

Yüceol, N. ve Can, E. (2023). "The Relationship Between Entrepreneurial Competencies and Firm Performance in SMEs: A Literature Review Shedding Light on the Field", *International Journal of Entrepreneurship and Management Inquiries*, 07(12), 29-55

Doi: 10.55775/ijemi.1199906

<https://dergipark.org.tr/en/pub/ijemi>

Başvuru Tarihi/Received Date: 06.11.2022 Kabul Tarihi/Accepted Date: 14.03.2023

Derleme/Review

The Relationship Between Entrepreneurial Competencies and Firm Performance in SMEs: A Literature Review Shedding Light on the Field*

Phd. Candidate, Nazlı YÜCEOL, ORCID: 0000-0001-8416-5707, Yildiz Technical University, Turkey; s1318045@std.yildiz.edu.tr

Prof. Dr. Esin CAN, ORCID: 0000-0003-1754-4867, Yildiz Technical University, Turkey; esincan@yildiz.edu.tr

The Relationship Between Entrepreneurial Competencies and Firm Performance in SMEs: A Literature Review Shedding Light on the Field

Abstract

This study presents a literature review regarding the relationship between entrepreneurial competence and firm performance using Web of Science and Scopus databases. It is anticipated that the study will provide benefits to academics and business professionals. Academically, an overview of the relationship between the concepts is provided and a roadmap is created for future studies. For business professionals, inferences are made in order to develop entrepreneurial competencies and increase the performance of firm. In the study, 40 studies examining the relationship between entrepreneurial competence and firm performance in SMEs through Web of Science and Scopus databases are discussed through literature review. Within the scope of the study, articles written in the field of business and management are evaluated. As keywords in search; "entrepreneurial competence", "entrepreneurial competencies", "performance", "firm performance", "business success" are used. ESCI, SSCI, SCI-Expanded and BKCI-SSH indices are included in the scan and the results are evaluated.

Keywords: SMEs, Entrepreneurial Competencies, Firm Performance, Business Success, Literature review

Jel Classification: M1, M13, L25

KOBİ'lerde Girişimcilik Yetkinliği ve Firma Performansı İlişkisi: Alana Işık Tutan Bir Literatür İncelemesi

Özet

Bu çalışmada Web of Science ve Scopus veri tabanları üzerinden girişimcilik yetkinliği ve firma performansı ilişkisi üzerine yapılmış olan akademik çalışmalar literatür incelemesi yöntemi ile ele alınmıştır. Çalışmanın akademik ve iş hayatı açısından fayda sağlayacağı öngörülmektedir. Akademik olarak kavramlar arasındaki ilişkiye genel bir bakış sağlanmış ve ileride yapılacak çalışmalara yol haritası oluşturulmuş, çalışma hayatı için ise girişimcilik yetkinliklerinin geliştirilmesi ve firma performansının artırılabilmesi adına çıkarımlarda bulunulmuştur. Çalışma kapsamında Web of Science ve Scopus veri tabanları üzerinden ESCI, SSCI, SCI-Expanded ve BKCI-SSH indekslerinde yer alan işletme ve yönetim alanında kaleme alınmış KOBİ'lerde girişimcilik yetkinliği ve firma performansı ilişkisinin incelendiği 40 çalışma, literatür incelemesi yoluyla değerlendirilmiştir. Aramada anahtar kelimeler olarak; "girişimci yetkinlik", "girişimcilik yetkinliği", "girişimcilik yetkinlikleri", "performans", "firma performansı", "işletme başarısı" ve "iş başarısı" kelimeleri kullanılmıştır.

Anahtar Kelimeler: KOBİ, Girişimcilik Yetkinlikleri, Firma Performansı, İş Başarısı, Literatür incelemesi

JEL Sınıflandırması: M1, M13, L25

Araştırma ve Yayın Etiği Beyanı: Bu çalışmada, araştırma ve yayın etiği kurallarına uyulduğu yazarlar tarafından taahhüt edilmiştir.

