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Theoretical foundations on the entrepreneurial potential

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In this paper we present a theoretical model of entrepreneurial potential. First, we highlight the relevance of individual factors on the entrepreneurship process as they are possible to control and monitor by the entrepreneur. Next, we revise the literature on the main characteristics of entrepreneurs, which are on the basis of the entrepreneurial potential model. Based on the literature, we then suggest that entrepreneurial potential includes four main dimensions entrepreneurial motivations, psychological competencies, social competencies, and management competencies. These major competences, in turn, are constituted by eleven specific competences: desire for independence, economic motivation, entrepreneurial self-efficacy, vision, resource mobilization capacity, leadership capacity, innovation capacity, emotional intelligence, resilience, communication and persuasion capacity, and network development capacity. Finally, we discuss the importance of assessing entrepreneurial potential at universities and entrepreneurship centres.

Entrepreneurship as a process: the importance of an individual based perspective

Entrepreneurship has been described as a process including six main stages: 1) recognition of an opportunity; 2) decision to launch a venture; 3) assembling the resources; 4) actual launch of new venture; 5) building a successful business; and 6) harvesting the rewards (Timmons, & Spinelli, 2007, Baron and Shane, 2008, Burns, 2011). Across entrepreneurship stages, variables from different levels have important impacts upon the successful process development.

Variables from a more distal level include government policies, economic conditions, and technology. The *distal factors* are unpredictable, they are not controlled, nor can be changed by any individual, but their perception influence the interest in starting a business (Begley, Tan, & Schoch, 2006; Begley, & Tan, 2001). Generally, economic, technological, financial, industrial and cultural changes influence entrepreneurship activity (e.g., Bosma, Wennekers, & Amorós, 2011), and they are especially determinant for policy makers and institutions. (Acs, Desai & Hessels, 2008; Lundström & Stevenson, 2005). Distal factors have a direct impact on individuals, organizations and new ventures life, but they are not under the control of an entrepreneur.

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The *intermediate level* variables refer to factors that include the social environmental conditions that involve the entrepreneur and the new venture. More specifically, it refers to competitors, social ties (e.g., Klyver, Hindle & Meyer, 2008), entrepreneurial team, cultural context, effectiveness in interactions with venture capitalists, customers, or potential employees. The intermediate factors have a direct impact on the entrepreneurship process, but entrepreneurs are not able to control all the strengths and weaknesses that emerge from these. Although, entrepreneurs have greater monitoring ability on the mezzo factors when compared to the distal factors, they are still significantly uncontrollable by the individual.

The *proximal factors* refer to the individual skills and abilities, motives, capacities, knowledge and experience. These factors refer to all the individual dimensions that impact over the entrepreneurship process. Literature has shown that entrepreneurs are distinct from managers on critical skills and abilities such as risk taking (Miner & Raju, 2004), and self-efficacy (e.g., Chen, Greene, & Crick, 1998), among others. Thus, to be an entrepreneur, individuals must possess specific skills, abilities and knowledge. The motives that drive entrepreneurs, day after day through the entrepreneurial stages, are also determinant to the flow of the entrepreneurship process (Shane, Locke & Collins, 2003). Only a high motivational pattern can make the entrepreneur move forward on the hardest moments, and not to bounce back when facing disappointments and negative events. Similarly, the entrepreneurs' capacities and knowledge on the business area are critical to the success of the entrepreneurial process (Shane, 2000). Every entrepreneur has to possess deep and prior knowledge on the business area (Eckhardt & Shane, 2003). In addition, experience on similar business is also important to successfully achieve the launch of

a new venture (Morris, Kuratko, Schindehutte, & Spivack, 2012). The decision making process and strategies are also determining for the entrepreneurship process and new venture development. Decision makers are usually required to make fast decisions with limited information (Eisenhardt, 1989; Ocasio, 1997). Entrepreneurs are increasingly required to decide in uncertain environments, with fuzzy clues and unstable information (Baum and Wally, 2003). Despite cognitive limitations common to all human beings, all decision makers seek to influence outcomes (Norton and Moore 2002).

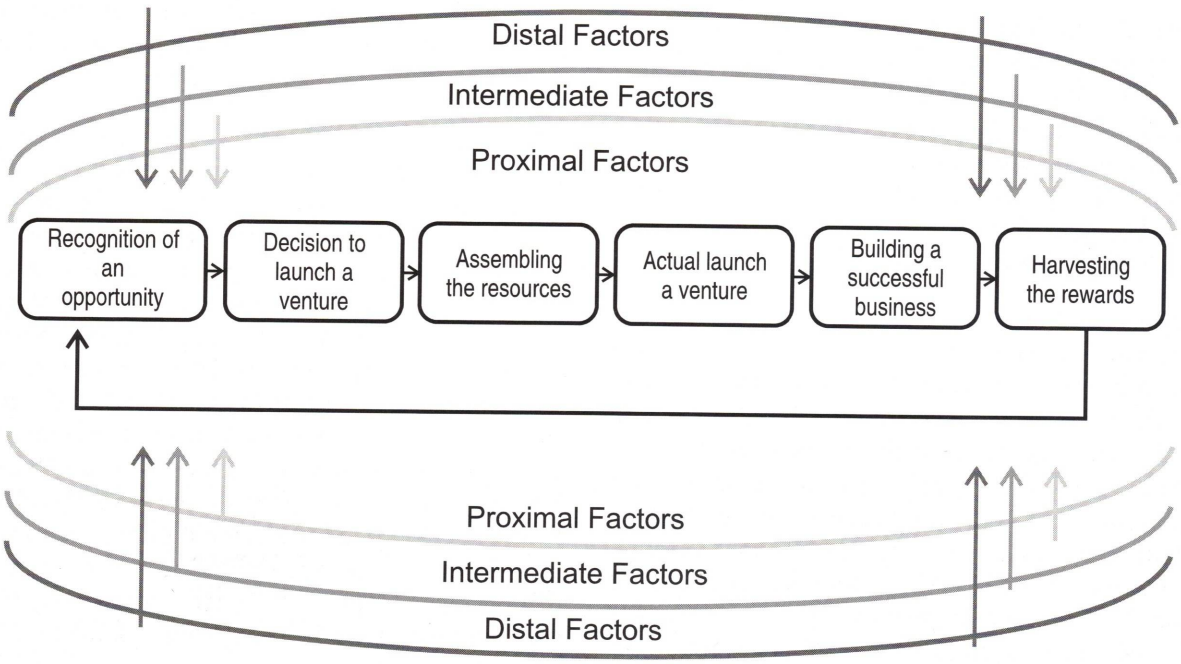
Thus, the individual factors have a direct impact on the entrepreneurship process and they share a common characteristic: they are all controllable and possible to monitor by the entrepreneur. The entrepreneur can train him or herself on the specific skills and abilities; the motives and drives that move the entrepreneur are only dependent on his or her will; the entrepreneur can gain and assimilate the required knowledge and experience on the business venture area. Therefore, the proximal factors are possible to control and monitor, as they only depend on the entrepreneur him or herself. Figure 1 describes the entrepreneurship process stages and the three levels of influencing variables: distal, intermediate and proximal factors.

