

HEURISTICS AND BIASES IN ENTREPRENEURIAL MARKETING: SOME NEW INSIGHTS

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ABSTRACT

Current paper advances the body of knowledge on entrepreneurial heuristics and biases and also entrepreneurial marketing. After screening the existing body of knowledge on heuristics and biases as well as marketing in the field of entrepreneurship, we propose that some exceptionally important heuristics and biases in entrepreneurs' decisions could impact entrepreneurial marketing as well. In order to make decisions, entrepreneurs need to cope with novelty, uncertainty, ambiguity and high time pressure. These factors, combined with specific entrepreneurial cognitive characteristics make entrepreneurs' decision prone to heuristics and biases. This is more severe in case of novice entrepreneurs who do not possess necessary decision making styles. Because of not having necessary business experience, novice entrepreneurs face more uncertainty and complexity in their decisions. Thus, they become more susceptible to heuristics and biases. Though heuristics and biases have been studied adequately in lots of entrepreneurship-related decisions, they have been mostly and surprisingly ignored in the field of entrepreneurial marketing. Novice entrepreneurs face increasing rivalry and severe competition while having little resources and being prone to information overload or high time pressure. These factors make novice entrepreneurs even more susceptible to heuristics and biases in their marketing decisions. Though the bulk of research on entrepreneurial heuristics and biases seems to be satisfactory, we argue that there are some important, neglected areas in this regard. According to our propositions developed in this study, some very influential heuristics and biases impact entrepreneurial marketing.

Key words: Novice entrepreneurs, Entrepreneurial marketing, Heuristics, Biases.

INTRODUCTION

Decision making is one of the most crucial entrepreneurial tasks in starting and managing enterprises. Entrepreneurial decisions are sometimes irrational. Because of not having enough experience as well as sufficient staff and acting in mostly uncertain environments, entrepreneurial decisions, especially in the beginning phases of their activities, are prone to heuristics and biases (Busenitz & Barney, 1997). A lot of researchers have been trying to identify the main causes of entrepreneurial decision making biases. For example, Baron (1998) identified cognitive factors as the main drivers of some of the most important entrepreneurial heuristics as well as biases. Koellinger, Minniti and Schade (2007) studied overconfidence, another major decision bias in entrepreneurs. They introduced individual factors as the main causes of its genesis. Cognitive factors (Kaish and Gilad, 1991), heuristics (Manimala, 1992) as well as

emotions and affect (Baron, 2008) are other main factors leading to entrepreneurial decision making biases. This is mostly true for novice entrepreneurs who make a large part of their decisions based on their intuition and emotions (Baron and Shane, 2007), which consequently could make them more susceptible to biases. Novice entrepreneurs, when engaging in marketing activities, are more prone to heuristics and biases, because on the one hand the influence of emotions, intuitions and personal cognitive characteristics is more apparent on their decisions and on the other hand, they do not have sufficient resources to gather and assess all the data and information needed to make sound decisions. This could be more obvious in the field of entrepreneurial marketing. According to Hills and Hultman (2011) entrepreneurial marketing is influenced by entrepreneurial thinking and decision making. Kilenthong et al. (2016) conclude that Entrepreneurial marketing behavior is determined by entrepreneurial thinking and decision-making as well as firm age and firm size. By considering that novice entrepreneurs do not have necessary expertise to gather and analyze information and their marketing activities are rooted in their thoughts and decisions, one could conclude that the genesis of heuristics and biases in novice entrepreneurs' marketing decisions is more probable. In general, though the bulk of work on entrepreneurial decision making biases seems adequate, there is still some ambiguity regarding another major areas affected by heuristics and biases. Relatively few studies have investigated the influence of heuristics and biases in entrepreneurial marketing. In order to fill this neglected gap, this paper tends to study some of the most common entrepreneurial heuristics and biases in the field of marketing. We argue that two heuristics (affect and availability) and three biases (overconfidence, escalation of commitment as well as planning fallacy) influence novice entrepreneurs' marketing decisions. In the following sections, we render our literature review, propositions and discussion and implications, respectively.