Yazar Katkı Oranları: Birinci yazarın katkı oranı %50; İkinci yazarın katkı oranı %50

Çıkar Beyanı: Yazarlar açısından ya da üçüncü taraflar açısından çalışmadan kaynaklı çıkar çatışması bulunmamaktadır.

* This study was carried out by Nazlı YÜCEOL, it is derived from the PhD Thesis titled "The Role of Entrepreneurial Competence in the Effect of Environmental Factors on Firm Performance in the Context of Strategic Entrepreneurship", which she carried out under the consultancy of Professor Doctor Esin CAN, in the Business Administration Doctorate Program of Yildiz Technical University Social Sciences Institute. This is also supported by Yildiz Technical University BAP (Scientific Research Projects) Unit with the project code SDK-2022-4851 within the scope of its graduate project.

1. Introduction

Small and medium-sized enterprises (SMEs) are considered to contribute significantly to the development of a country. Some governments, especially in underdeveloped or developing countries, are trying to support the development and sustainability of SMEs in order to achieve their development goals and address the problem of unemployment (Dar, Ahmed, & Raziq, 2017, p. 62). SMEs are described as the "backbone of the economy". The role of small businesses in the development of the economy is a fact that is especially referenced in developing countries. But even the most advanced economies seem heavily dependent on the performance of SMEs for their economic development (Hallam, 2018, p. 87). Over the past two decades and more, there has been a sizable literature documenting the importance of small and medium-sized enterprises (SMEs) in the economic development of most countries around the world (Kraja & Osmani, 2015). It is argued that SMEs have critical importance for developing an entrepreneurial culture, promoting competition, creating great employment opportunities, improving the quality of human resources and creating new opportunities for businesses (Tehseen, Ahmed, Qureshi, Uddin, & T., 2019, p. 2). SMEs are also directly associated with the economic prosperity of their entrepreneurs. Therefore, the growth and superior performance of firms remains a priority for most entrepreneurs (Rosli & Abdullah, 2015). With the increasing importance and criticality of SMEs, there is a serious need to explore the determinants responsible for the success of small businesses. Hence, academics and practitioners are always keen on exploring the factors that are critical for any business, especially SMEs, in order to perform better for the organization and national economic development (Khan, et al., 2021, p. 3). Entrepreneurial competencies have an undeniable effect on the growth, continuity and success of SMEs, which are remarkably important. Entrepreneurial competencies are expressed as essential components to succeed in business utilizing assets that develop small businesses (Mamun & Fazal, 2019). It is a well-known fact that the discovery and use of entrepreneurial competencies are essential components of any successful business venture (Ahmad, Rani, & Kassim, 2010). In fact, competencies such as strategic, managerial, entrepreneurial and conceptual competencies play a crucial role in the effective performance and success of any business (Grimmer, Miles, Byrom, & Grimmer, 2017).

One of the main impetuses for research and practice on entrepreneurial competencies is their supposed relevance to business performance and growth, and therefore economic development. In particular, policy makers are concerned with both avoiding small business failures and promoting business growths. In the context of entrepreneurship, competencies are particularly relevant to the birth, survival and/or growth of a venture (Bird, 1995). Research indicates that an entrepreneur's competencies contribute to venture performance and growth (Lerner & Almor, 2002). Furthermore, Chandler and Jansen (1992) provide evidence that developing entrepreneurial competencies among entrepreneurs contributes to profitability and growth (Mitchelmore & Rowley, 2010, p. 128). More competent entrepreneurs, herein, choose to take advantage of better entrepreneurial opportunities and opportunity quality. In this context, it is clear that entrepreneurial competencies result in enterprise performance, profitability and growth (Bird, 1995). In addition, previous studies have obtained important results when examining the relationship between entrepreneurial competencies and the performance of firms (Minai, Raza, Hashim, Zain, & Tariq, 2018, p. 2). For instance, Yusuff, Bakar and Ahmad (2016) reported that entrepreneurial competencies positively affect the performance of companies (Hwang, Choi, & Shin, 2020). In their study with 212 SMEs, Ahmad et al. (2010) concluded that entrepreneurial competencies are one of the strong precursors of business success in SMEs in Malaysia. He also stated that the relationship between entrepreneurial competencies and business success is stronger in hostile and dynamic environments than in more benign and stable environments (Ahmad, Ramayah, Wilson, & Kummerow, 2010, p. 182). The

