

A Conceptual Development of Entrepreneurial Skills and Entrepreneurial Intentions: A Case of IT employees in Pakistan

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Abstract

The purpose of this paper is to observe the effects of important factors affecting IT employees' entrepreneurial intentions in Pakistan. Pakistan is a developing country and has a low rate of employment of young people. The basic issue is how to recognize the attraction of being self-employed instead of seeking jobs. The literature reviews into concepts and conceptualizations of the theories and has offered a framework recognizing the problems and the research gap. The research design comprises of developing a hypothetical model with entrepreneurial skills as the exogenous variable to test the endogenous variable of entrepreneurial intentions. In addition, perceived behavioral control and stakeholders' support system considered as mediating variables. The methodology used in this study is quantitative that contains a random sample from IT professionals working in Pakistan. The questionnaire is proposed for data collection and analyzed through SPSS version 18.0 and Partial Least Squares Structural Equation Modelling (PLS-SEM) 3.0.

Entrepreneurship's role for the development and well-being of society has also been recognized by academic researchers and policymakers (Bosma, Wennekers, & Amorós, 2011). Entrepreneurship has assumed a proactive approach to tackle the ever-changing business environment of the 21st century, building sustainable development in the country, supporting the economic growth of countries, creating new job opportunities for young graduates, and societal well-being. Keeping in view its significance, developed countries and under-developed



countries have shifted their focus towards entrepreneurship (Bosma, 2011; GEM, 2013; Volkmann, 2009).

The term entrepreneurship has been used in a wider sense to denote all the persons either working in MNCs, public sector, academia, or developing small and medium businesses (Busenitz, Gómez, Spencer, Busenitz, & Spencer, 2014; GEM, 2013; GEM, 2012; Looney, 2012; Robertson, Collins, Medeira, & Slater, 2003; Wu, 2009; Volkmann, 2009). Entrepreneurial intent has been recognized as a strong predictor of future entrepreneurial behavior and seen as a planned intentional behavior (Davidsson, 1995; Fayolle, 2006; Krueger 2000; Lorz, 2011; Rengiah & Sentosa, 2014; Shapero. A & Sokol, 1982). Intentions refer to "a person's motivation to make an effort to act upon a conscious plan or decisions" (Conner & Armitage, 1998: 1430). Entrepreneurial intention can be defined as the intentions to start a new business (Douglas & Shepherd, 2002; Kolvereid, 1996), the intention to start a new venture (Krueger & Brazeal, 1994; Zhao ,2005), or the intention for possesses an enterprise (Crant, 1996). The preceding studies on entrepreneurial intentions focused on two dimensions; the individual's traits, and characteristics, and the effects of environmental and contextual factors on entrepreneurial process. These studies normally tend to understand the importance of entrepreneurial intentions and its impact on individuals to start businesses (Agbim, Oriarewo, & Owocho, 2013; Fatoki, 2010). Nonetheless, there is still a need to explain more precisely about how the individual's entrepreneurial intentions are formed (Liñán, 2008). A basic question which appeals, is that what factors govern the entrepreneurial intentions of an individual.

Entrepreneurship, accordance with its modern trends, practice remained very limited in Pakistan (GEM, 2012; Hague, 2007; HEC, 2000). According to World Bank's report (2007) and GEM (2012), entrepreneurship activity in Pakistan was much lesser than the other developing countries, such as Bangladesh, India and Sri Lanka compared to other Asian countries. Nevertheless, in recent years, Pakistan government has acknowledged the role of entrepreneurship to promoting economic growth. Unemployment of young population is one of the main problems facing by Pakistani economy. Fresh graduates prefer to become paid employees rather entrepreneurs. The lack of structural and informal support are believed to be among the numerous causing factors to the existing problems (GEM, 2012). Realizing the significant importance of entrepreneurship in the development of the factor-driven economy in Pakistan (GEM, 2012), lots of efforts need to be taken to flourish entrepreneurship in all ways. The government of Pakistan has placed special attention to promote entrepreneurship in Pakistan through promoting entrepreneurship among youth and proposed some skill development programs. However, the lower level of entrepreneurial intention and the weak contribution to overall entrepreneurial activities are still barriers in growth of economy (Ahmad, 2014; Ali , 2011; Chemin, 2008; GEM, 2010; GEM, 2012; Planning Comission of Paksitan, 2011; Tanveer ,2012). The main reasons are; lower level of entrepreneurial skills, higher level of fear of failure, lack of governmental support, and low level of intentions among young people in Pakistan (GEM, 2013; Ahmad, 2014).

