

The Entrepreneurial Mind: Unraveling Psychological Drivers

Anjali Kushwaha¹, Anju Singh²

¹Assistant Professor, ²Assistant Professor, School of Management Sciences (SMS), Varanasi, India

Abstract

Entrepreneurship is important for economic growth of any nation as it contributes to job and enterprise creation which drives the engine of economic development. Skill development is a precursor to entrepreneurship development. Studies suggest that all those who possess/acquire skills may not necessarily use it for economic gains. Entrepreneurship occurs when acquired skills are used for innovative and economically gainful activities. Research on entrepreneurship indicate that there are certain external and internal factors that are responsible for translation of entrepreneurial skills into entrepreneurial behaviour. This study was conducted with the objective to identify the important psychological factors that act as determinants for entrepreneurial behaviour. An extensive review of literature found that entrepreneurial orientation, entrepreneurial image, entrepreneurial self-perception, and entrepreneurial intention are important factors that influence the entrepreneurial process. This implies that mere skill development may not ensure entrepreneurial behaviour. It is essential to concentrate on these psychological elements in order to foster entrepreneurship.

Keywords: Entrepreneurial behaviour, Entrepreneurial Skills, Entrepreneurial Orientation, Entrepreneurial Image, Entrepreneurial Self-Perception

Corresponding Author: Anjali Kushwaha, Assistant Professor, School of Management Sciences (SMS), Varanasi, India E-mail id: anjali@smsvaranasi.com

How to cite this article: Kushwaha Anjali, Singh Anju (2023). The Entrepreneurial Mind: Unraveling Psychological Drivers, Commerce Research Review 1(1) 44 - 57

Doi: <https://doi.org/10.21844/crr.v1i01.1104>

Source of support: Nil

Conflict of Interest : None

Received: 26-10-2023 **Accepted :**25.11.2023 **Published :**11.12.2023

Introduction

One important aspect of a country's development is said to be its business as it promotes innovation, creates employment opportunities for individuals, in turn creating economic and social wealth for a nation (Wang, Cui, & Dong, 2023; Hathaway & Litan, 2014; Van Stel & Suddle, 2008; Porter, Ketel Delago, 2007; Wong et al. 2005). It is an engine that drives a country's growth (Keat et al, 2011). Particularly in developing nations, business is frequently perceived as the answer to every economic and social issue (Thornton et al., 2011). Due to this factor, entrepreneurship has emerged as a significant focus of interest for both researchers and policy makers (Brancu et al., 2015). Entrepreneurship is a complex phenomenon which mainly involves three elements, the

individual, the firm and the environment (Begley, 1995), whereas development and growth of entrepreneurship depends upon many factors like entrepreneurship education, entrepreneurship environment, and entrepreneurial skills.

There are many skills that are required for entrepreneurship; but all those who acquire skills do not show entrepreneurial behaviour. For entrepreneurship development, it is essential that the acquired entrepreneurship relevant skills are translated into entrepreneurial behavior. This translation of skills into entrepreneurial behaviour is affected by a number of psychological processes. While personality refers to those characteristics of the person that account for consistent patterns of feelings, thinking, and behaving (Pervin, Cervone & John, 2005, p. 6), the psychological aspect of entrepreneurship takes into consideration behavioral pattern, rather than the personality traits which cause entrepreneurial behaviour. Some important psychological processes include entrepreneurial orientation (Ibrahim et al., 2016), entrepreneurial intention (Davidsson, 2003; Ajzen, 2001, 1991; Krueger et al., 2000; Bird, 1988), entrepreneurial self-perception (Rosique-Blasco et al., 2016; Chen et al. 1998; Boyd & Vizikis, 1994; Krueger & Brazeal, 1994), entrepreneurial image (Van Auken & Stephens, 2006; Kuratko, 2005; Krueger, Reilly, & Carsrud, 2000). This paper attempts to explore the literature to identify the impact of these psychological processes on entrepreneurial behavior.

