

Entrepreneurship Research in Iran: Current Trends and Future Agendas



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Abstract This chapter examines the current trends and future research agendas for entrepreneurship in Iran. Using the systematic literature review method, the papers published in the field were organized and the chronological evolution of the papers was examined. Some 208 articles published in between 2000 and 2012 were identified in 38 academic journals. The findings revealed that entrepreneurship paper publication has witnessed several variations where the number and quality of published articles constantly increased from 2000 to 2007, critically improved from 2008 to 2011 and then declined in 2012. Furthermore, the majority of these papers focus on fragmented topics, are mostly at the exploratory stage and descriptive and have little contribution to theory building.

Keywords Entrepreneurship research · Systematic literature review · Iran

1 Introduction

Entrepreneurship has recently attracted the increased attention of policy makers, researchers, educators and practitioners throughout the world. This is because of the prominent effects of entrepreneurship and entrepreneurial activities in organizational, economic and social development of both developed and developing countries (Gibb 2002; Matlay 2006). Particularly for developing countries including Iran, entrepreneurship has been considered as an effective solution to the economic and

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social crises and challenges that the country is grappling with and may encounter in the future (Ahmadpour Daryani et al. 2009a; Cheng et al. 2009). Consequently, researchers have made tremendous attempts to provide better insights into various aspects of the entrepreneurship phenomenon, develop the body of knowledge on the phenomenon and establish entrepreneurship as a specific domain of research and practice (Aldrich 2012; Grégoire et al. 2006; Mitchell 2011). Scholars accentuated that contextual factors such as cultural, social and economic environments highly influence entrepreneurship and research in the field (Zahra 2007) and business environment differs across countries (Cardon and Kirk 2013).

Much of our knowledge about entrepreneurship also came from the U.S and Europe having mature economies and highly encouraging and supportive environment for entrepreneurship (Jing et al. 2014). Furthermore, there is little information on the main focal areas and interests of entrepreneurship researchers in different countries (Bruton et al. 2008) and our knowledge about “how entrepreneurship research developed in different regions” is limited (Jing et al. 2014, p. 1).

Specifically in Iran, few studies have systematically examined the literature and entrepreneurship research development (Arasti and Valinejad 2011). In general, previous studies mostly included few numbers of published articles on a specific area of entrepreneurship. To narrow the gap, this study aims to examine the current trend and future research agendas for entrepreneurship in Iran. Using the systematic literature review (SLR) method, it organizes the papers published in the field and examines the chronological evolution of the research on entrepreneurship. This chapter also presents the research themes emerging in the research period. Doing this, the gap in the empirical research findings is identified and the direction for future research is suggested. The findings of the current study make several contributions to entrepreneurship literature. Firstly, it makes contributions to map out the research program on entrepreneurship, particularly in Iran. It also provides contribution to entrepreneurship literature in languages other than English. Secondly, this study improves the number of papers included in the analysis by previous researchers. In most prior studies, less than 200 papers on entrepreneurship were analyzed (George et al. 2016; Jing et al. 2014).

Furthermore, this study is one of the first contributions to entrepreneurship research literature in Iran using the SLR. Specifically, this chapter provides better insights into contextualized entrepreneurship studies in Iran and how the theories originally developed in more developed countries addressed the specific context of entrepreneurship in Iran. By including the papers in academic journals, this study also reflects a better picture of the related research works on entrepreneurship in top ranking Iranian journals (Ahmadpour Daryani et al. 2009b). It also implies Iranian scholars' research interests and themes in more than the last decade.

This chapter is organized in four main sections. After the introduction, we explain the research method and represent the process through which the SLR was conducted. Then, we present our findings related to the six key research themes emerging from this study including entrepreneurship education and training, SMEs, entrepreneurs and entrepreneurship process, organizational and corporate entrepreneurship, social entrepreneurship and family businesses and entrepreneurship

development in national and international levels. Finally, we discuss the findings and conclude with highlighting the future agendas for research on the emerging themes.

2 Method

To examine the current status and future agendas of entrepreneurship research in Iran, we utilized the systematic literature review (SLR) method. In the SLR, the findings of available studies on a specific topic or research question such as entrepreneurship are summarized and interpreted using an extensive search of relevant peer-reviewed articles and a set of specific criteria for choosing articles to review is specified (Cook et al. 1995). Indeed, the SLR assists researchers in identifying the gaps in the current research and suggests new research activities and helps policy makers, managers and practitioners “develop a reliable knowledge base by accumulating knowledge from a range of studies” (Tranfield et al. 2003, p. 220). Therefore, the researchers require to document and describe all the procedures undertaken in details in order to reduce biases and ensure transparency of their findings (Denyer and Neely 2004). The SLR has been extensively adopted in the studies on various aspects of entrepreneurship including entrepreneurial ventures (Thorpe et al. 2005), entrepreneurial opportunity recognition (George et al. 2016), social entrepreneurship (Lehner and Kansikas 2013), entrepreneurship education (Pittaway et al. 2004), and innovation (Pittaway et al. 2004).

We focused on the entrepreneurship papers published in Iranian academic journals rather than the utility and citation of the publications because citation partially manifests the impact and importance of the research and is biased against specific popular authors (Ratnatunga and Romano 1997). This study differs from traditional literature review of entrepreneurship research in that it sought to use a clear scientific process that can be repeated by other researchers as well as a thorough bibliographical search of published entrepreneurship studies in Iran (Cook et al. 1997; Tranfield et al. 2003). Although one can find a robust body of literature on entrepreneurship all over the world, in this study we concentrated only on papers published in Iran based on the assumption that cultural, social and economic factors that affect entrepreneurship and entrepreneurship research vary in different countries (Jing et al. 2014). Furthermore, we aimed to provide a precise picture of the current trends and future research agendas for entrepreneurship research and practice in Iran and explore the gaps in the empirical entrepreneurship research (Tranfield et al. 2003).

Drawing on previous SLRs on entrepreneurship, we also included only peer-reviewed papers in academic journals excluding conference proceedings, books, book chapters, book reviews, tutorials, technical reports, working papers, Masters theses and PhD dissertations in order to reduce bias in our findings. Furthermore, papers published in top academic journals present influential and approved knowledge on entrepreneurship (George et al. 2016).

Building on the two steps for the SLR proposed by Moustaghfir (2008), we adopted the following phases in this study. First, we established the criteria to identify the top-rank journals published in Iran under the classification of Academic-Research journals (which is the highest scientific journal ranking in Iran). These criteria assisted us in selecting the high quality articles from the key journals that have published the findings of entrepreneurship empirical studies.

We used the website of the journals to retrieve the related articles. We limited our analysis to the entrepreneurship articles published between 2000 and 2012 (the year of data analysis for this study). We started the analysis of the articles published from 2000 because we could not find any studies on entrepreneurship in academic journals before the year 2000 in Iran. Then, we specified a series of keywords related to entrepreneurship such as entrepreneur(s), entrepreneurial, entrepreneurship, business, venture, innovation and opportunity. These keywords were deliberately selected broad in order to include a wide range of studies on entrepreneurship (George et al. 2016). We used the keywords to search within the title, keywords, abstract and full text of each article. The initial search yielded 221 articles selected from 38 Academic-Research journals published in the Persian language. Of the articles, 13 were eliminated from the analysis because they were review papers. Therefore, the analysis was performed on 208 papers. The journals were organized based on the number of the articles relevant to entrepreneurship. Table 1 presents the name of selected journals and frequency of the published articles in each journal. As the table shows, entrepreneurship articles have been published in a wide range of journals in different areas such as economics, social science, psychology, arts and humanities, educational science (educational administration, school psychology and educational innovations), sports science, agriculture, business, management, information technology and women studies. Most of these journals are not specific entrepreneurship journals but expanded their scope to include entrepreneurship research findings. Furthermore, the majority of the entrepreneurship research findings in Iran are published in the *Journal of Entrepreneurship Development* (142, 64.8%) since its first publication in 2008.

In the second step of the SLR, one of the authors read the title, abstract, keywords and full text of the retrieved articles to determine their relevance to entrepreneurship in Iran. Then, the selected articles and the retrieved information were checked in depth by other authors regarding the title, year of publication, area of study and characteristics of research method (type of research method, research instrument, data analysis method and sample) in order to minimize bias against the researcher and improve reliability of the findings (Tranfield et al. 2003). Following Pittaway and Cope (2007), we further coded the articles based on their main themes and sub-themes in order to provide a general comprehensive map of entrepreneurship research in Iran and identify the interconnections between the themes and gaps in the research areas.

Table 1 Entrepreneurship articles by categories

Category	1995-2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	Total
EE & TR	1	1	2	1	5	3	2	4	2	14	3	11	34	83
SMEs	-	1	1	-	1	-	-	-	4	9	11	13	13	53
OR & CE	-	-	-	-	-	-	-	3	5	10	11	8	4	41
EN & EP	1	-	-	-	-	2	2	-	-	8	6	9	10	38
ED	-	-	-	-	-	-	-	1	2	-	1	4	4	12
SE & FB	-	-	-	-	-	-	-	-	1	1	4	2	1	9
Total	-	2	3	1	6	5	3	8	14	42	36	47	66	236

Note: *EE & TR* entrepreneurship education and training, *SMEs* small and medium size enterprises, *EN & EP* entrepreneur and entrepreneurship process, *OR & CE* organizational and corporate entrepreneurship, *SE & FB* social entrepreneurship and family business, *ED* entrepreneurship development

3 Results

This section presents the results of the SLR, answering the research questions individually based on the data from the 208 articles extracted from 38 Academic-Research journals over a publication period of 12 years (2000–2012). Figure 1 shows the number of studies published in the period. The figure indicates the number of published articles on entrepreneurship consistently increased from 2000 to 2007, dramatically improved from 2008 to 2011 and then declined in 2012. Regarding the research subject areas, we identified six areas including humanities, social and behavioral sciences (187, 85.4%), agricultural science (22, 10.1%), technical science (8, 3.7%) and medicine (2, .9%).

Furthermore, most of the studies have examined entrepreneurship in Tehran, the capital city of Iran (101, 48.5%) covering also provinces other than Tehran (59, 28.5%), national (45, 21.6%) and international levels (3, 1.4%). Regarding research methods (survey vs. experimental), a majority of the studies were conducted using a survey research design (105, 47.9%) and through a quantitative method (152, 69%) followed by mixed method (38, 17.4%) and qualitative method (28, 12.8%). Notably, none of the studies used an experimental or quasi-experimental research method. The analysis also indicated that researchers have mostly analyzed the data obtained by a questionnaire (151, 71.2%), interview protocol (26, 12.2%) and a combination of the two instruments (35, 16.5%). Six main themes emerged from the thematic analysis of the articles including entrepreneurship education and training, SMEs, entrepreneurs and entrepreneurship process, organizational and corporate entrepreneurship, social entrepreneurship and family businesses and entrepreneurship development at national and international levels. These themes and the related sub-themes are presented in the following sections.