findings of the study by İdris and Abu Bakar (2020) show that entrepreneurial competencies for women entrepreneurs, including strategic, commitment, conceptual, opportunity and relationship competencies, are vital to business success (İdris & Abu Bakar, 2020, p. 329). Sallah and Caesar (2022), in their study with 211 women entrepreneurs, concluded that the development of entrepreneurial competencies in women entrepreneurs is critical for the growth and maintenance of their businesses (Sallah & Caesar, 2022, p. 450). Considering the number and development of studies dealing with entrepreneurial competence and firm performance in the literature, the main purpose of this study is to examine and evaluate the studies investigating the relationship between entrepreneurial competence and firm performance through a literature review. In such manner, some inferences were about the journals, context, topics, methods, levels of analysis and sample groups in which the relationship of these two subjects were discussed, and suggestions were made for future studies. This study was guided by the following research questions:

- What are the subjects of the studies conducted in the fields of entrepreneurship competence and firm performance relationship?
- What is the context of the studies on the relationship between entrepreneurial competence and firm performance?
- What are the methods of studies in the fields of entrepreneurship competence and firm performance relationship?
- Who is the sample of the studies on the relationship between entrepreneurship competence and firm performance?
- What are the themes and sub-themes examining the relationship between the two fields?

In the research, 40 studies examining the relationship between entrepreneurial competence and firm performance in SMEs through Web of Science and Scopus databases were discussed through literature review. Within the scope of the study, articles written in the field of business and management were evaluated. As keywords in search; entrepreneur competence, entrepreneur competencies, entrepreneurial competency, entrepreneurship competence, entrepreneurship competencies, performance, firm performance, business success and job success were used. ESCI, SSCI, SCI-Expanded and BKCI-SSH indices were included in the scan and the results were evaluated. In the study, firstly, the distribution according to years, work areas, document type was expressed and the most frequently used keywords were visualized with the Vosviewer program. The following table includes the publication names, authors, journals, year and citations. In the continuation part of the study, the research methods of the publications, the sample, and country of study, the industry and the type of firm are demonstrated. Finally, the tables indicate the concepts, main topics, sub-topics and the context of the studies that are discussed in the studies investigating the relationship between entrepreneurial competence and firm performance. In the light of the information obtained, it was seen that the studies were mainly carried out with a quantitative research design, using the survey method. Moreover, it was seen that these studies were handled with a cross-sectional research design and SME owners or senior managers were generally preferred as samples. Women entrepreneurs were more preferred. Furthermore, it is seen that micro-enterprise and SME are preferred as the type of firm. Additionally, it is seen that the most research on the subject is conducted in Malaysia and the Resource-Based Approach is predominantly preferred as a context.

In the study, firstly, the concepts of entrepreneurship competence and then firm performance were explained under the title of conceptual framework, and the relationship between the two concepts was revealed. In the following section, the methodological procedures related to the aim and method of the study, followed by the results and discussions are presented. The article concludes with final evaluations, recommendations for future work, and limitations.

