



Engineers Who Become Entrepreneurs; How to Study Them through Phenomenology

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ABSTRACT

The role of new technological businesses in economic development and social transformation is undeniable. The study of engineer-entrepreneur as the heart of these businesses is one of the main research areas in the field of entrepreneurship. Engineer-entrepreneur is defined as an engineer establishes a new technology business and manage it based on development of advanced technology and commercialization. Designing a clear methodology for study of engineer-entrepreneurs can be effective not only in creating and growing the businesses of entrepreneur-entrepreneurs, but also in providing better educating entrepreneurship to engineers. So this article systematically reviews the indexed articles in the Scopus database related to the usage of phenomenology in entrepreneurship. The analysis of 78 related articles indicates that the process of applying phenomenological method for study of entrepreneurs is growing. In response to the question of how phenomenology is applied, the results of the reviewed articles were described in seven sections, including the defining of subject, the selection of phenomenological procedure, the selection of participants and sampling, data collection, Analysis, validation, and presentation. This phenomenological method for study of engineer-entrepreneurs is illustrated through a worked example of competency for being engineer-entrepreneur.

Keywords: Engineer, Entrepreneur, Phenomenology, Methodology, Competency

JEL Classifications: L26, O15

1.INTRODUCTION

Today, the role of startups and, in general, technological businesses has become very prominent in the economic and social development. These businesses are one of the main factors for creating individual and regional wealth (Venkataraman, 2004); play a key role in enhancing the technological capacity of an economy through the production, transfer and diffusion of technology (Rojas and Huergo, 2016); are effective in creating jobs for elites, especially the academic class (Brinckmann, 2008. p. 2-3); and have a special place in the social and cultural changes resulting from the development of technology (Aoyama, 2009).

These businesses are often created by engineers; those who have experience or are educated in various technical-engineering fields. These people can be called engineer-entrepreneurs (Diver, 1982). So engineer-entrepreneur is defined as an engineer establish a new technology business and manage it based on

development of advanced technology and commercialization. Given the complexity of the process of establishing technological businesses (Maine et al., 2015), engineer-entrepreneurs need to be deeply studied, because it is not possible to achieve a profound understanding of the experiences of them through methodologies such as functionalist methods (Neergaard and Ulhøi, 2007). It is essential to study people who enter the entrepreneurship world through new and deeper ways. In fact, due to ambiguity and uncertainty of entrepreneurs' activities (Berglund, 2015), the use of qualitative methods, especially phenomenology, has been recently recommended for studying these people (Cope, 2011). In the study of entrepreneurs, human interactions and individuals' interpretations and beliefs are evaluated, and phenomenology is compatible with such concepts and research questions (Knörr, 2011). As one of the main methods of qualitative research (Creswell, 2007. p. 9), phenomenology means the study of structures of consciousness based on the point of view of the first-person experiencing the phenomena, and the search for meanings

of phenomena in view of them. Actually, phenomenological research describes the meaning of a concept or phenomenon from the perspective of several individuals who have experienced that phenomenon (Creswell, 2007. p. 57).

This study aimed to provide grounds for studying engineer-entrepreneurs through the phenomenological method to understand their experience in business establishment, profoundly. This can be effective not only in creating and growing the businesses of entrepreneur-entrepreneurs, but also can be helpful in providing better educating entrepreneurship to engineers, and improving the training and support of them in the centers like tech incubators and accelerators. To this end, phenomenological studies on entrepreneurs in different fields were systematically reviewed. Then, these papers were analyzed and a clear procedure was proposed for studying engineer-entrepreneurs. And finally, this approach was put in practice in a research on the meaning of competency from the standpoint of a number of engineer-entrepreneurs. In the following, the methodology of this research is described and after presenting of the results, a conclusion is made.

2. METHODOLOGY USED FOR THE SYSTEMATIC REVIEW

The main feature of a systematic review is the use of transparent, well-documented, and replicable search processes through meta-synthesis of relevant studies in order to organize the literature (Denyer and Tranfield, 2009). The process of systematic review in the present study were defined base on following published articles in management (Crossan and Apaydin, 2010) and entrepreneurship (Conway Dato-on et al., 2016). According to inclusion criteria, conceptual boundaries of the research were defined and the study area was determined to include articles whose title, keywords or abstract contain entrepreneur and phenomenology. In order achieve a collection of potentially relevant studies of acceptable quality, searches were focused on peer-reviewed academic journal articles, book chapters and reviews, published on Scopus. Since the first major studies on phenomenology of entrepreneurs have been conducted in the 2000, the study period was determined 2000–2017. In accordance with the defined procedure, the articles found in the previous step (83 articles) were evaluated and those unrelated to study of entrepreneurs were put aside. The remaining items included 78 articles which were used for further analyses. While reviewing the articles, to analyze the content of related articles, information of articles including the research subject, and methodology was collected and coded.