LITERATURE REVIEW

Entrepreneurial Marketing

Entrepreneurial marketing has been introduced and developed as a novel way of doing marketing, especially in small businesses. Gardner (1994) was one of the first scholars who studied the interface of marketing and entrepreneurship. According to Gardner, The interface of entrepreneurial behavior and marketing is that where Innovation is brought to the market. Marketing's role in innovation is to provide the concepts, tools and infrastructure to close the gap between innovation and market positioning to achieve sustainable competitive advantage. Hills, Hultman, Kraus and Schulte (2010) defined entrepreneurial marketing as a spirit, an orientation and a process of passionately pursuing opportunities and launching and growing ventures that create perceived customer value through relationships by employing innovativeness, creativity, selling, market immersion, networking and flexibility.

Morris (2011) regards entrepreneurial marketing as a strategy to cope with dynamic marketing environment. Gilmore (2011) concludes that entrepreneurial marketing is opportunistic, intuitive and profit driven. In a more recent study, Hills and Hultman (2013) believe that entrepreneurial marketing is the result of entrepreneurs' interpretation of data, decision-making, and proper actions. Based on this definition we could surmise the importance of entrepreneurial decision making in entrepreneurial marketing. This would be especially true for small businesses. According to Hill & Wright (2000), the marketing style of small firms are

simple based on intuition with little Formal marketing planning. Also, entrepreneurial marketing behavior in small firms tends to be innovation-oriented rather than customer-oriented and uses informal networking instead of formalized research systems (Stokes, 2002). In small businesses, the entrepreneur is responsible for making most of the decisions and executing them, especially in small businesses, in which entrepreneurial marketing is of grave importance (Jones and Rowley, 2011). Though there are very few mentioning of decision making in marketing, there is one very important study by Hills and Hultman (2005) who conclude that entrepreneurial marketing is determined by entrepreneurial thinking and decision-making. By contemplating the main propositions set forward by entrepreneurial marketing scholars, one could easily conclude that entrepreneurial marketing is more crucial in small businesses with little, insufficient resources. Also, the role of one single entrepreneur in these ventures is more emphasized. On the other hand, by reviewing the characteristics introduced by Hills and Hultman, one could easily suppose that these characteristics and conditions, combined with the situations novice entrepreneurs encounter, could be rife with decision making biases.

Heuristics and Biase in Entrepreneurship

Heuristics are simplifying strategies that individuals use to assess probabilities, make predictions, and finally make decisions (Tversky & Kahneman, 1975) and biases are thought processes that involve erroneous inferences or assumptions (Forbes, 2005). Though heuristics and biases are inseparable parts of entrepreneurial decision making (Shepherd, Williams and Patzelt, 2015), there are very few empirical studies about heuristics and biases in the field of entrepreneurship (Cossette, 2014). A lot of researchers in the field of entrepreneurship have studied and emphasized the role of heuristics and biases in entrepreneurial decisions as well as their importance in the fate of entrepreneurs' enterprises. Entrepreneurial decisions have specific and unique characteristics emanating from entrepreneurial mindset and cognitive determinants, therefore, some of decision making biases are actually embedded in entrepreneurial characteristics because entrepreneurs rely on their intuition and cognition a lot (Baron, 1998) and frequently use heuristics in their decisions (Manimala, 1992). Entrepreneurs are more prone to heuristics and biases in their strategic decisions than managers in large organizations (Busenitz and Barney, 1997). Decision making biases make entrepreneurs underestimate the latent risk in their decisions to start new ventures and subsequently cause entrepreneurs to enter new market not prepared adequately (Simon, Houghton and Aquino, 2000). In general, heuristics and biases have important implications in entrepreneurial decisions and influence the results of entrepreneurial decisions and the fate of entrepreneurs' enterprises, as well. The main causes of heuristics and biases as well as their effects have been studied, especially in some phases like new business creation. Though the body of research in this regard seems to be satisfactory, some gaps still remain, the most important of which are the nature of heuristics and biases, the ability to draw a definite line between positive and negative impacts of heuristics and biases, the relationship between heuristics and the resulting biases and the necessary measures to increase their positive effects and to decrease their negative impacts. And last but not least, the influence of heuristics and biases in some nascent areas like entrepreneurial marketing that entrepreneurs play substantial roles, seems to be understudied. In the following section, we analyze some of the most important heuristics and biases and their impact on entrepreneurial marketing decisions.