Entrepreneurial Skills and Entrepreneurial Behaviour

In simple terms skills refers to the ability of an individual to demonstrate his/her knowledge through action (Wickham, 2006). It has also been defined as the capacity to solve complex problems (Elbyaly, & Elfeky, 2023; Baptista et al. 2013, p. 311). As per seminal theorizing theory given by Becker (1964), skills are a result of one's life experiences and knowledge. Entrepreneurial skill refers to the ability to build or create something new that will bring value to society and generate financial gains for the entrepreneur (Ibrahim & Masud, 2016, p. 227). Continuing on the same strings of thoughts Olagunju (2004) also elaborated entrepreneurial skills as an individual's ability to create new business and exploit an idea for the benefit of his own and the society at large. The importance of skills cannot be ignored in the process of entrepreneurship (Ibrahim and Lucky, 2014). Many studies have tried to identify the skills required for entrepreneurship. The two important categories of skills for entrepreneurship have been reported to be management skills, which includes planning, organizing, directing and controlling skills (Weitzel et al., 2010) and

creative thinking skills (Raposo & Paco, 2011; Linan, 2007; Ward, 2004). Creative thinking skills include skills to identify opportunities, innovate, act upon ideas. Highlighting the important role played by entrepreneurial skills in the process of entrepreneurship, Lucas (1978) emphasized that entrepreneurial skills determine the size of the venture of an entrepreneur. Entrepreneur acts as a strategic manager in the resource allocation and management of an enterprise (Augier & Teece 2008; Teece 2007; Teece et al. 1997; Teece & Pisano 1994). But contrary to this school of thought that advocates mastery of certain entrepreneurial skills, Lazear (2004) promoted the theory of jack of all trades. This theory postulates that an entrepreneur, is not required to be a master of one trade or skill rather he/she should have the knowledge and skills of almost all trades. In other words, individuals with varied set of work experience have the highest possibility of becoming entrepreneurs (Wagner, 2003). Few researchers tried to measure this varied work experience in terms of distinct functional areas in which the individual has a work experience (Stuetzer et al., 2012; Wagner, 2003). This theory has very wide acceptance among the research community. This indirectly indicates that development of entrepreneurial skills is a long process as it talks about life experiences. But this conclusion contradicts the assumption that entrepreneurial skills can be taught and upgraded as and when needed (Jones, Matlay, & Maritz, 2012).

Mere possession of entrepreneurial skills does not guarantee the conversion of those skills into entrepreneurial behaviour. Globally, only 16.6 % individuals intend to pursue entrepreneurial activity and convert that into entrepreneurial behaviour, contrary to the fact that more than 56% of population possesses knowledge and the skills required to carry out entrepreneurial activity (Farashah, 2015). Mere acquisition of skills and knowledge is not sufficient to pursue entrepreneurial behaviour and assume entrepreneurial identity (Rae, 2006, p. 45).

Lee & Wong (2004) argue that individual and situational factors play a very significant role in the prediction of entrepreneurial behaviour. The characteristics and traits of entrepreneurial behaviour varies with the variation in their cultures (Pidduck, Clark, & Lumpkin, 2023; Rozell et al., 2010). One reason for such differences was found that, different cultures have different leadership styles (House et al., 2004), which impacts the characteristics and traits required for entrepreneurial behaviour. There are many universal entrepreneurial characteristics but there are few entrepreneurship characteristics which are unique to a culture.

Research Methodology

In order to carry out this study, we undertook an extensive evaluation of the existing literature on the subject of entrepreneurial behaviour. The literature review was conducted using an integrated strategy, as recommended by Torraco (2005). An integrative literature review is performed on dynamic subjects, facilitating the development of novel frameworks and knowledge within a particular domain. Entrepreneurship being a dynamic field of study, integrative literature review method was found to be most suitable for reviewing the literature on this topic. We included in this review of literature, scholarly articles published in refereed journals. A multidisciplinary approach was adopted for the review of literature. Relevant literature was reviewed from the field of entrepreneurship, business management and psychology. This study makes use of multiple databases. To extract significant articles following databases were searched: JSTOR, Sage, Emerald Insight, ProQuest, Elsevier, Taylor & Francis, Springer, Wiley and the Academy of Management Database. Different academic and research websites were also explored for the purpose of finding the relevant literature on the topic. Different key words were used to search articles on ‘entrepreneurial skills’, ‘entrepreneurial behaviour’, ‘psychology of entrepreneurs’, ‘entrepreneurial orientation’, ‘entrepreneurial intention’, ‘entrepreneurial self-perception’.

The initial research generated 315 research papers from various databases. Then articles were reviewed in terms of relevance for the study in concern. In this process 150 papers were selected on the basis of their face value, which were downloaded for further detailed review. Finally 87 papers were studied thoroughly. The paper was organized by grouping research based on the similarity of the theories and the concepts as suggested by the Publication Manual of the American Psychological Association (American Psychological Association, 2010). The research paper follows a thematic structure for organizing the review of literature. The introduction section initially delves into the concept of entrepreneurship. This study delves into the correlation between entrepreneurial abilities and entrepreneurial behaviour, as well as the distinction between personality research and psychological components of entrepreneurship studies. Lastly, a proposed conceptual framework demonstrates the correlation between entrepreneurial skills, entrepreneurial behaviour, and the four psychological processes that influence this correlation.