As shown in the Figure 1, the process of applying phenomenology to the study of entrepreneurs is on the rise. The first article in this field was published in 2000 and the trend has peaked in 2017. The researches is published in a wide-ranging of journals (44 journals), disseminated over a range of business and management journals, economics journals, social science journals, engineering journals etc. Main Journals in this field are International journal of entrepreneurial behavior and research (7 articles) and International small business journal (4 articles). With 37% of articles, UK has the largest number of articles in the phenomenology of entrepreneurs.

3. HOW TO STUDY ENGINEER-ENTREPRENEURS THROUGH PHENOMENOLOGY?

Besides having a philosophy consistent with the study of entrepreneurs, phenomenology can be turned into a methodology and used in scientific research (Raco and Tanod, 2014a). This section indicates the use of phenomenology for studying engineer-entrepreneurs based on the review of the literature.

3.1. Definition of Subject for Studying Engineer-Entrepreneurs

Phenomenology is a structured method to study the experience or give meaning to significant concepts and events in the lives of entrepreneurs (such as, discovery of opportunities, risk taking, and business planning). Since entrepreneurship is a special process of human development and an experience through which an individual becomes an entrepreneur through the process of dealing with events, assessing situations, and taking a series of actions (Ezzedein and Zikic, 2017), the phenomenology is used as a tool for understanding “the meaning of being an entrepreneur” (Raco and Tanod, 2014a). Therefore, this method can be used to study entrepreneurs’ learning (Abebrese, 2014b), their beliefs and inner thoughts (Cardon et al., 2017), the totality and context of their experiences (Raco and Tanod, 2014a; Seymour, 2006), and complicated and relatively unknown position of their actions (Hemme et al., 2017; Parkinson and Howorth, 2008). Especially, when it is obvious that there are no powerful concepts for explaining the actions of entrepreneurs or the available concepts are vague, phenomenology can play a role in creating new concepts while at the same time enhancing the mexisting concepts (Berglund, 2007).

3.2. Selection of the Methodological Procedure

The first step in performing a phenomenological study is selection of the methodological procedure, since there are various approaches in this regard. Main approaches are interpretative approach, and descriptive approach. When the emphasis is on describing the general nature of the experience of engineer-entrepreneurs, the descriptive method is recommended and when the emphasis is on understanding them in the practical context, the interpretative approach is recommended (Wojnar and Swanson, 2007). Researchers who have adopted the interpretative approach have proceeded mainly based on the principles of interpretative phenomenological analysis (Kempster and Cope, 2010). On the other hand, there are practitioners of descriptive approach who have used the Human Scientific Phenomenological Method or the Collaizzi’s phenomenological approach (Ahmadzadeh et al., 2013; Robinson, 2004).

3.3. Selection of Participants and Sampling

After selecting the procedure, study starts with the selection of participants and sampling. Selection of participants is about choosing those who can be the focus of the study, while sampling is a process by which a subset of participants’ population is selected for the study (Brinkmann, 2013. p. 57). The inclusion criteria are being an engineer-entrepreneur, and the desire to

describe and express the experience (Fiet et al., 2013; Raco and Tanod, 2014b). The reviewed articles had mainly used purposeful sampling method, because the goal was to obtain rich information rather than being representative of the statistical population (Cope, 2005; Doern, 2015; Ezzedeen and Zikic, 2017). In addition to this strategy, snowballing sampling method (which benefits from personal and social relationships) (McPherson, 2010; Selvarajah and Masli, 2011), cluster sampling method (Sart, 2014), and maximum variety sampling method (which focuses on the searches for the common nature of the experience of different people) (Hamilton, 2011) were also used. It is important to note that there is no rule about the number of participants and it's determined by theoretical saturation (Abebrese, 2014a; Adom and Asare-Yebo, 2016).