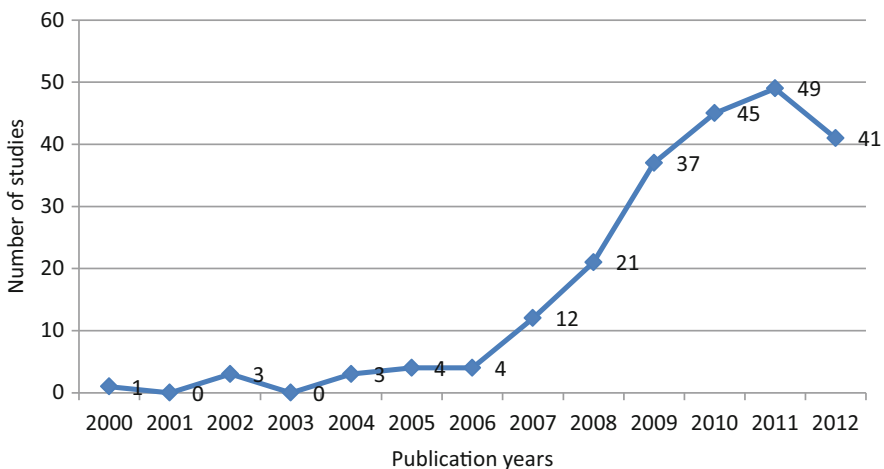


Fig. 1 The number of published studies from 2000 to 2012

3.1 Entrepreneurship Education

Entrepreneurship education has been constantly a core focus of entrepreneurship research in Iran (Table 2). Studies on this theme examined the entrepreneurial characteristics and the organizational factors that facilitate the development of entrepreneurial capabilities. Interestingly, in accordance with research findings in other MENA countries (Ooi and Ahmad 2012) the first entrepreneurship study published in a scientific journal found a significant positive relationship between university students' personal characteristics (creativity, achievement motivation and self-esteem) and their motivation to pursue entrepreneurship as their future career path (Shekarshakan et al. 2002). The only entrepreneurship paper published in 2003 was also dedicated to entrepreneurship education and examined graduates' entrepreneurial characteristics. Of the three published papers in 2004, two contributed to exploring the entrepreneurial characteristics of university graduates (Kalantari et al. 2004) and developing an organizational structure model for entrepreneurship in higher education institutions (Kordnaeej et al. 2005). From 2005 to 2008, several studies examined entrepreneurial characteristics (self-effectiveness and tolerance of uncertainty) and attitudes of university students (Bromandnasab and Shekarshakan 2007; Jafarimoghadam and Etemadi 2008; Salimifar and Mortazavi 2005), factors affecting entrepreneurial performance of graduates (Eskandari et al. 2006) and the impact of school organizational environment on students' entrepreneurial spirit (Samadi and Shirzadi Esfehiani 2007). Research on entrepreneurship education in 2009 focused on entrepreneurial propensity of university students (Arabiun et al. 2009; Barani et al. 2009), the relationship between gender and students' entrepreneurial characteristics (Feiz 2009) and the impact of entrepreneurship education programs (e.g., creative teaching methods, entrepreneurship extra-curriculum activities, appropriate textbooks, students' interest-based programs) on developing students' entrepreneurial characteristics (Hosseini et al. 2009).

Several research findings have also been published on the entrepreneurship process in universities (Sadeghi and Ghanadan 2009), curriculum objectives and development (Liaghatdar et al. 2009; Yadollahi Farsi and Mirarab Razi 2009) and the factors affecting entrepreneurial universities (F. Sharifzadeh et al. 2009a). While scant research has been conducted on entrepreneurial traits of university students between 2010 and 2011 (Farajollahi et al. 2011; Ghasemi and Asadi 2010), exploring such characteristics among students again emerged as a buzz topic in 2012 (Abbasi et al. 2002; Ahmadi et al. 2012; Alipour et al. 2012; Amini et al. 2012; Khanifar et al. 2012; Rezaei Zadeh et al. 2012). Research has also investigated the factors that shape university students' entrepreneurial intentions (Akbari et al. 2012; Karimi et al. 2012; Rahmanian Koushkaki et al. 2012) and their needs of entrepreneurship education (Rezaei et al. 2012). Between 2010 and 2012, a growing body of research has evaluated the impact of university administration (Talebi et al. 2011), organizational structure (Yadolahi Farsi et al. 2011) and model (Kavoosi and Rahmati Zanjantalab 2010) and entrepreneurial characteristics (Kordnaeej et al.

Table 2 Themes and sub-themes of the articles on entrepreneurship education

Themes	Sub-themes	Papers
Personal variables	Achievement need and achievement motivation	Kalantari et al. (2004); Feyz (2009); Moradi and Shabanali Fami (2010); Talebi et al. (2010); Ahmadi et al. (2012); Alipour et al. (2012); Amini et al. (2012); Khanifar et al. (2012)
	Creativity	Hezarjaribi (2003); Shekarshekan et al. (2002); Kalantari et al. (2004); Ahmadi et al. (2012); Amini et al. (2012); Khanifar et al. (2012)
	Risk taking	Hezarjaribi (2003); Kalantari et al. (2004); Feyz (2009); Alipour et al. (2012); Amini et al. (2012); Khanifar et al. (2012)
	Entrepreneurial skills and propensity to act	Hezarjaribi (2003); Kalantari et al. (2004); Barani et al. (2009); Arabiun et al. (2009); Feyz (2009)
	Tolerance of ambiguity, emotional intelligence, uncertainty and failure	Salimifar and Mortazavi (2005); Borumand Nasab and Shekarshekan (2007); Feyz (2009); Khanifar et al. (2012)
	Self-esteem, self-efficacy and self-confidence	Shekarshekan et al. (2002); Borumand Nasab and Shekarshekan (2007); Khanifar et al. (2012); Rezaeezade et al. (2012)
	Internal locus of control	Feyz (2009); Amini et al. (2012); Khanifar et al. (2012)
	Need for independence	Ahmadi et al. (2012); Amini et al. (2012); Khanifar et al. (2012)
	Proactiveness, imagination and challenging	Feyz (2009); Khanifar et al. (2012)
	Entrepreneurial spirit	Salimifar and Mortazavi (2005); Samadi and Shirzadi Esfehiani (2007); Ghasemi and Asadi (2010); Farajolahi et al. (2011)
	Entrepreneurial intentions	Akbari et al. (2012); Karimi et al. (2012); Rahmadian Koushkaki et al. (2012)
	Entrepreneurial attitudes	Jafarimoghadam and Etemadi (2008)
	Entrepreneurial performance	Eskandari et al. (2006)
	Needs of education	Rezaee et al. (2012)
	Organizational variables	Perceived obstacles to university entrepreneurship
Structure and environment		Kordnaeej et al. (2005); Samadi and Esfehiani (2007); Yadollahi Farsi et al. (2011)
Administration, leadership and managerial systems		Sharifzade et al. (2009a); Gahramani et al. (2011); Talebi et al. (2011)
	Commercialization of university research findings	Pourezat et al. (2010); Meigounpoory and Ahmadi (2012)

(continued)

Table 2 (continued)

Themes	Sub-themes	Papers
	Lecturers' entrepreneurial skills, teaching methods	Mohammadi Elyasi et al. (2012); Arasti et al. (2012a)
	Effectiveness of entrepreneurship education	Baghersad et al. (2012)
	Curriculum objectives, development and	Leyaghatdar et al. (2009); Yadollahi Farsi and Mirrab Razi (2009)
	Entrepreneurial characteristics	Kordnaeej et al. (2012)
	Entrepreneurship process	Sadeghi and Ghanadan (2009)

Table 3 Themes and sub-themes of the articles on entrepreneurship training

Themes	Sub-themes	Papers
Entrepreneurship and professional training	Entrepreneurial behavior and skills of staff	Shekary and Arani (2011)
	Women entrepreneurship empowerment and entrepreneurial tendency	Tabatabaie and Hosseineyan (2005)
	Women's employment activities	Salehi Najafabadi et al. (2006)
	Group self-efficacy of disabled women	

2012) and students' perceived obstacles to (Hosseini et al. 2009) university entrepreneurship. Research in these years has also investigated the factors influencing commercialization of university research findings (Pourezat et al. 2010), university leadership (Ghahramani et al. 2011) and managerial systems (Talebi et al. 2011), entrepreneurial skills of entrepreneurship lecturers (Mohammadi Elyasi et al. 2012) and effectiveness of university entrepreneurship e-learning programs (Baghersad et al. 2012).

Following the previous research, we grouped the articles on entrepreneurship training under entrepreneurship education (Table 3). Unlike entrepreneurship education, we could only find few researches on entrepreneurship training. Research on entrepreneurship training started in 2005 and provided empirical evidence for the significant relationship between professional and entrepreneurship training and women's entrepreneurial tendency (Tabatabaie and Hosseineyan 2005). From then, researchers have explored the influential impact of such training on employment activities of women (Salehi Najafabadi et al. 2006), entrepreneurial behavior of staff (Mehrabad and Mohtadi 2011), group self-efficacy of disabled women (Moradi and Shabanali Fami 2010) and entrepreneurial skills of employees from insurance companies (Shekarey and Heidarzadeh Arany 2011).

3.2 *Small and Medium Sized Enterprises (SMEs)*

This research stream started in 2004. We organized the articles on this stream around four main sub-themes including SMEs' environment, performance, success, growth and development, internationalization and the effect of SMEs on employment change (Table 4). Research on the appropriate environment for SMEs explored the supportive (Mortazavi and Maharati 2004; A. Sharifzadeh et al. 2010) and economic factors that facilitate and/or obstruct SMEs' creation (Alvani and Rahmati 2008; Amiri et al. 2009; Maleki et al. 2009; Zivdar 2011; Zivdar and Ghasemi 2011) and development (Ahmadpour Daryani et al. 2009a). These studies have also

Table 4 Themes and sub-themes of the articles on SMEs

Themes	Sub-themes	Papers
Environment	Facilitators and impediments	Mortazavi and Maharati (2004); Alvani and Rahmati (2008); Ahmadpour Daryani et al. (2009b); Amiri et al. (2009); Maleki et al. (2009); Sharifzadeh et al. (2010); Zivdar (2011); Zivdar and Ghasemi (2011); Talebi et al. (2011, 2012)
Performance	Strategic resource planning, marketing and distribution system	Alem Tabriz et al. (2010); Khodadad Hosseini and Kolabi (2012); Rezvani and Fanaeei (2012)
	Information technology, e-trading, outsourcing and social network	Talebi et al. (2009); Sohrabi and Khanlari (2010); Teymori and Ashori (2010); Mehdivand and Zali (2011); Zali et al. (2011)
	Innovation capacity and competitiveness	Fakour and Ansari (2009); Rezaeian et al. (2010); Zafarian et al. (2012)
	Personal traits and skills, ethics and social responsibility	Doroudian et al. (2012); Zare Ahmadabadi et al. (2012)
	Entrepreneurship indicators	Arabiun et al. (2010)
Success	Personal characteristics	Mohammadi and Asgari (2011); Azar et al. (2012)
	Banks' financial supports, financial indicators, and national policies and rules	Azar et al. (2012); Khoshnodifar et al. (2010)
	Knowledge management	Seyed Javadin et al. (2011)
Growth and development	National	Khanifar and Vakili (2008); Moghimi and Ahmadpour Dariani (2008); Sharifzadeh et al. (2009b); Kermanshah and Samei (2010); Vafaei and Shafei (2010); Alimirzaei et al. (2011); Talebi et al. (2011, 2012)
	Internationalization	Rezvani et al. (2009); Faghihi et al. (2010); Talebi et al. (2010)
	Employment change	Feizpour et al. (2011)

emphasized the role that science and technology parks play in SMEs' growth (Talebi et al. 2011). Studies mostly focused on examining the strategies on organization resource planning (Alem Tabriz et al. 2010) and competitiveness (Rezaeian et al. 2010), personal traits and skills (Doroudian et al. 2012), thinking capital and social networks (Mehdivand and Zali 2011; Zali et al. 2011), information technology and e-trading (Sohrabi and Khanlari 2010; Teymori and Ashori 2010), marketing and distribution system (Khodadad Hosseini and Kolabi 2012; Rezvani and Fanaeei 2012), innovation capacity (Fakour and Ansari 2009; Zaefarian et al. 2012), nature and type of outsourcing (Talebi et al. 2009), and ethics (Zare Ahmadabadi et al. 2012). Research has also specified indicators for SMEs' level of entrepreneurship (Arabiun et al. 2010). The variety of research focuses implies that researchers identified different factors that affect SMEs in Iran and did not intensely concentrate on a particular area to provide deep insights into the area.