Psychological Determinants

Entrepreneurship is fundamentally a personal phenomenon (Braun, Fese & Baron, 2007) as it takes a vision, intention and hard work of an entrepreneur to convert ideas and opportunities available in the environment into profitable business ventures. An entrepreneur's decisions and actions work as drivers for the success of his/her entrepreneurial ventures (Sexton, 2001; MacMilan et al. 1985). Although the literature on entrepreneurship research gives importance to the entrepreneurial environment for the success of entrepreneurship (Baum, Locke & Smith, 2001; Rauch & Frese, 2000), various studies have confirmed a significant relationship between personality characteristics and entrepreneurial behaviour (Zhao et al. 2010; Zhao & Seibert, 2006). Zhao et al. (2006, 2010) agree that an individual's personality predicts one's behaviour (Funder, 1994). Many authors have cited that entrepreneurial preference by an individual arises out of one's personal traits (Bruck & Travers, 2011; Linan, 2007). A review of entrepreneurship literature makes it evident that personality is given importance and it is viewed that an entrepreneurs personal traits differentiates it from other individuals. But recent developments in the area of entrepreneurship research confirm that psychology of an entrepreneur also plays an important role in the entrepreneurship process and more specifically in the execution of entrepreneurial activities. Personality theorists agree on the impacts of psychological characteristics on the behaviour of an individual. These personal traits act as psychological motivation factors (Širec, Karin & Močnik, Dijana 2012). The evolution of this line of thought can be traced back to the views suggested by McClelland (1991). Despite the findings in the literature that an entrepreneurs personal characteristics affect the success of an entrepreneurial venture, the psychology of entrepreneurs have not been studied thoroughly (Braun, Fese & Baron, 2007). Baron (2000) while looking at the psychological perspectives of entrepreneurship, tried to find out that why some entrepreneurs are more successful than others? He concluded that the psychology of an entrepreneur plays an important role in deciding the success of an entrepreneur's entrepreneurial venture.

Entrepreneurship is a dynamic and multi-disciplinary area of research. Its contents find roots in economics, management and sociology. The field of psychology has much to offer to the field of entrepreneurship (Braun, Fese & Baron, 2007; Baron, 2000). Psychological traits positively influence entrepreneurial preference. (Rosique-Blasco et al. 2016). A thorough review of literature explored four major psychological determinants which were found to be affecting the

entrepreneurial behaviour of an individual. These determinants are discussed in the following sections.

Entrepreneurial Intention

The word intention captures in itself the essence of motivation that converts the individual's planning efforts into actions (Liñán & Santos, 2007). In the theory of planned behaviour, intention has been identified as an important factor. Many researchers have confirmed through their research that entrepreneurial intention plays a very important role in entrepreneurial behaviour (Davidsson, 2003; Ajzen, 1991, 2001; Krueger et al., 2000; Bird, 1988). Bird (1998) defines entrepreneurial intention as “the mind sets that direct, guide, coordinate and control the basic concept (action) of new business development, implementation and evaluation”. Other scholars have defined it in subjective terms at the level of an individual as “a state of mind directing a person's attention towards a specific object or a path in order to achieve something” (Vesalainen & Pihkala, 1999). Intention can be defined as the cognitive awareness of objectives, goals, and behaviours that an individual seeks to attain in alignment with predetermined objectives (Tubbs & Ekeberg, 1991).

The planned behaviour theory (Ajzen, 1991) posits that intention is a crucial factor in influencing an individual's behaviour. Therefore, an individual's entrepreneurial activity is influenced by their desire to engage in entrepreneurship. It plays a very important role in making the decision to start a new business (Ozaralli & Rivenburgh, 2016). Entrepreneurial behaviours entail relatively complex linkages between intention and action (Krueger & Carsrud, 1993). Different researchers have identified different factors for the prediction of entrepreneurial intention of an individual. Self-efficacy is considered as an important factor for determining the entrepreneurial intention (Mobaraki & Zare, 2012; Boyd & Vozikis, 1994). Other factors like personality (Zarafshani, 2011; Nga & Shamuganathan, 2010) and, entrepreneurship education (Solesvik, 2013; Jorge-Moreno et al., 2012) all also seen as the determining factors of entrepreneurial intention. The influence of gender on the entrepreneurial intentions of an individual is also substantial (Gupta & Turban, 2009). Studies on entrepreneurship have established a relationship between entrepreneurial skills and entrepreneurial intention (Liñán, 2008; Phelan & Sharpley, 2012; Pysiainen et al., 2006).