Following the previous arguments, the entrepreneurship process can only be totally monitored by the proximal factors, i.e., by the individual. Based on this reasoning, it is important to increase the focus on the individual side of the entrepreneurship. To promote research on the individual level of entrepreneurship can help to develop evidence-based practices for entrepreneurship (e.g., education, strategies, platforms and policies) focused on the human development. Following this relevance on the individual, there is an increasing research work on entrepreneurship focusing on individual perspectives, adapting several theoretical frameworks, such as psychology (e.g., Baum, Frese, & Baron, 2007; Rauch & Frese, 2012) and cognitive science (e.g., Baron, 2004; Baron & Ward, 2004; Santos, Curral & Caetano, 2010). Despite the relevance on the individual factors, it is important to highlight that the entrepreneurship process stages are interactive and the three-level factors are critical and have different and systematic impacts over the process, time and cultures (Audretsch, Thurik, Verheul & Wennekers, 2002).

This perspective is then focused on the internal environment of the organism, on the cognitions, actions, decisions, aspirations and emotions of the entrepreneur (Venkataraman, Sarasvathy, Dew and Forster, 2012). We support the choice of this perspective based on the evidence that entrepreneurship is a human based practice and intrinsically dependent on the individuals decisions and actions. Radically, there is no entrepreneurship without the individual.

Despite the relevance of both the individual and the organizational constructs, this paper focuses exclusively on the individual level. Our focus on the individual level is strengthened by the importance

Figure 1. Entrepreneurship process stages and the three levels of influencing variables (based on Baron & Shane, 2008).



individual characteristics have on the entrepreneurial process (e.g., Baum, Locke and Smith, 2001; Baum and Locke, 2004; Baron and Shane, 2008). We assume that entrepreneurship is not solely the result of an individual's actions and characteristics, as external factors also play a relevant role (e.g., the economic, technological, political and regulatory context). However, as the environmental factors are mostly unpredictable, we argue that an individual's psychosocial characteristics play a critical role in the development of the entrepreneurial process.

Thus, this paper aims to make a contribution to the development of the theoretical entrepreneurship field by presenting a model for entrepreneurial potential, i.e. summative result for the most relevant individual characteristics for entrepreneurship.

Entrepreneurial potential: Definition and properties

In several decades of research around the question *"Who is an entrepreneur?"* (Carland, Hoy, and Carland, 1988; Gartner, 1989), empirical evidence is diffuse and disconnected in the literature, which makes it complex to develop a broad theoretical framework. In other words, despite the great amount on research based on the individual characteristics of entrepreneurs, including traits, competencies, attitudes, motives and skills (e.g., Woo, Cooper & Dunkelberg, 1991), it is still absent an integrative framework of the most distinctive psychosocial characteristics of entrepreneurs. In addition, to describe the individual characteristics of entrepreneurs is still one of the main highlights and needs on the research field, as Sarasvathy and Venkataraman (2011) suggested when describing the need to develop an entrepreneurial method.

Research on the individual characteristics of entrepreneurs has been mainly focused on trying to differentiate entrepreneurs from other organizational agents, such as managers, (e.g., Chen, Greene and Crick, 1998) or describing the characteristics associated with entrepreneurial intention (e.g., Carey, Flanagan, & Palmer, 2010; Hayton & Cholakova, 2012).

Despite the different approaches and methods, the most distinctive characteristics of entrepreneurs are also indicative of having an adequate psychosocial profile to develop entrepreneurial activity. As a result, our argument on the development of the entrepreneurial potential construct is: if we can aggregate the most distinctive characteristics of entrepreneurs, based on previous research evidences, we can develop an overall measure of the potential to be an entrepreneur - the *entrepreneurial potential*. This argument was already used in previous studies, which *"investigate means for the early analysis of the potential for the success of new ventures"* (p. 278) in a sample of students (Wong, Cheung, & Venuvinod, 2005).

Grounded on the assumption that the similar most important dimensions that are most shared among the entrepreneurs are also critical in assessing an individuals' preparedness to engage in typical entrepreneurship activities (i.e., an individuals' entrepreneurial potential) we propose that entrepreneurial potential can be explained by the four main dimensions evidenced in the literature on entrepreneur characteristics.

The entrepreneurial potential is then the latent construct underlying the most distinctive psychosocial characteristics of entrepreneurs, which are related to the successful new venture development (Krueger & Brazeal, 1994). The entrepreneurial potential model we propose is based on competencies. We have adopted the definition of competency stressed by Spencer and Spencer: "*A competency is an underlying characteristic of an individual that is causally related to criterion-referenced effective and/or superior performance in a job or situation*" (1993, p. 9).

We consider that entrepreneurial potential refers to an individual's preparedness to engage in typical entrepreneurial activities. By focusing on *"entrepreneurial potential"* we intend to highlight the typical entrepreneurial skills that are more associated to venture launch.

We propose that entrepreneurial potential is the summative result of several individual entrepreneurial characteristics. Thus, by bringing together the most relevant characteristics in the entrepreneur characteristics literature, we can propose that these multi dimensions also express an individual's preparedness to engage in activities that are typical of entrepreneurship.

We next present a summary organized according to the main dimensions of the most distinctive characteristics of entrepreneurs that we suggest that are included on the entrepreneurial potential construct domain: *(a)* entrepreneurial motivations; *(b)* management competencies; *(c)* psychological competencies and *(d)* social competencies. These are main dimensions, but included in these are several sub dimensions that are considered more distinguishing of entrepreneurial behaviour, or entrepreneurial identity (Anderson & Warren, 2011). It is not our purpose here to develop a systematic literature review of the characteristics of entrepreneurs because good state of the art overviews of psychological entrepreneurship research have already been provided, for example,

by Chell, Haworth and Brearly (1991), Cooper and Gimeno-Gascon (1992) and meta-analysis (Schwenk and Shrader, 1993).

The main dimensions that can explain entrepreneurial potential are: *(a)* entrepreneurial motivations; *(b)* psychological competencies; *(c)* social competencies; and *(d)* management competencies. These dimensions allow us to identify and differentiate the preparedness of an individual to engage in typical entrepreneurial activities: i.e., the entrepreneurial potential. Moreover, and connecting the dots to bring together the most relevant aspects of previous empirical research and theoretical suggestions, a review of the literature highlighted eleven subdimensions included on these main dimensions (see Table 1 for a summary).