Affect Heuristic

Affect (including moods as well as emotions) plays a lot of important roles in entrepreneurship process (Baron, 2008). Entrepreneurial passion and emotions are key to a lot of entrepreneurship-related processes (Cardon et al., 2009). Affect, especially as a heuristic, is a subconscious process causing individuals to make decisions based on emotional incentives at the time, therefore reducing the amount of time and cognitive effort necessary to make decisions. Affect heuristic is one of the most common heuristics in individuals and has been a hot topic in studying behavioral finance and has been recognized as most influential in decision making while judging risks and benefits of different situations (Finucane et al., 2000). Regarding entrepreneurs, because they need to make some decisions rapidly and their emotions play substantial roles in this regard, it is highly probable that entrepreneurs are susceptible to affect heuristics in their decisions. It has been proven that affect and emotions influence lots of entrepreneurship processes. For example, affect influences effort (Foo et al., 2009) as well as entrepreneurial opportunity evaluation (Foo, 2011). Affect is also influential in the pursuit of entrepreneurial ideas and subsequent new business creation (Hayton and Cholakova, 2012). Though there are few studies regarding the role of affect heuristic in marketing, most of these studies have targeted consumers, not the entrepreneurs. Because affect and emotions play important roles in entrepreneurial marketing (Hills and Hultman, 2005), and novice entrepreneurs do not have necessary experience about marketing issues and need to rely on their intuitions to make decisions (Gilmore, 2011), we could suppose that affect heuristic plays an important role in entrepreneurial marketing decisions. Thus:

Proposition 1: Affect heuristic impacts novice entrepreneurs' marketing decisions.

Availability Heuristic

Availability heuristic is the tendency of individuals to make judgments about the probability of outcomes based on how easily they could recall relevant and related cases (Tversky and Kahneman, 1973). According to this mental short-cut, if something is remembered more vividly and easily, it must be (more) important. Availability heuristic is one of the most recognized decision making heuristics, having been studied in various fields of science, especially behavioral finance. Availability heuristic could lead to some decision making errors like ease of recall. In the field of entrepreneurship, availability heuristic plays an important role in entrepreneurial opportunity evaluation because entrepreneurs rate the opportunities more in line with their experience and knowledge as being more attractive (Haynie et al., 2009). Though very important, availability heuristic has not been given necessary attention in the field of entrepreneurship. This heuristic, like affect, has mostly been studied in consumer decisions. Because entrepreneurial marketing is the result of entrepreneurial interpretation of data, decision-making, and proper actions and also the entrepreneur is responsible for making most of the decisions and executing them in the firm (Hill & Wright, 2000), one could conclude that novice entrepreneurs rely on their experience and cues to make decisions about matters they do not have a picture, therefore availability heuristic is a probable heuristic in their mind. Thus:

Proposition 2: availability heuristic influences novice entrepreneurs' marketing decisions.

Framing Effect

Framing effect occurs when equivalent descriptions of a decision problem lead to systematically different decisions by individuals (Tversky and Kahneman, 1985). Though a lot has been said about the various impacts of framing effect on consumer decision making, there are very few studies regarding the influences of framing effect on entrepreneurial marketing behavior. Entrepreneurs are more likely to evaluate and frame equivocal situations as being more prosperous than risky (Palich and Bagby, 1995), thus, using framing effect. This could be more evident for novice entrepreneurs who are more aspiring to identify lucrative business opportunities in the markets, thus:

Proposition 3: Framing effect influences novice entrepreneurs' marketing decisions.

Overconfidence

Overconfidence is the tendency of individuals to overestimate the correctness of their initial estimations in answering average to difficult questions (Bazerman, 1994). In the field of entrepreneurship overconfidence has been studied both as the tendency to overestimate the likelihood that one's favored outcome will occur and as the overestimation of one's own knowledge (De kort and Vermeulen, 2010). Overconfidence is one of the most important causes of entrepreneurial unprepared entry (Camerer and Lovallo, 1999) and may persist irrationally in entrepreneurs' decisions and cause them to make feeble business decisions (Bernardo and Welch, 2001). Overconfidence is the main driver of entrepreneurial entry decisions, below-average returns, high failure rates (Koellinger et al., 2007) as well as new business creation (Hogarth and Karelaia, 2012). According to some scholars, the outcomes of overconfidence for entrepreneurs could be both positive (by increasing entrepreneurial efforts) and negative (by increasing the riskiness of the business) (Everett and Fairchild, 2015).