3.4. Data Collection

The most common data collection method among the reviewed articles was phenomenological interview. When the purpose of the research is to understand how people experience a phenomenon, interview is the main method for data collection (Brinkmann, 2013. p. 47). The phenomenological interview is a kind of interview that directly describes a situation or an event experienced, without causal explanations, focusing on lived experiences (Cope, 2005; 2011). According to literature review, the phenomenological interview was usually done in one session (Hemme et al., 2017), but in some studies, multiple interviews or a series of interviews have also been used (Cope and Watts, 2000; Hamilton, 2011). In most articles, the type of interview was interpreted to be unstructured or semi-structured, conducted with a limited number of open questions, where directing questions were avoided and participants were free to express their experiences (Hemme et al., 2017). In fact, one of the main challenges of the phenomenological interview is to manage the direction of the interview with minimum number of questions. Therefore, the following tool (Table 1) is suggested for managing phenomenological interviews based on the reviewed papers (Al-Harthi, 2017; Cope, 2005; Seymour, 2006). This tool consists of three main parts in which, first the context of the experience of being an engineer-entrepreneur, then the description of this experience, and finally its meaning is investigated (Seidman, 2013).

3.5. Analysis

In data analysis, emphasis is placed on rebuilding the experience of the inner world of the participant in order to understand their

perception of the phenomenon (Doern, 2015). The purpose of the analysis is to identify the stated common themes (Cardon et al., 2017). Themes are a means of identifying the structures of experience (Lewis, 2015). Most reviewed papers have used descriptive phenomenological analysis method. This method is completely inductive and idiographic, which begins with a detailed and subtle analysis of a case and comes to the narrower analysis of the following cases (Kempster and Cope, 2010). To this end, softwares such as Nvivo (Ezzedeen and Zikic, 2017), ATLAS.ti (Feldmann, 2014), Wmatrix (Parkinson and Howorth, 2008) and MAXQDA (Hemme et al., 2017) can be used.

3.6. Validation

Given that phenomenology is performed in a paradigm different from the positivistic paradigm, it is validated on the basis of different criteria. Diversity of data collection references, checking the interview transcriptions and commenting on the findings by the participants, achieving a rich and deep description of the phenomenon, having a clear and accurate documentation of the research process, evaluation of the jury, as well as coding by several coders, are among the methods of validation for phenomenological studies (Adom and Asare-Yebo, 2016; Aslan et al., 2016; Hemme et al., 2017; Rehman and Roomi, 2012).

3.7. Presentation of the Phenomenological Research

Coding tables, along with an outline of identified concepts and themes, are often used to present phenomenological research results. Clarity of the subject matter for readers (Schotter and Abdelzahr, 2013) and the use of strong and positive quotes (Ezzedeen and Zikic, 2017) should also be considered. However, the important thing in a qualitative research is that analysis and report writing go hand in hand (Brinkmann, 2013. p. 67).

Furthermore, based on the reviewed literature, additional points on the methodology of phenomenology in the study of engineer-entrepreneurs can be mentioned. First, the phenomenological method emanates from a particular philosophy and, therefore, the theoretical foundations of the research should be coordinated with the philosophical principles of phenomenology in order to maintain the coherence of the research. For example, in some studies, situational and process approaches are used as the approaches consistent with phenomenology (Hamilton, 2011; Smith and McKeever, 2015; Steyaert, 2007). Second, phenomenology can

Table 1: A tool for phenomenological interview with entrepreneurs

Questions in the number order			
Interview parts	Past	Present	Future
Part 1 (context)			
Environment	3. Analysis of the past situation of the industry and the environment?	6. Analysis of the current state of the industry and the environment?	9. Future of the industry and the environment?
Business	2. The story of business formation?	4. Description of the current business situation?	7. Future of the business?
Entrepreneur	1. The entrepreneur's background?	5. The current situation of the entrepreneur and their concerns and hopes?	8. The entrepreneur's description of their personal path in the future?
Part 2 (Description)	10. The entrepreneur's changes of perception from the past to now?	11. Examining the concerns and hopes of the entrepreneur?	12. Entrepreneur's options?
Part 3 (Meaning)	13. What is the entrepreneur's perception of experience? How does the entrepreneur share his perception of experience?		

