Track 2: Developments in IB theory
Competitive Session Format

THE CREATIVITY FLOW: THE RECURSIVE EFFECT BETWEEN INTERNATIONAL INVOLVEMENT AND ORGANIZATIONAL CREATIVITY

ABSTRACT

This theoretical paper proposes that there is a recursive effect of creativity on international involvement, and organizational creativity. We found this paper on two main pillars: the first is Penrose's assumption that creativity plays central roles in the processes of resource accumulation and experimentation and, the second is the Theory of Effectuation. The choice of an approach based on the Theory of Effectuation owes to the specific advantages that those who are more creative in the use of existing resources and relationships, as well as those who explore unexpected contingencies in international markets. Recently, the behavioral perspective of internationalization included the entrepreneurial capability as a prerequisite to internationalization (Schweizer, Vahlne, & Johanson, 2010). Therefore, in this research we approximate creativity, international involvement and the recursive effects of internationalization to explore how entrepreneurial capability mediates the relation between organizational creativity and the international involvement, resulting a creativity flow.

Keywords: Creativity. Entrepreneurship. International involvement. Entrepreneurial capability.

THE CREATIVITY FLOW: THE RECURSIVE EFFECT BETWEEN INTERNATIONAL INVOLVEMENT AND ORGANIZATIONAL CREATIVITY

INTRODUCTION

There is a sense of conciliation among scholars that the international involvement[i] of the firm establishes a flow of learning from the international environment to the organization. The more the entrepreneur interacts with uncertain situations and diverse institutional environments the faster this cycle becomes. This capability to deal with uncertainty at the organizational level reflects the presence of entrepreneurial capabilities[ii], which are nurtured by the entrepreneur's creative ability to solve problems.

Starting from the assumption that creativity is a high-level resource that nurtures entrepreneurial behavior and influences performance (Kor, Mahoney, & Michael, 2007), we assume that organizational creativity[iii] is an antecedent of entrepreneurial capability. Once an organization acts in international environments, a flow of creativity takes place. Such flow supports innovative initiatives, processes, products, and services. Therefore, the more creativity is brought into the firm; the more the firm's entrepreneurial capability will improve.

We propose that there is a recursive flow of creativity between international involvement that nurtures organizational creativity. Changes in the external environment erode organizational resources and routines, which the firm would employ to promote innovative responses (Penrose, 1959) and to build sustainable and competitive advantages (Barney, 1991; Grant, 1991). Thus, by a discovery process, managers amplify their ability to solve problems adopting creative strategies (Scott, Gibbons, & Coughlan, 2010).

Scarce, but recent empirical studies have evaluated the relationship between organizational creativity and entrepreneurial behavior. Based on the Theory of Effectuation (TE), Sitoh, Pan, and Yu (2014) researched the decision-making process that took place and how it influenced subsequent tactics employed during the process of new product creation. Dayan, Zacca, and Di Benedetto (2013) developed an exploratory study to understand the role of entrepreneurial creativity and found that expertise and creative self-efficacy are significantly related to entrepreneurial creativity. Scholars consider that there are specific advantages to international involvement for those who are more creative in the use of existing resources and relationships, as well as those who explore unexpected contingencies (Sarasvathy, Kumar, York, & Bhagavatula, 2014). To enrich internationalization process studies, as recommended by Schweizer, Vahlne, and Johanson (2010), we based TE as the cornerstone for the arguments presented in this paper.

As the entrepreneurial capability is a reflect of the entrepreneurial behavior (Kor et al., 2007), we propose that the two main constructs of entrepreneurial behavior – causation and effectuation – are influenced by organizational creativity (Sarasvathy, 2001). This argument aligns with Chandler, DeTienne, McKelvie, and Mumford (2011) adopting a multidimensional dimension of the effectuation construct. Based on Sarasvathy (2001), Chandler et al. (2011) concluded that the causation process is an ordinary construct while effectuation process is a multidimensional construct composed of four factors. Such factors are: a) focusing on short-term experiments (experimentation), b) focusing on projects where the loss in a worst-case scenario is affordable (affordable loss), c) exploiting environmental contingencies by remaining flexible (flexibility), and d) emphasizing pre-commitments and strategic alliances to control an unpredictable future (pre-commitments). In addition, Chandler et al. (2011), concluded that the pre-commitment factor affects the two main dimensions, the causation and the effectuation process of decision-making indistinctly. This

research proposes that the creativity flow crosses the multidimensional perspective of entrepreneurial capabilities, influencing and being influenced by the international involvement. The more involved internationally a firm is; the more creativity flows to the firm, reinforcing the organizational creativity. Figure 1 summarizes such relations.

FIGURE 1 GOES ABOUT HERE

We organized this paper in sections. After this introduction, Section 2 offers an overview of creativity, entrepreneurial capability, international involvement, and the recursive effects of internationalization. Finally, Section 3 presents a discussion and suggestions to extend the research on the recursive effects of internationalization.

LITERATURE REVIEW

According with Schweizer et al. (2010), TE is imperative to the understanding of internationalization as a context in which entrepreneurs, as decision makers, act in unpredictable environments. We do not presume that the effectuation process of decision-making is prevalent in international business. However, since entrepreneurs use creative abilities to solve problems in unpredictable environments (Sarasvathy, 2001); this research proposes that TE may support organizational creativity as an antecedent of entrepreneurial capability influenced by the international involvement.