Dimensions	Sub-Dimensions	Definition	Empirical Evidences / Theoretical Propositions
Entrepreneurial Motivations	Desire for independence	Autonomy and strategic decision making intention autonomy	Hisrich (1985) found that one of the prime motivations for starting a business was a desire for independence. Hornaday and Aboud (1971) surveyed 60 business founders using several personality inventories and showed that those founders scored significantly higher than the general population on measures of independence. Correspondingly, the drive for independence influenced the development of family businesses, and entrepreneurs generally show a preference for independent tasks (e.g., Alstete, 2008; Moyer and Chalofsky, 2008; Utsch, Rauch, Rothfuss and Frese, 1999).
	Economic motivation	Desire to achieve economic profit	The desire to pursue entrepreneurial opportunities to generate economic profit, i.e., the economic motivation, has been cited as one of the characteristics most shared by successful entrepreneurs: the need to make money. In general, entrepreneurs perceived their work as more profitable than working for others (e.g., Alstete, 2008; Brice and Nelson, 2008). Thus, behaviourally oriented researchers of entrepreneurship argued that it is important to consider and measure the economic value of business opportunities because that is what drives entrepreneurs' motivation (Shane, Locke and Collins, 2003).
	Entrepreneurial self-efficacy	Individual belief in the capacity to successfully perform the entrepreneurial goals	An individual's belief in his/her capacity to pursue a particular goal has been identified as crucial to several activities (Bandura, 1982and entrepreneurial activity is no exception (e.g., Chen, Greene and Crick, 1998; Poon, Ainuddin, and Junit, 2006). Self-efficacy is important for entrepreneurs because they must be confident in their abilities to perform different and often unanticipated tasks in uncertain situations (Baum and Locke, 2004). Self-efficacy has been related to business venture launch and success (Boyd, & Vozikis, 1994; Chen, Greene and Crick, 1998; Poon, Ainuddin, and Junit, 2006), and dynamics around business performance (Hmieleski and Baron, 2008).
	Innovation capacity	Capacity to engage in inventive development processes, resulting in the introduction of new products, processes or market services	There are significant differences between entrepreneurs and employers. The capacity for innovation is one of the main characteristics of the entrepreneurial human capital (e.g., Engle, Mah and Sadri, 1997; Marvel and Lumpkin, 2007; Utsch, Rauch, Rothfuss and Frese, 1999). It is possible to distinguish entrepreneurs from non-entrepreneurs based on achievement, self-esteem, personal control, and innovation (Robinson, Stimpson, Huefner and Hunt, 1991). While innovativeness can be defined as a characteristic of an individual, innovation implementation effectiveness depends on a group of persons, and as such is a characteristic of an entrepreneurial venture (Klein and Sorra, 1996). In other words, it refers to the capacity to engage in inventive development processes, resulting in the introduction of new products, processes or market services.
Psychological competencies	Emotional intelligence	Ability to perceive, interpret and manage emotions from self and from the others	Mayer, Salovey and Caruso (2000) defined emotional intelligence as an ability to express emotions, to use emotions to facilitate thinking, to understand and argue by means of emotions, and to manage them internally while communicating with others effectively. Previous research has shown that entrepreneurs get relatively high scores for emotional intelligence (Baron and Markman, 2000; Cross and Travaglione, 2003; Higgs and Dulewicz, 2003). Empirical studies analysing the relationship of emotional intelligence with entrepreneurship attitudes and entrepreneurial intentions have begun to be carried out. Zampetakis, Kafetsios, Bouranta, Dewett and Moustakis, (2009) made a significant contribution by creating a theoretical model connecting emotional intelligence and entrepreneurship attitudes, as well as entrepreneurial intentions. The authors integrated emotional intelligence and entrepreneurial intentions, using the features of proactivity and creativity that form the entrepreneurship attitudes of an individual. The Zampetakis, Kafetsios, Bouranta, Dewett and Moustakis (2009) model showed that emotional components were expressed by feelings and emotions, determining attitude towards entrepreneurial intentions.

	Resilience	Ability to react to unexpected results in a risky and uncertain situation. This is a multidimensional characteristic, which has been conceptualized as a strategy for coping with stress and uncertainty	In entrepreneurship the uncertainty level is generally higher than in other organizational settings, and entrepreneurs have to know how to design and implement adaptable behaviours. Resilience refers to the description and explanation of an unexpected positive outcome despite a scenario of high risk and uncertainty (e.g., Friborg, Hjemdal, Rosenvinge, Martinussen, Aslaksen and Flaten, 2006). Resilience evidenced multidimensional characteristics and can be conceptualized as a measure of successful stress-coping ability (Connor and Davidson, 2003). Empirical research evidenced that entrepreneurs showed greater levels of persistency than non-entrepreneurs (e.g., Friborg, Hjemdal, Rosenvinge, Martinussen, Aslaksen and Flaten, 2006). Given that entrepreneurship is strictly associated with risk, it was relevant to analyse an entrepreneur's ability to cope with difficulties, threats and unsuccessful projects. We argue that resilience must be an important factor across the entrepreneurship process, as the level of uncertainty faced by entrepreneurs is greater than that of other organizational players (e.g., Covin and Slevin, 1989). Entrepreneurs have to know how to design and implement positive adaptive behaviours that fit each situation (Mallak, 1998), i.e., they have to be resilient. In addition, it was shown that resilient companies promote entrepreneurial behaviour (Reinmoeller and van Baardwijk, 2005), and that entrepreneurs could develop emotional, cognitive, social and financial resilience that can be harnessed and mobilized for a subsequent venture launch (Hayward, Forster, Sarasvathy and Fredrickson, 2010).
Social Competencies	Persuasion and communication capacity	Ability to change own and others' attitudes and behaviours to create the circumstances most likely to contribute to entrepreneurial success	The ability to interact effectively with others has a positive effect on entrepreneurial success (Baron and Markman, 2000). Entrepreneurs consider that they have a greater capacity for persuasion (Hoehn-Weiss, Brush and Baron, 2004). Recent studies evidenced that the social competencies relate significantly to new venture performance measures, and this relationship is mediated through success in information seeking and resources (Baron and Tang, 2009). Eggers, Leahy and Churchill (1996) studied 112 entrepreneurial companies by employing 20 behavioural scales that measure CEO leadership and management skills. The results evidenced, for instance, that communication, delegating, and performance facilitation were positively related to success. Entrepreneurs usually exhibit greater scores in the main individual psychosocial variables (Begley and Boyed, 1987; Green, David, Dent and Tyshkovsky, 1996; Utsch, Rauch, Rothfuss and Frese, 1999).
	Network development capacity	Ability to develop a network between entrepreneurs and other individuals who can provide resources for business implementation and development	The ability to develop a network between entrepreneurs and other individuals who can provide resources for business implementation and development was identified as one of the entrepreneurial performance predictors (Baughn, Cao, Le, Lim e Neupert, 2006; Chay, 1993). The ability to develop a social network, together with other constructs, has a direct effect on venture creation development (e.g., Johannisson, 1988; Lee and Tsang, 2001). The network approach assumes that an entrepreneur's ability to organize and coordinate networks between individuals and organizations was critical for both starting up a company and business success (Birley, 1985; Rauch, and Frese, 2000). Bruederl and Preisendoerfer (1998) showed that network support is related to the survival and growth of newly founded enterprises, and that support from friends and relatives in particular was more important than support from business partners, former employers, and co-workers.
Management Competencies	Vision	Ability to preview and visualize the goals, objectives and future realizations	Despite the diversity of definitions for vision, Greenberger and Sexton (1988: 5) argued that "entrepreneurs are likely to have some abstract image in mind about what they intend to accomplish", and this vision serves as a guide for their own actions. Entrepreneurial vision is conceived as a result of the entrepreneur's intuitive and holistic thinking, and bridges the current situation and the future state (Ensley, Carland and Carland, 2000). Empirically, vision capacity has been shown to be a predictor of entrepreneurial venture development (Baum, Locke and Kirkpatrick, 1998; Baum, Smith and Locke, 2001), and direct and indirect causal effects on small venture performance (Baum, Locke and Kirkpatrick, 1998). In entrepreneurial companies, vision might be more important than in bigger organizations because of the relatively close contact between entrepreneur and employees, customers, and suppliers. Thus, vision has an effect on the performance of small companies.