be applied along with other methodologies such as case studies (Hamilton, 2011; Smith and McKeever, 2015; Steyaert, 2007), discourse analysis (Parkinson and Howorth, 2008), and grounded theory (Shaw and Carter, 2007). Third, in phenomenology, sampling, and data collection and analysis overlap and are not carried out exactly one after the other (Ainley, 2014). Fourth, it is necessary to take a full account of the role of researcher in phenomenological research, since the main tool for data collection is the researcher themselves (Raco and Tanod, 2014a) and from this perspective, a phenomenological commitment is a feature that the researcher should pay close attention to (Cope, 2005). Fifth, like all methodologies, phenomenology has its own limitations. Phenomenological findings are essentially interpretative and conceptual; they focus on individuals, and usually raise more questions than answer the existing ones (Ainley, 2014; Cope, 2005; Deveci, 2016).

4. A CASE STUDY: COMPETENCY OF ENGINEER-ENTREPRENEURS

A sample research on engineer-entrepreneurs is presented in this section to better understand the above mentioned process. This research began with the problem definition, which is studying the competency of engineer-entrepreneurs in creating the opportunities. This is important because without understanding the competencies of engineer-entrepreneurs, many of the technological businesses will fail. The descriptive method was then selected considering the fact that we were looking for the essence of competency in these individuals. Subsequently, a number of engineer-entrepreneurs engaged in various technological industries such as ICT, Nano, financial technology, Bio, advanced materials and advanced services were selected and underwent one or two interviews. Eventually, the conceptual model reached a theoretical saturation after interviewing 12 cases and analyzing the data using the MAXQDA. According to the findings of this research, for engineer-entrepreneurs, the meaning of competency is to maintain balance in the three roles described below.

4.1. Engineer-Entrepreneur as a Technologist

In this role, the engineer needs technological competencies. This group of competencies focuses on technology-related activities to create a technological business and includes three competencies: “Tendency to Solve Technological Problems,” which means technological innovation through communicating with technological authorities, while understanding the value of technology as an opportunity to change and solve a problem; “Realizing the Solution to a Technological Problem,” which is related to employing technological skills in order to use technology in solving a related problem; and “Technological demonstrating,” in a sense that engineer-entrepreneurs believe that the technology should be used to solve a problem and try to prove it.

4.2. Engineer-Entrepreneur as a Creator

In this role, the required entrepreneurial competencies are those related to the activities associated with the launch of technological businesses and include three competencies: “Opportunity Formation,” which refers to identification of the opportunity,

application of market knowledge, and commercialization to create value from technology; “Business Establishment,” with which the engineer-entrepreneurs link the opportunity to business creation and engage in initiative activities with the entrepreneurial attitude, intention and commitment, as well as the application and development of entrepreneurial skills; “Social Competency,” in a sense that engineer-entrepreneurs have high social competencies and thus develop relationships with others, and use social relationships to obtain resources and information, legitimize and sustain (what they are considering).

4.3. Engineer-Entrepreneur as a Director

This role requires managerial competencies. This group of competencies is associated with activities related to the management of technological businesses and includes three competencies: “Human resource management,” which is related to the capabilities such as motivation, leadership of human resources, and management of expert human resources. “Technology management,” in a sense that, by this competency, engineer-entrepreneurs try to continue the process of technological innovation in the heart of the business, while pursuing the realization of the goals considered for the previous technological products, and “Administrative Competency,” which is generally related to the ability to manage a technological business and includes capabilities such as market development, financing, access to resources, and the use of management skills for business administration.

Based on the findings of this research, since competencies are varied and can improve the path of training engineers to be entrepreneurs, it is suggested that entrepreneurship training programs be developed based on the available competencies of the trainees, their future path, and classification of types of competencies of engineer-entrepreneurs. In fact, competency-based technology entrepreneurship training is effective in entrepreneurial action (Sánchez, 2013). These trainings should firstly focus on three types of technological, entrepreneurial, and managerial competencies, and second, these trainings should be different in accordance with the type of potential technology entrepreneur. For example, given the initial technical competence of engineering students, this group needs their own entrepreneurial and managerial training to successfully complete the path to becoming a technological entrepreneur. In fact, in developing competencies for them, one should have the “entrepreneur technologist” approach to them, not the “technology-based entrepreneur” approach; that is, paying full attention to their being a technologist in the trainings of entrepreneurship. Establishing short-term competency-based courses for technical and engineering students can be achieved at the heart of the courses and at the technical colleges themselves (Figure 2).