2.1 Creativity

Guilford (1950) considered creativity as an instrument to solve problems through the application of multiple intellectuafl abilities, the analysis of alternatives, the evaluation of possible solutions, and synthesis. Five intellectual operations integrate the intellectual abilities – cognition, memory, convergent thinking, divergent thinking, and evaluation. These

mental operations, especially divergent thinking, could foster the ability to offer a wide range of possible responses to problems from a single stimulus.

In recent years, scholars researched creativity from a variety of different perspectives. Sometimes it refers to an ability to create new products/services (for example, Le Masson, Hatchuel, & Weil, 2011; Tahseen, 2012); while other times relating to the way choices and decisions are made (George, 2007; Kor et al., 2007).

Although this research focuses on the organizational dimension of creativity, it is relevant to connect this dimension to the individual and to the organizational field that embeds organizations. As emphasized by Levitt and March (1988), most ideas are bad. In addition, ideas are useless unless applicable (Levitt, 1963). When ideas are appropriate and add value to the organization, there is a conversion of individual creativity in capabilities (Sirmon, Hitt, & Ireland, 2007). Creativity is an antecedent of behavioral entrepreneurship that produces alternatives to cope with uncertainty (Kor et al., 2007). In the organizational environment, creativity becomes one of the factors that may offer alternatives to changes in the external environment, presenting it as an instrument able to provide answers to uncertainty (Knight, 1967). In a broad sense, creativity nurtures the intrinsic capabilities of individuals to respond to external changes. Creative ideas thrive when there are those who register and implement them (Csikszentmihalyi, 2000). It results from the interaction between individuals who present ideas in an environment in which there are granted legitimacy and validation as innovative ideas (Amabile, 1996).

Creativity has long been considered something inherent in the individual. In a moment of illumination, an individual can produce solutions to problems as mentioned by Kaplan and Simon (1990), citing Duncker (1945). This is the “Aha!” insight when the decision maker is solving a problem based on subjective assumptions. Still from a psychological perspective,

Boden (1994) associated creativity to the condensation of ancient knowledge in a moment of problem-solving in the social context.

Nevertheless, individual creativity has contradictory implications in the organizational environment. For instance, Cummings (1965) perceived bureaucracy inhibits creativity and innovation. He said bureaucracy has an aversion to the spread of ideas and that creativity causes conflicts that undermine its standards. According to Cummings (1965), tasks specialization is highly bureaucratic and that, in stable environments, some managers play the role of creativity inhibitors in order to maintain previously designed structures. Acting in this way managers reduce the ability to solve problems (Cummings, 1965).

Another dimension of creativity refers to organizational relationships. Creativity can establish links between organizations that may be useful in the future (Baer, 2012). According to Baer (2012), the implementation of ideas has a positive relationship to creativity. Hence, the more ideas are implemented, the more creativity is developed. Internal relationships may also affect the organization in relation to creativity.

Creativity may play different roles, especially in social environments (Moran, 2010). It can serve as an antecedent of organization performance, mediating the role of corporate entrepreneurship and environment (Bratnicka, 2013), or as a critical link between team dynamics and product competitive advantage (Im, Montoya, & Workman, 2013). Furthermore, creativity can foster the special ability to solve or to get responses to particular problems or situations (Amabile, 1996; Csikszentmihalyi, 2000; Cummings, 1965; Runco, 2004). Broadly, creativity may act as an antecedent of entrepreneurial behavior for solving problems (Amabile, 1996; Moghimi & Subramaniam, 2013).

Solving problems is an activity inherent to being an entrepreneur. Moreover, entrepreneurship can be broadly defined as the promotion of innovative activities in organizations by the entrepreneur as he/she perform the subjective tasks of discovery,

learning and applying his/her creativity (Kor et al., 2007; Penrose, 1959). This implies in the necessity for the refined orchestration of these tasks to create more sustainable competitive advantages (Sirmon et al., 2011), especially in dynamic environments (Sirmon et al., 2007) where knowledge acquisition is crucial (Runco, 2004).

While the entrepreneur handles with uncertainty, a process of learning and sharing knowledge takes place. Various entrepreneurs in an organization may collectively influence organizational learning, as new entrepreneurial opportunities for learning occur during their interactions with an unpredictable business environment (Kor et al., 2007; Witt, 1998)

2.2 Entrepreneurial Capability

In organizational studies, scholars research the entrepreneurial behavior for a long time. In his prior studies about innovation and economic advancement, Schumpeter (1939) considered the entrepreneur to be the main driver for change. Penrose (1959) endorsed this idea. She referred to the entrepreneur as the primary driver for implementing routines and innovation that could put a firm in a better position before its competitors.

Entrepreneurial behavior is intrinsically subjective. It includes attributes of the entrepreneur such as knowledge, resources, skills, and the process of discovery and creativity. These attributes could be said to constitute the "heart of entrepreneurship" (Kor et al., 2007:1187). This subjective perspective allows the entrepreneur to use creative responses, which may sometimes be contrary to what would be considered the most rational course of action in a given environment (Kor et al., 2007; Penrose, 1959). When entrepreneurs share their problem-solving abilities as well as their ability to convert ideas into new standards, they are converting entrepreneurial resources (Mosakowski, 1998) to the entrepreneurial capability of the firm.