	Resources mobilization capacity	Ability to gather the resources to manage the venture (financial and material)	The ability to gather the financial and material resources to manage a venture has been identified as an important predictor of entrepreneurial success, given that resources are an essential feature of new venture development and make it easier for new ventures to adjust to complex environments (e.g., Ramachandran and Ray, 2006; Romanelli, 1987; Tan and Peng, 2003). Financial resources have also been identified as an important predictor of entrepreneurial success in that they are an essential ingredient in the development of new ventures (Dollinger, 1995). Moreover, financial resources serve to acquire other resources in such a way that provides a venture with strategic flexibility (Romanelli, 1987) and facilitates its adjustment to complex environments (Tan and Peng, 2003).
	Leadership capacity	Capacity to mobilize and manage others allied to the business growth vision	Leadership research has shown that while leadership emergence is greatly affected by personality traits (Lord, DeVader and Alliger, 1986), leadership success is less clearly related to personality factors (Landy, 1989). Entrepreneurial leadership has been identified as important to this process and has been described as the ability to influence others, to manage resources strategically in order to emphasize both opportunity-seeking and advantage-seeking behaviours (Eyal, & Kark, 2004; Ireland, Hitt and Simon, 2003). Entrepreneurs share some characteristics with leaders. McCarthy, Puffer and Darda (2010) found that the vast majority of these entrepreneurs displayed an open leadership style, with a balanced leadership style being the second most frequent, and a controlling style the least.

Entrepreneurial Motivations

By entrepreneurial motivations we mean the motives that drive individuals towards typical entrepreneurial activities. Human motivation is one of the strongest predictors of entrepreneurial success. It is the main driver in pursuing entrepreneurial activities (Shane, Locke and Collins, 2003).

The entrepreneurial motivations highlighted in the literature include general and task-specific levels, with different impacts on the entrepreneurial process (Shane, Locke and Collins, 2003), and on venture growth (Baum, Locke and Smith, 2001; Urban, 2010). The rich complexities of motivations were engaged as a critical role in entrepreneurial behaviours (Carsrud & Brännback, 2011). The entrepreneurial motivations were also identified in the literature as one of the greatest predictors of a new venture's success (Baum, Locke and Smith, 2001; Stewart and Roth, 2007). According to the literature, three main drivers can express entrepreneurial motivation: desire for independence, economic motivation and entrepreneurial self-efficacy (see table 1).

Psychological Competencies

There is a broad set of characteristics that can be included among the psychological competencies, and they refer to the wide group of skills and attributes that characterize entrepreneurial individuals (e.g., Chell, 2008). In the group of psychological competencies we include the individual traits that are distinctive among entrepreneurs: innovation capacity, emotional intelligence and resilience (see table 1).

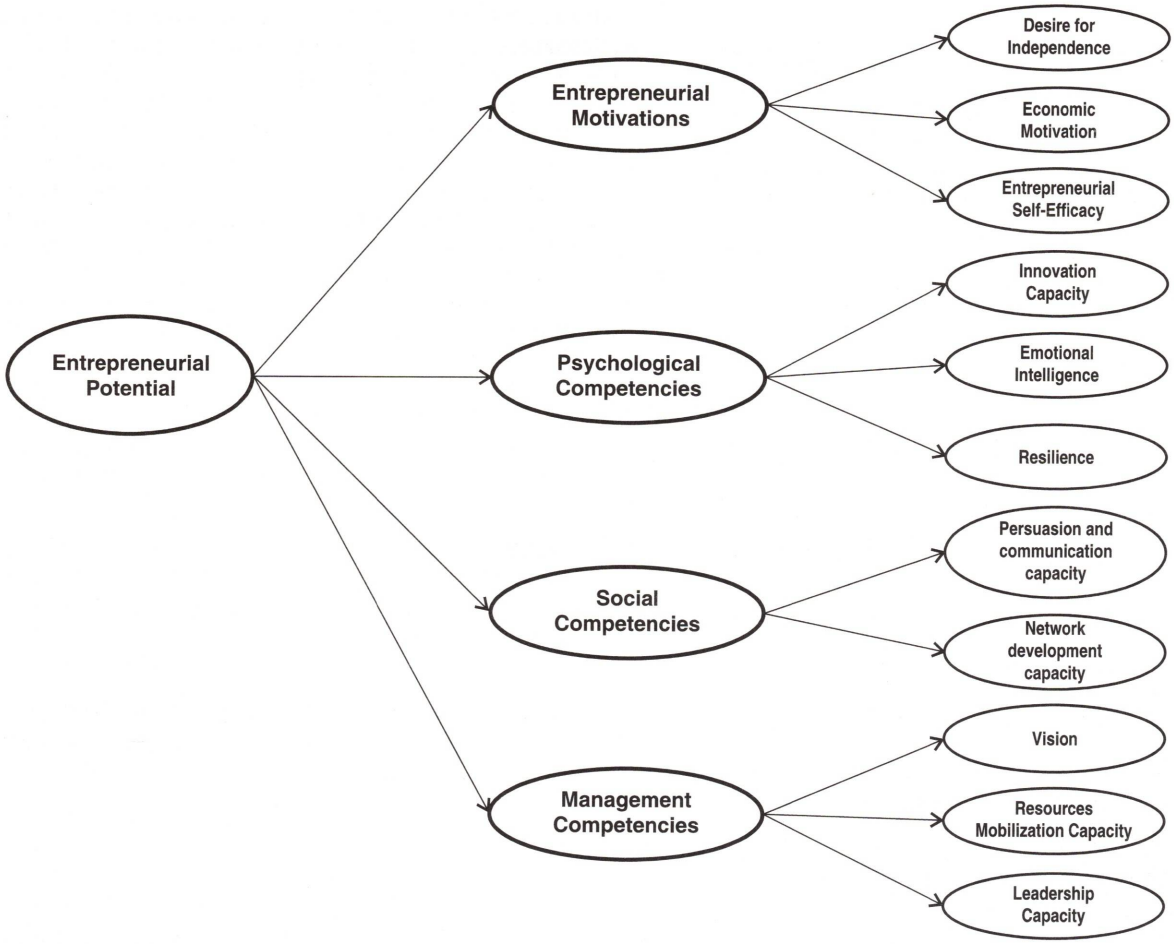
Social Competencies

Since an entrepreneur acts within a social context and therefore has to interact with different players, another dimension of an entrepreneur's characteristics that would denote an individual's ability to interact effectively with others involves social competence (e.g., Baron, 2000). An entrepreneur's effectiveness in interacting with others, that is, his / her social competence, may also affect their entrepreneurial success (Baron & Markman, 2000). This assumption were based on predicting that the higher an entrepreneur's social competence, the greater the success of his or her business. The social competencies include the characteristics that determine the entrepreneurs' action in a social context, when interacting with others. Among the most relevant are the persuasion and communication capacity and network development capacity (see table 1).