Some researchers have also studied positive outcomes of entrepreneurial overconfidence. For example, overconfidence could be a decisive factor resulting in new business creation despite the high rate of venture failure (Hayward et al., 2006). In marketing, the relation of overconfidence and the introduction of risky products (Simon and Houghton, 2003) as well as the influence of optimistic overconfidence on new product introduction to the market (Simon and Shrader, 2012) have been studied. Because novice entrepreneurs need to make lots of their decisions with little information based on their guts, they need to have confidence in their ability to make correct, operational decisions in a given span of time, therefore becoming prone to overconfidence. Thus:

Proposition 4: Overconfidence impacts novice entrepreneurs' marketing decisions.

Escalation of Commitment

Escalating situations are situations which individuals can become locked into costly courses of action (Staw, 1981). In other words, allocating resources to the failing courses of actions with scant chances of success, especially after receiving negative feedbacks has been defined as escalation of commitment (Brockner, 1992). Feeling responsibility for the decision, the reluctance to make mental efforts all over again, fear of losing face among various

stakeholders, and last but not least the strong desire to justify one's initial decisions to oneself are the main factors leading to the escalation of commitment. (Staw and Ross 1987; Bobocel and Meyer 1994). The importance of the escalation of commitment in various phases of entrepreneurship process has been reiterated (Baron, 1998). Though there are few comprehensive studies about entrepreneurial escalation of commitment, two studies have been influential in shedding lights on the topic. In one study, Cooper et al. (1988) concluded that Escalation of commitment is more potent in entrepreneurs having founded their own businesses. In another relevant study, McCarthy et al. (1993) concluded that psychological factors play substantial roles in entrepreneurs vying to expand their businesses even after receiving negative feedbacks from the environment. In entrepreneurial marketing, entrepreneurs are zealous and committed to their plans and decisions (Hills and Hultman, 2008). This may be more severe in case of novice entrepreneurs who pursue to fulfill their plans and who have invested dearly in their ventures. For these novice entrepreneurs, letting go of their ideas could be a final, fatal blow and thus their commitment to their ventures could easily escalate. Therefore:

Proposition 5: Escalation of commitment affects novice entrepreneurs' marketing decisions.

Planning Fallacy

Planning fallacy is a common bias among entrepreneurs. Entrepreneurs are prone to planning fallacy because they are forward looking and ignore related previous experiences (Baron, 1998). Also, entrepreneurs are inclined to attribute positive results to their own capabilities and ascribe negative outcomes to other factors beyond their controls. Planning fallacy makes entrepreneurs either underestimate the necessary time to fulfill a given task or overestimate the amount of work they could accomplish in a given span of time. In entrepreneurial marketing, marketing decisions are mostly based on daily contacts with market actors and networks (Hills and Hultman, 2005), thus, any delay in delivering on promises from any party could lead to planning fallacy in entrepreneurial decisions. On the other hand, because novice entrepreneurs need to be optimistic about the results of their decisions, planning fallacy is a very probable bias in their decisions, thus:

Proposition 6: Novice entrepreneurs' marketing decisions are prone to planning fallacy.

DISCUSSION AND CONCLUSION

Heuristics and biases have important effects on entrepreneurial decisions and on the fate of entrepreneurial ventures, as well. Novice entrepreneurs are very important parts of economies with their own specific cognitive characteristics. Novice entrepreneurs do not have needed expertise and resources to make decisions and their decisions tend to be intuitive.

These factors make novice entrepreneurs more prone to various heuristics and biases. On the other hand, entrepreneurial marketing is rooted in entrepreneurial thought and decision making (Hills and Hultman, 2005). According to the existing literature, these factors could lead to the formation of heuristics and biases. Therefore, one could suppose that novice entrepreneurs' marketing decisions are susceptible to heuristics and biases, as well. The propositions of this paper present some valuable insights into the issue of heuristics and biases in

the field of entrepreneurship. According to the propositions elaborated in this article, three heuristics (affect, availability and framing) and three biases (overconfidence, escalation of commitment as well as planning fallacy) influence novice entrepreneurs' marketing decisions. All the heuristics and biases studied in this paper are influential in entrepreneurial decisions, including entrepreneurial marketing decisions. Therefore, reducing negative effects of these biases and enhancing their positive effects could definitely influence the creation, survival and growth of entrepreneurial ventures.