The Theory of Effectuation (TE) is an alternative way of observing how firms behave, which is particularly different from how the prevalent economic theories approach the topic

of entrepreneurship (Sarasvathy, 2001). Influenced by Herbert Simon, TE is an emerging conceptual framework founded upon the concept of unbounded rationality (Simon, 1957, 1981), Levitt and March's (1988) studies on learning, Mintzberg's (1978) discussion of strategy formation patterns of strategy formation, and Weick's (1999) theory of enactment-retention-selection in decision-making in organizations.

Sarasvathy (2001) defined two main processes in entrepreneurial behavior – causation and effectuation. For Perry et al. (2012), the processes of causation and effectuation are constructs that lie at the opposite sides of a continuum. Entrepreneurs constantly move along this line, making decisions and choosing alternatives, sometimes from a more systematic (causation) approach, while at other times based on intuition and without a predictive path (effectuation).

Effectuation is about how expert entrepreneurs build new ventures and new markets. It is a way to examine the way entrepreneurs think, act, make decisions and solve problems (Sarasvathy & Dew, 2008). Nonetheless, effectuation is not just a characteristic. It is also an ability that needs to be developed in order to deal with uncertainty (Perry et al., 2012; Sarasvathy & Dew, 2008) as well as to cultivate, strengthen and maintain good relationships (Chandler et al., 2011). Hence, when instead of opportunism, intelligent altruism is applied, TE enables the conversion of problems into opportunities to reach new markets (Sarasvathy, 2004, mentioning Simon, 1981).

As a human being, the entrepreneur manages situations among other entrepreneurs, which involve heterogeneity, lability, and contextual issues. Hence, intuition becomes a very relevant factor. According to Sarasvathy (2003), entrepreneurial intuition does not arise from thin air and isolated from experience. On the contrary, it is related to the language they use, the stories they tell, the way they handle problems. These characteristics are associated with informal institutional behavior and mutual acceptance in the social context. For Sarasvathy

(2003), effectuators follow intuition better than rational plans in the presence of uncertainty. In line with this notion, assumption one reads:

Assumption 1: Organizational creativity is an antecedent of entrepreneurial capability, which is nurtured by the subjective role of creativity, at times when entrepreneurs realize and share with the organization alternative ways to deal with uncertainty.

Considering that the entrepreneurial capability is the entrepreneurial behavior converted to an organizational resource to handle and solve problems, organizational creativity influences entrepreneurial capability in two main dimensions. Firstly, when organizational creativity affects the causation process of decision-making, organizational creativity is consistent with strategic plans. The causation dimension includes activities as creative opportunity recognition and also the business plan development (Chandler et al., 2011; Sarasvathy & Dew, 2008). In this sense, the second assumption reads:

Assumption 2: Organizational creativity is an antecedent of entrepreneurial capability under the causation dimension. The more organizational creativity influences the entrepreneurial capability; the more entrepreneurial capability is applied to planning and discovering of opportunity recognition as alternative ways to deal with uncertainty.

Secondly, when organizational creativity influences the effectuation process of decision-making, organizational creativity is consistent with emergent strategies. The selection of alternatives to handle with uncertainty bases on experimentation, loss affordability, flexibility, and pre-commitments (Chandler et al., 2011; Sarasvathy, 2001), as sub-dimensions of the effectuation process of decision-making. The third assumption follows these four sub-dimensions.

Openness to new ideas is a feature of creative people, as they consider multiple possibilities and experimentation to develop skills of persuasion and encourage positive responses to new ideas on the organizational level (Matthews, 2010). The conversion of ideas in alternatives to solve problems is a feature of the organizational creativity applied as an entrepreneurial capability, as we propose in the assumption 3a.

Assumption 3a: Organizational creativity is an antecedent of entrepreneurial capability under the effectuation dimension, taken the experimentation sub-dimension. The more organizational creativity influences the entrepreneurial capability; the more the ability to convert experimentation results in positive responses to new ideas.

Effectuator's search for creative alternatives while prescribes previous commitment to avoid investing in projects with the best-expected returns (Sitoh et al., 2014), organizational creativity may influence the process of discovering such alternatives, given the loss affordability. The entrepreneur's affordability of loss in the effectuation logic is in the opposite sense of the causation logic of expecting returns. The effectuator's sense is to create prospective options in the present rather than maximize returns as an expectation for the future (Sarasvathy, 2001; Svensrud & Asvoll, 2012). This process of creating prospective options is a feature of the organizational creativity influencing the entrepreneurial capability, over the affordable loss sub-dimension of the effectuation logic of the entrepreneurial capability, as we propose on the assumption 3b.

Assumption 3b: Organizational creativity is an antecedent of entrepreneurial capability under the effectuation dimension, taken the affordable loss sub-dimension. The more organizational creativity influences the entrepreneurial capability; the more the ability to create prospective options to recognize the affordable loss to respond to uncertainty is developed.

Entrepreneurs use effectuation logic for searching for opportunities. They start with generalized aspirations applying the resources they have available (Perry, Chandler, & Markova, 2012). As the objective is not clear, flexibility is necessary to scan opportunities to employ their experience, their knowledge, and their network to take advantage of environmental contingencies (Sarasvathy, 2001). As the future is something to be build, rigid plans are useless (Read & Sarasvathy, 2005). Although recent studies confirmed that goal orientation has an adverse effect on applying organizational creativity in situations of high uncertainty (Blauth, Mauer, & Brettel, 2014), other studies confirmed that flexibility also is a feature of creative individuals that absorb information and are more open to new experiences (de Stobbeleir, Ashford, & Buyens, 2011). In this study we propose that flexibility is an ability that compounds the entrepreneurial capability, influenced by the organizational creativity, as Assumption 3c reads:

Assumption 3c: Organizational creativity is an antecedent of entrepreneurial capability under the effectuation dimension, taken the flexibility sub-dimension. The more organizational creativity influences the entrepreneurial capability; the more flexible the organization to scan opportunities.

