AUTHOR(S): KAKOURIS, A., FULFORD, H. and LIARGOVAS, P.

TITLE: Matching experiential learning style with entrepreneurial opportunities: a framework.

YEAR: 2015

Publisher citation: KAKOURIS, A., FULFORD, H. and LIARGOVAS, P. 2015. Matching experiential learning style with entrepreneurial opportunities: a framework. In Dameri, R.A., Garelli, R. and Resta, M. (eds.) Proceedings of the 10th European innovation and entrepreneurship conference (ECIE 2015), 17-18 September 2015, Genoa, Italy. Reading: Academic Conferences and Publishing International Limited [online], pages 836-839. Available from: http://academic-bookshop.com/ourshop/prod_4014001-ECIE-2015-10th-European-Conference-on-Innovation-and-Entrepreneurship-Genoa-Italy-ISBN-9781910810491-ISSN-20491050.html

OpenAIR citation: KAKOURIS, A., FULFORD, H. and LIARGOVAS, P. 2015. Matching experiential learning style with entrepreneurial opportunities: a framework. In Dameri, R.A., Garelli, R. and Resta, M. (eds.) Proceedings of the 10th European innovation and entrepreneurship conference (ECIE 2015), 17-18 September 2015, Genoa, Italy. Reading: Academic Conferences and Publishing International Limited, pages 836-839. Held on OpenAIR [online]. Available from: https://openair.rgu.ac.uk.

Proceedings of the

10th European Conference on Innovation and Entrepreneurship

University of Genoa, Italy

17-18 September 2015

Edited by

Prof Renata Paola Dameri
and
Prof Luca Beltrametti
University of Genoa, Italy

A conference managed by ACPI, UK

Proceedings of The 10th European Conference on Innovation and Entrepreneurship

ECIE 2015

The University of Genoa, Italy

17-18 September 2015

Edited by
Renata Paola Dameri
Roberto Garelli and Marina Resta

Papers submitted to this conference have been double-blind peer reviewed before final acceptance to the conference. Initially, paper abstracts were read and selected by the conference panel for submission as possible papers for the conference. Many thanks to the reviewers who helped ensure the quality of the full papers.

Conference Proceedings

The Conference Proceedings is a book published with an ISBN and ISSN. The proceedings have been submitted to a number of accreditation, citation and indexing bodies including Thomson ISI Web of Science and Elsevier Scopus for indexing.

The Electronic version of the Conference Proceedings is available to download from **DROPBOX**. (**http://tinyurl.com/ECIE2015**) Select Download and then Direct Download to access the Pdf file. Free download is available for conference participants for a period of 2 weeks after the conference.

The Conference Proceedings for this year and previous years can be purchased from http://academic-bookshop.com

E-Book ISBN: 978-1-910810-50-7
E-Book ISSN: 2049-1069
Book version ISBN: 978-1-910810-49-1
Book Version ISSN: 2049-1050
CD Version ISBN: 978-1-910810-51-4
CD Version ISSN: 2049-1077

Published by Academic Conferences and Publishing International Limited
Reading, UK
44-118-972-4148
www.academic-publishing.org

Matching Experiential Learning Style With Entrepreneurial Opportunities: A Framework

Alexandros Kakouris[1,2], Heather Fulford[3] and Panagiotis Liargovas[2]
[1]Faculty of Informatics and Telecommunications, National and Kapodistrian University of Athens, Athens, Greece
[2]University of Peloponnese, Greece
[3]Robert Gordon University, UK
akakour@phys.uoa.gr

Abstract: In the present conceptual article, we draw upon the notions of entrepreneurial opportunity and learning style to discuss a research question, and the corresponding theoretical framework, for an online experiment. The research question concerns how individuals seize different types of opportunities (e.g., Ardichvili, Cardozo & Ray), while the proposed experiment concerns either Kirznerian or Schumpeterian entrepreneurs or enterprising teams. The present approach is focused on technology entrepreneurship, innovation and creativity. Implications concern nascent or corporate entrepreneurship.

Keywords: entrepreneurship, learning, entrepreneurial opportunities, learning styles

1. Introduction

Genuine questions of entrepreneurship are: "Why some people, and not others from the same environment, decide to become entrepreneurs?", and "Why some entrepreneurs, and not others from the same environment, become successful in their own businesses?" Shane & Venkataraman (2000) highlighted these questions to introduce entrepreneurship as an autonomous research field, stressing attention in three inherent presuppositions for the phenomenon:

- market incubates entrepreneurial opportunities,
- there is human potential keen to seize entrepreneurial opportunities, and
- opportunities can be identified and pursued through an entrepreneurial process.