2. Literature Review

2.1. Entrepreneurial Competencies

The term competence is an expression that was initially used to describe the behaviors of teacher candidates in education. However, the term was later widely discussed in the field of management by Boyatzis (1982) in the USA (Boyatzis, 1983). While competence is a behavioral approach to a person's ability, performance theory underlies the concept of competence. Maximum performance is believed to occur when one's ability is consistent with the demands of the job and the needs of the organizational environment. Particularly, competence is "the underlying characteristics of the person that lead or cause effective or superior performance" (Boyatzis, 1983). Competencies can also be expressed as behavioral manifestations of abilities (Boyatzis, 2008, pp. 6-7). The concept of competence has been the subject of research in different disciplines. The concept of "competence", which is often confused with the concepts of "skill" and "talent" which are used interchangeably in Turkish, is essentially a behavior-based concept that evokes competition, unlike other expressions. Competence has been used by the American Management Association as part of the initiative to identify the characteristics that distinguish average management performance from superior performance. Throughout time, politicians have been and continue to be concerned with the development of entrepreneurial competencies to support business and economic development (Mitchelmore & Rowley, 2010, p. 95). In this direction, developing the competencies of entrepreneurs, who are responsible for the success of businesses and are the most significant actors in shaping the economy of a society, has become a priority issue (Feurer & Chaharbaghi, 1994). Mitchelmore and Rowley (2010) defined entrepreneurial competence as underlying characteristics such as specific knowledge, motives, traits, self-image, social roles, and skills (Mitchelmore & Rowley, 2010, p. 96). Entrepreneurial competence refers to the behavior of the entrepreneur and her collaborators to successfully acquire, use and develop resources for business purposes in the particular context in which a business operates (Kiwala, Oliver, & Kintu, 2021, p. 425). Entrepreneurial competencies are described as a group of competencies that enable and support successful entrepreneurship (Madichie, 2009). There is a consensus that these sets of competencies required for successful entrepreneurship are embodied in an entrepreneur who adds value by organizing resources and opportunities for their business (Bird, 2019). In the literature, it is suggested that entrepreneurial competencies are related to the life cycle of organizations (Ibidunni, Ogundan, & Okonkwo, 2021, p. 471). One of the reasons behind the differences in definitions lies in the different basic assumptions that various researchers use to reach regarding the perceptions of entrepreneurial competencies. Chandler and Jansen (1992) have taken a similar approach, by taking an explicitly a priori perspective, attempting to identify the core knowledge or abilities that are thought to reflect understandings of entrepreneurial competence. Mitchell et al. (2002) and Çoban (1992) have commonly used a process or behavioral approach to examine entrepreneurial competencies in order to align with the process dimension of the competitiveness condition. Finally, other researchers, such as Lerner and Almor (2002), have evaluated it in the context of self-perception from a performance-based perspective by identifying key tasks and then assessing skill intelligence. In summary, in the last two decades, many studies have been conducted in different contexts trying to create lists of entrepreneurial competencies

with different levels of categorization (Ibidunni, Ogundan, & Okonkwo, 2021, p. 475). Adam *et al.* (2002) defines entrepreneurial competencies as the ability of an entrepreneur to successfully fulfill a job role. Competencies shape the entrepreneur's wishes and choices regarding the direction of the firm. They are also useful in mobilizing and converting other types of resources for firm expansion (Namatovu & Dawa, 2017, p. 31).

Entrepreneurial competencies have been recognized as helping entrepreneurs perform their underlying characteristics or tasks in the most beneficial way (Osman & Rahim, 2014). Individuals who start and add value to a business through identifying opportunities and using resources often have entrepreneurial competencies (Bird, 1995). Highly compelling entrepreneurs grow their businesses through their competencies. Entrepreneurial competencies are closely linked to the growth and sustainability of businesses (Tehseen, Ahmed, Qureshi, Uddin, & T., 2019, p. 5).