Pre-commitments are important to effectuator's in order to minimize risks (Read, Song, & Smit, 2009). There is a share of interests between the firm and the stakeholders in order to prospect opportunities. Scholars have been skeptics about pre-commitments as an effectuation logic sub-dimension; once previous agreements also have causation features (Chandler et al., 2011; Faia, Rosa, & Machado, 2014). Otherwise, pre-commitments may represent levels of formalization that can allow the emergence of bureaucratic behavior. As bureaucracy inhibits creativity (Cummings, 1965), creative individuals avoid the formalization of pre-commitments, mitigating entrepreneurial capability, as we propose in the Assumption 3d:

Assumption 3d: Organizational creativity is an antecedent of entrepreneurial capability, but the pre-commitment sub-dimension of effectuation inhibits the effect on entrepreneurial capability. The more organizational creativity influences the entrepreneurial capability; the fewer pre-commitments contribute to entrepreneurial capability development.

Several international business studies have looked at how innovation and organizational capabilities are reflected in international business (for instance, Cavusgil & Knight, 2015; Golovko & Valentini, 2011; Knight & Cavusgil, 2004). In parallel, as an entrepreneurial process internationalization (Schweizer et al., 2010) has been present as a complementary perspective to the model developed by Johanson and Vahlne (1977), which became known as the Uppsala model. As depicted in Schweizer et al., (2010:365), this amplified approach "incorporates entrepreneurial capabilities as a state variable, and exploiting contingencies as a change variable." The assumption 4 takes this broad perspective:

Assumption 4: Entrepreneurial capability permits the firm to explore opportunities in international markets. The more entrepreneurial capability a firm develops; the more is its involvement in international markets.

2.3 International involvement

Since the focus of this paper is the organizational environment, attention must be turned to aspects related to the manager's behavior, especially about how this behavior reflects the creative character as an entrepreneurial feature. The steps of the firm's international involvement depend on the development of knowledge, activity and organizational structure, suggesting, therefore, that knowledge about the a firm's internationalization process is dependent upon the ongoing experience of its decision makers (Johanson & Wiedersheim-paul, 1975; Schweizer et al., 2010).

Referring to learning arising from the internationalization process, Forsgren (2002) emphasized that access to a network of business relationships creates the opportunity to learn from other organizations. This sense meets to Sarasvathy (2001) perception that relationships facilitate decision-making on effectuation logic. Dew and Hearn (2009) examined how creativity can enhance learning in groups with the restriction of access to resources. As the effectuation logic is often adopted for handle uncertainty, such as scanning opportunities in less known environments is more prevalent in new firms (Evers & O'Gorman, 2011). This research argues that the more experienced firm is, the more it tends to follow the causation logic, instead of effectuation logic. Assuming that both international experience and previous recursive effects may influence the entrepreneurial capability, this research proposes:

Assumption 5: Firms more experienced in the international market tends to adopt the causation dimension of entrepreneurial capability when expand business abroad. Thus, the less uncertainty is perceived in new foreign markets; the more entrepreneurs are goal oriented.

When opportunities arise from international markets, the entrepreneurial capability moves on the continuum of effectuation (Perry et al., 2012), depending on the uncertainty perceived. This study explores the four sub-dimensions of effectuation logic, to propose Assumption 6, splitted in four sub-dimensions.

Besides the intense flow of possibilities for improving a sort of resources in a firm that connects the international environment (Coviello, 2006), international networks established by organizations during the international experience reflects knowledge flow. In an amplified sense, knowledge diversity brings benefits because it safeguards institutions and networks where the firm is inserted from becoming 'locked into' the 'old' technologies (Kotabe, Dunlap-Hinkler, Parente, & Mishra, 2007).

In longitudinal and qualitative research over new ventures firms, Gabrielsson and Gabrielsson (2013:1372) evaluate if decision-making patterns change in international business to business new ventures, based on assumptions from TE. They interpret their results considering that the "effectuation-based decision-making increased the role of opportunity creation as an important antecedent for growth and the importance of explorative learning for long-term survival as well". As individuals take experience abroad, they connect to different institutional environments that allow better responses (Delios, 2011). According to Delios (2011), the experience can be a valued asset to the organization, in that it that allows it to generate knowledge and capabilities that may be useful in different institutional contexts. Based on experimentation sub-dimension of the entrepreneurial capability, we propose:

Assumption 6a: When involved in international markets, the experimentation sub-dimension of the entrepreneurial capability facilitates the conversion of experiences in new ideas to scan opportunities.

Previous learning bases routines to obtain better results in the future. Also, the behavior is related to what an organization wants, i.e., the organization needs to learn how to handle with available resources and knowledge or supposed to have in the future. "They [organizational members] change as a result of experience within a community of other learning organizations. These changes depend on interpretations of history, particularly on the evaluation of outcomes in terms of targets" (Levitt & March, 1988, p.320). While entrepreneurs focus on affordable loss, the need to predict future gains is mitigated, thus implying less time engaged in planning (Sarasvathy et al., 2014). Approaching the affordable loss sub-dimension, the Assumption 6b states:

Assumption 6b: When involved in international markets, the affordable loss sub-dimension of the entrepreneurial capability anchors on experience to accelerate the process of decision-making, promoting faster responses to environmental changes.