Entrepreneurial Orientation

Miller (1983) defined the entrepreneurial orientation concept as consisting of three key elements: risk-taking, proactiveness and innovativeness. Other researchers also came up with the same

components including features such as innovation, risk-taking and proactivity (Sánchez, Lanero, & Yurrebaso, 2005, Chang, Benamraouri, & Rieple, 2014; Ismail, Zain, & Zulihtar, 2015). Lumpkin and Dess (1996) expanded the concept of entrepreneurial orientation by incorporating two more components: competitive aggressiveness and autonomy. In his study, Okhomina (2010) associated competitive aggressiveness with proactiveness.

Langkamp Bolton and Lane (2012) provided a concise definition of entrepreneurial orientation as a psychological construct that elucidates the fundamental character and facilitates comprehension of the behaviours shown by individuals involved in entrepreneurial endeavours. Therefore, the three elements that constitute the concept of entrepreneurial orientation are of a psychological origin, rather than being inherent personality attributes of an individual. Entrepreneurial orientation has a significant interaction with other dimensions, such as entrepreneurial skills (Ibrahim & Mas'ud, 2016, p.232). It interacts positively (Ibrahim & Mas'ud, 2016, p.232) with entrepreneurial skills, helping in the transformation of it into entrepreneurial behaviour. Since entrepreneurial orientation helps an individual in identification and exploitation of business opportunities available in the environment better than the competitors (Smith & Cao, 2007), which is very important for showcasing entrepreneurial behaviour. It influences the whole entrepreneurship process. Ibrahim et al. (2016) found that good entrepreneurial skills and an entrepreneurial environment do not guarantee entrepreneurial activity if an individual lacks risk-taking, innovativeness, and proactiveness.

Entrepreneurial Self-Perception

According to William James (1950), 'empirical self' is the key to the understanding the experience of individuals. Bem (1972, p. 2) gave a self-perception theory, which states that: "individuals come to know their own attitudes, emotions and other internal states partially by inferring them from observations of their own overt behaviour and/or by the circumstances in which this behaviour occurs". The relationship between perception and entrepreneurship activity and the influence of both of them on each other have been found positive in the literature (Boyd & Vizikis, 1994; Krueger & Brazeal, 1994, Chen et al. 1998). Individual's perception about oneself, influences their career choices (Fagenson & Marcus, 1991). Thus, the choice of an individual to engage in entrepreneurial activity is influenced and dependent on the ability of an individual to identify the characters and behaviors in himself/herself which are associated with entrepreneurship. Kae (1984) long ago recognized and explained that not everyone possess the

required skills to start and run a business. Kae (1984) suggested that self- assessment can help an entrepreneur in the best way to identify his weaknesses and strengths, this will facilitate the selection and execution of appropriate strategies for the business and overcoming deficiencies. Those individuals who carry a positive self-perception about their skills specially about their ability of being proactive and creative, are more likely to choose an entrepreneurial path (Rosique-Blasco et al. 2016).

Entrepreneurial Image

Entrepreneurship image includes the image an individual has about entrepreneurs and the business itself. Individuals who create a positive image of entrepreneurs are more likely to choose a path which involves entrepreneurial behaviour (Rosique-Blasco et al. 2016). The Role model theory given by Thomas and Biddle (1996), suggests that an individual's behaviour is shaped by two factors, socialization and learning, at different stages in life cycle. Many researchers have correlated the behaviour of a person to the entrepreneurial preference of the person (Krueger, Reilly & Carsrud, 2000; Kuratko, 2005; Van Auken & Stephens, 2006). If an individual's role model is an entrepreneurs then it is most likely that the individual's preference for entrepreneurial carrier will be enhanced. Stressing the same point other researchers have concluded that entrepreneurial role model is an important factor in creating a positive image of entrepreneurship among individuals and shaping their preference for entrepreneurial carrier and exhibiting entrepreneurial behaviour (Zellweger et al., 2011; Bosma, et al., 2012). Thus having an entrepreneurial model in the immediate environment of an individual helps in creating a positive image of both an entrepreneur and the business, exerting an influence over the entrepreneurial behaviour of an individual (Rosique-Blasco et al. 2016). Vaciana and Urbano (2008) also shared the same view, concluding that positive image of business will have a positive influence on creating and maintaining a positive attitude of an individual towards entrepreneurship.

Conceptual Model

An extensive review of literature identified four psychological factors which influence the usage of entrepreneurial skills for entrepreneurial behavior. The factors identified are entrepreneurial orientation, entrepreneurial intention, entrepreneurial self-perception and entrepreneurial image. On the basis of identified factors, a conceptual model (Figure 1) is proposed, depicting relationship between the various constructs.