Management Competencies

The management competencies are defined by the basic and specific competencies in business management (e.g., Baum, Locke and Smith, 2001), and mostly they refer to the individual's ability to manage the four elements of the business: the entrepreneur him/herself, business strategy, business resources and human resources. Included in management competences are three sub-

Figure 2. Entrepreneurial Potential Conceptual Model.



dimensions: vision, resources mobilization capacity and leadership capacity (see table 1).

Globally, and as described on table 1, we propose that the entrepreneurial potential theoretical model comprises eleven first-order dimensions: desire for independence, economic motivation, entrepreneurial self-efficacy, vision, resource mobilization capacity, leadership capacity, innovation capacity, emotional intelligence, resilience, communication and persuasion capacity, and network development capacity. These eleven first order variables express four second-order dimensions: entrepreneurial motivation, psychological competencies, social competencies, and management competencies.

In accordance with the literature review in which entrepreneurial potential model was developed, figure 2 presents a conceptual model that integrates the four central dimensions that contribute to the emergence of entrepreneurial potential

Relevance of entrepreneurial potential construct

Literature has evidenced that including entrepreneurship on graduation courses contributes to the intention to create new ventures (e.g., Sanz-Velasco, 2007; Shinnar, Pruett, and Toney, 2009). Up to the previous decade, the trend to teach entrepreneurship on the graduate courses was mainly focused on the management and business fields (e.g., Volkman, 2004). Nowadays, there is dissemination to the main fields, such as the arts, geography, environmental science and nursing (e.g., Maguire & Guyer, 2004; Dickerson & Nash, 1999). Today it is largely assumed that academic entrepreneurship is one of the fundamental motors of economic growth and wealth creation (Shane, 2004). As a result, and in accordance with the emergence of academic entrepreneurship, universities have pursued policies that promote the creation of academic entrepreneurship centers and encouraged students, researchers and academics to patent their discoveries, spin-offs, and technological licenses, thus effectively expanding the universities' activities (e.g., Wood, 2009).

Another strategy designed to foster academic entrepreneurship focuses on creating entrepreneurial opportunities and training students

in the main skills, competencies and entrepreneurial activity (van Praag, 2009). One example of this is the initial financial funds for business opportunities to motivate academics and university students to become entrepreneurs and to launch new ventures (Shane, 2004a; Wright, Clarysse, Mustar, and Lockett, 2007). Thus, it is clearly evident that the importance of promoting entrepreneurship is a widespread issue, and one that has the attention of academic, governmental and organizational agents.

Despite the need to stimulate entrepreneurship at universities, it is also important to develop models and tools that allow identifying the individuals who have a greater predisposition and profile to become entrepreneurs. Certainly, there are individuals who are far away from having the same psychosocial profile as entrepreneurs, and consequently, they are not potential entrepreneurs. In this group of individuals, is highly risky to invest resources, as they difficultly will be launching ventures. On the other side, individuals who have a similar psychosocial profile as entrepreneurs, have a greater chance to launching ventures, especially if they are exposed to an innovative and entrepreneurial environment.

The entrepreneurial potential model is the theoretical basis to develop methodologies and tools to assess the individuals' preparedness to engage in typical entrepreneurial activities. There have been different efforts to develop a measure with sound psychometric characteristics to assess the entrepreneurial potential construct (e.g., Santos, Caetano & Curral, 2010; Santos, Caetano, Curral & Spagnoli, 2010).

It is essential to encourage young university students and young employees to develop an eagerness for entrepreneurship and innovation. Despite extensive entrepreneurial programs and the emphasis on academic entrepreneurship (e.g., van Praag, 2009), knowledge about the individuals' preparedness to engage in typical entrepreneurship activities, i.e., their entrepreneurial potential, is still scant. It is important that an individual aspiring to be an entrepreneur is able to assess him or herself against an entrepreneurial profile before undertaking the personal and professional risks of a start-up venture (Osborne, 1995). The entrepreneurial potential model gives entrepreneurs and investors a solid instrument to assess the fundamental competencies all successful entrepreneurs possess.

References

Acs, Z. J., Desai, S., & Hessels, J. (2008), "Entrepreneurship, economic development and institutions", Small Business Economics, Vol. 31, pp. 219 - 234.

Alstete, J. W. (2008), "Aspects of entrepreneurial success", Journal of Small Business and Enterprise Development, Vol. 15, No. 3, pp. 584 - 594.

Anderson, A., & Warren, L. (2011), "The entrepreneur as hero and jester: Enacting the entrepreneurial discourse", International Small Business Journal, 16, doi: 10.1177/0266242611416417.

Audretsch, D., Thurik, R., Verheul, I., & Wennekers, S. (2002), Entrepreneurship: Determinants and Policy in a European - US Comparison, Boston/Dordrecht: Kluwer Academic Publishers.

Bandura, A. (1982), "Self-efficacy mechanism in human agency", The American Psychologist, Vol. 37, No. 2, pp. 122 - 147.

Barbosa, S. D., Gerhardt, M. W., & Kickul, J. R. (2007), "The role of cognitive style and risk preference on entrepreneurial self-efficacy and entrepreneurial intentions", Journal of Leadership and Organizational Studies, Vol. 13, No.4, pp 86 - 104.

Baron, R. (2000), "Psychological perspectives on entrepreneurship: Cognitive and social factors in entrepreneurs' success", Current Directions in Psychological Science, Vol. 9, no. 1, pp. 15-18.

Baron, R., & Markman, G. D. (2000), "Beyond social capital: The role of social skills in entrepreneurs' success", Academy of Management Executive, Vol. 14, No. 1, pp. 106-116.

Baron, R., & Tang, J. (2009), "Entrepreneurs' social skills and new venture performance: mediating mechanisms and cultural generality" Journal of Management, Vol. 35, pp. 282 - 306.

Baron, R. (2004a), "The potential role of entrepreneurs' social skills in the success of new ventures: Why the ability to get along with others really matters. In W. G. Carter, K. G. Shaver, N. M. Carter, & P. D. Reynolds (Eds.)", Handbook of Entrepreneurial Dynamics: The Process of Business Creation (pp. 220-233). Newbury Park, CA: Sage.

Baron, R. A. (2004), "The cognitive perspective: a valuable tool for answering entrepreneurship's basic "why" questions", Journal of Business Venturing, Vol. 19, pp. 221 - 239.