2.2. Firm Performance

Firms' growth patterns and determinants are the most emphasized topic in the management literature (Martins, 2016). Growth is critical for SMEs since growth increases their chances of survival by reducing the likelihood of SMEs closing down (Rauch & Rijdsdijk, 2013). Firm growth typically results from increased product/service demand which leads to increased sales and investment in additional factors of production so that firms can respond to the new level of demand. Growth refers to an internal process that corresponds to the improvement and/or quality improvement of a business over a period of time (Tehseen, Ahmed, Qureshi, Uddin, & T., 2019, p. 4). Many entrepreneurship studies used growth rate or profitability or both to measure enterprise performance (Lee & Tsang, 2001). Performance can also be measured in terms of headcount or growth in sales and/or profits (N.Chandler & H.Hanks, 1993). Based on these statements, it should be stated that growth and profitability measure different aspects of performance. For instance, growth is sometimes achieved at the expense of profitability in the short term. There is no consensus yet on the optimal performance metrics for small firms (Tunberg & Anderson, 2020, p. 1453). However, Wiklund (2006) stated that growth is an easily accessible indicator of performance (Tehseen & Anderson, 2020, p. 646). The performance, a multidimensional factor, can be divided into two categories, financial and non-financial (Wiklund & Shepherd, 2005). According to Venkatraman and Ramanujam (1986), financial performance is supported by the indicators of sales turnover, sales growth, profitability and sales margins. Ahmad *et al.* (2011) expressed various non-financial performance indicators for small business success such as customer satisfaction, customer retention, owner's own satisfaction, company image and reputation, employee satisfaction, good workplace relations and owner lifestyle and social responsibility (Rahman, Amran, Ahmad, & Taghizadeh, 2015, p. 1208).

The literature studies proposes that superior firm performance, and hence the probability of growth is derived from a firm's valuable resources. Given that an individual's venture may be part of the entrepreneur, firm resources may also depend on the entrepreneur (West & Noel, 2009, p. 3). Therefore, it has been suggested that entrepreneur-specific factors such as human capital resources may influence venture growth and related performance outcomes (Song, Devi, Srivastava, & Asgari, 2018). In its most general form, a perception of performance is firm growth (Krasniqi & Branch, 2020). Many internal and external factors influences the growth of the enterprise (Tehseen, Ahmed, Qureshi, Uddin, & T., 2019, p. 8). However, the management of these factors demonstrates competencies, and firm growth is arguably the result of competency in entrepreneurial behavior (Tehseen & Anderson, 2020, p. 646).

2.3. The Relationship Between Entrepreneurial Competence and Firm Performance

For years, the relationship between competencies and enterprise outcomes has consistently fascinated management scientists. There is a widespread acceptance that the success, performance and growth of a small business largely depend on the competencies of the entrepreneur (Mitchelmore & Rowley, 2013, p. 128). Competencies facilitate growth by increasing confidence to try new ideas and facilitating stakeholder relationships (Tsai, Chang, & Peng, 2016). Regarding new ideas, competencies encourage individuals to generate new ideas as they can assemble and experiment. When it comes to stakeholder relations, competencies enable interaction with individuals with different perspectives (Parida, Pesämaa, Wincent, & Westerberg, 2017). Therefore, having the necessary competencies enable an individual to ask new questions, raise unusual comments, identify unclear connections, and produce alternative solutions to problems. Additionally, having competencies contribute to entrepreneurs' readiness to understand and adapt to their external environment, thus providing a greater opportunity to position the firm for growth (Manolova, Carter, Manev, & Gyoshev, 2007, p. 415). As they drive resource mobilization and transformation, they shape the entrepreneur's aspirations and choices about the direction of their firm (Dawa, et al., 2021, p. 34). Resource-based theorists stated that entrepreneurs and their competencies are a critical and valuable resource for firms (Barney, 1991; Grant, 1991). According to Bird (1995), entrepreneurial competencies express the quality of actions taken by entrepreneurs, directly related to the results of the intervention. However, the results of previous studies have revealed different approaches as to which particular form of entrepreneurial competence influences the performance of businesses (Bird, 1995). Chandler and Jansen (1992) found that founders' self-reported competencies are associated with enterprise performance. Man et al. (2002) concluded that six aspects of entrepreneurial competencies have direct or indirect effects on SME performance. Results of Baum's study (1994) indicate that entrepreneurial competencies such as self-efficacy, technical skill, personal marketing, innovation/production focus, and business passion have the strongest direct positive association with venture growth. Moreover, Fabrizio et al. (2011) examined the impact of entrepreneurial competencies on business performance in SMEs. The results of their studies showed that entrepreneurial competency dimensions such as productivity, focus, planning, persuasion, self-confidence, organizational awareness, teamwork and leadership provide an improved output to firm performance (Gerli, Gubitta, & Tognazzo, 2011, p. 17). Another study showed that entrepreneurial competencies have a positive influence on SME performance. Businesses with managers having high entrepreneurial competencies tend to scan and manage the environment in which they operate to find new opportunities and consolidate their competitive position (Covin & Miles, 1999). In contrast, entrepreneurial competencies, locus of control, and visionary characteristics have significantly affected business performance. The findings also revealed that entrepreneurial competencies have a positive impact on performance and micro-business sustainability (Mamun & Lumpur, 2021, p. 381). Zainol and Mamun (2018) demonstrated in their study that commitment competence, conceptual competence, organizing competence and opportunity-granting competence have a significant positive effect on competitive advantages and competitive advantages have a significant and positive effect on the performance of owned enterprises (Zainol & Mamun, 2018, p. 303). In the research claiming that entrepreneurial orientation and competencies are effective factors of business performance, entrepreneurial competencies have mediated the relationships between creativity, innovation, autonomy and business performance (Mamun & Fazal, 2018, p. 379). According to the study of Pranowa et al. (2020), entrepreneurial competence and innovation ability have positively impacted the commercial success of the shoe industry in Indonesia (Pranowa, Sutrisno, Sulastiono, & Siregar, 2020, p. 24).