Among the factors that influence SMEs' success in Iran, studies have explored the significant impact of banks' financial supports (Khoshnodifar et al. 2010), personal characteristics of the entrepreneur (Azar et al. 2012; M. Mohammadi et al. 2011), knowledge management (Seyed Javadin et al. 2011) and national policies and rules (Azar et al. 2012). Researchers have also looked at SMEs' growth and development from environmental, organizational and integrative perspectives. In the environmental perspective, studies examined the impact of obstacles and constraints (Alimirzaei et al. 2011) and education (Moghimi and Ahmadpour Dariani 2008) on SMEs' development. In the organizational perspective, researchers highlighted the significant relationship between organizational factors (Khanifar and Vakili 2008; Vafaei and Shafei 2010), science and technology parks (Talebi et al. 2011), competitive and growth strategies (Kermanshah and Samei 2010; Talebi et al. 2012) and SMEs' growth. Through an integrative perspective, Sharifzadeh et al. (2009b) suggested a combination of personal characteristics (e.g., personal capabilities and competencies and economic motivation), business dimensions (e.g., production resource management and marketing management), a supportive environment (e.g., family and institutions), business learning and business infrastructures as the influential factors on the development of agricultural SMEs. This SLR also revealed emerging research themes on exploring the factors that affect internationalization of SMEs in Iran (Faghihi et al. 2010; Rezvani et al. 2009; Talebi et al. 2010). Researchers have also provided empirical evidence for the significant impact of SEMs on changes in the employment (Feizpour et al. 2011).

3.3 Entrepreneur and the Entrepreneurship Process

Studies on entrepreneurs have focused on six sub-themes including role of gender, entrepreneurial characteristics, success and failure factors, decision making and entrepreneurial behavior (Table 5). Overall, research on this stream provides a

Table 5 Themes and sub-themes of the articles on entrepreneur and entrepreneurship process

Category	Themes	Sub-themes	Papers
Entrepreneur	Personal variables	Success and failure	Abolghasemi et al. (2009); Razghandi and Dorani (2009); Arasti and Gholami (2010); Mohammadi Elyasi and Notash (2011)
		Achievements, decision making and entrepreneurial behavior	Keshavarzfar and Arabiun (2012); Mobaraki et al. (2012); Khodayaryfar et al. (2012); Neghabi et al. (2012)
		Internal locus of control, need for achievement, values and intuition cognition	Ahmadpour Daryani et al. (2009a); Rezaei Toroghi et al. (2010)
		Motivation	Ahmadpour Daryani et al. (2009b); Arasti and Valinejad (2011)
	Demographic variables	Women's perceived obstacles, cultural and social stereotypes, women's family financial problems	Arasti (2006); Golrod (2009); Sharifi and Adeli (2010)
		Women's particular needs and success	Shaemi et al. (2011)
		Women's networking communication	Arasti and Akbari Jokar (2006)
		Women's employment rate	
		Immigration	
	Entrepreneurship process	Entrepreneurial opportunity	Personal and social variables
Environmental variables			Imanipour and Kanani (2009); Amini Nejad et al. (2010); Jafarjnd et al. (2011); Khanifar et al. (2011)

fragmented picture of the impact of gender on entrepreneurship and there are still many critical unaddressed questions on the relationship between the two variables. Studies on this vein started with investigating the impact of women entrepreneurs' networking communication practices on their business start-up (Arasti and Akbari Jokar 2006) and the cultural and social factors that affect their business (Arasti 2006). Then, the findings of Golrod's (2009) study highlighted the critical role that family and specifically financial problems of family, having parents as an entrepreneur and family emotional and financial supports play in driving women to become an entrepreneur. Research also attempted to explore the obstacles that women entrepreneurs perceive in the process of a new venture creation (Sharifi and Adeli 2010). Studies have also systematically classified women entrepreneurs' motivation to become an entrepreneur (Arasti and Valinejad 2011) and their specific needs (Shaemi et al. 2011).

Only few studies looked at entrepreneurs from a psychological perspective and explored the particular characteristics such as intuition cognition (Rezaei Toroghi et al. 2010) and achievement motivation (Ahmadpour Daryani et al. 2009a) that differentiate entrepreneurs from non-entrepreneurs. Researchers have also investigated the reasons behind entrepreneurs' success and failure. They first attempted to distinguish entrepreneurial managers' success or failure in promoting organizational entrepreneurship by examining their entrepreneurial traits such as internal locus of control, tolerance of ambiguity, innovativeness, self-actualization, self-efficacy and self-esteem (Abolghasemi et al. 2009). Then, studies examined the impact of personal and environmental factors on entrepreneurs' success (Razghandi and Dorani 2009) and failure (Arasti and Gholami 2010; Mohammadi Elyasi et al. 2011). Identifying the factors that affect entrepreneurs' decision making (Keshavarzfar and Arabiun 2012; Mobaraki et al. 2012), achievements (Khodayaryfar et al. 2012) and entrepreneurial behavior (Neghabi et al. 2012) has recently emerged in the studies on entrepreneurs.

In addition to the entrepreneur, researchers have also investigated the process of entrepreneurship through different perspectives. First, researchers developed a communication model for the process of entrepreneurship (Farhangi and Safarzadeh 2005). Then, studies focused on the influence of social capital on novice entrepreneurs' financing (Amini Nejad et al. 2010) and their financial needs from the design to development phase (Khanifar et al. 2011). Regarding entrepreneurial financing, one article examined the factors that affect entrepreneurial investors' decision to exit (Imanipour and Kanani 2009).

Furthermore, studies examined the personal, environmental, behavioral and job-related factors affecting the process of entrepreneurship (Jafarjnd et al. 2011).

Of the critical phases in the process of entrepreneurship, entrepreneurial opportunity has mostly attracted the attention of researchers. Research has consistently explored the personal (creativity, self-efficacy, entrepreneurial characteristics and awareness and previous knowledge) and social (links and networks) factors

that influence entrepreneurial opportunity recognition among successful entrepreneurs and in different organizations (Azizi et al. 2012; R. Gholipour et al. 2009b; Kordnaeej et al. 2010; Mohammadi Elyasi et al. 2011; Saremi and Alizade Sani 2009). Several articles have also explored entrepreneurial opportunities in transportation systems (Fartook Zadeh and Rajabi Nohouji 2009) and companies (Kordnaeej et al. 2010), airlines (Kourani and Ahmadpour Dariani 2011) and food counseling services (Meigounpoory et al. 2011).

3.4 Organizational and Corporate Entrepreneurship

A robust body of literature investigated different aspects of organizational and corporate entrepreneurship (Table 6). We organized these articles around three general sub-themes including staffs' and managers' entrepreneurial characteristics and behavior, factors affecting organizational entrepreneurship creation and development and measuring organizational entrepreneurship. Exploring entrepreneurial

Table 6 Themes and sub-themes of the articles on organizational and corporate entrepreneurship

Themes	Sub-themes	Papers
Entrepreneurial characteristics, skills and behavior	Managers	Kazemi and Maharati (2007); Kordnaeej et al. (2007); Jahangir and Kalantari (2008); Pardakhtchi et al. (2008); Abolghasemi et al. (2009); Gholipour et al. (2009a); Yadollahi Farsi et al. (2009); Marzban et al. (2010); Mehrabad and Mohtadi (2011); Naeiji and Abbasalizadeh (2011); Divandari and Bagheri (2012)
	Staffs	Zare et al. (2007); Abdolmalki et al. (2008); Hadizadeh Moghadam et al. (2009); Beygi Neya et al. (2010); Hezarjaribi and Ebrahimi (2010); Mohammadi et al. (2011); Nikraftar (2011); Fani et al. (2012)
Organizational entrepreneurship creation and development	Organizational variables	Imanipour and Zivdar (2008); Alambeygi and Malek Mohammadi (2009); Mahmoudi and Beiryaye (2009); Manian et al. (2009); Yadollahi Farsi et al. (2009); Arabi and Abedi (2010); Danaeefard et al. (2010); Hosseinzadeh Shahri (2010); Ghahremani et al. (2010); Ghanati et al. (2010); Arabi and Mostafavi (2011); Madhoshi and Sadati (2011); Talaei (2011); Ghasemiyeh and Abdollahi (2012); Mobini Dehkordi et al. (2012)
	Environmental variables	Rezaee et al. (2011); Saeidi et al. (2010); Seyyed Naghavi and Abdolhpour (2010)

characteristics and behavior of staff and managers has been consistently a hot topic for research. Researchers have investigated the relationship between psychological empowerment (Zare et al. 2007), entrepreneurial skills (Abdolmalki et al. 2008), emotional intelligence (Hadizadeh Moghadam et al. 2009) and entrepreneurial characteristics (Beygi Neya et al. 2010; Fani et al. 2012; H. R. Mohammadi et al. 2011; Nikraftar 2011) with staffs' entrepreneurial tendency, intentions and job satisfaction in different organizations.

Managers have also been a subject of organizational entrepreneurship research. Studies examined managers' entrepreneurial behavior (Kazemi and Maharati 2007), characteristics (Abolghasemi et al. 2009; Jahangir and Kalantari 2008; Naeiji and Abbasalizadeh 2011), motivation (Gholipour et al. 2009a) and innovation (Divandari and Bagheri 2012). Research has also examined the effectiveness of management in preparing an appropriate environment for organizational entrepreneurship development (Pardakhtchi et al. 2008). Furthermore, studies contributed to the significant impact of entrepreneurial climate in the organization (Marzban et al. 2010) and organizational structure (Yadolahi Farsi et al. 2009) on managers' entrepreneurial behavior. Researchers have also highlighted organizational culture, control style, short and long term profits, organizational award system and leadership style as the obstacles to organizational entrepreneurship behavior (Kordnaeij et al. 2007; Mehrabad and Mohtadi 2011).

More specifically, Rezaee et al. (2011) classified the obstacles to corporate entrepreneurship in business counseling corporates into four main groups which are: structural, environmental, personal (psychological) and educational. Several articles explored the environmental variables such as social capital and innovation (Saeidi et al. 2010; Seyyed Naghavi and Abdolahpour 2010) and ICT (Alambeygi and Malek Mohammadi 2009; Vafaei and Moghimi 2010) as to be influential on organizational entrepreneurship creation and development. Two papers have also contributed to conceptual models for organizational entrepreneurship (Jahangiri and Mobaraki 2009; Rezvani et al. 2008). Of the organizational structure factors affecting organizational entrepreneurship, studies highlighted the degree of formalization, complexity and centralization (Hosseinzadeh Shahri 2010; Yadolahi Farsi et al. 2009) and information systems (Mahmoudi and Beiryae 2009). Studies have also examined organizational culture (Ghahremani et al. 2010; Ghanati et al. 2010; Mobini Dehkordi et al. 2012), an encouraging and supportive organizational environment (Danaeefard et al. 2010) and knowledge management process (Madhoshi and Sadati 2011) as the significant factors influencing organizational entrepreneurship. In addition, organizational entrepreneurship and entrepreneurial activities have been studied as an independent variable influencing performance of different organizations and corporates (Arabi and Abedi 2010; Arabi and Mostafavi 2011; Ghasemiyeh and Abdollahi 2012; Imanipour and Zivdar 2008; Manian et al. 2009). We found only one paper on measuring organizational entrepreneurship using internal corporate indicators (Talaie 2011).

Table 7 Themes and sub-themes of the articles on social entrepreneurship and family businesses

Category	Themes	Sub-themes	Papers
Social entrepreneurship	Personal and environmental variables		Moghimi et al. (2008); Ansari et al. (2010); Omrani et al. (2010)
	Organizational variables	Model and performance	Asadi et al. (2011); Arasti et al. (2012a, b); Yadegar et al. (2011)
Family businesses	Capital structure		Seyed Amiri et al. (2009)
	Personal variables		Khanifar et al. (2010)

3.5 *Social Entrepreneurship and Family Businesses*

Only few articles concentrated on social entrepreneurship and family businesses (Table 7). Despite the extensive studies on social entrepreneurship in other countries (Lehner and Kansikas 2013), research on social entrepreneurship started in 2007 and examined the impact of social entrepreneurship components (entrepreneurial culture, entrepreneurial plans and activities and entrepreneurial success factors) on the performance of private organizations (Moghimi et al. 2008). Then, Sedgheyani et al. studied the behavioral characteristics (creativity, innovativeness, entrepreneurial beliefs, searching for social capital and entrepreneurial opportunity recognition and exploitation) of social entrepreneurs. Omrani et al. (2010) found individuals, mission, contextual factors, capital and entrepreneurial opportunities as the significant factors affecting social entrepreneurship as perceived by social entrepreneurs. Ansari et al. (2010) identified social capital and social responsibility as the particular characteristics of social entrepreneurs. In 2011, Asadi et al. developed a model for social entrepreneurship in non-profit organizations (a street children organization) and Yadegar et al. (2011) investigated how social entrepreneurs start social entrepreneurship initiations. Finally, Arasti et al. (2012a) specified the institutional factors affecting the emergence of social entrepreneurship activities.