In international markets, a firm that trusts on emergent goals tends to remain flexible concerning their strategic goals. On the other hand, firms relying on defined targets would have a fixed plans about the selection of markets, entry modes, and specific strategies (Harms & Schiele, 2012). Effectuators usually are more flexible to handle with external environment changes, new means at disposal, and even eventual unexpected stakeholders demand (Kalinic, Sarasvathy, & Forza, 2014). Referring to the flexibility sub-dimension, the Assumption 6c reads:

Assumption 6c: When involved in international markets, the flexibility sub-dimension of the entrepreneurial capability permits faster changes in strategies, once entrepreneurial capability promotes less rigidity in strategies.

The prospect of networked relationships in international business (for example, Johanson & Vahlne, 2009) favors recognition of opportunities during the course of business, rather than a plan to seek specific opportunities. Therefore, the previously existing relationships facilitate taking advantage of prior knowledge to discover opportunities, enabling the entrepreneur to find alternative business more focused on established knowledge in their relationships than following recommendations from others (Johanson & Vahlne, 2009). In a foreign environment, where the risk perception used to be higher, entrepreneurs look for connectors to other networks in foreign countries in order to gain trust (Smith & Ryan, 2012).

The creative process develops while networks are being established (Baer, 2012). The search for associations based on knowledge generated from personal experience occurs not only by the combination of experiences between the parties in a creative manner (Harms & Schiele, 2012). While acting and working together, entrepreneurs may be more willing to

adopt creative responses in the face of contingencies that may arise, turning them into opportunities. Previous studies found that both causation and effectuation dimensions correlate positively with core aspects of pre-commitment sub-dimension (Chandler et al., 2011; Faia et al., 2014). As a sub-dimension of the entrepreneurial capability, pre-commitments influence international involvement is a broad range than other sub-dimensions, as stated in Assumption 6d.

Assumption 6d: As pre-commitment sub-dimension of entrepreneurial capability is related to causation and effectuation dimensions, pre-commitments has more influence on international involvement than other sub-dimensions, experimentation, affordable loss, and flexibility.

2.4 Recursive effects of internationalization

Internationalization is a learning process and knowledge acquisition (Johanson & Vahlne, 2009) that permits the expansion of international involvement of the firm (Knight & Kim, 2009). Organizational performance depends, to some extent, how managers can mobilize all knowledge and resources they have available and turn them into activities that may create value to the firm (Pla-Barber & Alegre, 2014). Creativity is a result of an intricate connection between a recent set of events and prior knowledge that is potentialized when divergent thinking is stimulated (Lubart, 2003; Runco, 2001). It is possible to infer that international markets replicate conditions to instigate divergent thinking as it permits contact with different cultures, feeding back organizational creativity. Considering that previous studies have confirmed recursive effects of international involvement in learning, experiential knowledge and innovation, this research proposes:

Assumption 7: There is a recursive effect on the creativity flow when a firm is involved in the international environment, once divergent thinking is stimulated on a

broad scale. The more involved in international markets a firm is; the more creativity flows through the organization.

Discussion / Implications

Initially, we proposed that there is a recursive flow on international involvement, and organizational creativity. In addition, we proposed a theoretical interaction with TE, as the more creative use of existing resources and relationships, the more unexpected contingencies can be explored. Such proximity highlights creativity as an antecedent of entrepreneurial capability to handle complex environmental contingencies, usually found in international markets.

Theoretically, we follow Runco's (2001) assertive creativity as an element to solve problems through multiple intellectual abilities and analysis of alternatives, evaluation of possible solutions and synthesis. In addition, entrepreneurs borrow their experience, knowledge and creativity to their firms. Such influences on their decisions, as entrepreneurs choose between more aggressive or defensive tactics (Fern, Cardinal, & O'Neill, 2012).

This research proposed that organizational creativity is an antecedent of entrepreneurial capability, considering idiosyncratic aspects of creativity in the entrepreneurial behavior. This paper also proposed that organizational creativity has different roles as an antecedent of entrepreneurial capability, influencing in two main dimensions, causation and the effectuation. On the sequence, this paper analyzed the four sub-dimensions of entrepreneurial capability, experimentation, affordable loss, flexibility, and pre-commitments. Afterward, this paper proposed relations between the four sub-dimensions and international involvement. Finally, this paper proposed a recursive effect on the process of creativity flow that happen when a firm is involved in the international environment, once divergent thinking is stimulated on a broad scale.

As a theoretical contribution, this research may help in examining the role of organizational creativity as an intersubjective element in International Business by effectuation perspective, as provoked by Sarasvathy et al. (2014). International business studies are spreading its concepts in order to encompass multidisciplinary understandings and Theory of Effectuation seems to be useful. This paper also collaborate in filling a gap that can answer how organizations can make use of creativity for more room in markets and less time in the face of increasingly global competition.

Under an applied aspect, future empirical research can also foster different actions. In organizations, may bring the relevance of management focused on creativity, in an attempt to find alternatives that combine logic and intuition to respond more quickly to strategic issues in international business. Researching implications of the creativity flow between international involvement and the firm, studies can also be useful in establishing public policies that promote the creative industry in international markets. On a sociological level, can contribute in pointing corrections in educational and vocational training aimed at long-term gains for regions in which creativity could be converted into a differentiating factor for emerging economies.