REFERENCES

- Aldrich, H. & Auster, E.R. (1986). Even dwarfs started small: Liabilities of age and size and their strategic implications. *Research in organizational behavior*, 8(1986), 165-186.
- Baron, R.A. (1998). Cognitive mechanisms in entrepreneurship: Why and when entrepreneurs think differently than other people. *Journal of Business venturing*. 13(4), 275-294.
- Baron, R.A. (2008). The role of affect in the entrepreneurial process. *Academy of management Review*. 33(2), 328-340.
- Bazerman, M.H. (1994). *Judgment in Managerial Decision Making*. New York: Wiley.
- Bernardo, A.E. & Welch, I. (2001). On the evolution of overconfidence and entrepreneurs. *Journal of Economics & Management Strategy*. 10(3), 301-330.
- Bjerke, B. & Hultman, C. (2004). *Entrepreneurial marketing: The growth of small firms in the new economic era*. Edward Elgar Publishing.
- Bobocel, D.R. & Meyer, J.P. (1994). Escalating commitment to a failing course of action: Separating the roles of choice and justification. *Journal of Applied Psychology*. 79(3), 360.
- Brockner, J. (1992). The escalation of commitment to a failing course of action: Toward theoretical progress. *Academy of management Review*, 17(1), 39-61.
- Busenitz, L.W. & Barney, J.B. (1997). Differences between entrepreneurs and managers in large organizations: Biases and heuristics in strategic decision-making. *Journal of business venturing*. 12(1), 9-30.
- Camerer, C. & Lovo, D. (1999). Overconfidence and excess entry: An experimental approach. *The American Economic Review*. 89(1), 306-318.
- Cardon, M.S., Wincent, J., Singh, J. & Drnovsek, M. (2009). The nature and experience of entrepreneurial passion. *Academy of management Review*, 34(3), 511-532.
- Carr, J.C. & Blettner, D.P. (2010). Cognitive control bias and decision-making in context: Implications for entrepreneurial founders of small firms. *Frontiers of Entrepreneurship Research*, 30(6), 2.
- Cooper, A.C., Woo, C.Y. & Dunkelberg, W.C. (1988). Entrepreneurs' perceived chances for success. *Journal of business venturing*. 3(2), 97-108.
- Cossette, P. (2014). Heuristics and cognitive biases in entrepreneurs: a review of the research. *Journal of Small Business & Entrepreneurship*. 27(5), 471-496.
- Davidsson, P. (2006). Nascent entrepreneurship: empirical studies and developments. *Foundations and Trends® in Entrepreneurship*, 2(1), 1-76.
- De Kort, M.J. & Vermeulen, P.A. (2010). Entrepreneurial decision-makers and the use of biases and heuristics. Vermeulen, Patrick. *AM and Curseu, PL (Ed.), Entrepreneurial Strategic Decision-Making A Cognitive Perspective*, Edward Elgar Publishing Limited. 123-134.
- Duhaime, I.M. & Schwenk, C.R. (1985). Conjectures on cognitive simplification in acquisition and divestment decision making. *Academy of Management Review*. 10(2), 287-295.
- Everett, C.R. & Fairchild, R.J. (2014). A Theory of Entrepreneurial Overconfidence, Effort, and Firm Outcomes. *The Journal of Entrepreneurial Finance*. 17(1), pp. 1-26.
- Finucane, M.L., Alhakami, A., Slovic, P. & Johnson, S.M. (2000). The affect heuristic in judgments of risks and benefits. *Journal of behavioral decision making*. 13(1), 1.
- Foo, M.D. (2011). Emotions and entrepreneurial opportunity evaluation. *Entrepreneurship Theory and Practice*. 35(2), 375-393.
- Foo, M.D., Uy, M.A. & Baron, R.A. (2009). How do feelings influence effort? An empirical study of entrepreneurs' affect and venture effort. *Journal of Applied Psychology*. 94(4), 1086.