Of the articles in this stream, only two studies contributed to family and home entrepreneurship. Research on the topics started in 2009 and examined the structure of family business capital in 88 textile and oil family corporations (Seyed Amiri et al. 2009). The second article presented the significant relationship between demographic variables (gender and marital status) and motivation (entrepreneurial motivation, joblessness, financial problems and beliefs) and individuals' decision to establish a home business (Khanifar et al. 2010).

3.6 *Entrepreneurship Development at National and International Levels*

As Table 8 indicates, of the few studies on national entrepreneurship development, one examined the obstacles and constraints of entrepreneurship development in sports (Yadolahi Farsi et al. 2011) and one attempted to develop a strategic plan

Table 8 Themes and sub-themes of the articles on entrepreneurship development at rural, national and international levels

Themes	Sub-themes	Papers
Rural development	Influential factors	Rezvani and Najarzadeh (2008); Ghambarali and Zarafshani (2008); Alimirzaei et al. (2011); Heydari Sareban (2012)
Facilitators, obstacles and constraints		Kordnaeej et al. (2007); Alambeygi et al. (2011); Aghajani and Talebnejad (2011)
Policy making and strategic plan		Yadollahi Farsi et al. (2011); Arasti et al. (2012a)
Globalization and international trading		Tayebi and Fakhri (2010)

for religious entrepreneurship (Arasti et al. 2012a). Alambeygi et al. (2011) looked at the role played by entrepreneurship research and development in the success of IT transmission in agriculture. Researchers have also examined different aspects of rural entrepreneurship development. While Rezvani and Najarzadeh (2008) studied entrepreneurial awareness and skills of rural people, Ghambarali and Zarafshani (2008) explored the indicators for rural entrepreneurs’ success. Research has also specified the obstacles and constraints that rural entrepreneurs face in developing their business ventures (Alimirzaei et al. 2011). Furthermore, study focused on identifying the factors that influence agricultural entrepreneurship development in rural areas (Heydari Sareban 2012). Kordnaeej et al. (2007) and Aghajani and Talebnejad (2011) emphasized the role of entrepreneurship centers in entrepreneurship development. At the international level, only one article looked at the impact of globalization and international trading on entrepreneurship development among different countries (Talebi et al. 2010).

4 Discussion

This chapter was an attempt to provide a precise map of the research on entrepreneurship in Iran in a 12-year period (2000–2012). Furthermore, it synthesized the entrepreneurship research findings to identify the areas of interest and future trends for research through a systematically review of 208 articles published in the top academic journals. The findings indicate that entrepreneurship research in Iran started almost a decade later than other countries such as the U. S, Europe and China and the literature is recent and unsubstantial (Jing et al. 2014). Most of the studies were conducted at provincial levels and specifically in Tehran and few of the papers were based on a national research. This research scarcity may face policy makers, researchers and educators with serious challenges in providing the

appropriate environment for entrepreneurship development. We also found out that very few studies presented the findings of an international research and no research was conducted in collaboration with international researchers representing the data across countries. Furthermore, despite the critical importance of journals specifically devoted to publishing entrepreneurship research findings, only one journal (*Journal of Entrepreneurship Development*) has recently published in entrepreneurship. Though, from its first publication, this journal played a critical role in improving the number and quality of the entrepreneurship articles.

In general, paper publication on entrepreneurship varies in different periods where the number of published articles constantly increased from 2000 to 2007, drastically improved from 2008 to 2011 and then declined in 2012. These papers focused on six subject areas including humanities, social and behavioral sciences, agricultural science, technical science and medicine. The majority of these studies used a survey research design and was conducted through a quantitative research method. We found no research using an experimental or quasi-experimental research method. Regarding research instrument, the researchers mostly employed a questionnaire and a mix of a questionnaire and an interview protocol.

The thematic analysis also implied six key themes of the articles which are: entrepreneurship education and training, SMEs, entrepreneurs and entrepreneurship process, organizational and corporate entrepreneurship, social entrepreneurship and family businesses and entrepreneurship development at national and international levels. Articles on entrepreneurship published in a scientific journal started with examining entrepreneurship education. This indicates the critical importance of entrepreneurship education for the researchers, educators and policy makers in Iran. This trend protects high interests of researchers in entrepreneurship education at international level (Pittaway and Cope 2007). As illustrated in the research findings in the MENA countries (Lope Pihie and Bagheri 2013), research in this stream has constantly explored entrepreneurial characteristics, attitudes and motivation of university students and graduates. Though, these papers explored different characteristics and reported only few common entrepreneurial characteristics (e.g., self-efficacy and tolerance of uncertainty) in students.

Between 2010 and 2011, less research was conducted on entrepreneurial traits of university students and studies examined their intentions to new venture creation. In 2012, exploring such characteristics among students again emerged as a buzz research topic. This is in contrast to the huge number of studies that examined entrepreneurship education and training in other countries (Sirelkhatim and Gangi 2015). Few studies have also examined the effective organizational structure for entrepreneurship education both at higher education institutions and schools. From 2009, the focus of the research shifted from exploring students' entrepreneurial characteristics to the factors (e.g., gender) that affect these characteristics and their propensity to become an entrepreneur. The significant impact of different components of entrepreneurship education programs such as curricular and extra-curricular activities, university management and leadership, creative teaching methods, entrepreneurial skills of entrepreneurship lecturers, textbooks and needs for education on

developing students' entrepreneurial capabilities has also been emphasized. Researchers have also questioned the effectiveness of university entrepreneurship e-learning programs. Although these studies have extensively examined the organizational factors affecting entrepreneurship education, they do not provide a comprehensive picture of the future directions of such education in Iran as other MENA countries (Mastura and Abdul Rashid 2008).

Another emergent research topic was the process and factors affecting (e.g., university administration, organizational model, entrepreneurial university characteristics and students' perceived obstacles) entrepreneurship in universities. Researchers have also recognized the importance of and factors influencing commercialization of university research findings. Despite the robust body of literature on entrepreneurship education, this analysis included only few articles on entrepreneurship training. This stream of research started in 2005 and found a significant relationship between entrepreneurship training and entrepreneurial tendency among women, entrepreneurial behavior and skills of staff and group self-efficacy of disabled women.

The second major theme emerged from the SLR was SMEs. This theme included four key sub-themes which are: SMEs' environment, performance, success, growth and development as well as internationalization of SMEs and the impact of SMEs on employment changes. First, research on the appropriate environment for SMEs explored the supportive and economic factors that facilitate and/or obstruct SMEs' creation and development as well as the role played by science and technology parks in their growth. Second, studies highlighted strategies on organizational resource planning and competitiveness, personal traits and skills of the entrepreneurs, thinking capital and social networks, information technology and e-trading, marketing and distribution system, innovation capacity, nature and type of outsourcing and ethics as to be influential on SMEs' performance. While research in other countries specified social capital, entrepreneurial orientation and organizational resources as the influential factors affecting entrepreneurial performance of new ventures (Chen 2007). Research has also developed the indicators for measuring the level of entrepreneurship in SMEs. Third, studies have identified banks' financial supports, personal characteristics of the entrepreneur, knowledge management and national policies and rules as to be influential on SMEs' success in Iran. Fourth, SMEs' growth and development were investigated through environmental, organizational and integrative perspectives. In the environmental perspective, studies examined the impact of obstacles and constraints and education on SMEs' development. In the organizational perspective, studies highlighted the significant relationship between organizational factors, science and technology parks, competitive and growth strategies and SMEs' growth. Finally, in the integrative perspective researchers suggested a combination of personal characteristics, business dimensions, a supportive environment, business learning and business infrastructures as the influential factors on SMEs' development. Emergent research topics on SMEs investigated the factors that affect SMEs' internationalization and the significant impact of SEMs on the employment changes.

The third key theme which emerged from our study was the entrepreneur and the entrepreneurship process. Overall, studies provide a fragmented and underdeveloped picture of the entrepreneur, the process of entrepreneurship and the interplay between the two key factors in venture creation. Studying the role of the entrepreneur, researchers mostly investigated the environmental factors that drive women to become an entrepreneur and successfully run a new venture (e.g., networking communication practices, culture and society and family). In contrast to the intersection between gender and entrepreneurship in other countries which explored the socially constructed stereotypes (Gupta et al. 2008), only few studies looked at women entrepreneurship through a psychological perspective exploring their perceived obstacles in the process of entrepreneurship, entrepreneurial motivation and particular needs. We could find no research that compares entrepreneurial characteristics, motivation and behavior of females and males. This implies the lack of research on different aspects of gender and entrepreneurship and insignificant contribution to theory development on the intersections between gender and entrepreneurship (Harrison et al. 2015). In addition to the role of gender, research on entrepreneurs explored the psychological characteristics that differentiate entrepreneurs from non-entrepreneurs and the influence of entrepreneurial managers' success on improving organizational entrepreneurship. This emphasizes that exploring entrepreneurial characteristics of staff and managers has been constantly a hot topic for research in Iran as in other countries (Tan 2001). Studies have also identified the personal and environmental factors that influence entrepreneurs' success, failure, decision making, achievements and entrepreneurial behavior. In contrast to research in other countries (Chen et al. 1998), we found no study that compared entrepreneurial characteristics, motivation and behavior among entrepreneurs and non-entrepreneurs. Research on the process of entrepreneurship in Iran was conducted in three main directions. First, a communication model for the process of entrepreneurship was developed. Second, the social capital and financial needs required by entrepreneurs as well as the factors that affect entrepreneurial investors' decision to exit were specified. In general and unlike the broad focus of research on entrepreneurial finance in other developing countries (Eddleston et al. 2014), there is a high scarcity of research on this area in Iran. Third, the personal, environmental, behavioral and job-related factors influencing the process of entrepreneurship were identified. Furthermore, research has consistently explored the personal and social (links and networks) factors that influence entrepreneurial opportunity recognition among successful entrepreneurs and in different organizations and companies. Despite the importance of research on other aspects of entrepreneurial opportunity such as opportunity creation and exploitation (George et al. 2016), we could find no research on these topics among the papers that we studied. More specifically, our understanding on the appropriate socioeconomic environment and rules and regulations that encourage and support entrepreneurial opportunity creation, evaluation and exploitation is insufficient.

The fourth key theme emerging from this study was organizational and corporate entrepreneurship. Our findings revealed three general sub-themes related to this theme. First, researchers investigated the impact of entrepreneurial characteristics

and behavior of both staff and managers on their performance and job satisfaction in different organizations. For staff, the impact of entrepreneurial characteristics, entrepreneurial skills, psychological empowerment and emotional intelligence were suggested as the significant factors influencing their entrepreneurial tendency and intention as well as their job satisfaction. While for managers, studies focused on examining their entrepreneurial behavior, characteristics and motivation and the impact of entrepreneurial climate in the organization and organizational structure on their entrepreneurial behavior. The studies also investigated managers' effectiveness in providing an appropriate environment for the development of organizational entrepreneurship. Therefore, there is a wide gap in our knowledge on the effect of managers' entrepreneurial characteristics and behavior on improving their job performance and satisfaction.