Baron, R. A., & Ward, T. B. (2004), "Expanding entrepreneurial cognition's toolbox: Potential contributions from the field of cognitive science", Entrepreneurship Theory and Practice, Vol. 28, No. 6, pp. 553-573.

Baron, R., & Shane S. (2008), Entrepreneurship: A Process Perspective (2nd ed). Canada: Thomson South-Western.

Baughn, C. C., Cao, J. S. R., Le, L. T. M., Lim, V. A., & Neupert, K. E. (2006), "Normative, social and cognitive predictors of entrepreneurial interest in China, Vietnam and the Philippines", Journal of Developmental Entrepreneurship, Vol. 11, No. 1, 57 - 77.

Baum J. R., & Wally, S. (2003), "Strategic decision speed and ?rm performance", Strategic Management Journal, Vol. 24, No. 11, 1107–129.

Baum, J. R., Locke, E. A., and Smith, K. G. (2001), "A multidimensional model of venture growth", Academy of Management Journal, Vol. 44, No. 2, pp. 292-303.

Baum, J. R. & Locke, E. A. (2004), "The relationship of entrepreneurial traits, skills, and motivation to subsequent venture growth", Journal of Applied Psychology, Vol. 89, No. 4, pp. 587 - 598.

Baum, J. R., Frese, M., & Baron, R. A. (2007), The Psychology of Entrepreneurship. Lawrence Erlbaum Associates: USA.

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

Begley, T. M., & Boyd, D. P. (1987), "Psychological characteristics associated with performance in entrepreneurial firms and smaller businesses", Journal of Business Venturing, Vol. 2, No. 1, pp. 79 - 93.

Begley, T. M., Tan, W.-L., & Schoch, H. (2006), "Politico-economic factors associated with interest in starting a business: A multi-country study", Entrepreneurship Theory and Practice, Vol. 29, No. 1, pp. 35 - 55.

Begley, T. M. & Tan, W. L. (2001), "The socio-cultural environment for entrepreneurship: A comparison between East Asian and Anglo-Saxon countries", Journal of International Business Studies, Vol. 32, No. 3, pp. 537 - 555.

Birley, S. (1985). The role of networks in the entrepreneurial process. Journal of Business Venturing, Vol. 1, No. 1, 107 - 117.

Bosma, N., Wennekers, S., & Amorós, J. E. (2011), Global Entrepreneurship Monitor 2011 Extended Report: Entrepreneurs and Entrepreneurial Employees Across the Globe. London, England: Global Entrepreneurship Research Association.

Boyd, N., & Vozikis, G. S. (1994), "The influence of self-efficacy on the development of entrepreneurial intentions and actions", Entrepreneurship Theory and Practice, Vol. 18, No. 4, pp. 63 - 77.

Brice, J. Jr., & Nelson, M. (2008), "The impact of occupational preferences on the intent to pursue an entrepreneurial career", Academy of Entrepreneurship Journal, Vol. 4, No. 1, pp. 13 - 36.

Bruederl, J., & Preisendoerfer, P. (1998), "Network support and the success of newly founded businesses", Small Business Economics, Vo. 10, No. 3, pp. 213 - 225.

Burns, P. (2011), Entrepreneurship and Small Business. Start-up, Growth and Maturity, Hampshire, Palgrave Macmillan (3.ª edição).

Carey, T. A., Flanagan, D. J., & Palmer, T. B. (2010), "An examination of University Student entrepreneurial intentions by type of venture", Journal of Developmental Entrepreneurship, Vol. 15, No. 4, pp. 503 - 517.

Carland, J. W., Hoy, F., & Carland, J. A. C. (1988), "Who is an entrepreneur? Is a question worth asking", American Journal of Small Business, Vol. 12, No. 4, 33 - 39.

Carsrud, A., & Brännback, M. (2011), "Entrepreneurial motivations: What do we still Need to know?", Journal of Small Business Management, Vol. 49, No. 1, 9–26.

Chay, Y. W. (1993), "Social support, individual differences, and well-being: A study of small business entrepreneurs and employees", Journal of Occupational and Organizational Psychology, Vol. 66, pp. 285 - 302.

Chell, E. (2008), The Entrepreneurial Personality: A Social Construction. London: The Psychology Press/Routledge.

Chell, E., Haworth, J., & Brearley, S. (1991), The Entrepreneurial Personality: Concepts, Cases, and Categories. London: Routledge.

Chen, C. C., Greene, P. G., & Crick, A. (1998), "Does entrepreneurial self-efficacy distinguish entrepreneurs from managers?", Journal of Business Venturing, Vol 13, pp. 295 - 316.

Connor, K. M., & Davidson, J. R. T. (2003), "Development of a new resilience scale: The connor-davidson resilience scale (CD-RISC)", Depress Anxiety, Vol. 18, pp. 76 - 82.

Cooper, A. C., & Gimeno-Gascon, F. J. (1992), Entrepreneurs, process of founding, and new-firm performance. In: Sexton, D. L., & Kasarda, J. D. (Eds.). The State of the Art of Entrepreneurship (pp. 301-340). Boston: PWS Kent.

Covin, J. G., & Slevin, D. P. (1989), "Strategic management of small firms in hostile and benign environments", Strategic Management Journal, Vol. 10, No. 1, pp. 75-87.

Cross, B., & Travaglione, A. (2003), "The untold story: Is the entrepreneur of the 21st century defined by Emotional Intelligence?", The International Journal of Organisational Analysis, Vol. 11, No. 3, pp. 221 - 228.

Dickerson, P., & Nash, B. A. (1999), "Nurse entrepreneurs as educators", American Journal of Nursing, Vo. 99, pp. 25 - 26.

Dollinger, M. (1995), Entrepreneurship: Strategies and Resources. Flossmoor IL: Austen Press.

Eckhardt, J. T., & Shane, S. A. (2003, "Opportunities and Entrepreneurship", Journal of Management, Vol. 29, No. 3, pp. 333 - 349.

Eggers, J. H., Leahy, K. T., & Churchill, N. C. (1996), "Leadership, management, and culture in high-performance entrepreneurial companies", Frontiers of Entrepreneurship research. Babson: Babson- College.

Eisenhardt, K. M. (1989), "Making fast strategic decisions in high-velocity environments", Academy of Management Journal, Vo. 32, No. 3, pp. 543 - 576.

Engle, D. E., Mah, J. J., & Sadri, G. (1997), "An empirical comparison of entrepreneurs and employees: Implications for innovation", Creativity Research Journal, Vol. 10, No. 1, pp. 45 - 49.

Ensley, M. D., Carland, J. W., & Carland, J. C. (2000), "Investigating the existence of the lead entrepreneur", Journal of Small Business Management, Vol. 38, No. 4, pp. 59 - 77.

Eyal, O., & Kark, R. (2004), "How do transformational leaders transform organizations? A study of the relationship between leadership and entrepreneurship", Leadership and Policy in Schools, Vol. 3, No. 3, pp. 211 - 235.

Friborg, O., Hjemdal, O., Rosenvinge, J. H., Martinussen, M., Aslaksen, P. M., & Flaten, M. A. (2006), "Resilience as a moderator of pain and stress", Journal of Psychosomatic Research, Vol. 61, No. 2, pp. 213-219.