- Forbes, D.P. (2005). Are some entrepreneurs more overconfident than others?. *Journal of business venturing*, 20(5), 623-640.
- Gardner, D.M. (1994). Marketing/entrepreneurship interface: A conceptualization. *Marketing and Entrepreneurship: Research Ideas and Opportunities*, 35-54.
- Gilmore, A. (2011). Entrepreneurial and SME marketing. *Journal of Research in Marketing and Entrepreneurship*. 13(2), 137-145.
- Gruber, M. (2004). Marketing in new ventures: theory and empirical evidence. *Schmalenbach Business Review*. 56(2), pp.164-199.
- Gudmundsson, S.V. & Lechner, C. (2013). Cognitive biases, organization, and entrepreneurial firm survival. *European Management Journal*. 31(3), 278-294.
- Haynie, J.M., Shepherd, D.A. & McMullen, J.S. (2009). An opportunity for me? The role of resources in opportunity evaluation decisions. *Journal of Management studies*. 46(3), 337-361.
- Hayton, J.C. & Cholakova, M. (2012). The role of affect in the creation and intentional pursuit of entrepreneurial ideas. *Entrepreneurship Theory and Practice*. 36(1), 41-68.
- Hayward, M.L., Shepherd, D.A. & Griffin, D. (2006). A hubris theory of entrepreneurship. *Management Science*. 52(2), 160-172.
- Hill, J. & Wright, L.T. (2000). Defining the scope of entrepreneurial marketing: a qualitative approach. *Journal of Enterprising Culture*. 8(1), 23-46.
- Hills, G. & Hultman, C. (2005). Marketing, Entrepreneurship and SMES: Knowledge and education revisite, paper presented at the *Academy of Marketing Special Interest Group on Entrepreneurial and SME Marketing*, Southampton, UK, January.
- Hills, G. E. & Hultman, C.M. (2011). Academic roots: The past and present of entrepreneurial marketing. *Journal of Small Business & Entrepreneurship*. 24(1), 1-10.
- Hills, G.E. & Hultman, C. (2013). Entrepreneurial marketing: Conceptual and empirical research opportunities. *Entrepreneurship Research Journal*. 3(4), 437-448.
- Hills, G.E., Hultman, C.M., Kraus, S. & Schulte, R. (2009). History, theory and evidence of entrepreneurial marketing—an overview. *International Journal of Entrepreneurship and Innovation Management*, 11(1), 3-18.
- Hills, G.E., Hultman, C.M. & Miles, M.P. (2008). The evolution and development of entrepreneurial marketing. *Journal of Small Business Management*. 46(1), 99-112.
- Hogarth, R.M. (1987). *Judgement and choice: The psychology of decision*. John Wiley & Sons.
- Hogarth, R.M. & Karelaia, N. (2012). Entrepreneurial success and failure: Confidence and fallible judgment. *Organization Science*. 23(6), 1733-1747.
- Hulbert, B., Gilmore, A. & Carson, D. (2013). Sources of opportunities used by growth minded owner managers of small and medium sized enterprises. *International Business Review*. 22(1), 293-303.
- Invernizzi, A.C., Menozzi, A., Passarani, D.A., Patton, D. & Viglia, G. (2016). Entrepreneurial overconfidence and its impact upon performance. *International Small Business Journal*, 0266242616678445.
- Jones, R. & Rowley, J. (2011). Entrepreneurial marketing in small businesses: A conceptual exploration. *International Small Business Journal*. 29(1), 25-36.
- Kaish, S. & Gilad, B. (1991). Characteristics of opportunities search of entrepreneurs versus executives: Sources, interests, general alertness. *Journal of business venturing*. 6(1), 45-61.
- Kilenthong, P., Kilenthong, P., Hultman, C.M., Hultman, C.M. & Hills, G.E. (2016). Entrepreneurial marketing behaviours: impact of firm age, firm size and firm's founder. *Journal of Research in Marketing and Entrepreneurship*. 18(1), 127-145.
- King, J. & Slovic, P. (2014). The affect heuristic in early judgments of product innovations. *Journal of Consumer Behaviour*, 13(6), 411-428.
- Koellinger, P., Minniti, M. & Schade, C. (2007). I think I can, I think I can: Overconfidence and entrepreneurial behavior. *Journal of economic psychology*. 28(4), 502-527.
- Langer, E.J. (1975). The illusion of control. *Journal of personality and social psychology*. 32(2), 311.
- Manimala, M.J. (1992). Entrepreneurial heuristics: A comparison between high PL (pioneering-innovative) and low PI ventures. *Journal of Business Venturing*. 7(6), 477-504.
- McCarthy, A.M., Schoorman, F.D. & Cooper, A.C. (1993). Reinvestment decisions by entrepreneurs: Rational decision-making or escalation of commitment?. *Journal of Business Venturing*. 8(1), 9-24.