Evidently, the origin and the identification of entrepreneurial opportunities are central in entrepreneurship research. But do opportunities really exist in the market or they are created (totally or partly) during the entrepreneurial process? Relevant literature has addressed two certain types of entrepreneurs: the Kirznerian ones and the Schumpeterian ones.

Kirzner (1979, 1997) has introduced the notion of entrepreneurial alertness (Gaglio & Katz 2001) which assumes that opportunities exist in the market and the entrepreneur is 'alert' to identify them. According to Sarasvathy et al. (2003), in equilibrium states of the market, opportunities are short-term fluctuations (distributed opportunity) and due to temporary misallocation of the resources. Despite Pareto optimality in a pure, ideal, Warlasian market; distributed opportunity is non-zero but also non-promising as it will be spontaneously covered by entrepreneurs. Nevertheless, real markets can barely be Warlasian. Thus, in real transitional markets, resources are not optimally distributed so that an entrepreneur is able to re-organize them in a higher productive state. Such a process defines entrepreneurship and the initial misallocation of the resources (and relevant information asymmetries) allows promising entrepreneurial opportunities. Hence, the Kirznerian entrepreneur acts as an experienced observer of the market able to schedule appropriate interventions in order to grasp opportunities. Furthermore, the cognitive theory of entrepreneurship (e.g. Krueger 2000) examines how a person identifies and pursues opportunities.

The Schumpeterian entrepreneur is focused on innovation. In this case, opportunities may be conceived in a more personal (subjective) framework and 'outside' the market. Such opportunities must be later developed, testified and introduced in the market. Hence, in innovative entrepreneurship, opportunity promotion is a part of the entrepreneurial process. Examples of innovative products and services come from technology-transfer industry sectors. Von Hippel (1994) has pointed out that the vast majority of customers are not able to articulate their needs, problems or interests per se, and thus, innovative products can only be examined in the market

through a perceived 'value' they refer to. Hence, entrepreneurs who employ high levels of creativity can start outside the identified market needs.

Beyond the opportunity discourse, entrepreneurship is known to be inherently an experiential learning process (Minniti & Bygrave 2001, Politis 2005). Since entrepreneurial theory is in its infancy, entrepreneurs have to experiment with their ideas and learn from practice. Even opportunity identification is an experientially learned process as potential entrepreneurs, or enterprising teams (Lumpkin & Lichtenstein 2005), analyse market signals and personal/customer needs to conceive and seize opportunities. Research on the opportunity recognition process has been cognitive (Mitchell et al. 2007) or 'transcendent' based on individual differences and intuition (e.g. Vaghely & Julien 2010). For instance, O'Connor & McDermott (2004) conclude that radical innovation implies a 'human side'. Such an approximation requires a systematic exploration of human preferences and their role in the entrepreneurial process. Individuals can learn differently from practice due to their prior experience, habits of mind, preferences and styles. Corbett (2007) and Dimov (2007), showed that demand-driven or supply-driven entrepreneurship can be associated to divergent or convergent thinking accordingly. Thus, they propose opportunity recognition is due to learning asymmetries beyond mere information asymmetries adopted in economics studies. With this result given, a further exploration of learning differences in the opportunity identification is aimed in this work. Various opportunities exhibit different levels of creativity. In the rest of this article, we develop a framework for further research introducing a classification of entrepreneurial opportunities and the notion of learning style based on Kolb's (1984) theory for experiential learning. Then, a research question derived in the last section and an online experiment is proposed. Implications concern both theory building in entrepreneurship and provision of effective entrepreneurship education.

2. A classification of entrepreneurial opportunities

Ardichvili, Cardozo & Ray (2003) have developed a theory for opportunity recognition, development and evaluation where they classify entrepreneurial opportunities as shown in Table 1. The authors have adapted the matrix from Getzels' (1962) work on creativity. The 'value sought' parameter corresponds to the needs in the market and the 'value creation capability' to products or services that can fulfil the needs. Thus, depend on the defined/undefined and identified/unidentified criteria, four types of opportunities emerge: (I) 'dreams', (II) problem solving, (III) technology transfer and (IV) business formation. The adoption of 'value' (instead of needs/products, etc.) permits classification of the above figure to cover the whole range of opportunities: from the more abstract ones to the most concrete. Problem solving (II) is the most frequent type of customary opportunities pursued; however, other types can be especially important for various policies and practices for regional development.

Table 1: Types of entrepreneurial opportunities (Ardichvili, Cardozo & Ray 2003).