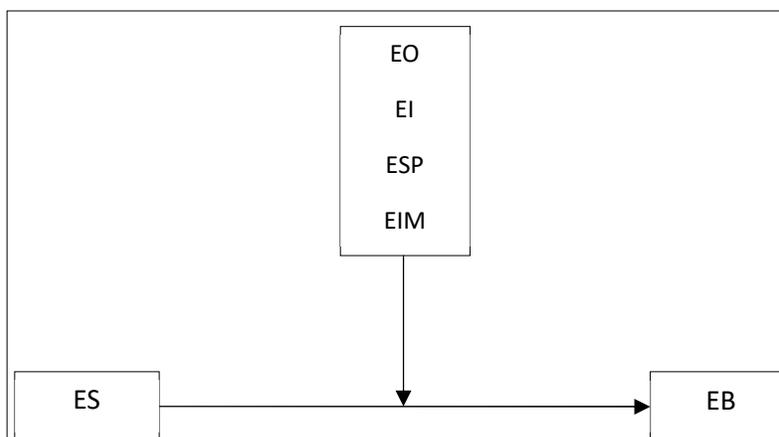


Figure 1

Psychological determinants of Entrepreneurial behaviour

Notes: EO- Entrepreneurial Orientation; EI- Entrepreneurial Intention; ESP- Entrepreneurial Self-perception; EIM- Entrepreneurial Image; ES- Entrepreneurial Skills; EB-Entrepreneurial Behaviour.

Implications of the Study

The findings of the study have implications for policy makers. As Ibrahim et al. (2016) pointed out, enriching students with entrepreneurial skills and conducive entrepreneurial environment is not enough. To boost entrepreneurial behaviour among target population, institutions for entrepreneurship development should not only focus on the development of entrepreneurial skills, they should also focus on the psychological factors which influence the usage of entrepreneurial skills for entrepreneurship. Increasing the active involvement of entrepreneurs in the educational programs may help in creating a positive entrepreneurial Image (Zellweger et al. 2011). The government should prioritize fostering entrepreneurial intention among students/trainees and implement proactive measures to achieve this goal. Additional studies have demonstrated that the absence of entrepreneurial orientation is a cause for concern, as highlighted by Gupta and Gupta (2015).

Conclusions

Mere acquisition and development of entrepreneurship skills will not lead to the development of entrepreneurship. For entrepreneurship development there is need to look upon and improve the psychological factors influencing entrepreneurial behaviour. The current study identified four psychological factors which influence the transformation of entrepreneurship skills into entrepreneurial behaviour. The factors include entrepreneurial orientation, entrepreneurial intention, entrepreneurial self-perception and entrepreneurial image. It is concluded that the improvement in the psychological factors is very important

for it determines the how positively the other conducive factors of the entrepreneurship process will be utilized by the entrepreneur.

Scope for Future Research

Future researcher can focus and expand the scope of the study taking into consideration the non-psychological determinants which impact the conversion of entrepreneurship skills into entrepreneurial behaviour. Future studies can also test the proposed model in different contexts of genders or cultures or geographical regions.

References

- Ajzen, I. (2001). Nature and operation of attitudes. *Annual review of psychology*, 52(1), 27-58.
- Baptista, R., Lima, F., & Preto, M. T. (2013). Entrepreneurial skills and workers' wages in small firms. *Small Bus Econ* 40 (2), 309–323.
- Baum, J. R., Fese, M., & Baron, R. (2007). *The Psychology of Entrepreneurship*. New York: Psychology Press.
- Baum, J.R., Locke, E. A., & Smith, K. G. (2001). A multidimensional model of venture growth. *Academy of Management Journal*, 44(2), 292-303.
- Begley, T.M. (1995): Using founder status, age of firm, and company growth rate as the basis for distinguishing entrepreneurs from managers of smaller businesses. *Journal of Business Venturing*, 10, 249.
- Becker, G. S. (1964). *Human Capital*. Chicago: University of Chicago Press.
- Bem, D. J.(1972). Self-perception theory. *Advances in Experimental Social Psychology*, 6, 1-62.
- Bosma, N., Hessels, J., Schutjens, V., Praag, M. Van, & Verheul, I. (2012). Entrepreneurship and role models. *Journal of Economic Psychology*, 33(2), 410–424.
- Bird, B. (1988). Implementing entrepreneurial ideas: The case for, intention. *Academy of management Review*, 13(3), 442-453.
- Boyd, N. G., & Vozikis, G. S. (1994). The influence of self-efficacy on the development of entrepreneurial intentions and actions. *Entrepreneurship theory and practice*. 18, 63-63.
- Brancu, L., Guðmundsdóttir, S., Gligor, D., & Munteanu, V. (2015). Is Culture a Moderator of Entrepreneurship Motivation? A Comparative Study of Romania and Iceland. *The Amfiteatru Economic Journal*, 38(17).
- Brück, T., Llusa, F., & Tavares, J. a. (2011). Entrepreneurship: The role of extreme events. *European Journal of Political Economy*, 27(1), S78–S88.
- Chang, J., Benamraoui, A., & Rieple, A. (2014). Learning-by-doing as an approach to teaching social entrepreneurship. *Innovations in Education and Teaching International*, 51(5), 459–471.
- Chen, S., Hsiao, H., Chang, J., Chou C., Chen, C., & Shen, C. (2015). Can the entrepreneurship course improve the entrepreneurial intentions of students?. *Int Entrep Manag J*, 11 (3), 557–569.
- Chen, S. C., & Sung, M. H. (2011). The entrepreneurial intention for university students. *Leisure Industry Research*, 9(1), 47–60.