3. Methodology

3.1. Aim of the study

The aim of this study is to conduct a research on studies on the relationship between entrepreneurial competencies and firm performance. SMEs are an important actor of economic development. In this context, it is extremely important to investigate the performance of these actors that affect economic development and the factors that affect this performance. The performance of firms is affected by many internal and external factors. Entrepreneurial competencies are one of the main driving factors for the success of an enterprise, and firm growth is considered to occur as a result of competence in entrepreneurial behavior. In this context, the researches are remarkably important considering the assumed relationship of entrepreneurial competencies with firm performance, growth, and therefore economic development. From this point of view, in this study, academic studies on the relationship between entrepreneurship competence and firm performance through Web of Science and Scopus databases are discussed with the literature review method.

3.2. Method of the study

Literature review method was used in the study. Literature review can be utilized for more than one purpose. It can be used to determine a previously studied, needed and original research topic, to follow previous discussions and developments on the subject, and to learn basic concepts and ideas. In addition, it can be used for purposes such as clarifying the rationale of the research, forming research questions and hypotheses, determining appropriate methods for research and discussing the contributions of the results to science (Demirci, 2014, p. 74). This study was carried out through a literature review that includes the steps as indicated below. The subjects of study are the articles in the field of business and management on the relationship between entrepreneurial competencies and firm performance. The study is based on a scenario adapted from Machado et al. (2021) and was developed in six stages: (a) delimitation of the research question; (b) selection of data sources; (c) directory selection; (d) definition of inclusion criteria; (e) evaluation of selected articles; (f) interpretation and synthesis (Machado, Cazella, Piekas, & Carvalho, 2021, p. 7). Figure 1 shows the steps followed.