Gartner, W. B. (1989), "Who is an entrepreneur? Is the wrong question", Entrepreneurship Theory and Practice, Vol. 13, pp. 47-68.

Green R, David J, Dent M and Tyshkovsky A (1996), "The Russian entrepreneur: a study of psychological characteristics", International Journal of Entrepreneurial Behaviour and Research, Vol. 2, No. 1, pp. 49 - 58.

Greenberger, D. B., & Sexton, D. L. (1988), "An interactive model of new venture formation", Journal of Small Business Management, Vol. 26, No. 3, pp. 1 - 7.

Hayton, J. C. & Cholakova, M. (2012), "The role of affect in the creation and intentional pursuit of entrepreneurial ideas", Entrepreneurship Theory and Practice, Vol. 36, pp. 41 - 68.

Hayward, M. L. A., Forster, W. R., Sarasvathy, S. D., &

Fredrickson, B. L. (2010), Beyond hubris: How highly confident entrepreneurs rebound to venture again", Journal of Business Venturing, Vol. 25, No. 6, pp. 569 - 578.

Higgs, M. J., & Dulewicz, V. (2003), "Leadership at the top: The need for emotional intelligence," International Journal of Organizational Analysis, Vol. 11, No. 3, pp. 193 - 210.

Hisrich, R. D. (1985), "The woman entrepreneur in the United States and Puerto Rico: a comparative study", Leadership and Organizational Development Journal, Vol. 5, No. 5, pp. 3 - 8.

Hmieleski, K. M., & Baron, R. A. (2008), "When does entrepreneurial self-efficacy enhance versus reduce firm performance?" Strategic Entrepreneurship Journal, Vol. 2, No. 1, pp. 57 - 72.

Hoehn-Weiss, M. N., Brush, C. G., & Baron, R. (2004), "Putting your best foot forward? Assessments of entrepreneurial social competence from two perspectives", The Journal of Private Equity, Vol. 7, No. 4, pp. 17 - 26.

Hornaday, J., & Aboud, J. (1971), "Characteristics of successful entrepreneurs", Personal Psychology, Vol. 24, No. 2, pp. 141 - 153.

Ireland, R. D., Hitt, M. A., & Sirmon, D. G. (2003), "A model of strategic entrepreneurship: The construct and its dimensions", Journal of Management Vol. 29, No. 6, pp. 963-989.

Johannisson, B. (1988), "Business formation: A network approach", Scandinavian Journal of Management, Vol. 4, No. 3-4, pp. 83 - 99.

Klein, K. J., & Sorra, J. S. (1996), "The challenge of innovation implementation", Academy of Management Review, Vol. 21, No. 4, pp. 1055 - 1080.

Klyver, K., Hindle, K., & Meyer, D. (2008), "Influence of social network structure on entrepreneurship participation – A study of 20 national cultures", International Entrepreneurship Management Journal, Vol. 4, No. 3, pp. 331 - 347.

Krueger, N. F. & Brazeal, D. (1994), "Entrepreneurial potential and potential entrepreneurs", Entrepreneurship: Theory and Practice, Vol. 18, No. 3, pp. 91 - 104.

Landy, F. J. (1989), Psychology of Work Behavior. Belmont California: Wadsworth.

Lee, D. Y., & Tsang, E. W. K. (2001), "The effects of entrepreneurial personality, background and network activities on venture growth", Journal of Management Studies, Vol. 38, pp. 583 - 602.

Lord, R. G., de Vader, C. L., & Alliger, G. M. (1986), "A meta-analysis of the relation between personality traits and leadership perceptions: An application of validity generalization procedures", Journal of Applied Psychology, Vol. 71, No. 3, pp. 402 - 410.

Lundström, A., & Stevenson, L. A. (2005), Entrepreneurship Policy: Theory and Practice. New. York: Springer.

Maguire, S. & Guyer, C. (2004), "Preparing geography students for employment in enterprise culture" Journal of Geography in Higher Education, Vol. 28, No. 3, pp. 369 - 379.

Mallak, L. (1998), "Putting organizational resilience to work", Industrial Management, Vol. 40, No. 6, pp. 8-14.

Markman, G. D, Baron, R., & Balkin, D. B. (2005), "Are perseverance and self-efficacy costless? Assessing entrepreneurs' regretful thinking" Journal of Organizational Behavior, Vol. 26, pp. 1 - 19.

Marvel, M. R., & Lumpkin, G. T. (2007), "Entrepreneurs human capital and its effects on innovation radicalness", Entrepreneurship: Theory and Practice, Vol. 31, No. 6, pp. 807 - 828.

Mayer, J. D., Salovey, P., & Caruso, D. R. (2000), Models of emotional intelligence. In: Sternberg R. J. (Eds.) Handbook of Intelligence. Cambridge, England: Cambridge University Press, 396 - 420.

McCarthy, D., Puffer, S., & Darda, S. V. (2010), "Convergence in entrepreneurial leadership style: Evidence from Russia", California Management Review, Vol. 52, No. 4, pp. 48 - 72.

McClelland, D. C. (1987), "Characteristics of successful entrepreneurs", Journal of Creative Behavior, Vol. 21, pp. 219 - 233.

McGee, J. E., Peterson, M., Mueller, S., & Sequeria, J. (2009), "Entrepreneurial self-efficacy: Refining the measure", Entrepreneurship: Theory and Practice, Vol. 33, No. 4, pp. 965 - 988.

Miner, J. B., & Raju, N. S. (2004), "Risk propensity differences between managers and entrepreneurs and between low- and high-growth entrepreneurs: A reply in a more conservative vein", Journal of Applied Psychology, Vol. 89, No. 1, pp. 3 - 13.

Morris, M. H., Kuratko, D. F., Schindehutte, M., & Spivack, A. J. (2012), "Framing the entrepreneurial experience", Entrepreneurship Theory and Practice, Vol. 36, pp. 11-40.

Moyer, S. K., & Chalofsky, N. E. (2008), "Understanding the selection and development of life goals of family business owners", Journal of Enterprising Culture, Vol. 16, No. 1, pp. 19 - 53.

Norton, W. I., & Moore, W. T. (2002), "Entrepreneurial risk: Have we been asking the wrong questions?", Small Business Economics, Vol. 18, No. 4, pp. 281 - 287.

Ocasio, W. (1997), "Towards an attention-based view of the ?rm", Strategic Management Journal, Vol. 18, pp. 187 - 206.

Osborne, R. L. (1995), "The essence of entrepreneurial success", Management Decision Vol. 33, No. 7, pp. 4 - 9.

Poon, J. M. L., Ainuddin, R. A., & Junit, S. O. (2006), "E?ects of self-concept traits and entrepreneurial orientation of firm performance", International Small Business Journal, Vol. 24, No. 1, pp. 61 - 82.

Ramachandran, K., & Ray, S. (2006), "Networking and resource strategies in new ventures: A study of information technology start-ups", Journal of Entrepreneurship, Vol. 15, No. 2, pp. 145 - 168.