REFERENCES

Amabile, T. M. (1996). Creativity and Innovation in Organizations. *Harvard Business School*. Harvard Business School.

Baer, M. (2012). Putting Creativity To Work: the Implementation of Creative Ideas in Organizations. *Academy of Management Journal*, *55*(5), 1102–1119. doi:10.5465/amj.2009.0470

Barney, J. (1991). Firm Resources and Sustained Competitive Advantage. *Journal of Management*, *17*(1), 99–120.

Blauth, M., Mauer, R., & Brettel, M. (2014). Fostering Creativity in New Product Development through Entrepreneurial Decision Making. *Creativity and Innovation Management*, *23*(4), 495–509.

Bratnicka, K. (2013). Linking two dimensions of organizational creativity to firm performance: the mediating role of corporate entrepreneurship and the moderating role of environment. *Advances in Business-Related Scientific Research Journal*, *4*(2), 153–164.

Cavusgil, S. T., & Knight, G. (2015). The born global firm: An entrepreneurial and capabilities perspective on early and rapid internationalization. *Journal of International Business Studies*, *46*(1), 3–16. doi:10.1057/jibs.2014.62

Chandler, G. N., DeTienne, D. R., McKelvie, A., & Mumford, T. V. (2011). Causation and effectuation processes: A validation study. *Journal of Business Venturing*, *26*(3), 375–390. doi:10.1016/j.jbusvent.2009.10.006

Coviello, N. E. (2006). The network dynamics of international new ventures. *Journal of International Business Studies*, *37*, 713–731.

Csikszentmihalyi, M. (2000). *Beyond boredom and anxiety*. San Francisco, CA, EUA: Jossey-Bass.

Cummings, L. (1965). Organizational Climates for Creativity. *Academy of Management Journal*, *8*(3), 220–227. doi:10.2307/254790

Dayan, M., Zacca, R., & Di Benedetto, A. (2013). An Exploratory Study of Entrepreneurial Creativity: Its Antecedents and Mediators in the Context of UAE Firms. *Creativity and Innovation Management*, *22*(3), 223–240.

De Stobbeleir, K. E. M., Ashford, S. J., & Buyens, D. (2011). Self-Regulation of Creativity at Work: The Role of Feedback-Seeking Behavior in Creative Performance. *Academy of Management Journal*, *54*(4), 811–831. doi:10.5465/AMJ.2011.64870144

Delios, A. (2011). Experience and a firm's performance in foreign markets: A commentary essay. *Journal of Business Research*, *64*(2), 227–229. doi:10.1016/j.jbusres.2010.01.002

Dew, R., & Hearn, G. (2009). a New Model of the Learning Process for Innovation Teams: Networked Nominal Pairs. *International Journal of Innovation Management*, *13*(04), 521–535. doi:10.1142/S136391960900239X

Evers, N., & O'Gorman, C. (2011). Improvised internationalization in new ventures: The role of prior knowledge and networks. *Entrepreneurship & Regional Development*, *23*(7-8), 549–574. doi:10.1080/08985621003690299

Faia, V. da S., Rosa, M. A. G., & Machado, H. P. V. (2014). Alerta Empreendedor e as Abordagens Causation e Effectuation sobre Empreendedorismo. *RAC*, *18*(2), 196–216.

Gabrielsson, P., & Gabrielsson, M. (2013). A dynamic model of growth phases and survival in international business-to-business new ventures: The moderating effect of decision-making logic. *Industrial Marketing Management*, *42*(8), 1357–1373. doi:10.1016/j.indmarman.2013.07.011

George, J. M. (2007). Creativity in Organizations. In *The Academy of Management Annals* (Vol. 1, pp. 439–477). doi:10.1080/078559814

Golovko, E., & Valentini, G. (2011). Exploring the complementarity between innovation and export for SMEs' growth. *Journal of International Business Studies*, *42*(3), 362–380. doi:10.1057/jibs.2011.2

Grant, R. M. (1991). The resource-based theory of competitive advantage: implications for strategy formulation. *California Management Review*, (Spring), 114–135.

Harms, R., & Schiele, H. (2012). Antecedents and consequences of effectuation and causation in the international new venture creation process. *Journal of International Entrepreneurship*, *10*(2), 95–116. doi:10.1007/s10843-012-0089-2

Im, S., Montoya, M. M., & Workman, J. P. (2013). Antecedents and Consequences of Creativity in Product Innovation Teams. *Journal of Product Innovation Management*, *30*(1), 170–185. doi:10.1111/j.1540-5885.2012.00887.x

Johanson, J., & Vahlne, J. (2009). The Uppsala internationalization process model revisited: From liability of foreignness to liability of outsidership. *Journal of International Business Studies*, *40*(9), 1411–1431. doi:10.1057/jibs.2009.24

Johanson, J., & Wiedersheim-paul, F. (1975). The Internationalization of the firm — four Swedish Cases. *The Journal of Management Studies*, (October), 305–322.

Kalinic, I., Sarasvathy, S. D., & Forza, C. (2014). "Expect the unexpected": Implications of effectual logic on the internationalization process. *International Business Review*, *23*(3), 635–647. doi:10.1016/j.ibusrev.2013.11.004

Kaplan, A., & Simon, H. A. (1990). In Search of insight. *Cognitive Psychology*, *19*, 374–419.