- Davidsson, P. (2003). The domain of entrepreneurship research: Some suggestions. *Advances in entrepreneurship, firm emergence and growth*, 6(3), 315-372.
- Dana, L. P. (1987) Towards a skills model for entrepreneurs. *Journal of Small Business & Entrepreneurship*, 5 (1), 27–31.
- Elbaly, M. Y. H., & Elfeky, A. I. M. (2023). The effectiveness of a program based on augmented reality on enhancing the skills of solving complex problems among students of the Optimal Investment Diploma. *Ann. For. Res*, 66(1), 1569-1583.
- Fini, R., Grimaldi, R., Marzocchi, G. L., & Sobrero, M. (2009). The foundation of entrepreneurial intention. *Summer Conference*, 17-19.
- Farashah, A. D. (2015). The effects of demographic, cognitive and institutional factors on development of entrepreneurial intention: Toward a socio-cognitive model of entrepreneurial career. *Journal of International Entrepreneurship*, 1-25.
- Gupta, V. K., Turban, D. B., Wasti, S. A., & Sikdar, A. (2009). The role of gender stereotypes in perceptions of entrepreneurs and intentions to become an entrepreneur. *Entrepreneurship theory and practice*, 33(2), 397-417.
- Gupta, V., & Gupta, A. (2015). The concept of entrepreneurial orientation. *Foundations and Trends in Entrepreneurship*, 11(2), 55-117.
- Hathaway, I., & Litan, R. E. (2014). Declining business dynamism in the United States: A look at states and metros. *Brookings Institution*.
- House, R.J., Hanges, P.J., Javidan, M., Dorfman, P.W. and Gupta, V. (2004). *Culture, Leadership, and Organizations: The GLOBE Study of 62*. Thousand Oaks, CA: Societies Sage Publications.
- Ismail, V. Y., & Zain, E. (2015). The Portrait of Entrepreneurial Competence on Student Entrepreneurs. *Procedia - Social and Behavioral Sciences*, 169, 178–188.
- Ibrahim, N. A., & Mas`ud, A. (2016). Moderating role of entrepreneurial orientation on the relationship between entrepreneurial skills, environmental factors and entrepreneurial intention: A PLS approach. *Management Science Letters*, 6, 225–236.
- Ibrahim, N. A., & Lucky, E. O. I. (2014). Relationship between Entrepreneurial Orientation, Entrepreneurial Skills, Environmental Factor and Entrepreneurial Intention among Nigerian Students in UUM. *Entrepreneurship and Innovation Management Journal*, 2(4), 203-213.
- James, W. (1910). *The Principles of Psychology*. (reprint, original publication in 1890). New York: Dover.
- Kao (1984). *Small Business Management*. Toronto: Holt Rinehart and Winston.
- Krueger, N. F., & Carsrud, A. L. (1993). Entrepreneurial intentions: Applying the theory of planned behaviour. *Entrepreneurship & Regional Development*, 5(4), 315–330.
- Kollmann, T., Christofor, J., & Kuckertz, A. (2007). Explaining individual entrepreneurial orientation: Conceptualisation of a cross-cultural research framework. *International Journal of Entrepreneurship and Small Business*, 4(3), 325-340.
- Krueger, N. F., Reilly, M. D., & Carsrud, A. L. (2000). Competing models of entrepreneurial intentions. *Journal of business venturing*, 15(5), 411-432.
- Kuratko, D. F. (2005). The emergence of entrepreneurship education: Development, Trends, and Challenges. *Entrepreneurship Theory and Practice*, 29(5), 557–597.