5. CONCLUSION

As it is expected in the early stages of the formation of a discipline, most studies in this field were in the form of statistical descriptions or case studies, while for further development, we need to use conceptual and critical analyzes and apply interdisciplinary approaches that examine the complexity and

Figure 1: The trend of using phenomenology in the study of entrepreneurs based on systematic review

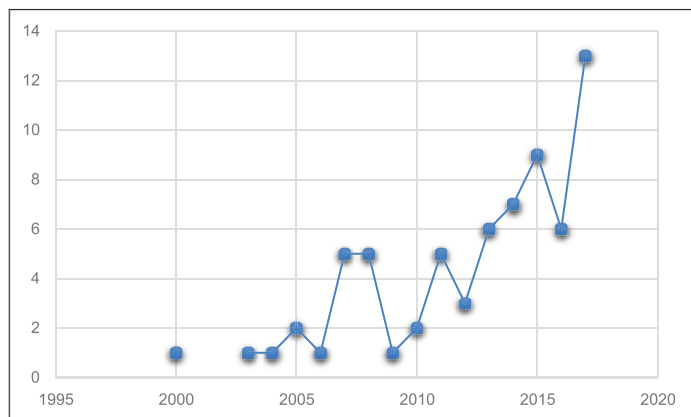
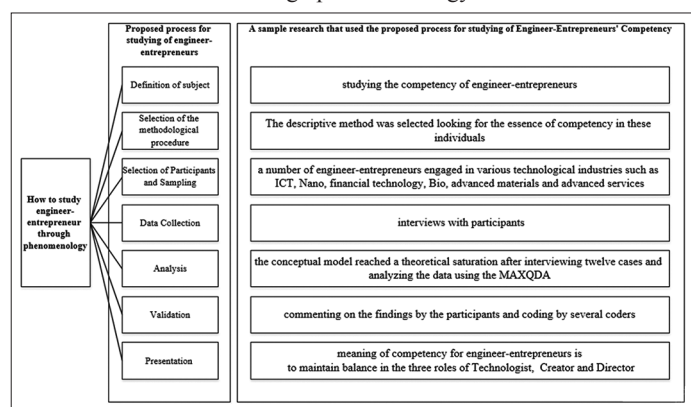


Figure 2: Proposed process for studying of engineer-entrepreneurs through phenomenology



ambiguity of entrepreneurship (Parkinson and Howorth, 2008). Since entrepreneurship is a relatively young discipline in which there is still debate on the subject, questions, and methods of study, phenomenology can be an accessible and constructive methodology for exploring and modifying the subjects of this discipline (Berglund, 2007). In this paper, we attempted to provide a specific procedure to study engineer-entrepreneurs through phenomenology based on a systematic review of phenomenological studies on entrepreneurs.

To answer the question of how to use phenomenology in the study of engineer-entrepreneurs, a summary of reviewed literature was provided and explained in seven sections, including definition of the subject of the research, selection of a phenomenological methodology, selection of participants and sampling, data collection, analysis, validation, and presentation of the phenomenological research, along with the methodological points. These steps were then put in practice in a study on the competencies of engineer-entrepreneurs. In terms of limitations, we admit that the current research is not beyond the limitation of being publication-oriented since it is focused on English-language papers of the Scopus database. Given the fact that the studies on entrepreneurs are carried out in many countries and in different languages, those studies that publish a summary of research conducted in a language in English can provide a better understanding of different findings in different cultures and geographies.