There is also no information on the impact of managers' entrepreneurial characteristics and behavior on their staff entrepreneurial behavior, performance and job satisfaction. Second, studies identified the personal, organizational, environmental and educational obstacles that hinder entrepreneurial behavior in different organizations and corporates. Researchers have also explored the environmental and organizational structure variables that affect organizational entrepreneurship creation and development. Based on these studies, two conceptual models for organizational entrepreneurship were developed. Finally, the effects of organizational entrepreneurship and entrepreneurial activities as independent variables on the performance of organizations and corporates have been investigated. Internal corporate indicators have also been used to measure the degree of corporate entrepreneurship. Yet, the mediating and moderating factors that affect different aspects of organizational and corporate entrepreneurship have not been examined.

In contrast to researchers' great interests in social entrepreneurship (e.g., Lehner and Kansikas 2013) and family businesses (Goel and Jones 2016) all over the world, only few researchers have recently contributed to this theme. The majority of these researchers focused on exploring the personal and social characteristics of social entrepreneurs and their perceptions toward the factors that affect social entrepreneurship. The process of how social entrepreneurs start social entrepreneurship initiatives has also been investigated. In addition, social entrepreneurship has been examined as an independent variable where its significant impact has been suggested on performance of private organizations. It has also been considered as a dependent variable where the institutional factors that affect the emergence of social entrepreneurship were highlighted. Of the articles under this theme, only two were dedicated to family business. One article examined the structure of capital in family businesses and the other found a significant relationship between demographic variables (gender and marital status) and motivation with individuals' decision to establish a home business. These findings imply a huge gap in our contextualized knowledge on family businesses in Iran that encounters researchers and practitioners with serious challenges in conducting research and facing the difficulties of running a family business in Iran.

Finally, studies on entrepreneurship development at national and international levels have been conducted in four main directions. First, researchers explored the

obstacles and constraints of entrepreneurship development both in sports and rural areas. Second, several studies examined the facilitators and impediments of rural entrepreneurship success and development. Third, researchers attempted to develop a strategic plan particularly for religious entrepreneurship and examined the role that entrepreneurship centers play in developing entrepreneurship at the national level. Contrary to the extensive literature on international entrepreneurship in other countries (Jones et al. 2011), only one article investigated the impact of globalization and international trading on entrepreneurship development across different countries. Therefore, there is a wide gap in our knowledge on entrepreneurship development both at national and international levels.

5 Conclusion

Based on the SLR and in accordance with previous research (Jing et al. 2014), we can conclude that entrepreneurship research in Iran is highly fragmented and underdeveloped, mostly exploratory and descriptive and greatly drawn on the theories and research methodologies developed in western countries. The literature, therefore, has little contribution to the global body of knowledge on entrepreneurship (Meyer 2006). Furthermore, all through the development process and in contrast to other countries (e.g., the U.S, Europe and China) “internal forces” were the main drivers of entrepreneurship research. Therefore, huge investments are needed in the development of entrepreneurship research in Iran. Establishing specific centers for entrepreneurship research can greatly help to develop strategic plans for entrepreneurship research at national level. These centers can also conduct international entrepreneurship research projects where researchers from other countries collaborate in conducting research and present a more holistic picture of entrepreneurship across countries. Particularly, collaboration in research works with Asian countries can highly contribute to the development of entrepreneurship in MENA region (Jing et al. 2014). These centers can also publish journals that particularly dedicated to the findings of entrepreneurship studies and improve the number and quality of entrepreneurship contributions. Holding national and international conferences on entrepreneurship can also provide researchers with the opportunities to share their theoretical and methodological development. All of the articles in this study were empirical and no paper was devoted to theory building. The scarcity of research on theory building and the importance of stabilizing entrepreneurship field by theory building studies have been emphasized by researchers in other countries (George et al. 2016; Jing et al. 2014). Validating the theories developed in western countries and exploring the political, cultural, social and economic particularities and differences of other nations including Iran can highly help the development of indigenous theories on entrepreneurship (Hindle and Moroz 2010; Jing et al. 2014). Furthermore, high concentration of researchers on doing studies in Tehran highlights the importance of undertaking entrepreneurship related studies in other provinces and specifically at national level in order to provide a comprehensive map of

entrepreneurship in Iran. Due to the critical role played by the *Journal of Entrepreneurship Development* as the only scientific journal dedicated to entrepreneurship, more such journals should be established in order to publish high quality articles on entrepreneurship.

6 Limitations and Future Research Agendas

As with other SLRs, this study has several limitations. First, it includes the articles published in the Academic-Research journals excluding books, book chapters, conference proceedings and research reports. Although the journals represent validated knowledge that has great effects on the research field, future research should include other sources of entrepreneurship research. Using the research streams and themes emerging from this study, future meta-analysis can also provide a holistic understanding of entrepreneurship research in Iran. Second, this study does not analyze the citations of the papers and calls for further investigations. Finally, we only concentrated on the papers published in Persian language. Future research can include the papers on entrepreneurship in Iran in other languages.

This study suggested important agendas for future research on entrepreneurship in Iran. First, exploring the reasons behind the critical increment of articles from 2008 to 2011 and decrement of the papers in 2012 has a great potential for future research. In respect to research methodology, future studies should concentrate on longitudinal and experimental research designs in order to provide more precise insights into different aspects of entrepreneurship. Although entrepreneurship research in Iran started with studies on entrepreneurship education, there are still many unanswered questions related to the most effective teaching methods and the impact of these methods on developing students' entrepreneurial mindset as well as entrepreneurial competencies. In general, these studies have been conducted in isolation from other research areas such as higher education governance and policy making, entrepreneurial learning and business environment. Furthermore, the national policies and programs for entrepreneurship education, the role of government and other related organizations and institutions in promoting such education, effectiveness of the budgeting and funding systems and assessment methods for achieved objectives and outcomes can also be subjected to future research. Scarcity of research in these aspects of entrepreneurship education has been emphasized by previous researchers. Further research is also required to examine if entrepreneurship graduates launch a real new venture and whether they are more successful in leading their ventures than other graduates. Further research is also recommended to investigate if entrepreneurship graduates have a higher chance for employment and whether there is a higher demand in the job market for graduates with entrepreneurship education and if these graduates are more innovatively perform their job tasks than other graduate students. Another area of research is the general business and enterprise environment and the role that environment can play in encouraging and supporting graduates to establish new ventures, specifically in knowledge-based and high technology businesses. It is also recommended that future researches develop

indigenous models for the relationships between entrepreneurship education, government, industries and entrepreneurial businesses as well as how to commercialize university research findings and translate the knowledge created in universities into entrepreneurial ventures. Future studies can also pay more attention to the development of the curricular and extra-curricular activities that can better improve students' entrepreneurial learning, attitudes and competencies (Pittaway et al. 2010).

Research on how to provide the opportunities to experience the real entrepreneurial business environment can highly help educators in developing entrepreneurial competencies in students. Another research area that should be given more attention is to explore if current university lecturers and professors have the required qualifications to teach entrepreneurship, if they are provided with the requisite infrastructures to teach entrepreneurship and whether their education backgrounds, entrepreneurship experiences and teaching skills affect students' entrepreneurial learning and entrepreneurial competencies development. Comparative studies on existing entrepreneurship teaching methods at different education levels and across universities and their effects on students' entrepreneurial motivation, mindset and competencies will also provide educators with valuable information on entrepreneurship education promotion.

In addition, this study revealed a wide gap in the literature on entrepreneurship training and its influence on fostering various aspects of organizational performance and growth. Further studies should include both males and females and examine the effect of entrepreneurship training on developing entrepreneurial competencies in both staffs and managers. An emergent topic of research was the impact of entrepreneurship training on disabled women. Future research should examine if the current training for disabled people and specifically disabled women is effective in developing entrepreneurial capabilities in them, whether they are successful in leading their new ventures and if not what the reasons behind their failure are. Developing the entrepreneurship training programs and activities for disabled people has also a great potential for further investigations. These studies will help to promote entrepreneurship among people with disabilities.

Despite the robust body of research on SMEs in Iran, our knowledge on the appropriate business environment for SMEs' growth and development is limited. First, we found no article on the national economic policies and rules that facilitate SMEs' creation, growth and development. Second, no research investigated the infrastructures required by SMEs to improve their international performance and success. Third, there was no comparative study exploring the entrepreneurial characteristics, motivation and behavior between males and females and how gender differences affect a new venture performance and success. Fourth, there was no contribution to the differences of entrepreneurial competencies among nascent, novice and serial entrepreneurs in different phases of a new venture creation and growth. No research has also examined the interactive effects of the entrepreneur and the entrepreneurship process. Furthermore, we could not find any studies on how ethics affect the entrepreneur and entrepreneurship process. While research has constantly explored entrepreneurial opportunity recognition, we found no research on entrepreneurial opportunity creation, exploration, evaluation and exploitation.

This confirms the lack of a holistic approach to and scarcity of empirical evidence on different phases of entrepreneurial opportunity (George et al. 2016).

This SLR has also opened several new directions for future research on organizational and corporate entrepreneurship. First, a key direction for future research is to examine the influence of managers' entrepreneurial characteristics and behavior on improving their job performance and satisfaction. The impact of managers' entrepreneurial characteristics and behavior on their staff entrepreneurial behavior, performance and job satisfaction also need further investigations. Second, huge research efforts are needed in examining the association between organizational leaders' entrepreneurial leadership behavior and their success in facing current organizations' challenges. Research can also be undertaken to explore the impact of entrepreneurial leadership on staff entrepreneurial behavior and performance as well as success of organizations. The third critical direction of future research is to suggest the effective organizational structure and environment that foster entrepreneurial behavior in both managers and staff. Furthermore, developing the indicators for measuring organizational entrepreneurship and exploring the mediating and moderating factors that affect organizational entrepreneurship have great potentials for further research.

Future research should also address many questions in relation to social entrepreneurship and family business. Some of these questions are: which personal, environmental and organizational factors motivate and enable individuals to become a social entrepreneur? Are there gender differences in individuals' intention toward social entrepreneurship? What are the facilitators and impediments to social entrepreneurship in Iran? and how networking affects social entrepreneurship development? Due to the scarcity of articles on family business, future studies are needed in different aspects of the topic. First, the factors that motivate and enable individuals to establish a family business should be identified in order to improve the number of family businesses. Second, gender differences in family business management should be explored. Third, the most effective family business governance and financing structure and factors leading to a family business failure should be recognized in order to enhance the probability of family business success. Furthermore, comparative studies should investigate the differences in the crisis readiness and management in family and non-family businesses. Finally, future studies should investigate the effects of business policies on family business development.

In general, entrepreneurship literature in Iran requires huge efforts in doing empirical studies on entrepreneurship development and research at national and international levels. At national level, researchers should concentrate on exploring the factors that foster entrepreneurship development in different provinces and across the country. In addition, further studies should be done on the appropriate policies and infrastructures for the development of entrepreneurship all over the country. At international level, there is an urgent need for further research into internationalization of new ventures in order to open new trading windows to the growth of entrepreneurial ventures in Iran. To do so, researchers should explore the factors that improve new ventures' competitiveness in the global business environment. They can also examine the motives that drive entrepreneurs to enter the global markets.