		VALUE SAUGHT	
		Unidentified	**Identified**
VALUE CREATION CAPABILITY	**Undefined**	(I) "Dreams"	(II) Problem Solving
	Defined	(III) Technology Transfer	(IV) Business Formation

Domain (II) of problem solving refers to the demand-driven entrepreneurship (or the market pull) where, firstly, a demand in the market is identified, and subsequently, the entrepreneur seeks how to fulfil the demand. Domain (III) of technology transfer refers to the supply-driven entrepreneurship (or technology push) where, firstly, a new technology has emerged, and subsequently, the entrepreneur seeks whether there are needs in the market that can be fulfilled by the specific technology. Accordingly, domain (IV) refers to situations where both the demand and the solution are known beforehand, in contrast to domain (I) where the entrepreneur 'creates' having an abstract and vague perception of products and the market.

Adopting the taxonomy of Ardichvili et al. (2003) and presupposition (b) of Shane & Venkataraman (2000), a relevant question concerns the kind of individual profiles that are expected to pursue certain types of opportunities. Starting from learning preferences, i.e. the way that individuals are accustomed to learn from practice and thus capture and evaluate market signals, the previous question may encompass many other attributes that refer to human creativity and intelligence. Concerning corporate entrepreneurship, the choices of Table 1 can be restricted from the organisation and thus creativity becomes organisational. In this case, innovating teams operate within an organisation and their work depends on the market sector, the perspectives and absorptive capacity of the company; most of these issues confronted in the context of innovation management.

3. Learning styles in entrepreneurial research

Experiential learning has been comprehensively addressed in the work of Kolb (1984) who introduced four, dialectically opposed, modes for learning from experience. The modes concern: concrete experience (CE), reflective observation (RO), abstract conceptualization (AC) and active experimentation (AE). Kolb also addressed the preferences of some people to specific learning modes due to individual differences. Thus, four learning styles emerge from Kolb's model: divergent, assimilating, convergent, and accommodating. Empirical results show that divergent style learners tend to see a problem from different perspectives, assimilating style learners tend to theorise on experience, convergent style learners tend to apply theory on problem-solving while accommodating style learners tend to experiment with different possible solutions in order to confront a problem.

Kolb's learning style is widely adopted in management theory. Based upon the work of Kolb, the idea of learning styles has also been developed by Honey & Mumford (1986) who identified four distinct learning styles or preferences: activist, theorist, pragmatist and reflector. Furthermore, cognitive style (e.g. Myers-Briggs Personality Test) is widely used in management studies.

There is also evidence that creativity is related to divergent thinking (e.g. Sir Ken Robinson 2001). Bird (1995) also refers an early study (in 1986) which found learning style differences between successful and unsuccessful entrepreneurs. Therefore, there is indication for an inherent relation between learning (or thinking) style and the types of opportunities pursued. With these indications given, there is a need to systematically introduce and examine further the idea of the learning style in the context of entrepreneurial opportunity.

4. Discussing the framework for further research

Drawing upon the contexts of sections 2 and 3, and in order to examine possible correlation of opportunity types and individual characteristics, we propose an anonymous online experiment where participants will be asked to choose amongst a given set of opportunities. The opportunity set corresponds to all kinds of Table1. Subsequently, the participants will be asked to measure their learning style or other individual characteristics (e.g. the Myers-Briggs cognitive style – MBPT). In return, they will be informed about their scores and their consequences in learning. Finally, demographic data will be collected as to examine possible correlations with gender, age, studies, work experience, etc. The relevant research question is: "Is there a correlation between learning styles and types of opportunities identified and pursued by entrepreneurs?".

Power of analysis will be calculated where the sample will encompass more than 600 respondents. The type of research will be a survey (Cohen, Manion & Morrison 2000). In order to achieve reliable results, a stratified final sample will be used. For triangulation reasons, other samples will be also accessed and the results will be compared within groups. If necessary, complementary tests will be developed and administered. A initial pilot phase for each experiment will be performed, discussed and evaluated.

The proposed research focuses on the 'technology entrepreneurs' where innovation is central in the adoption of entrepreneurial opportunities. It is well known that in the technology sector, opportunities are transient, risky and ambiguous. In such mature markets, there is a high failure rate (almost 80%) and the need for achievement (McClelland 1961) is central in entrepreneurial motivation. In contrast, developing markets can gestate high-profit opportunities that are expected to be covered independently of the personal characteristics of the entrepreneurs. But in the technological sector, personal traits are expected to underpin entrepreneurial decision making. As a consequence of this perspective, the adopted opportunity set will encompass items with similar expectation or 'weight' as to avoid biases due to the existence of prominent cases.