REFERENCES

- Abebrese, A. (2014a), Designing a phenomenological research model for entrepreneurship research. *International Journal of Entrepreneurship and Small Business*, 22(3), 286-306.
- Abebrese, A. (2014b), Research practice in entrepreneurship: A phenomenological approach. *International Journal of Business and Globalisation*, 12(3), 264-280.
- Adom, K., Asare-Yeboah, I.T. (2016), An evaluation of human capital theory and female entrepreneurship in sub-Saharan Africa: Some evidence from Ghana. *International Journal of Gender and Entrepreneurship*, 8(4), 402-423.
- Ahmadzadeh, K., Jale, F., Tamasoki, M., Rasooli, A., Tarhani, B.R. (2013), Waiting intellectual capital in the context of entrepreneurship and development. *Advances in Environmental Biology*, 7(8), 1988-1997.
- Ainley, S. (2014), A Phenomenological study of agritourism entrepreneurship on ontario family farms. *Tourism Planning and Development*, 11(3), 317-329.
- Al-Harathi, A.S.A. (2017), Understanding entrepreneurship through the experiences of Omani entrepreneurs: Implications for entrepreneurship education. *Journal of Developmental Entrepreneurship*, 22(1), 1-20.
- Aoyama, Y. (2009), Entrepreneurship and regional culture: The case of Hamamatsu and Kyoto, Japan. *Regional Studies*, 43(3), 495-512.
- Aslan, A.E., Duman, B., Sen, D., Duran, C., Atarbay, S. (2016), A pilot study on the perception of innovation and entrepreneurship. *Eurasian Journal of Educational Research*, 64, 139-156.
- Berglund, H. (2007), Researching entrepreneurship as lived experience. *Handbook of Qualitative Research Methods in Entrepreneurship*. Cheltenham, UK: Edward Elgar. p93-75
- Berglund, H. (2015), Between cognition and discourse: Phenomenology and the study of entrepreneurship. *International Journal of Entrepreneurial Behaviour and Research*, 21(3), 472-488.
- Brinckmann, J. (2008), *Competence of Top Management Teams and Success of New Technology-Based Firms*. Wiesbaden: Springer.
- Brinkmann, S. (2013), *Qualitative Interviewing*. USA, New York: Oxford University Press.
- Cardon, M.S., Glauser, M., Murnieks, C.Y. (2017), Passion for what? Expanding the domains of entrepreneurial passion. *Journal of Business Venturing Insights*, 8, 24-32.
- Conway Dato-on, M., Conway Dato-on, M., Kalakay, J., Kalakay, J. (2016), The winding road of social entrepreneurship definitions: A systematic literature review. *Social Enterprise Journal*, 12(2), 131-160.
- Cope, J. (2005), Researching entrepreneurship through phenomenological inquiry: Philosophical and methodological issues. *International Small Business Journal*, 23(2), 163-189.
- Cope, J. (2011), Entrepreneurial learning from failure: An interpretative phenomenological analysis. *Journal of Business Venturing*, 26(6), 604-623.
- Cope, J., Watts, G. (2000), Learning by doing – An exploration of experience, critical incidents and reflection in entrepreneurial learning. *International Journal of Entrepreneurial Behaviour and Research*, 6(3), 104-124.
- Creswell, J.W. (2007), *Qualitative Enquiry and Research Design: Choosing among Five Approaches*. US: Sage Publications Ltd.
- Crossan, M.M., Apaydin, M. (2010), A multidimensional framework of organizational innovation: A systematic review of the literature. *Journal of Management Studies*, 47(6), 1154-1191.
- Denyer, D., Tranfield, D. (2009), Producing a systematic review. In: Buchanan, D.A., editor. *The Sage Handbook of Organizational Research Methods*. Thousand Oaks, CA: Sage Publications Ltd. p671-689.
- Deveci, I. (2016), Perceptions and competence of turkish pre-service