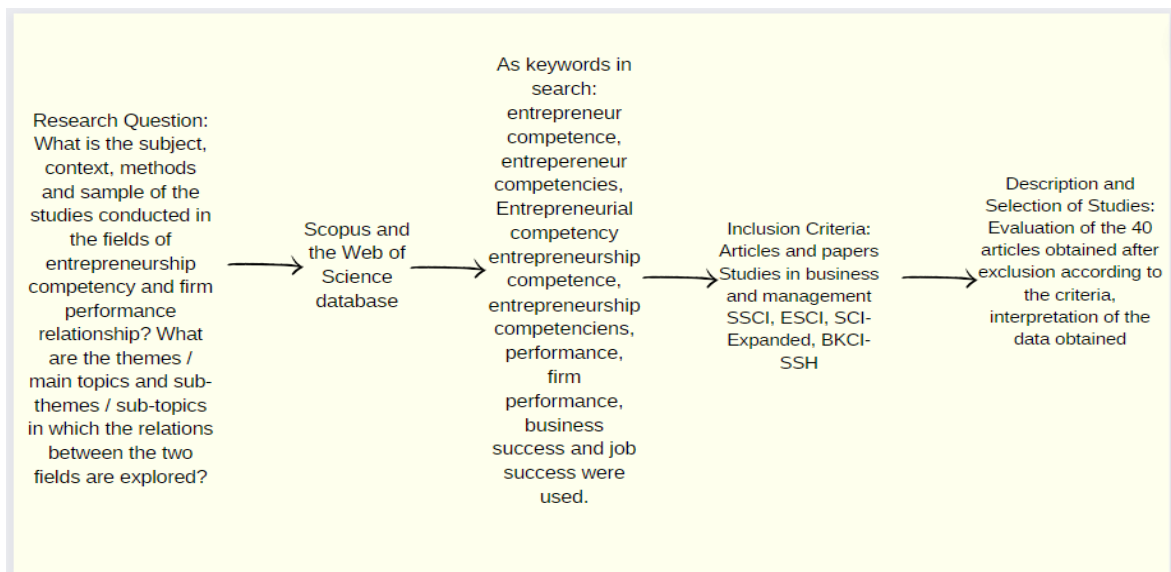


Figure 1. Stages of Literature Review

Source: Author

In the literature review process, the search was carried out in May 2022 through Scopus and Web of Science, both multidisciplinary electronic databases. Articles and papers published in scientific journals were selected as filtering criteria. As inclusion criteria, the keywords, abstracts and titles of the articles are used: I) Entrepreneurial competency II) Entrepreneur competency III) Entrepreneur competencies IV) Entrepreneurial competencies V) performance VI) firm performance VII) business success and VIII) business success. Within the scope of the study, solely articles and papers written in the field of business and management were evaluated. ESCI, SSCI, SCI-Expanded and BKCI-SSH indices were included in the scan.

In the first stage, 74 articles (62 articles from web of Science and 12 articles from Scopus) were identified. A file was created for each search string and the results were exported to Excel. Depending on the title of the articles, duplicate articles were removed. The selection criteria of the articles were based on the title, keywords and abstract. All the titles and keywords of the articles were read and the articles not suitable for the research scope were removed from each database. In this case, 40 articles suitable for the research criteria were included in the research and the final data set was composed of 40 articles. These 40 articles were read in detail and the data was systematized in one file in Excel. First, a graph showing the change of articles over the years was included. The most frequently used keywords were visualized with the Vosviewer program. Afterwards, a table showing the publication names, authors, journals, year and citations is provided. In the next part of the study, a table showing the research methods, sample, country of study, industry and company type of the publications is given. Consequently, there are tables presenting the concepts, main topics/themes, sub-topics/sub-themes and the context of the studies which are discussed in studies investigating the relationship between entrepreneurship competence and firm performance.

4. Findings

When the findings of the studies were examined, firstly, an evaluation was made on a yearly basis. 4 out of 40 studies reviewed in the literature were currently published in 2022; 5 were published in 2021; 7 were published in 2020; 3 were published in 2019 and 4 were published in 2018. When the remaining studies are examined, it is seen that 3 studies were published in 2012, and 1 study in the remaining years. It can be concluded that there has been an increase in the number of studies on the relationship between entrepreneurial competence and firm performance, especially in recent years.