Rauch, A., & Frese, M. (2000), "Psychological approaches to entrepreneurial success: A general model and an overview of findings. In Cooper C. L., & Robertson, I. T.(Eds.)", International Review of Industrial and Organizational Psychology, (101-142). Chichester: Wiley.

Rauch, A., & Frese, M. (2012), "Entrepreneurship as a key element in advancing the psychology of competitive advantage", Industrial and Organizational Psychology: Perspectives on Science and Practice, Vol. 5, No. 1, 108 - 111.

Reinmoeller, P., & van Baardwijk, N. (2005), "The link between diversity and resilience", MIT Sloan Management Review, Vol. 46, No. 4, pp. 61 - 65.

Robinson, P. B., Stimpson, D. V., Huefner, J. C., & Hunt, K. (1991), "An attitude approach to the prediction of entrepreneurship", Entrepreneurship Theory and Practice, Vol. 15, No. 4, pp. 13 - 31.

Romanelli, E. (1987), "New venture strategies in the minicomputer industry", California Management Review Fall, pp. 160 - 173.

Santos, S. C., Caetano, A., & Curral, L. (2010), "Atitude dos Estudantes Universitários face ao empreendedorismo: Como identificar o Potencial Empreendedor?", Revista Portuguesa e Brasileira da Gestão, Vol. 9, No. 4, pp. 2-14.

Santos, S. C., Caetano, A., Curral, L., & Spagnoli, P. (2010), How to assess the entrepreneurial potential. International Council for Small Business Conference - ICSB 2010. Cincinatti: USA (24-27 Junho 2010).

Santos, S. C., Curral, L., & Caetano, A. (2010), "Cognitive maps in early entrepreneurship stages: From motivation to implementation", International Journal of Entrepreneurship and Innovation, Vol. 11, No. 1, 29-44.

Sanz-Velasco, S. A. (2007), "Opportunity development as a learning process for entrepreneurs", International Journal of Entrepreneurial Behaviour and Research, Vol. 12, No. 5, pp. 251 - 271.

Sarasvathy, S. D., & Venkataraman, S. (2011), "Entrepreneurship as method: Open questions for an entrepreneurial future", Entrepreneurship Theory and Practice, Vol. 35, pp. 113 - 135.

Schwenk, C. R., & Shrader, C. B. (1993), "Effects of formal strategic planning on financial performance in small firms: A meta- analysis", Entrepreneurship Theory and Practice, Vol. 17, No. 3, pp. 48 - 53.

Shane, S. (2000), "Prior knowledge and the discovery of entrepreneurial opportunities", Organization Science, Vo. 11, No. 4, pp. 448 - 469.

Shane, S. (2004a), "Encouraging university entrepreneurship? The effect of the Bayh-Dole act on university patenting in the United States", Journal of Business Venturing, Vol. 19, No. 1, pp. 127 - 151.

Shane, S. (2004), Academic Entrepreneurship: University Spinoffs and Wealth Creation, Cheltenham, UK: Edward Elgar.

Shane, S., Locke, E. A., & Collins, C. J. (2003), "Entrepreneurial motivation", Human Resource Management Review, Vol. 13, pp. 257 - 279.

Shinnar, R., Pruett, M., & Toney, B. (2009), "Entrepreneurship education: Attitudes across campus", Journal of Education for Business, Vol. 84, No. 3, pp. 151 - 159.

Speier, C., & Frese M. (1997), "Generalized self-e?cacy as a mediator and moderator between control and complexity at work and personal initiative: A longitudinal field study in East Germany", Human Performance, Vol. 10, pp. 171 - 192.

Spencer, L. M. Jr., & Spencer, S. (1993), Competence at Work: Models for Superior Performance. New York: John Wiley and Sons.

Stewart, W. H. Jr., & Roth, P. L. (2007), "A meta-analysis of achievement motivation: Differences between entrepreneurs and managers", Journal of Small Business Management, Vol. 45, no. 4, pp. 401 - 421.

Tan, J., & Peng, M. W. (2003), "Organizational slack and firm performance during economic transitions: Two studies from an emerging economy", Strategic Management Journal, Vol. 23, No. 13, pp. 1249 - 1263.

Timmons, J. A., & Spinelli, S. (2007), New Venture Creation. Entrepreneurship for the 21st Century. McGraw-Hill International Edition.

Urban, B. (2010). Cognitions and motivations for new venture creation decisions: linking expert scripts to self-efficacy, a South African study. International Journal of Human Resource Management, 21 (9), 1512 - 1530.

Utsch, A., Rauch, A., Rothfuss, R., & Frese, M. (1999), "Who becomes a small scale entrepreneur in a post-socialist environment: On the difference between entrepreneurs and managers in East Germany", Journal of Small Business Management, Vol. 37, No. 3, pp. 31 - 42.

Van Praag, M. (2009), Academic entrepreneurship in Europe: A different perspective. In Z. J. Acs, D. Audretsch & R. J. Strom (Eds.), Entrepreneurship, Growth and Public Policy (pp. 284-298). New York: Cambridge University Press.

Vecchio, R. P. (2003), "Entrepreneurship and leadership: Common trends and common threads", Human Resource Management Review, Vol. 13, pp. 303-327.

Venkataraman, S., Sarasvathy, S. D., Dew, N., & Forster, W. R. (2012), "Reflections on the 2010 AMR decade award: Whiter the promise? Moving forward with entrepreneurship as a science of the artificial", Academy of Management Review, Vol. 37, No. 1, pp. 21-33.

Volkman, C. (2004). Entrepreneurial studies in higher education. Higher Education in Europe, 29, 177–185.

Wong, W., Cheung, H., & Venuvinod, P. K. (2005), "Individual entrepreneurial characteristics and entrepreneurial success potential", International Journal of Innovation and Technology Management, Vol. 2, No. 3, pp. 277 - 292.

Woo, C., Cooper, A. C., & Dunkelberg, W. C. (1991), "The development and interpretation of entrepreneurial typologies", Journal of Business Venturing, Vol. 6, No. 2, pp. 93 - 114.

Wood, M. S. (2009), "Does one size fit all? The multiple organizational forms leading to successful academic entrepreneurship", Entrepreneurship: Theory and Practice, Vol. 33, 4, pp. 929 - 947.

Wright, M., Clarysse, B., Mustar, P., & Lockett, A. (2007), Academic Entrepreneurship in Europe. Cheltenham, UK: Edward Elgar.

Zampetakis, L. A., Kafetsios, K., Bouranta, N., Dewett, T., & Moustakis, V. S. (2009), "On the relationship between emotional intelligence and entrepreneurial attitudes and intentions", International Journal of Entrepreneurial Behaviour and Research, Vol. 15, No. 6, pp. 595-618.

Zhao, H., Seibert, S., & Hills, G. E. (2005), "The mediating role of self-efficacy in the development of entrepreneurial intentions", Journal of Applied Psychology, Vol. 90, No. 2, pp. 1265 - 1272.