Following the stream of Corbett (2007) and Dimov (2007), we expect to validate their findings but also to extend them in the areas of (I) "dreams" and (IV) enterprise formation of Ardichvili et al. (2003). Beyond pull/push venturing (II and III cells in Table 1) areas (I) and (IV) have to do with the abstractness/concreteness of a business idea and thus with creativity. Hence, a possible relevance of these regions with experiential learning style would provide a new perspective with implications to education and policy makers. In this case, there will be certain implications on the interdisciplinary fostering of the entrepreneurial mindset, and on innovation management and corporate entrepreneurship towards effective team building.

5. Conclusion

In the present on-going work, a theoretical framework is discussed in order to examine possible correlations of various entrepreneurial opportunities with personal traits of entrepreneurs. Kolb's learning style will be the first personal attribute to examine. The proposed experiment will be online, conducting a sufficient sample to derive reliable and valid results. Innovation will be central for the analysis, connected implicitly with experiential learning, creativity and intelligence. The main portion of the sample is expected to come from Greece, with a possible addition of English graduates. Presently, the pilot phase of the proposed experiment is under way.

References

Ardichvili, A., Cardozo, R., & Ray, S. (2003) A theory of entrepreneurial opportunity identification and development. Journal of Business Venturing, 18(1), 105–123.

Bird, B. (1995) Toward a theory of entrepreneurial competency. In Advances in Entrepreneurship, Firm Emergence and Growth: v.2, 51–72.

Cohen, L., Manion, L. & Morrison, K. (2000) Research methods in education (5th edn). London, Routledge Falmer.

Corbett, A. C. (2007) Learning asymmetries and the discovery of entrepreneurial opportunities. Journal of Business Venturing, 22(1), 97–118.

Dimov, D. (2007) From opportunity insight to opportunity intention: the importance of person-situation learning match. Entrepreneurship Theory and Practice, 31(4), 561–583.

Gaglio, C.M., & Katz, J. (2001) "The psychological basis of opportunity identification: entrepreneurial alertness", Journal of Small Business Economics, 16, 11–95.

Getzels, J. (1962) Creativity and Intelligence. Routledge, London.

Honey, P. & Mumford, A. (1986) Using your Learning Styles. Maidenhead:PeterHoney.

Kirzner, I.M. (1979) Perception, Opportunity and Profit: Studies in the Theory of Entrepreneurship. University of Chicago Press, Chicago.

Kirzner, I.M. (1997) Entrepreneurial Discovery and the Competitive Market Process: An Austrian Approach. Journal of Economic Literature, 35, 60–85.

Krueger, N.F., Jr. (2000) The cognitive infrastructure of opportunity emergence. Entrepreneurship Theory and Practice, 24, 5–23.

Lumpkin, G.T., & Lichtenstein, B.B. (2005) "The role of organizational learning in the opportunity recognition process", Entrepreneurship Theory and Practice, 29, 451–472.

McClelland, D.C. (1961) The achieving society. Van Nostrand, Princeton, NJ.

Mitchell, R.K., Busenitz, L., Bird, B., Gaglio, C.M., McMullen, J., Morse, E., & Smith, B. (2007) "The central question in entrepreneurial cognition research 2007", Entrepreneurship Theory and Practice, 31 (1), 1–27.

Minniti, M. & Bygrave, W. (2001) A dynamic model of entrepreneurial learning. Entrepreneurship Theory and Practice, 25(3), 5–16.

O'Connor, C.G., & McDermott, C.M. (2004) "The human side of radical innovation", Journal of Engineering and Technology Management, 21, 11–30.

Politis, D. (2005) The process of entrepreneurial learning: a conceptual framework. Entrepreneurship Theory and Practice, 29(4), 399–424.

Robinson, Ken (2001) Out of our Minds: Learning to be creative. Capstone.

Sarasvathy, S.D., Dew, N., Velamuri, R., & Venkataraman, S. (2003) Three views of entrepreneurial opportunity. In D.N. Audretsch& Z.J. Acs (Eds.), Handbook of entrepreneurship research, Kluwer Academic, Boston, Mass and London, 141–160.

Shane, S., & Venkataraman, S. (2000) The promise of entrepreneurship as a field of research. Academy of Management Review, 25 (1), 217–226.

Vaghely, I. P., & Julien, P. A. (2010). Are opportunities recognized or constructed? An information perspective on entrepreneurial opportunity identification. Journal of Business Venturing, 25(1), 73-86.

von Hippel, E. (1994) ''Sticky information'' and the locus of problem solving: implications for innovation. Management Science 40(4), 429–439.