References

- Abbasi E, Kalansangyani M, Balu M (2002) Evaluating entrepreneurial characteristics of female students of Science-Application Centers in Golestan Province. *Women Social Psychol Stud* 10 (3):163–179
- Abdolmalki J, Yousefi M, Pir Mohammadi M, Sabokro M, Mohammadi N (2008) Relationship between entrepreneurial skills and competencies with organizational entrepreneurship among middle managers at IRAN KHODRO company. *J Entrep Dev* 1(2):103–129
- Abolghasemi A, Abbasi M, Narimani M, Ghamari H (2009) Personal characteristics as a predictor for success and failure of managers. *Psychol Outcome J* 4(2):129–152
- Aghajani H, Talebnejad A (2011) Comparative performance evaluation of selected technology incubators in Iran. *J Entrep Dev* 4(13):149–166
- Ahmadi F, Shafeai R, Mafakhernia F, Faraji B (2012) Individual and environmental factors influencing student's entrepreneurial behavior in Kurdistan University. *J Entrep Dev* 4 (15):145–164
- Ahmadpour Daryani M, Salehi M, Khosravi Z (2009a) A comparative study of entrepreneurs' and non-entrepreneurs' need for achievement in Tehran industry. *J Entrep Dev* 2(6):57–72
- Ahmadpour Daryani M, Davari A, Ramezanpoor Nargesi G (2009b) Encouraging business environment: a prerequisite of entrepreneurship development in Iran. *Motale-ate Modiri-ate Behbood va Tahavol* 61:65–89
- Akbari M, Shakiba H, Zehtabi M (2012) Relationship between religious beliefs and entrepreneurship intention: the case of faculty of entrepreneurship and college of agricultural and natural resources' students. *J Entrep Dev* 5(18):87–105
- Alambeygi A, Malek Mohammadi I (2009) The role of information and communication technology (ICT) in entrepreneurship development (Case Studies: Iranian Agricultural Extension Organization). *J Entrep Dev* 2(5):139–162
- Alambeygi A, Malak Mohammadi I, Zareie B, Asadi A (2011) Entrepreneurial research and development based on knowledge translation and the success of agricultural technology transfer. *J Entrep Dev* 4(11):107–126
- Aldrich HE (2012) The emergence of entrepreneurship as an academic field: a personal essay on institutional entrepreneurship. *Res Policy* 41:1240–1248
- Alem Tabriz A, Motahari Farimani N, Yazdani HR (2010) Evaluation of implementation strategy ERP plan for small and medium enterprises. *J Strat Manag Stud* 1(3):15–31
- Alimirzaei E, Asadi A, Tahmasbi M (2011) Development barriers of rural entrepreneurial SMEs in Khzestan province (Case study of date complementary industries). *J Entrep Dev* 4(12):165–184
- Alipour A, Shaghagh F, Barghi Irani Z (2012) A differential distribution of entrepreneurial traits in left- and right-handed students. *School Psychol Quart* 1(3):63–81
- Alvani SM, Rahmati MH (2008) Business opportunities in the industry of decorative plants and flowers in Qom province. *J Entrep Dev* 1(1):11–50
- Amini Nejad R, Gholipur A, Eslami Bidgoli GR (2010) Social capital of novice entrepreneurs and informal finance. *J Entrep Dev* 3(10):49–70
- Amini M, Tamanaei MR, Gholami Alavi S (2012) Evaluation of entrepreneurship capabilities of girl student. *Women Soc* 3(4):115–138
- Amiri M, Zali MR, Majd M (2009) Limitations of emergent businesses. *J Entrep Dev* 2(3):81–102
- Ansari M, Ahmadpour Dariani M, Behrozazar N (2010) Individual characteristics affecting the development of social entrepreneurship in charities in the province of Tehran. *J Entrep Dev* 3 (8):37–64
- Arabi SM, Abedi R (2010) Relationship between coordination of business strategy, financial strategy and organization performance. *J Indus Manag Stud* 8(19):239–277
- Arabi SM, Mostafavi A (2011) A comprehensive model for strategies to market production and business and their impact on organization performance. *Improvement Change Manag Stud* 64:89–116

- Arabiun A, Abdollahzadeh G, Sharifzadeh A (2009) Factors affecting students' entrepreneurial orientation. *Quart J New Econ Comm* 17(18):138–157
- Arabiun A, Abdollahzadeh G, Sharifzadeh A, Mohseni A (2010) Identifying and prioritizing the components of business entrepreneurship. *J Entrep Dev* 3(8):65–97
- Arasti Z (2006) Iranian women entrepreneurs: sociocultural structure affecting entrepreneurial business creation. *Women Dev Polit* 4(1-2):93–119
- Arasti Z, Akbari Jokar MR (2006) Impact of networking on Iranian women entrepreneurs to set up businesses. *Women Stud* 4(3):5–22
- Arasti Z, Gholami M (2010) Causes of failures entrepreneurs in Iran. *J Entrep Dev* 3(8):163–184
- Arasti Z, Valinejad M (2011) Typology of Iranian women entrepreneurs' motivation. *Women Dev Polit* 5(3):99–125
- Arasti Z, Ghafourian FS, Kaviani M (2012a) Strategic management in religious entrepreneurship (Case Study: Pedaran Asemani Organization). *J Entrep Dev* 5(18):129–147
- Arasti Z, Maleki Karam Abad MM, Motavaseli M (2012b) Identifying the institutional factors affecting the emergence of social entrepreneurial activities. *J Entrep Dev* 5(16):185–203
- Asadi M, Razavi SM, Farasat Khah M (2011) Social entrepreneurship model for organizing street children. *J Entrep Dev* 4(12):65–84
- Azar A, Sadeghi A, Kordnaeij A (2012) Prioritizing the factors affecting high-tech SME's success: a Fuzzy Analytic Network Process (ANP) approach. *J Entrep Dev* 5(16):165–184
- Azizi S, Motameni A, Abdollahpour AR (2012) A model for individual and social factors affecting entrepreneurial opportunity recognition. *J Entrep Dev* 5(16):7–26
- Baghersad V, Alizadeh M, Saeidbanadaki S (2012) Identifying the key success factors of e-learning entrepreneurship in Tehran public universities. *J Entrep Dev* 5(17):85–104
- Barani S, Athari Z, Zarafshani K (2009) Determinants of entrepreneurial intention among technical and vocational agricultural students (Case Study: Kermanshah Province). *J Entrep Dev* 2(6):73–96
- Beygi Neyfa AR, Safari S, Mohammadi M (2010) Impact of need type on staff propensity to organizational entrepreneurship. *Manag Hum Resour Oil Indus* 4:7–36
- Bromandnasab M, Shekarshakan H (2007) Simple and multiple correlation between self-efficacy, locus of control and tolerance of ambiguity and entrepreneurship. *Psychol Outcome J* 4(1):27–50
- Bruton GD, Ahlstrom D, Obloj K (2008) Entrepreneurship in emerging economies: where are we today and where should the research go in the future. *Entrep Theory Pract* 32(1):1–14
- Cardon MS, Kirk CP (2013) Entrepreneurial passion as mediator of the self-efficacy to persistence relationship. *Entrep Theory Pract* 28:1–24
- Chen CN (2007) The relationship among social capital, entrepreneurial orientation, organizational resources and entrepreneurial performance for new ventures. *Contemp Manag Res* 3(3):213–232
- Chen C, Greene P, Crick A (1998) Does entrepreneurial self-efficacy distinguish entrepreneurs from managers? *J Bus Ventur* 13:295–316
- Cheng MY, Chan WS, Mahmood A (2009) The effectiveness of entrepreneurship education in Malaysia. *Educ Train* 51:555–566
- Cook D, Sackett D, Spitzer W (1995) Methodological guidelines for systematic reviews of randomized control trials in health from the potsdam consultation on meta-analysis. *J Clin Epidemiol* 48:167–171
- Cook D, Mulrow C, Haynes R (1997) Systematic reviews: synthesis of best evidence for clinical decisions. *Ann Intern Med* 126:376–380
- Danaeefard H, Azar A, Didevar F (2010) A model for institutionalizing entrepreneurship in agriculture. *J Entrep Dev* 3(10):7–27
- Denyer D, Neely A (2004) Introduction to special issue: innovation and productivity performance in the UK. *Int J Manag Rev* 5–6(3–4):131–135
- Divandari A, Bagheri T (2012) Benchmarking of innovation in the Iranian banking industry and comparing it with the MENA Region. *J Entrep Dev* 5(17):145–164

- Doroudian AA, Mozaffari AA, Tondnevis F, Kazemnejad A (2012) The relationship between personal traits and skills with venture performance of sports entrepreneurs. *J Entrep Dev* 5 (16):107–124
- Eddleston KA, Ladge JJ, Mitteness C, Balachandra L (2014) Do you see what I see? Signaling effects of gender and firm characteristics on financing entrepreneurial ventures. *Entrep Theory Pract* 40(3):489–514
- Eskandari F, Hossaini SM, Kalantari K (2006) Factors affecting entrepreneurial performance of agriculture and natural resources' graduates of higher education. *Agric Econ Dev* 14 (53):107–134
- Faghihi A, Tajedin M, Tajedin M (2010) The internationalization of small and medium sized businesses in the food industry: a causal model. *Iranian Manag Sci* 5(17):1–24
- Fakour B, Ansari MT (2009) Barriers to and motives for innovation in the selected Iranian small enterprises. *J Entrep Dev* 2(4):39–65
- Fani AA, Babashahi J, Afkhami Ardakani M, Ebrahimi M (2012) Promoting entrepreneurship: analysis of the GLOBE cultural model components. *J Entrep Dev* 5(16):125–144
- Farajollahi M, Aghajani H, Ghanjeh-khor Z (2011) Role of Education in vocational schools' entrepreneurial spirit of students in Mazandaran. *Women Stud* 9(3):111–141
- Farhangi AA, Safarzadeh H (2005) Designing and defining an organizational communication model for the entrepreneurship process (Focus on Distribution Industry). *Daneshvar Raftar* 12 (14):1–20
- FartookZadeh HR, RajabiNohouji M (2009) Dynamic modeling of entrepreneurial opportunity: "Inner-Urban Physical Distribution", embedded in the traffic of metropolitan areas. *J Entrep Dev* 2(6):97–124
- Feiz D (2009) Effect on gender students' entrepreneurial personality characteristics in Semnan university. *Women Stud* 2(20):25–44
- Feizpour MA, Saeda Ardakani S, Poushdouzbashi H (2011) The life cycle of new SMEs firms and their role in job turnover: experiences of textile industry in the 1995–2005. *J Entrep Dev* 4 (12):67–86
- George NM, Parida V, Lahti T, Wincent J (2016) A systematic literature review of entrepreneurial opportunity recognition: insights on influencing factors. *Int Entrep Manag J* 12(2):309–350
- Ghahramani M, Rashid Haji Khajeh Loo S, Abuchenari A (2011) The role of transformational leadership in promoting the university to an entrepreneurial organization: case of Shahid Beheshti University. *J Entrep Dev* 4(14):185–204
- Ghahremani M, Pardakhtchi MH, Hosein-zade T (2010) Organizational culture and organizational entrepreneurship. *J Public Admin Perspect* 1(1):25–39
- Ghambarali R, Zarafshani K (2008) Identifying success criteria among rural entrepreneurs: using multidimensional scaling. *J Entrep Dev* 1(2):131–160
- Ghanati S, Kordnaieji A, Yazdani HR (2010) Assessing the level of entrepreneurial organizational culture in the University of Tehran. *J Entrep Dev* 3(10):115–133
- Ghasemi J, Asadi A (2010) Factors affecting entrepreneurial mentality of graduate students. *J Econ Agric Dev* 24(1):13–22
- Ghasemiyeh R, Abdollahi H (2012) Investigating the effects of entrepreneurial activities on organizational performance (An Empirical Research). *J Entrep Dev* 5(17):27–46
- Gholipour A, Khanifar H, Piran Nejad A, Khazaie A, Sabokro M (2009a) Designing a motivation system to create entrepreneurship (Case Study: Petrochemical Company). *J Entrep Dev* 2 (5):11–30
- Gholipour R, Aghajani HA, Keramati Karimi MA (2009b) Factors affecting opportunity recognition: IT industry. *J Entrep Dev* 2(3):123–158
- Gibb A (2002) In pursuit of a new 'enterprise' and 'entrepreneurship' paradigm for learning: creative destruction, new values, new ways of doing things and new combinations of knowledge. *Int J Manag Rev* 4(3):233–269
- Goel S, Raymond J (2016) Entrepreneurial exploration and exploitation in family business: a systematic review and future directions. *Fam Bus Rev* 1:94–120