The problem statement therefore could be stated as, "the effectiveness of entrepreneurial skills in developing entrepreneurial intentions among the youth in Pakistan". The objective of this paper is to assess the influence and impact of entrepreneurial skills on entrepreneurial intentions of employees working with IT companies in Punjab, Pakistan. The study, therefore, attempts to answer the core question; what are the effects of entrepreneurial



skills on entrepreneurial intentions? There are few studies focused on entrepreneurial skills, proposing particular sets of entrepreneurial skills and their effectiveness on developing entrepreneurial intentions (Armanurah & Hussin, 2014; Chell, 2013; Fekri, 2012; Lichtenstein, 2001; Liñán, 2008; Morales & Marquina, 2013). In addition, entrepreneurship activity and its outcomes encompass several unexplored extents that lately have attracted research consideration in other disciplines (Fayolle, 2006; Pittaway & Cope, 2007). Furthermore, the rigor research on the outcomes of entrepreneurship education, skills, and its linkage with entrepreneurial intentions lacks in the literature of entrepreneurship (Lorz, 2011). Similarly, numerous associations and connections between entrepreneurial skills and entrepreneurship activity are still waiting to be addressed.

2. Literature Review

The literature focuses on some underlying theories relevant to entrepreneurial intentions and entrepreneurial skills. Theory of Planned behavior is the most relevant theory that used in this research (Ajzen, & Fishbein, 1980). The Theory of Planned Behavior (Ajzen, 1991), was derived from the Theory of Reasoned Action (Fishbein & Ajzen, 1975), which states that behavioral intentions are formed by one's attitude toward that behavior and one's subjective norms – (i.e. influence by significant others - e.g. parents, peers, role models). In turn, both attitudes and subjective norm are influenced by evaluations, beliefs, and motivation formed through one's unique individual environments. Numerous studies have been used the Theory of Planned behavior to test its model to assess entrepreneurial intentions. Supplementary, some other theories related to entrepreneurship are theory of Social Cognition (Bundura, 2001) and the theory of Social Learning (Wenger, 1991), illustrated that learning is an information-processing activity through knowledge transmission and assimilation with a network of social relationships. Entrepreneurial intentions have been acknowledged by numerous researchers (Lorz, 2011). Preceding studies exhibited that entrepreneurial intentions were affected by environmental factors, personal characteristics, and skills possessed by an individual (Chell, 2013; Linan, 2008; Lorz, 2011).

There was a common belief that entrepreneurship is a trait, which pushes the persons who possess it towards specific behavior (Huefner & Hunt, 1994; Kassicieh, 1997; Schumpeter, 1991). This belief about entrepreneurship was challenged by Lichtenstein and Lyons (2001), based on that "entrepreneurs are made and not born" (Shefsky, 1996). They argued, "If this is true, nothing can be done to develop entrepreneurs because we are powerless to effect changes in traits. The only feasible response would be to identify and work solely with those individuals who already have them. Another problem with this belief is that no one has ever been able to accurately identify such an entrepreneurial characteristic or a particular behavior in which all successful entrepreneurs engage. All entrepreneurs, however, do perform certain key functions—they identify market opportunities or needs, imagine and develop innovative solutions that address those needs, and build organizations to capture those market opportunities. Because the actions needed to perform these functions successfully will be different in different contexts, all entrepreneurs cannot be said to engage in the same behaviors" (Lichtenstein & Lyons, 2001; p. 7).



They also contended that entrepreneurial skills are necessary for performing all the functions important for entrepreneurial success. Lichtenstein and Lyons (2001) also claimed that entrepreneurial skills could be developed. When Lazear (2004, 2005) proposed the Jack-of-all-the-trades (JAT), he also guide that "even if individuals are not endowed with the complete set of skills necessary to start a business, they can acquire those skills" (Lazear, 2001; p. 208). Though, the concept that entrepreneurial skills can be acquired mainly underpins the work of Lichtenstein and Lyons (2001) by development of EDS. They suggest that entrepreneurship comprises a set of skills, which is an output of training and development rather innate endowment.