Knight, G. ., & Cavusgil, T. (2004). Innovation, organizational capabilities, and the born-global firm. *Journal of International Business Studies*, *35*, 124–141.

Knight, G. ., & Kim, D. (2009). International business competence and the contemporary firm. *Journal of International Business Studies*, *40*, 255–273. doi:10.1057/palgrave.jibs.8400397

Knight, K. E. (1967). A descriptive model of the intra-firm innovation process. *The Journal of Business*, 478–496.

Kor, Y. Y., Mahoney, J. T., & Michael, S. C. (2007). Resources , Capabilities and Entrepreneurial Perceptions *. *Journal of Management Studies*, *44*(7), 1187–1212.

Kotabe, M., Dunlap-Hinkler, D., Parente, R., & Mishra, H. a. (2007). Determinants of cross-national knowledge transfer and its effect on firm innovation. *Journal of International Business Studies*, *38*(2), 259–282. doi:10.1057/palgrave.jibs.8400261

Lanza, A., & Passarelli, M. (2014). Technology Change and Dynamic Entrepreneurial Capabilities. *Journal of Small Business Management*, *52*(3), 427–450. doi:10.1111/jsbm.12042

Le Masson, P., Hatchuel, A., & Weil, B. (2011). The Interplay between Creativity Issues and Design Theories: A New Perspective for Design Management Studies? *Creativity and Innovation Management*, *20*(4), 217–237. doi:10.1111/j.1467-8691.2011.00613.x

Levitt, B., & March, J. G. (1988). Organizational Learning. *Annual Review of Sociology*, *14*(1), 319–340. doi:10.1146/annurev.so.14.080188.001535

Levitt, T. (1963). Creativity Is Not Enough. *Harvard Business Review*, *41*(3), 72–83.

Lubart, T. (2003). *Psychologie de la créativité*. Armand Colin.

Matthews, J. H. . (2010). (2010). Investigating design, creativity and entrepreneurial processes. In *Annual Meeting of the Academy of Management-Dare to Care: Passion and Compassion in Management Practice & Research* (pp. 6–10).

Moghimi, S., & Subramaniam, I. (2013). Employees' Creative Behavior: The Role of Organizational Climate in Malaysian SMEs. *International Journal of Business and Management*, *8*(5), 1–13. doi:10.5539/ijbm.v8n5p1

Moran, S. (2010). The roles of creativity in society. In J. C. . James C. Kaufman & R. J. Sternberg (Eds.), *The Cambridge Handbook of Creativity*. New York: Cambridge University Press.

Mosakowski, E. (1998). Entrepreneurial Resources, Organizational Choices, and Competitive Outcomes. *Organization Science*, *9*(March 2015), 625–643. doi:10.1287/orsc.9.6.625

Penrose, E. T. (1959). *The Theory of the Growth of the Firm*. New York: Wiley.

Perry, J. T., Chandler, G. N., & Markova, G. (2012). Entrepreneurial Effectuation: A Review and Suggestions for Future Research. *Entrepreneurship Theory and Practice*, *36*(4), 837–861. doi:10.1111/j.1540-6520.2010.00435.x

Pla-Barber, J., & Alegre, J. (2014). The role of knowledge and learning in internationalization. *International Business Review*, *23*(1), 1–3. doi:10.1016/j.ibusrev.2013.09.005

Read, S., & Sarasvathy, S. D. (2005). Knowing what to do and doing what you know : Effectuation as a form of entrepreneurial expertise, (November).

Read, S., Song, M., & Smit, W. (2009). A meta-analytic review of effectuation and venture performance. *Journal of Business Venturing*, *24*(6), 573–587. doi:10.1016/j.jbusvent.2008.02.005

Runco, M. a. (2004). Creativity. In *Annual review of psychology* (Vol. 55, pp. 657–87). doi:10.1146/annurev.psych.55.090902.141502

Runco, M. a. (2001). Introduction to the Special Issue: Commemorating Guilford's 1950 Presidential Address. *Creativity Research Journal*, *13*(3-4), 245–245. doi:10.1207/S15326934CRJ1334_01

Sarasvathy, S. D. (2001). Causation and Effectuation: Toward a Theoretical Shift from Economic Inevitability to Entrepreneurial Contingency. *The Academy of Management Review*, *26*(2), 243. doi:10.2307/259121

Sarasvathy, S. D., & Dew, N. (2008). Effectuation and over-trust: debating Goel and Karri. *Entrepreneurship Theory and Practice*, *July*, 727–738.

Sarasvathy, S. D., Kumar, K., York, J. G., & Bhagavatula, S. (2014). An Effectual Approach to International Entrepreneurship: Overlaps, Challenges, and Provocative Possibilities. *Entrepreneurship Theory and Practice*, *38*(1), 71–93. doi:10.1111/etap.12088

Schweizer, R., Vahlne, J.-E., & Johanson, J. (2010). Internationalization as an entrepreneurial process. *Journal of International Entrepreneurship*, *8*(4), 343–370. doi:10.1007/s10843-010-0064-8

Scott, P., Gibbons, P., & Coughlan, J. (2010). Developing subsidiary contribution to the MNC-Subsidiary entrepreneurship and strategy creativity. *Journal of International Management*, *16*(4), 328–339. doi:10.1016/j.intman.2010.09.004

Simon, H. A. (1957). A Behavioral Model of Rational Choice. In *Models of Man, Social and Rational: Mathematical Essays on Rational Human Behavior in a Social Setting*. New York: Wiley.