- Keat, O. Y., Selvarajah, C., & Meyer, D. (2011). Inclination towards entrepreneurship among university students: An empirical study of Malaysian university students. *International Journal of Business and Social Science*, 2(4), 206–220.
- Linan, F. (2008). Skill and value perceptions: How do they affect entrepreneurial intentions? *International Entrepreneurship and Management Journal*, 4(3), 257-272.
- Liñán, F. (2007). The role of entrepreneurship education in the entrepreneurial process. *Handbook of research in entrepreneurial education* (pp. 230–247).
- Lucas, R. E. (1978). On the size distribution of business firms. *Bell Journal of Economics*, 9, 508–523.
- Lee, S. H., & Wong, P. K. (2004). An exploratory study of technopreneurial intentions: A career anchor perspective. *Journal of Business Venturing*, 19(1), 7-28.
- McClelland, D. (1961). *The Achieving Society*. Princeton, NJ: Van Nostrand.
- MacMilan, I. C., Siegle, R., & SubbaNarasimha, P. N. (1985). Criterion used by venture capitalists to evaluate new venture proposals. *Journal of Business Venturing*, 1, 119-128.
- Mobaraki, M. H., & Zare, Y. B. (2012). Designing Pattern of Entrepreneurial Self-Efficacy on Entrepreneurial Intention. *Information Management and Business Review*, 4(8), 428.
- Nga, J. K. H., & Shamuganathan, G. (2010). The influence of personality traits and demographic factors on social entrepreneurship start up intentions. *Journal of Business Ethics*, 95(2), 259-282.
- Olagunju, Y. A. (2004). *Entrepreneurship and Small Scale Business Enterprise Development in Nigeria*. Nigeria: University Press.
- Ozaralli, N., & Rivenburgh, N. K. (2016). Entrepreneurial intention: Antecedents to entrepreneurial behavior in the U.S.A. and Turkey. In *J Glob Entrepreneurship Research*, 6 (1).
- Okhomiya, D. (2010). Entrepreneurial orientation and psychological traits: the moderating influence of supportive environment. *Journal of Behavioral Studies in Business*, 2, 1-16.
- Phelan, C., & Sharpley, R. (2012). Exploring entrepreneurial skills and competencies in farm tourism. *Local Economy*, 27(2), 103-118.
- Pyysiäinen, J., Anderson, A., McElwee, G., & Vesala, K. (2006). Developing the entrepreneurial skills of farmers: Some myths explored. *International Journal of Entrepreneurial Behavior & Research*, 12(1), 21-39.
- Pidduck, R. J., Clark, D. R., & Lumpkin, G. T. (2023). Entrepreneurial mindset: Dispositional beliefs, opportunity beliefs, and entrepreneurial behavior. *Journal of Small Business Management*, 61(1), 45-79.
- Porter, M. E., Ketels, C., & Delgado, M. (2007). The microeconomic foundations of prosperity: Findings from the business competitiveness index. The Global Competitiveness Report 2007-2008.
- Rae, D., 2006. Entrepreneurial learning: A conceptual framework for technology based enterprise. *Technology Analysis & Strategic Management* 18, 39-56.
- Rauch, A., & Frese, M. (2000). Psychological Approaches to entrepreneurial success: A general model and overview of findings. *International Review of Industrial and Organizational Psychology*, 15, 101-142.
- Rosique, B. M., Madrid, G. A., & García-Pérez-de-Lema, D. (2016). Entrepreneurial skills and socio-cultural factors. *Education + Training*, 58 (7/8), 815–831.