2.1 Entrepreneurial Skills and Competencies

Prior to describe the importance of entrepreneurial skills and its impact on intentions, it seems important to define the concept of "skills". Chell (2013) define as;

"Skills are multidimensional constructs; they comprise the cognitive – knowledge and what is learnt; the affective – emotional expression and what is experienced; the behavior – action at strategic, tactical and personal levels; and the context – sectoral, occupational, job and task levels" (p. 8).

There is a debate among researchers about the skills that whether and how these skills can be learned or taught. Perhaps, Chell (2013) suggested that these skills can be imparted and improved with the passage of time with repetition and practice. Stella (2014) explains entrepreneurial skill as skill or competencies that are critical for any entrepreneur for success in his or her business venture. Smith and Morse (2005) noted that repetitive distinctions had been made in literature between management skills or competencies and entrepreneurial skills or competencies, further they also broadly categorized two basic themes of managerial entrepreneurial skills or competencies.

- Functional competencies (marketing, human resource, procurement and finance)
- Organizational competencies (motivating, leadership and other related skills)

Davidsson (1991) stated that starting a new business venture and business related skills, exposure and education are highly interrelated. Furthermore, Papulova (2007) recognized four areas of managerial skills imperative for entrepreneurs working at Small and medium sized enterprises, technical skills, interpersonal skills, conceptual skills and communication skills. Additionally, Chell (2013) proposed a category of entrepreneurship skills.



Idea identification/creation	Capitalizing on ideas
 Idea generation / envisioning Opportunity recognition and meansend analysis Capability to attain data and information about a possible prospect, domain expertise and associated skills Recognition of societal / market requirements 	 Awareness of environment and factors conducive to opportunity exploitation Ability to garner the necessary material resources Ability to convince others of the value of an opportunity Networking and social embedding
Traits/behaviors	Managerial/leadership skills
 Self-belief and trust in own verdict Capability to manage hazard and 	 Capacity to manage people Ability to cope with organizational
assume responsibility & accountability.	and other limitations
 Ability to tolerate and cope with complications. 	 Ability to transform an idea into commercial opportunity Capability to me decisions

Source: Chell (2013).

Hayton (2015) proposed that key entrepreneurial skills are recognizing consumer needs and identifying technical prospects and market opportunities, while Alvarez & Barney (2007) highlighted exploitation and identification of new prospects and Hunter (2012) concludes that recognizing social and market needs are most critical skills required for entrepreneurs. Michelmore and Rowley (2013) suggest an entrepreneurial framework and proposed that along with the managerial related skills six main entrepreneurial skills set are required; identification and recognition of a feasible niche market; new products and services development suitable for market needs; innovative Idea generation; environmental scanning; identification and capitalizing on opportunities; and framing innovative strategies to exploit market opportunities.

2.2 Skills and Entrepreneurial Intentions

Linan and Chen (2009), identified that a considerable body of research literature is available on the role of entrepreneurial Intentions on the decision to start a new business venture. Reynolds, Storey, and Westhead (1994), concluded that many factors have been identified in the literature on entrepreneurial Intentions, characteristics such as age, religion, gender level of education, origin and labor experience. Omid Yaghmaei and Iman Ghasemi (2015) established that regardless of several research studies about entrepreneurial intention, there is no consensus among scholars on the factors and elements which have a positive or negative



impact on entrepreneurial intention. Moreover, a furtherer review of literature Omid et. al. (2015) enlisted some factors that may have an impact of entrepreneurship intensions such as age, education, previous experience and role models. In addition to these factors they further added attitude, subjective norms (Ajzen, 2001) and perceived behavioral control norms (Ajzen, 2001) to research framework.

Ekpo and Edet (2013) stated that recently number of studies have been conducted to ascertain the link between entrepreneurship education and entrepreneurship intensions and importantly they found a very substantial association between entrepreneurship education and entrepreneurship intensions. Exploring on the same lines Kumara (2012) conducted a study in Sri Lanka and come up with the findings that students who were enrolled to entrepreneurial education have develop an affirmative believes and attitude towards entrepreneurship intention and being a self-employed.