- Golrod P (2009) Family and women entrepreneurship development approaches in Iran. *Women Stud* 7(21):131–149
- Grégoire DA, Noël MX, Déry R, Bécharde J-P (2006) Is there conceptual convergence in entrepreneurship research? A co-citation analysis of frontiers of entrepreneurship research, 1981–2004. *Entrep Theory Pract* 30(3):333–373
- Gupta VK, Turban DB, Bhawe NM (2008) The effect of gender stereotype activation on entrepreneurial intentions. *J Appl Psychol* 93(5):1053–1061
- Hadizadeh Moghadam A, Raminmehr H, Hoseini SS (2009) Relationship between emotional intelligence and entrepreneurial orientation among the employees of Oil Company-Affiliated organizations. *J Entrep Dev* 2(4):139–162
- Harrison R, Leitch C, McAdam M (2015) Breaking glass: toward a gendered analysis of entrepreneurial leadership. *J Small Bus Manag* 53(3):693–713
- Heydari Sareban V (2012) Factors affecting farmers' entrepreneurship in rural regions, meshkinshar county. *Geography* 10(35):263–297
- Hezarjaribi J (2003) Entrepreneurship development and graduates. *Higher Educ Res Plann* 9(4):159–177
- Hezarjaribi J, Ebrahimi M (2010) Relationship between entrepreneurial characteristics of organization personnels (male & female) and their job satisfaction. *Appl Sociol* 21(4):1–18
- Hindle K, Moroz P (2010) Indigenous entrepreneurship as a research field: developing a definitional framework from the emerging canon. *Int Entrep Manag J* 6(4):357–385
- Hosseini SM, Hosseini SJ, Soleymanpour MR (2009) An analysis of entrepreneurship barriers in higher agricultural education as perceived by graduate students. *Iranian J Agric Econ Dev* 41(3):359–368
- Hosseinzadeh Shahri M (2010) Effect of a the organizational context of a holding company's on the corporate entrepreneurship within strategic business units. *J Entrep Dev* 3(10):93–114
- Imanipour N, Kanani M (2009) Identifying the effective criteria on venture capitals exit decision. *J Entrep Dev* 2(4):67–83
- Imanipour N, Zivdar M (2008) Relationship between entrepreneurship orientation and corporate performance in Iran insurance company agencies in Tehran. *J Entrep Dev* 1(2):11–34
- Jafarimoghadam S, Etemadi K (2008) A comparative study of entrepreneurial attitudes among master students entrepreneurship management and electrical engineering of the University of Tehran. *J Entrep Dev* 2(4):163–182
- Jafarjnd A, Kia Kojory K, Rudgar Nezhad F (2011) Exploring the factors affecting independent entrepreneurship process (Case Study: Entrepreneurs in the City Of Bandar Anzali). *J Entrep Dev* 4(13):69–89
- Jahangir A, Kalantari SR (2008) An assessment of entrepreneurial characteristics in telecommunication company managers. *J Entrep Dev* 1(1):87–110
- Jahangiri A, Mobaraki MH (2009) A conceptual framework for entrepreneurship in public sectors. *J Entrep Dev* 2(3):35–60
- Jing S, Qinghua Z, Landström H (2014) Entrepreneurship research in three regions-the USA, Europe and China. *Int Entrep Manag J* 11(4):861–890
- Jones MV, Coviello N, Tang YK (2011) International entrepreneurship research (1989–2009): a domain ontology and thematic analysis. *J Bus Ventur* 26:632–659
- Kalantari S, Rabani R, Hezarjeribi J (2004) Evaluation of entrepreneurship graduates in the journals and newspapers industry. *J Sociol Sci Lett* 11(3):171–189
- Karimi S, Biemans HJA, Chizari M, Mulder M (2012) The effects of contextual factors and cultural aspects on entrepreneurial intention of agricultural students. *J Entrep Dev* 5(17):105–124
- Kavoosi E, Rahmati Zanjantalab F (2010) Designing an indigenous model to improve universities' organizational entrepreneurship. *Rahbord* 5(9):217–241
- Kazemi M, Maharati Y (2007) Measuring entrepreneurship level of managers: a Case of Khorasan. *Knowl Dev* 20:167–184
- Kermanshah A, Samei H (2010) The impact of initial competitive strategy on new firm's growth: a study in Iranian software industry. *J Entrep Dev* 3(9):81–102

- Keshavarzfar R, Arabiun A (2012) Identifying the factors affecting location decisions of Tehran ICT entrepreneurs: a partial least squares approach. *J Entrep Dev* 4(15):105–124
- Khanifar H, Vakili F (2008) The relationship between type of organizational/economic structure and organizational entrepreneurship in SMEs. *J Entrep Dev* 1(2):35–55
- Khanifar H, Ahmadi Azarm H, Zamanifar M (2010) Home-based entrepreneurship: identifying important motivations and role of the demographic variables. *J Entrep Dev* 3(9):181–203
- Khanifar H, Jamshidi N, Ramshini M (2011) Financial needs of entrepreneurs: from planning to implementation (Case study: Food and Chemical Materials in Qom province). *J Entrep Dev* 4(13):51–68
- Khanifar H, Hosseini Fard SM, Dehghan Ashkezary MJ, Chezani Sharahi M (2012) Relationship between entrepreneurial personality characteristics and Islamic moral components. *J Entrep Dev* 5(18):47–65
- Khodadad Hosseini H, Kolabi AM (2012) Verifying entrepreneurial marketing mix from islamic-religious viewpoint of the top entrepreneurs in Small and Medium Sized Enterprises. *J Entrep Dev* 518:107–127
- Khodayaryfar M, Ahmadpour Dariani M, Hodhodi B, Momeni L (2012) The relationship between religiosity and Iranian entrepreneur's achievements. *J Entrep Dev* 5(18):7–25
- Khoshnodifar Z, Sookhtanloo M, Malek-Mohammadi I (2010) The impact of agriculture bank and agricultural organization performance on the success of SMEs. *Agric Econ Dev* 18(72):139–162
- Kordnaeij A, Ahmadpour Dariani M, Shams S (2005) Developing an organizational structure model for higher education institutions in Iran. *Humanit Modares* 9(2):119–156
- Kordnaeij A, Ahmadpour Dariani M, Delkhah J (2007) Designing the applicant qualifications for the Entrepreneurship Centers. *Daneshvar Raftar* 14(23):91–108
- Kordnaeij A, Zali MR, Shoraka S (2010) Recognition and prioritization of entrepreneurial opportunities (Case Study: Raja Passenger Railway Company). *J Entrep Dev* 3(7):117–140
- Kordnaeij A, Ahmadi P, Ghorbani Z, Niakan Lahiji N (2012) Entrepreneurial university characteristics in Tarbiat Modares University. *J Entrep Dev* 5(17):47–64
- Kourani M, Ahmadpour Dariani M (2011) Identifying the entrepreneurial opportunities in passenger self-services of the airline of the Islamic Republic of Iran, "HOMA". *J Entrep Dev* 4(14):7–26
- Lehner OM, Kansikas J (2013) Pre-pragmatic status of social entrepreneurship research: a systematic literature review. *J Social Entrep* 4(2):148–219
- Liaghatdar MJ, Foroghi Abri AA, Abedi MR, Vasefian F (2009) A survey of students attitudes towards university curricula regarding entrepreneurship behavior (Case Study Isfahan Universities State and Islamic Azad Universities). *J Entrep Dev* 2(5):109–138
- Lope Pihie ZA, Bagheri A (2013) Self-efficacy and entrepreneurial intention: the mediation effect of self-regulation. *Vocat Learn* 36:385–401
- Madhoshi M, Sadati A (2011) Investigating the effect of knowledge management process on corporate entrepreneurship (Case Study: SMEs of Mazandaran East). *J Entrep Dev* 4(12):7–26
- Mahmoudi J, Beiryaie HS (2009) Assessment of entrepreneurial information systems in the Iranian governmental organizations (Case Study: Deputy,s Office Planning of the Ministry of Commerce). *J Entrep Dev* 5(6):157–181
- Maleki AH, Gholipour A, Abedi Jafari H (2009) Effects of religious beliefs on tendency towards new business venture. *J Entrep Dev* 2(3):11–34
- Manian A, Mousakhani M, Jam-Parvazi M (2009) The relationship between information technology and business alignment with organizational performance of ICT companies. *ICT Manag* 1(3):89–106
- Marzban SM, Moghimi SM, Arabiun A (2010) The impact of organizational entrepreneurship climate on managers' entrepreneurial behavior. *Quart J New Econ Comm* 6(21–22):1–25
- Mastura J, Abdul Rashid AA (2008) Entrepreneurship education in developing countries: exploring its necessity in the construction program. *J Eng Des Technol* 6(2):178–189
- Matlay H (2006) Researching entrepreneurship and education Part 2: What is entrepreneurship education and does it matter? *Educ Train* 48(8/9):704–718

- Mehdivand M, Zali MR (2011) The impact of intellectual capital and entrepreneurial orientation on the performance of nano businesses. *J Entrep Dev* 4(14):47–67
- Mehrabad MS, Mohtadi MM (2011) Impact of entrepreneurship education on entrepreneurial behavior development. *J Entrep Dev* 1(2):57–73
- Meigounpoory M, Ahmadi B (2012) Factors affecting the choice of the university research commercialization strategies in Petrochemical industry. *J Entrep Dev* 5(16):27–46
- Meigounpoory M, Yazdani P, Rezaeian Zadeh H (2011) Analysis of supply and demand trends in the field of diabetes nutrition counseling: a basic step toward identifying the entrepreneurial opportunities for nutrition consultants. *Payavard* 5(5):57–66
- Meyer KE (2006) Asian management research needs more self-confidence. *Asia Pac J Manag* 23(2):119–137
- Mitchell RK (2011) Increasing returns and the domain of entrepreneurship research. *Entrep Theory Pract* 35(4):615–629
- Mobaraki MH, Rezaeian A, Mehrabi R, Kolabi AM (2012) Conceptualization of predisposing factors in applying heuristics in superior Iranian entrepreneurs' decision making process (Focus Group). *J Entrep Dev* 4(15):7–24
- Mobini Dehkordi A, Rezaeian A, Dehghan Najmabadi A, Dehghan Najmabadi M (2012) Organizational culture and entrepreneurial orientation. *J Entrep Dev* 5(16):47–66
- Moghipi SM, Ahmadpour Dariani M (2008) Entrepreneurship education in Iran SMEs: needs and alternatives. *J Entrep Dev* 1(1):207–245
- Moghipi SM, Rosta M, Heydari M (2008) Social entrepreneurship and performance effectiveness in women private organizations. *Women Stud* 2:1–26
- Mohammadi M, Asgari GR (2011) Relationship between entrepreneurs' characteristics and entrepreneurial success in small and medium-sized enterprises. *J Entrep Dev* 4(13):129–148
- Mohammadi Elyasi G, Notash H (2011) Identifying the causes for failure of habitual Iranian entrepreneurs: a narrative approach. *J Entrep Dev* 4(13):31–50
- Mohammadi Elyasi G, Rokni N, Tayebi SK (2011) Role of social networks in recognizing entrepreneurial opportunities. *J Entrep Dev* 4(11):7–26
- Mohammadi Elyasi G, Ferasatkah M, Farrokhs S (2012) Required professorial skills for developing entrepreneurship graduates in universities. *J Entrep Dev* 4(15):185–201
- Mohammadi HR, Ahmadi A, Amin Shayan Jahromi SH (2011) Relationship between entrepreneurship and entrepreneurial intention. *Women Soc* 2(1):99–119
- Moradi H, Shabanali Fami H (2010) Identifying entrepreneurial capacities of female students (Case study: Ahwaz-Ramin Agricultural & Natural Resources University). *J Entrep Dev* 3(8):141–161
- Mortazavi S, Maharati Y (2004) Analysis of the dimensions of supports provided to small business in metal industry through an entrepreneurial approach. *J Knowl Dev* 15:85–110
- Moustaghfir K (2008) The dynamics of knowledge assets and their link with firm performance. *Meas Bus Excell* 12:10–24
- Naeiji MJ, Abbasalizadeh M (2011) Cultural intelligence and entrepreneurial characteristics of managers in Iranian NGOs. *J Entrep Dev* 4(12):27–44
- Neghabi S, Zaefarian R, Yousefi M, Rezavani M (2012) Relationship between networking behavior and entrepreneurial behavior (Case Study: Companies in Science Parks). *J Entrep Dev* 4(15):25–44
- Nikraftar T (2011) The impact of individual and social competences on entrepreneurial traits (Case Study: Employees of Exports Development Bank of Iran). *J Entrep Dev* 4(12):125–163
- Omran Z, Haghghi Kafash M, Mazlomi N (2010) Prioritizing factors affecting social entrepreneurship in Iran from the viewpoint of social activists. *J Entrep Dev* 3(8):11–36
- Ooi YK, Ahmad S (2012) A study among university students in business start-ups in Malaysia: motivations and obstacles to become entrepreneurs. *Int J Bus Soc Sci* 3(19):181–192
- Pardakhtchi MH, Heydari M, Shaffizadeh H (2008) Study of the effectiveness of the management in developing and expressing entrepreneurship. *Manag Perspect* 7(26):71–100
- Pittaway L, Cope J (2007) Entrepreneurship education: a systematic review of the evidence. *Int Small Bus J* 25(5):479–510