- Miles, M., Gilmore, A., Harrigan, P., Lewis, G. & Sethna, Z. (2015). Exploring entrepreneurial marketing. *Journal of Strategic Marketing*, 23, 94–111. doi:10.1080/0965254X.2014.914069.
- Morrish, S.C. (2011). Entrepreneurial marketing: a strategy for the twenty-first century?. *Journal of Research in Marketing and Entrepreneurship*. 13(2), 110-119.
- Palich, L.E. & Bagby, D.R. (1995). Using cognitive theory to explain entrepreneurial risk-taking: Challenging conventional wisdom. *Journal of business venturing*.10(6), 425-438.
- Podoyntsyna, K., Van der Bij, H. & Song, M. (2012). The role of mixed emotions in the risk perception of novice and serial entrepreneurs. *Entrepreneurship Theory and Practice*. 36(1), 115-140.
- Reynolds, P.D. & White, S. (1997). *The Entrepreneurial Process*. Westport, CT: Quorum Books.
- Shepherd, D. A., Williams, T. A., & Patzelt, H, 2015. Thinking about entrepreneurial decision making: Review and research agenda. *Journal of management*. 41(1), 11-46.
- Simon, M. & Houghton, S.M. (2003). The relationship between overconfidence and the introduction of risky products: Evidence from a field study. *Academy of Management Journal*. 46(2), 139-149.
- Simon, M., Houghton, S.M. & Aquino, K. (2000). Cognitive biases, risk perception, and venture formation: How individuals decide to start companies. *Journal of business venturing*. 15(2), 113-134.
- Simon, M. & Shrader, R.C. (2012). Entrepreneurial actions and optimistic overconfidence: The role of motivated reasoning in new product introductions. *Journal of Business Venturing*. 27(3), 291-309.
- Singer, S., Amorós, J.E. & Arreola, D.M. (2015). Global entrepreneurship monitor: 2014 global report. *Global Entrepreneurship Research Association*, 1-116.
- Staw, B.M. (1981). The escalation of commitment to a course of action. *Academy of management Review*. 6(4), 577-587.
- Staw B.M. & Ross J. (1987). Behavior in escalation situations: Antecedents, prototypes, and solutions. In L.L. Cummings and B.M. Staw, (eds.), *Research in Organizational Behavior* (Vol. 9). Greenwich, CT: JAI Press.
- Stokes, D. (2000). Entrepreneurial marketing: a conceptualisation from qualitative research. *Qualitative market research: an international journal*.3(1), 47-54.
- Stokes, D. (2002). Entrepreneurial marketing in the public sector: The lessons of headteachers as entrepreneurs. *Journal of Marketing Management*. 18(3-4), 397-413.
- Tversky, A. & Kahneman, D. (1973). Availability: A heuristic for judging frequency and probability. *Cognitive psychology*, 5(2), 207-232.
- Tversky, A. & Kahneman, D. (1975). Judgment under uncertainty: Heuristics and biases. In *Utility, probability, and human decision making* (pp. 141-162). Springer Netherlands.
- Tversky, A. & Kahneman, D (1985). The framing of decisions and the psychology of choice'. In *Environmental Impact Assessment, Technology Assessment, and Risk Analysis* (pp. 107-129). Springer Berlin Heidelberg
- Uslay, C. & Erdogan, E. (2014). The mediating role of Mindful Entrepreneurial Marketing (MEM) between production and consumption. *Journal of Research in Marketing and Entrepreneurship*.16, 47–62.
- Zhang, S.X. & Cueto, J. (2015). The study of bias in entrepreneurship. *Entrepreneurship Theory and Practice*.