Bird (1988) indicated that in order to understand new business venture creation it is imperative to grasp and recognize the significance of entrepreneurial intention. Working on the same lines Robinson, Stimpson, Huefner, & Hunt, (1991) added that there are two main lines on which entrepreneurial research had been carried out. Firstly, the personal & individual characteristics, traits and skills of entrepreneur; and secondly, the impact of contextual and relative elements in entrepreneurship. Liñan and Chen (2009) have described that an affirmative link has been found between individual's knowledge and skills and his or her entrepreneurial inclination. Chen, Greene, & Crick (1998) suggested that personal skills might also have an impact on the decision to be a self-employed. Linan (2008), stated that An evident connection have been found between skills and Perceived Behavioral Control (PCB), therefore the individuals with the feeling that they have better entrepreneurial skills are more likely to go for a new business venture.

Eggers and Smilor (1996) explained that after the review of academic literature on the skills and abilities for successful entrepreneurs, it has been notices that a very few studies have addressed the leadership skills in entrepreneurial context by the entrepreneurship scholars. Cogliser and Brigham (2004) noticed that same as less attention is designated to leadership by entrepreneurship scholars, similarity leadership scholars have also given very little consideration entrepreneurs as leader. Ardichvili, Cardozo and Gasparishvili (1998) have tested organizational behavior philosophies to the business venture framework and examine relationship between leadership skills and management practices in Russia However, Daily, McDougall, Covin, and Dalton (2002) pointed out that research scholars of entrepreneurship have given limited consideration to the skills of a business leader and its impact on the productivity of a new business.

Lichtenstein and Lyons (2001) argued that it is important for service providers to recognize that entrepreneurs come to entrepreneurship with different levels of skills and therefore each entrepreneur requires a different 'game plan' for developing his or her skills. However, entrepreneurship research lacks consensus regarding the issue of what main skills a successful entrepreneur has or needs (Morales & Marquina, 2013).

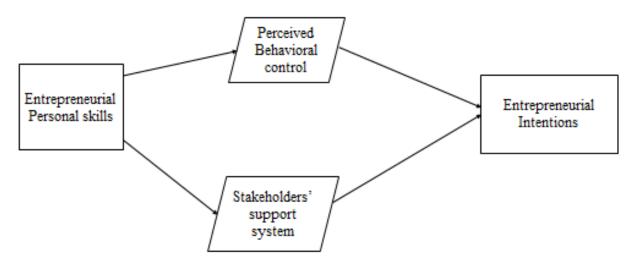


Preceding studies have addressed several facets of entrepreneurial intentions include the role of person's traits and competencies in the process of entrepreneurship (Katz, 2007; Liñán & Santos, 2007), the environmental factors influencing of entrepreneurial decision (Cusumano, 2013;. Krueger, 1993; Rengiah & Sentosa, 2014), and the effect of entrepreneurial education on entrepreneurship intention (Chrisman, 1997; Fekri, Shafiabady, Nooranipour, & Ahghar, 2012; Liñán, 2008; Lorz, 2011; Rengiah & Sentosa, 2014; Weber, 2010). In addition, the research in the entrepreneurial field comparing different countries has been focused particularly on cultural values (Lee & Peterson, 2000; Mueller & Thomas, 2001; Tiessen, 1997). Apart from Global Entrepreneurial skills in different countries has been attempted. Some of the neglected facets of entrepreneurial intention studies are the outcomes of education and training programs and its results in the form of skills and its linkage or connection with successful entrepreneurs (Linan, 2008; Lorz, 2011).

2.3 Conceptual Development to the Hypothetical Model

After a detail review of the literature, considering the research problem, and a thorough review of the relevant theories and models, a theoretical framework had been proposed to test the model for the research topic. hypotheses were developed in the model with the following constructs. The exogenous variable was considered as entrepreneurial personal skills which included the components of entrepreneurship environmental scanning, business concept, and networking abilities of an individual. Whereas two variables were identified as mediating variables; perceived behavioral control and stakeholder support system factors include formal support from government and financial institutions and support from parents, siblings, and friends to test the model. The endogenous variable examined in this study was the entrepreneurial intention of IT employees in Punjab, Pakistan. The following is the Hypothetical Model (refer Fig. 1).