Simon, H. A. (1981). *As Ciências do Artificial*. Coimbra: Armênio Amado.

Sirmon, D. G., Hitt, M. A., & Ireland, R. D. (2007). Managing Firm Resources in Dynamic Environments to Create Value: Looking Inside the Black Box. *Academy of Management Review*, *32*(1), 273–292.

Sitoh, M. K., Pan, S. L., & Yu, C. (2014). Business Models and Tactics in New Product Creation : The Interplay of Effectuation and Causation Processes. *IEEE Transactions on Engineering Management*, *61*(2), 213–224.

Smith, A. R., & Ryan, P. A. (2012). Born global networks: the role of connectors. *European Journal of International Management*, *6*(5), 566–589.

Svensrud, E., & Asvoll, H. (2012). Innovation in large corporations: a development of the rudimentary theory of effectuation. *Academy of Strategic Management Journal*, *11*, 59–89.

Tahseen, A. A. (2012). Entrepreneurial Intensity in the Corporate Sector in Oman: The Elusive Search Creativity and Innovation. *International Business Research*, *5*(9), 171–184. doi:10.5539/ibr.v5n9p171

Weick, K. E. (1999). Conclusion: Theory Construction as Disciplined Reflexivity: Tradeoffs in the 90s. *The Academy of Management Review*, *24*(4), 797–806. doi:10.2307/259355

Witt, U. (1998). Imagination and leadership – The neglected dimension of an evolutionary theory of the firm. *Journal of Economic Behavior & Organization*, *35*(2), 161–177. doi:10.1016/S0167-2681(98)00058-4

Woodman, R. W., Sawyer, J. E., & Griffin, R. W. (1993). Toward a Theory of Organizational Creativity. *The Academy of Management Review*, *18*(2), 293. doi:10.2307/258761

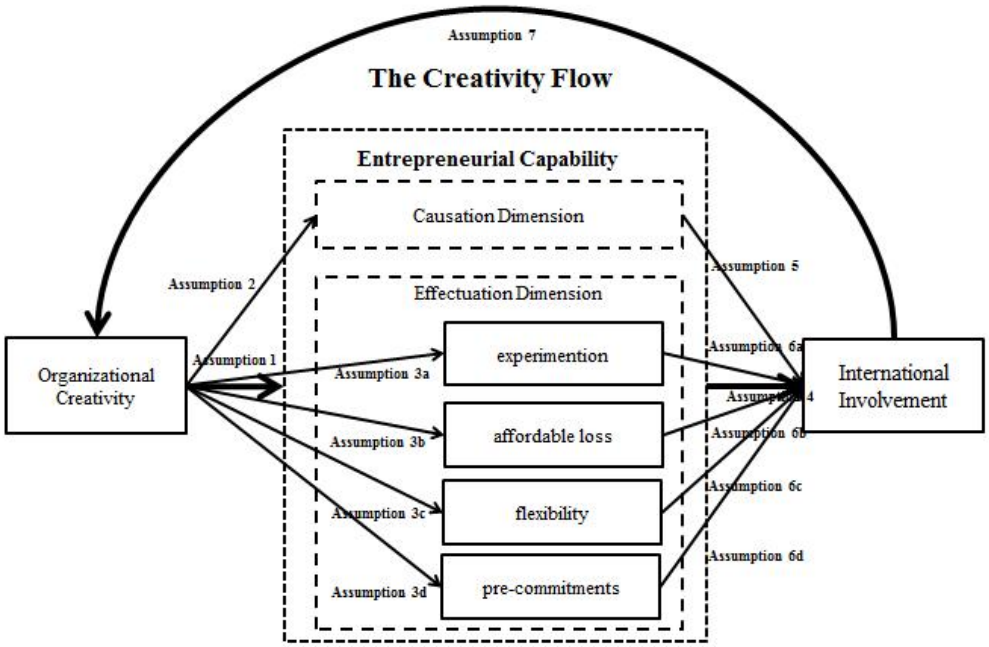

Figure 3: Proposed Framework of the Creativity Flow

---

[i] International involvement is beyond internationalization as a process of discovering and exploring new markets. In this paper, international involvement refers to necessary capabilities that firms need for growing in international markets, expanding their involvement (Knight & Kim, 2009).

[ii] Entrepreneurial capability is a high order capability of arranging resources to achieve competitive advantage. Scholars are still diffuse over this concept. On one hand, entrepreneurial resources may represent a creative skill of managers to solve problems, acting intuitively, and being open to opportunities. Such entrepreneurial resource can be dispersed over the organization and converted in an organizational resource (Mosakowski, 1998). On the other hand, there is the dynamic entrepreneurial capability, as a high-order capability that represents the conversion of a high order resource in a capability that allow firms to develop product innovation and deal with technology change specially in small and medium firms (Lanza & Passarelli, 2014). In this essay we refer to entrepreneurial capability indistinctly as an entrepreneurial resource and dynamic entrepreneurial capability. In a proposition for a revision of Uppsala Model, Schweizer et al. (2010) considered th entrepreneurial capability as a complementary explanation of the internationalization process.

[iii] Organizational creativity can be defined as the creation of products, services, ideas, processes, and procedures that are valuable and useful for the organization, arising from individuals working together in a complex social context (Woodman, Sawyer, & Griffin, 1993).