- science teachers with regard to entrepreneurship. *Australian Journal of Teacher Education*, 41(5), 153-170.
- Diver, C.S. (1982), Engineers and entrepreneurs: The dilemma of public management. *Journal of Policy Analysis and Management*, 1(3), 402-406.
- Doern, R. (2015), Entrepreneurship and crisis management: The experiences of small businesses during the London 2011 riots. *International Small Business Journal*, 34(3), 276-302.
- Ezzedeen, S.R., Zikic, J. (2017), Finding balance amid boundarylessness: An interpretive study of entrepreneurial work-life balance and boundary management. *Journal of Family Issues*, 38(11), 1546-1576.
- Feldmann, B.D. (2014), Dissonance in the academy: The formation of the faculty entrepreneur. *International Journal of Entrepreneurial Behaviour and Research*, 20(5), 453-477.
- Fiet, J.O., Norton, W.I. Jr., Clouse, V.G.H. (2013), Search and discovery by repeatedly successful entrepreneurs. *International Small Business Journal*, 31(8), 890-913.
- Hamilton, E. (2011), Entrepreneurial learning in family business: A situated learning perspective. *Journal of Small Business and Enterprise Development*, 18(1), 8-26.
- Hemme, F., Morais, D.G., Bowers, M.T., Todd, J.S. (2017), Extending sport-based entrepreneurship theory through phenomenological inquiry. *Sport Management Review*, 20(1), 92-104.
- Kempster, S., Cope, J. (2010), Learning to lead in the entrepreneurial context. *International Journal of Entrepreneurial Behaviour and Research*, 16(1), 6-35.
- Knörr, H. (2011), From top management to entrepreneurship: Women's next move? *International Journal of Manpower*, 32(1), 99-116.
- Lewis, K.V. (2015), Enacting entrepreneurship and leadership: A longitudinal exploration of gendered identity work. *Journal of Small Business Management*, 53(3), 662-682.
- Maine, E., Soh, P.H., Dos Santos, N. (2015), The role of entrepreneurial decision-making in opportunity creation and recognition. *Technovation*, 39-40(1), 53-72.
- McPherson, M. (2010), Business practices within South Asian family and non-family firms: A comparative study. *International Journal of Entrepreneurial Behaviour and Research*, 16(5), 389-413.
- Neergaard, H., Ulhøi, J.P. (2007), *Handbook of Qualitative Research Methods in Entrepreneurship*. Cheltenham: Edward Elgar Publishing.
- Parkinson, C., Howorth, C. (2008), The language of social entrepreneurs. *Entrepreneurship and Regional Development*, 20(3), 285-309.
- Raco, J.R., Tanod, R.H.M. (2014a), The phenomenological method in entrepreneurship. *International Journal of Entrepreneurship and Small Business*, 22(3), 276-285.
- Raco, J.R., Tanod, R.H.M. (2014b), Understanding spirituality as experienced by catholic entrepreneurs. *World Review of Entrepreneurship, Management and Sustainable Development*, 10(1), 40-51.
- Rehman, S., Roomi, M.A. (2012), Gender and work-life balance: A phenomenological study of women entrepreneurs in Pakistan. *Journal of Small Business and Enterprise Development*, 19(2), 209-228.
- Robinson, D.A. (2004), Entrepreneurial challenges in South Africa. *Journal of African Business*, 5(2), 173-185.
- Rojas, F., Huergero, E. (2016), Characteristics of entrepreneurs and public support for NTBFs. *Small Business Economics*, 47(2), 363-382.
- Sánchez, J.C. (2013), The impact of an entrepreneurship education program on entrepreneurial competencies and intention. *Journal of Small Business Management*, 51(3), 447-465.
- Sart, G. (2014), The new leadership model of university management for innovation and entrepreneurship. *Egitim Arastirmalari Eurasian Journal of Educational Research*, 57, 73-90.
- Schotter, A., Abdelzaher, D. (2013), The boundary spanning effects of the muslim diaspora on the internationalization processes of firms from organization of islamic conference countries. *Journal of International Management*, 19(1), 82-98.
- Seidman, I. (2013), *Interviewing as Qualitative Research: A Guide for Researchers in Education and the Social Sciences*. New York: Teachers College Press.
- Selvarajah, C., Masli, E.K. (2011), Ethnic entrepreneurial business cluster development: Chinatowns in Melbourne. *Journal of Asia Business Studies*, 5(1), 42-60.
- Seymour, R.G. (2006), Hermeneutic phenomenology and international entrepreneurship research. *Journal of International Entrepreneurship*, 4(4), 137-155.
- Shaw, E., Carter, S. (2007), Social entrepreneurship: Theoretical antecedents and empirical analysis of entrepreneurial processes and outcomes. *Journal of Small Business and Enterprise Development*, 14(3), 418-434.
- Smith, S.M., McKeever, E. (2015), *Using Constant Comparison as a Method of Analysis in Entrepreneurship Research*. Cheltenham, UK: Edward Elgar.
- Steyaert, C. (2007), 'Entrepreneurship' as a conceptual attractor? A review of process theories in 20 years of entrepreneurship studies. *Entrepreneurship and Regional Development*, 19(6), 453-477.
- Venkataraman, S. (2004), Regional transformation through technological entrepreneurship. *Journal of Business Venturing*, 19(1), 153-167.
- Wojnar, D.M., Swanson, K.M. (2007), Phenomenology: An exploration. *Journal of Holistic Nursing*, 25(3), 172-180.