Figure.1 Hypothetical Model





2.3.1 Endogenous variable

i) Entrepreneurial intentions

A considerable body of literature is available on the role of entrepreneurial intentions on the decision to start a new business venture (Armanurah & Hussin, 2014; Chell, 2013; Fekri, 2012; Lichtenstein, 2001; Linan & Chen, 2009; Morales & Marquina, 2013; Smith & Eichholz, 2007). Shapero & Sokal's Entrepreneurial Event Model claimed that entrepreneurial intentions were developed and influenced by perceptions of desirability, feasibility and propensity to act, and by exposure to entrepreneurship (Shapero and Sokal, 1982). It further supported by socialisation theory presented Gibb (1994), which suggested that learning experiences could influence the perceived desirability and through enhanced self-efficacy (Boyd & Vozikis, 1994; Shapero, 1982). However, many factors have been identified in the literature effect on developing entrepreneurial intentions, characteristics such as age, education, previous experience, role models, religion, gender, level of education, and origin. From numerous factors, entrepreneurship skills have been viewed as an indicator for establishing and managing new businesses or innovative projects in prevailing organizations. (Chandler, 1994; Chen, 2008; Chell, 2013; Eggers & Smilor, 1996; Davidsson, 1991; GEM, 2015; Linan, 2008; Lorz, 2011; Smithm & Morse, 2005: OECD, 2011). Entrepreneurship skills affect the intentions of an individual to become self-employed (OECD, 2011).

2.3.2 Exogenous Variable

ii) Entrepreneurial Personal skills

Entrepreneurial skills are simply business skill, which an individual acquires to enable him function effectively in the turbulent business environment as an entrepreneur of a self-employed (Folahan & Omoriyi, 2006). Lyons (2002) described entrepreneurial skills as "the skills needed to develop innovative products and services and to generate solutions to emerging needs in the marketplace" (p. 4). The capacity to constantly learn, acquiring knowledge, and developing skills are essential abilities of successful entrepreneurs (Smilor, 1997; Minniti and Byrgave, 2001; Tether et al. 2005; World Economic Forum, 2009). It further supported the notions about skills by some evidences providing support the significance of these skills for entrepreneurship (GEM, 2013; OECD, 2010). The examination of skills and its impacts on intentions is also in line with the suggestions that future studies should assess the effects of entrepreneurial skills on developing entrepreneurial intentions (GEM, 2013; Chell, 2013; Smith et al., 2007).

H1: Entrepreneurial skills have a direct positive effect on entrepreneurial intent of IT employees in Punjab, Pakistan.

2.2.2 Mediating variables

iii) Perceived Behavioral Control

In accordance with Social Cognitive Career Theory (Lent, Brown & Hackett, 1994, 2008), entrepreneurial self-efficacy or perceived behavioral control in the theory of planned behavior are expected to mediate the relationships between both person and distal contextual factors and entrepreneurial intentions, as well as the relationships between both person and distal contextual factors and outcome expectations. according to Lent and colleagues (Lent, Brown & Hackett, 1994, 2000), an individual's vocational interests, goals/intentions, and choice actions



reflect concurrent self-efficacy beliefs and outcome expectations, thus self-efficacy and outcome expectations are directly associated with intentions.

In support of this prescription, research suggests that the relationship between certain personality constructs and one's intentions is mediated by perceived behavioral control (e.g., Nauta, 2004; Rottinghaus, Lindley, Green, & Borgen, 2002). Further, specific to the entrepreneurship domain, Chen et al. (1998) provide evidence for the relationship between entrepreneurial perceived behavioral control and intentions, and Zhao and colleagues (2005) provide initial evidence that entrepreneurial perceived behavioral control mediates the relationships between formal learning, experience and risk propensity and entrepreneurial intentions. Therefore, given the theoretical arguments for perceived behavioral control's mediating effect (Bandura, 2001).

H2: Perceived behavioral control has a positive effect on entrepreneurial intent of IT employees in Punjab, Pakistan.

iv) Stakeholders' Support System

The stakeholder's support (from the government, financial institutions, parents, siblings, and friends etc.) is essential to ensure that entrepreneurship flourish in the society (Kelley, Singer, & Herrington, 2016). The stakeholder's support system consists of structural support by government and the social networks in the form of banks, agencies, and informal networks including parents, family, and friends etc. (Gelard & Saleh, 2011; Rengiah & Sentosa, 2014). The government can help the entrepreneurs to establish the business by supportive public policies, structural support and financial initiatives to support the entrepreneurial activities (Gelard & Saleh, 2011; Moghimi & Alambeigi, 2012; Rante & Warokka, 2013).

