaka, I. (1994). A dynamic theory of organizational knowledge creation. *Organization Science*, 5(1), 14-37.
- Oseifuah, E. K. (2010). Financial literacy and youth entrepreneurship in south Africa. *African Journal of Economic and Management Studies*, 1(2), 164 – 182.
- Payne, J. W., Bettman, J. R., & Johnson, E. J. (1992). Behavioural decision research: a constructive processing perspective. *Annual Review of Psychology*, 43(1), 87-131.
- Rousseau, D., Sitkin, S., Burt, R., & Camerer, C. (1998). Not so different after all: a cross-discipline view of trust. *Academy of Management Review*, 23(3), 393-404.
- Sahay, A., & Rai, S. K. (2004). How entrepreneurial are youth of varanasi: an empirical study through cyber cafe's. *Journal of Services Research*, 4(2), 175-203.
- Salancik, G. R., & Pfeffer, J. (1978). A social information processing approach to job attitudes and task design. *Administrative Science Quarterly*, 23(2), 224-253.
- Segal, G., Borgia, D., & Schoenfeld, J. (2005). The motivation to become an entrepreneur. *International Journal of Entrepreneurial Behaviour & Research*, 11(1), 42-57.
- Shane, S. (2003). *A general theory of entrepreneurship. The individual-opportunity nexus*. Massachusetts: Edward Elgar Publishing, Inc.
- Shane, S., Locke, E. A., & Collins, C. J. (2012). *Entrepreneurial motivation [Electronic version]*. Retrieved 5th Jan 2015, from Cornell University, ILR School site: < <http://digitalcommons.ilr.cornell.edu/articles/x> >
- Shane, S., & Venkataraman, S. (2000). The promise of entrepreneurship as a field of research. *Academy of Management Review*, 25(1), 217-230.

- Shaver, K. G., & Scott, L. R. (1991). Person, process and choice: the psychology of new venture creation. *Entrepreneurship Theory and Practice*, 16 (winter), 23–42.
- Shinnar, R., Mark, P., & Bryan, T. (2009). Entrepreneurship education: attitudes across campus. *Journal of Education for Business*, 84(3), 151-160.
- Simon, M., Houghton, S., & Aquino, K. (1999). Cognitive biases, risk perception and venture formation: how individuals decide to start companies. *Journal of Business Venturing*, 15(2), 113-134.
- Thornton, P. H., Ribeiro-Soriano, D., & Urbano, D. (2011). Socio-cultural factors and entrepreneurial activity: an overview. *International Small Business Journal*, 29(2), 105–118.
- Uzzi, B.D. (1999). Embeddedness in the making of financial capital: how social relations and networks. *American Sociological Review*, 64(4), 481-505.
- Walker, G., Kogut, B., & Shan, W. (1997). Social capital, structural holes and the formation of an industry network. *Organization Science*, 8(2), 109-126.
- Welter, F. (2011). Conceptual challenges and ways forward. *Entrepreneurship Theory & Practice*, 35(1), 165–184.
- Wood, M. S., & Williams, D. W. (2014). Opportunity evaluation as rule-based decision making. *Journal of Management Studies*, 51(4), 573–602.
- Wood, R., & Bandura, A. (1989). Social cognitive theory of organization management. *Academy of Management Review*, 14(3), 361-384.
- Yates, J. F., & Stone, E. R. (1992). In: Yates, J. F. (Ed.), *The risk construct in risk-taking behaviour*. Wiley, Chichester, 1-25.
- Zeffane, R. (2013). Gender and youth entrepreneurial potential: evidence from the united Arab Emirates. *International Journal of Business and Management*, 8(1), 60-72.
- Zeffane, R. (2015). Trust, personality, risk taking and entrepreneurship, *World Journal of Entrepreneurship. Management and Sustainable Development*, 11(3), 191 – 209.