- Pittaway L, Robertson M, Munir K, Denyer D, Neely A (2004) Networking and innovation: a systematic review of the evidence. *Int J Manag Rev* 5–6(3–4):137–168
- Pittaway L, Rodriguez-Falcon E, Aiyegbayo O, King A (2010) The role of entrepreneurship clubs and societies in entrepreneurial learning. *Int Small Bus J* 29(1):37–57
- Pourezat AA, Gholipor A, Nadirkhanlo S (2010) Prioritizing factors affecting knowledge commercialization at universities. *J Entrep Dev* 3(7):35–67
- Rahmanian Koushaki M, Chizari M, Havasi A (2012) Factors influencing entrepreneurial intentions of the agricultural students in Azad University of Ilam. *J Entrep Dev* 4(15):125–144
- Ratnatunga J, Romano C (1997) A “citation classics” analysis of articles in contemporary small enterprise research. *J Bus Ventur* 12(3):197–212
- Razghandi N, Dorani K (2009) Recognizing the individual and environmental factors affecting the success of superior entrepreneurs in the province of Tehran: developing an educational model. *J Entrep Dev* 2(6):39–56
- Rezaei Toroghi S, Mirzaei M, Zali MR, Rostami R, Razavi SM (2010) Role of even contribution in intuition quality enhancement of serial entrepreneurs. *J Entrep Dev* 3(10):29–47
- Rezaei Zadeh M, Ansari M, Arefi M, Murphy M (2012) The scope and sequence of curriculum to promote students’ entrepreneurial capabilities: using Interpretive Structural Modelling (ISM). *J Entrep Dev* 4(15):165–184
- Rezaei R, Gholifar E, Safa L, Kazemi Torbaghan M (2011) Identifying the barriers to corporate entrepreneurship development in agricultural consulting, technical and engineering service ventures in Zanjan province. *J Entrep Dev* 4(14):27–46
- Rezaei R, Karimi A, Mirikaram F, Safa L (2012) A Study of entrepreneurial education needs of agricultural Master students (Case Study: University of Zanjan). *J Entrep Dev* 5(17):65–84
- Rezaeian A, Mikaeili F, Tajik M, Ahmadizad A (2010) The relationship between generic strategies and E-business adoption levels in SMEs software producers. *J Strat Manag Stud* 1(4):107–120
- Rezvani M, Fanaeei L (2012) Improving the distribution system in Home Video Network by XTRIZ method. *J Entrep Dev* 5(17):185–203
- Rezvani MR, Najarzadeh M (2008) Analysis of villagers’ background knowledge on entrepreneurship in the process of rural development. *J Entrep Dev* 1(2):161–182
- Rezvani M, Yadollahi Farsi J, Vahed Vahdatkar M (2008) A conceptual model for corporate technological entrepreneurship: the case of intelligent transportation systems in the organization of Tehran municipality. *Quart J New Econ Comm* 4(14):64–87
- Rezvani HR, Aghajani HA, Moghimi Daronkalaie SN (2009) Determination of native indicators for innovation survey in Iran using Fuzzy Hypothesis test (Biotechnology field). *J Entrep Dev* 2(4):11–37
- Sadeghi SH, Ghanadan H (2009) Reproduction and testing of entrepreneurship process in the educational institutes of Tehran. *J Entrep Dev* 2(5):163–181
- Saeidi AA, Azizimehr K, Tousi N, Tamizifar R (2010) Social capital and innovation in Tondar Irankhodro car manufacturing unit. *J Entrep Dev* 3(9):131–155
- Salehi Najafabadi R, Abedi MR, Rabei M (2006) The impact of entrepreneurship education on improving women’s activities for employment in Sharekord. *Knowl Res Psychol* 30:111–122
- Salimifar M, Mortazavi S (2005) Human capital and entrepreneurship in vocational education approach. *Knowl Dev* 17:63–85
- Samadi P, Shirzadi Esfehani H (2007) A Study of the relation between schools’ organizational atmosphere and entrepreneurial spirit of students. *Quart J Educ Innov* 16(5):164–187
- Saremi M, Alizade Sani MK (2009) Factors affecting the trend of opportunity recognition among top entrepreneurs. *J Entrep Dev* 2(3):103–122
- Seyed Amiri N, Tehrani R, Tarjoman V (2009) A model for capital structure in family-based businesses (Oil and Textile Industries). *J Entrep Dev* 2(3):159–190
- Seyed Javadin SR, Ahmadi A, Khajeheian D (2011) Knowledge management in entrepreneurial firms: organizational factors influencing knowledge creation and knowledge transfer in the Iranian informatics industry. *J Entrep Dev* 4(11):27–46

- Seyyed Naghavi M, Abdolapour M (2010) Relationship between social capital and intrapreneurship. *J Entrep Dev* 3(9):103–129
- Shaemi A, Etebarian A, Kheradmand M (2011) Assessing women entrepreneurs' need in Isfahan. *Women Dev Policy* 9(3):51–180
- Sharifi O, Adeli M (2010) Barriers of women' farmers entrepreneurship in Kahnuj and Jiroft. *J Women's Stud* 5(1):112–125
- Sharifzadeh F, Razavi SM, Zahedi SS, Najari R (2009a) Factors affecting academic entrepreneurship in the University of Payam Noor: a model design and analysis. *J Entrep Dev* 2(6):11–38
- Sharifzadeh A, Mahboobi MR, Arabiun A (2009b) Explaining components of Agro-enterprises development in Golestan Province. *J Entrep Dev* 2(4):85–112
- Sharifzadeh A, Arabiun A, Abdollahzadeh G (2010) Identifying and prioritizing supportive needs of Agro-Enterprise development. *J Entrep Dev* 3(10):71–91
- Shekarey A, Heidarzadeh Arany S (2011) Effect of Insurance occupational training on entrepreneurial skills the performance of insurance companies' employees. *J Entrep Dev* 4(13):109–129
- Shekarshakan H, Broumand Nasab M, Najareyan B, Shahni Yeylagh M (2002) Simple and multiple relationships between creativity, motivation to achievement and self-esteem with students' entrepreneurship. *J Educ Stud Psychol* 3(3/4):1–24
- Sirelkhaim F, Gangi Y (2015) Entrepreneurship education: a systematic literature review of curricula contents and teaching methods. *Cogent Bus Manag* 2:1–11
- Sohrabi B, Khanlari A (2010) Factors affecting e-commerce adoption in Iranian SMEs. *J Entrep Dev* 3(7):11–34
- Tabatabaie YAS, Hosseinyan S (2005) Women empowerment and entrepreneurship through group counseling. *Fam Res* 5(9):217–241
- Talaei G (2011) A measurement model for corporate entrepreneurship based on inter-organizational factors and its impact on entrepreneurship. *J Entrep Dev* 4(12):185–203
- Talebi K, Zali MR, Peyrovian B (2009) Outsourcing in SMEs. *J Entrep Dev* 2(5):81–107
- Talebi K, Tajeddin M, Samizade M (2010) A study of environmental factors and internationalization of Small and Medium-sized enterprises. *J Entrep Dev* 3(9):55–79
- Talebi K, Sanaee Pour H, Heidari N (2011) Role of science and technology parks in the growth of the new technology-based firms. *J Entrep Dev* 4(11):147–166
- Talebi K, Imanipour N, Abbasi Beni S (2012) Identification and prioritization of growth strategies for SMEs in "Gaz-e-Boldaji" industrial cluster. *J Entrep Dev* 5(17):165–184
- Tan J (2001) Innovation and risk-taking in a transitional economy: a comparative study of Chinese managers and entrepreneurs. *J Bus Ventur* 16(4):359–376
- Tayebi SK, Fakhri M (2010) Impact of globalization and international trade on entrepreneurship development: the case of OECD countries. *J Entrep Dev* 3(9):37–45
- Teymori M, Ashori M (2010) Causes of entrepreneurs' failure in Iran. *J Entrep Dev* 3(9):157–179
- Thorpe R, Holt R, Macpherson A, Pittaway L (2005) Knowledge within small and medium sized firms: a systematic review of the evidence. *Int J Manag Rev* 7(4):257–281
- Tranfield D, Denyer D, Smart P (2003) Towards a methodology for developing evidence-informed management knowledge by means of systematic review. *Br J Manag* 14:207–222
- Vafaei F, Moghimi SM (2010) Efficiency of electronic system in administrative processes and organizational entrepreneurship in the University of Tehran. *Quart J New Econ Comm* 6(21–22):99–122
- Vafaei F, Shafei R (2010) The role of organizational factors in enhancing entrepreneurship in small industrial enterprises. *Manag Res Iran* 14(4):233–257
- Yadegar N, Bazargan A, Faghieh N (2011) The process of social entrepreneurial ventures formation: a grounded theory approach. *J Entrep Dev* 4(13):7–30
- Yadolahi Farsi J, Azizi Ziarat O, Khastar H (2009) Relationship between organizational structure and corporate entrepreneurship (Case Study: Banks in the City of Tehran). *J Entrep Dev* 2(5):55–80

- Yadolahi Farsi J, Gholami N, Amiri M, Kanani A (2011) Barriers to entrepreneurship in the country's sports sector. *J Entrep Dev* 4(12):105–124
- Yadollahi Farsi J, Mirarab Razi R (2009) A survey of entrepreneurship curriculum development. *J Entrep Dev* 2(3):61–80
- Zaefarian R, Mohammadi Elyasi G, Farokhmanesh T, Movaheddipour N (2012) The impact of network capital on a firm's innovation capability. *J Entrep Dev* 5(17):7–26
- Zahra SA (2007) Contextualizing theory building in entrepreneurship research. *J Bus Ventur* 22(3):443–452
- Zali MR, Shot T, Kordnaeij A, Najafian M (2011) Impact of social networking on business performance: moderation of role models and entrepreneurial motivation. *Manag Res Iran* 16(2):91–111
- Zare Ahmadabadi H, Jalili P, Zare Banadkooki MR (2012) SMEs: entrepreneurship and forcing to illegal/unethical behaviors. *Ethics Sci Technol* 1:1–14
- Zare GH, Hamidi M, Sajadi SN (2007) The relationship between psychological characteristics of employees' and organizational entrepreneurship in Sport organizations. *Mov Sport Sci* 5(1):71–81
- Zivdar M (2011) Prioritizing the factors facilitating starting SMEs using a Fuzzy Method. *J Entrep Dev* 11:167–186
- Zivdar M, Ghasemi AM (2011) Prioritization of SMEs' establishment facilitating factors: using the synthetic value of Fuzzy Judgments. *J Entrep Dev* 4(11):167–186