H3: Stakeholders' support system has a direct positive effect on entrepreneurial intent of IT employees in Punjab, Pakistan.

4. Methodology

The research approach expresses tests and improves hypotheses and involves a hypo-deductive approach and use quantitative measurement and employ of statistical analysis (Hair Jr. et al. 2014; Neuman, 2010). The main purpose was to remove some process or steps and propose a way forward (Hair Jr.et al. 2014). The study is descriptive and explanatory, as it is set out to confirm a hypothesized relationship between two or more variables. The survey method is adopted to collect the response. The collected data were analyzed through SPSS and PLS-SEM Partial Least Squares Structural Equation Modelling (SEM) techniques.

PLS-SEM is a statistical methodology that has been used by several researchers in various research areas in social sciences, including business research (Hair Jr., Sarstedt, Hopkins, & Kuppelwieser, 2014). For instance, marketing (Hair, Sarstedt, Ringle, & Mena, 2012; Henseler, Ringle, & Sinkovics, 2009; Reinartz, Krafft, & Hoyer, 2004); management information system (Chin, Marcolin, & Newsted, 2003; Marcoulides, Chin, & Saunders, 2009); human resource (Becker, Klein, & Wetzels, 2012); family business (Sarstedt, Ringle, Smith, Reams, & Hair, 2014); operations management (Peng & Lai, 2012); and strategic management (Gudergan, Devinney,



Richter, & Ellis, 2012; Hulland, 1999; Lew & Sinkovics, 2013). This is because PLS-SEM has the ability to assess latent variables and their relationship with the items (outer model) and test the relationship between the latent variables (inner model) (Hair, *et al.*, 2012; Henseler *et al.*, 2009). The model can then be tested statistically in an analysis of the entire system of variables to determine the extent to which it is consistent with the data. If the model fits adequately, it is found to be plausible of postulated relations among variables, if it is inadequate, then the testability of the relation is rejected (Hair Jr., 2014).

The study is focused on examining the theoretical constructs or latent variables that are not possible to observe directly as these variables are called latent variables. The latent variable is entrepreneurial intentions among IT employees working in Punjab, Pakistan. Since latent variables are not observed directly they cannot be measured directly. In this study, the exogenous variable is entrepreneurial skills include environmental scanning, business idea, and networking are the observed variables. These components serve as indicators of the underlying constructs which they represent. The other mediating variables consist of perceived behavioral control, and stakeholders' system support act as indicators. When PLS-SEM is employed, it then assessed the contribution of each indicator variable in representing its relevant construct and measure how well the combined set of indicator variables represents the construct (reliability and validity). This is the measurement model assessment PLS- SEM. PLS-SEM helps to provide an easy way to test theory and indicate the relationships among measured variables and latent constructs (variates), and then PLS-SEM assesses how well the theory fits as characterized by the data (Hair, *et al.*, 2014).

IV. Preliminary Conclusion and Findings

This research has identified and examined entrepreneurial personal skills as the exogenous variable against the endogenous variable of entrepreneurial intention, perceived behavioral control and stakeholders' support system factors as mediating variables. Numerous studies on provide evidence the significance of entrepreneurial entrepreneurship skills for entrepreneurship (GEM, 2013; OECD, 2010). Stimpson, Huefner, & Hunt, (1991) added that there are two main lines on which entrepreneurial research had been carried out. Firstly, the personal & individual characteristics, traits and skills of entrepreneur; and secondly, the impact of contextual and relative elements in entrepreneurship. Liñan and Chen (2009) have described that an affirmative link has been found between individual's knowledge and skills and his or her entrepreneurial inclination. Chen, Greene, & Crick (1998) suggested that personal skills might also have an impact on the decision to be a self-employed. Linan (2008), stated that An evident connection have been found between skills and Perceived Behavioral Control (PCB), therefore the individuals with the feeling that they have better entrepreneurial skills are more likely to go for a new business venture. As far as stakeholders' support system is concerned, studies showed that the individual as primary stakeholders were directly involved in entrepreneurship, and other stakeholders were of secondary importance ranging relatively low. Number of limitations were found in this research, the challenge being the data collection process as data collected was cross-sectional. It was suggested that longitudinal data would provide validity



research support. Further to this, future research could be oriented to empirically test this hypothetical model for assessing entrepreneurial intentions.



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