- Rozell, E.J., Scroggins, W.A., Amoros, J.E., Arteaga, M.E., & Schlemm, M.M. (2010), Entrepreneurship in specific cultural contexts: the role of training and development for entrepreneur-culture fit. *Journal for Global Business Education*, 10, 51-71.
- Raposo, M., & Paço, A. (2011). Entrepreneurship education : Relationship between education. *Psicothema*, 23(3), 453–457.
- Sánchez, J. C., Lanero, A., & Yurrebaso, A. (2005). Variables determinantes de la intención emprendedora en el contexto universitario. *Revista de psicología social aplicada*. 15, 37– 60.
- Schumpeter, J.A. (1934). *The Theory of Economic Development*. Cambridge, MA: Harvard University Press.
- Sexton, D. L. (2001). Wayne Huizenga: Entrepreneur and wealth creator. *Academy of Management Executive*. 1, 40-48.
- Širec, K., & Močnik, D. (2012). Gender specifics in entrepreneurs' personal characteristics. *Journal of East European Management Studies*, 17 (1), 11–39.
- Solesvik, M. Z. (2013). Entrepreneurial motivations and intentions: Investigating the role of education major. *Education+ Training*, 55(3), 253-271.
- Shane, S. (2009). Why encouraging more people to become entrepreneurs is bad public policy. *Small Business Economics*, 33(2), 141-149.
- Shane, S., & Venkataraman, S. (2000). The promise of entrepreneurship as a field of research. *Academy of Management Review*, 25(1), 217–226.
- Smith, K. G., & Cao, Q. (2007). An entrepreneurial perspective on the firm-environment relationship. *Strategic Entrepreneurship Journal*, 1(4), 329-344.
- Tubbs, M. E., & Ekeberg, S. E. (1991). The role of intentions in work motivation: Implications for goal-setting theory and research. *Academy of Management Review*, 16(1), 180-199.
- Teece, D. J. (2007). Explicating dynamic capabilities: The nature and micro-foundations of (sustainable) enterprise performance. *Strategic Management Journal*, 28, 1319–1350.
- Teece, D. J., & Pisano, G. (1994). The dynamic capabilities of firms: An introduction. *Industrial and Corporate Change*, 3, 537–556.
- Teece, D. J., Pisano, G., & Shuen, A. (1997). Dynamic capabilities and strategic management. *Strategic Management Journal*, 18, 509–533.
- Thomas, E. J., and Biddle, B. J. (1966). Learning and socialization. In B. J. Biddle, and E. J. Thomas (Eds.), *Role theory: Concepts and research* (pp. 345–346). New York: Wiley.
- Thornton, P. H., Ribeiro-Soriano, D., & Urbano, D. (2011). Socio-cultural factors and entrepreneurial activity: An overview. *International small business journal*.
- Torraco, R. J. (2005). Writing integrative literature reviews: Guidelines and examples. *Human Resource Development Review*, 4, 356-367.
- Vesalainen, J., & Pihkala, T. (1999). Entrepreneurial identity, intentions and the effect of the pushfactor. *Academy of Entrepreneurship Journal*, 5(2), 1-24.

- Veciana, J. M., & Urbano, D. (2008). The institutional approach to entrepreneurship research. Introduction, *International Entrepreneurship and Management Journal*, 4(4), 365–379.
- Van Stel, A., & Suddle, K. (2008). The impact of new firm formation on regional development in the Netherlands. *Small Business Economics*, 30(1), 31-47.
- Van Auken, H., Fry, F. L., & Stephens, P. (2006). The influence of Role Models on entrepreneurial Intentions, *Journal of Developmental Entrepreneurship*, 11(2), 157–167.
- Wagner, J. (2003) Testing Lazear's jack-of-all-trades view with German micro data. *Applied Economics Letters*, 10, 687–689.
- Ward, T. B. (2004). Cognition, creativity, and entrepreneurship. *Journal of Business Venturing*, 19(2), 173–188.
- Wilson, F., Kickul, J., & Marlino, D. (2007). Gender, entrepreneurial Self-Efficacy, and entrepreneurial career intentions: Implications for entrepreneurship Education. *Entrepreneurship theory and practice*, 31(3), 387-406.
- Weitzel, U., Urbig, D., Desai, S., Sanders, M., & Acs, Z. (2010). The good, the bad, and the talented: Entrepreneurial talent and selfish behavior. *Journal of Economic Behavior and Organization*, 76(1), 64–81.
- Wong, P. K., Ho, Y. P., & Autio, E. (2005). Entrepreneurship, innovation and economic growth: Evidence from GEM data. *Small Business Economics*, 24(3), 335–350.
- Wang, N., Cui, D., & Dong, Y. (2023). Study on the impact of business environment on private enterprises' technological innovation from the perspective of transaction cost. *Innovation and Green Development*, 2(1), 100034.
- Wickham, P. A. (2006). *Strategic entrepreneurship*. New York: Pearson Education.
- Zarafshani, K., Sharafi, L., & Rajabi, S. (2011). Using the Myers-Briggs type indicator (MBTI) in the teaching of entrepreneurial skills. *International Journal of Science and Technology Education Research*, 2(4), 67-74.
- Zellweger, T., Sieger, P., & Halter, F. (2011). Should I stay or should I go? Career choice intentions of students with family business background. *Journal of Business Venturing*, 26(5), 521–536.
- Zhao, H., & Seibert, S. (2006). The Big Five personality dimensions and entrepreneurial status: A meta- analytic review. *Journal of Applied Psychology*, 91(2), 259-271.
- Zhao, H., Seibert, S.E., & Lumpkin, G.T. (2010). The relationship of personality to entrepreneurial intentions and performance: A meta-analytic review. *Journal of Management*, 36(2), 381-390.