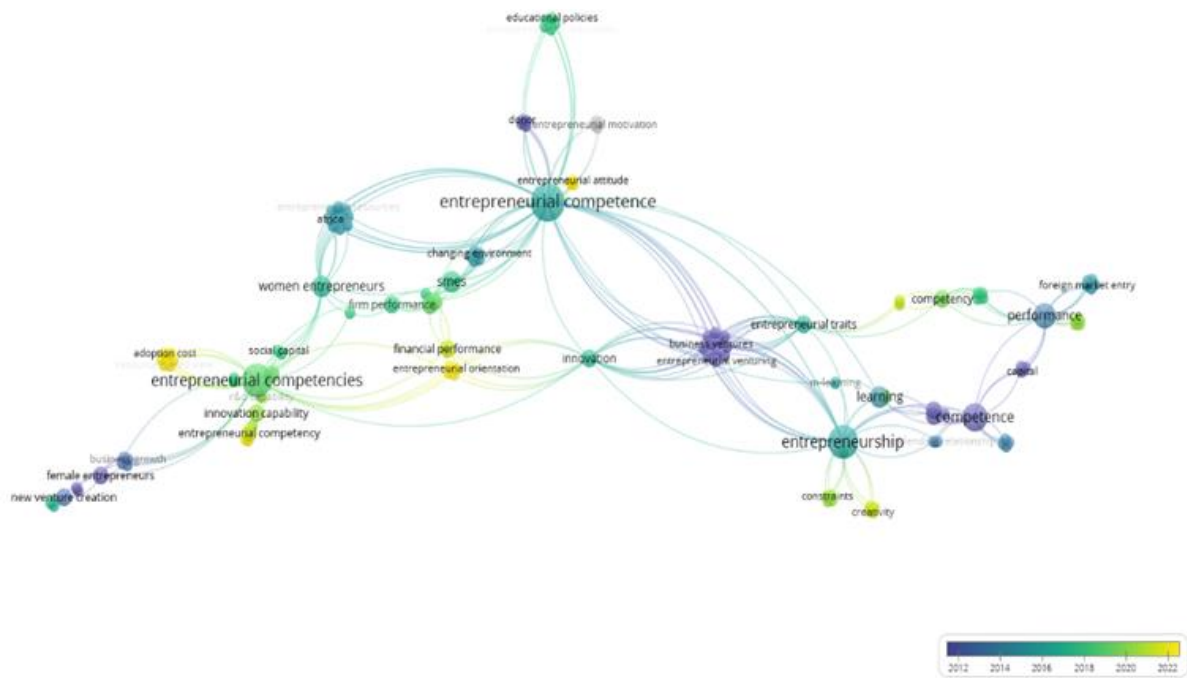


Figure 1. Displaying the Most Frequently Used Keywords With Vosviewer

In Figure 2, the most frequently used keywords are visualized with Vosviewer. When the figure is examined, the most frequently used keywords are women's entrepreneurship, business ventures, performance, learning, entry to foreign markets, environmental change, small and medium-sized enterprises, new enterprise creation, entrepreneurial motivation, entrepreneurial competence, entrepreneurial characteristics between 2012 and 2016. The keywords frequently used between the years of 2018 and 2022 are financial performance, entrepreneurial orientation, creativity, adaptation cost, innovation capacity, entrepreneurial competence, entrepreneurial attitude, and firm performance.

Table 1. Article Name(Publication Year), Author(s), Journal Name

	ARTICLE NAME	AUTHOR(S)	JOURNAL
1.	Sustainability Performance of Informal Micro-Enterprises: The Case of Senegal (2022)	Samsidine Aidara; Abdullah Al Mamun; Noorul Azwin Md Nasir and Muhammad Mohiuddin	Journal of Developmental Entrepreneurship
2.	Entrepreneurial Orientation, Entrepreneurial Competencies, Innovation, and Performances In SMEs of Pakistan: Moderating Role of Social Ties (2022)	Aftab, Junaid; Veneziani, Monica; Sarwar, Huma; Ishaq, Muhammad Ishtiaq	Business Ethics The Environment & Responsibility
3.	The Mechanism of Entrepreneurs' Social Networks on Innovative Startups' Innovation Performance Considering The Moderating Effect of The Entrepreneurial Competence and Motivation (2021)	Gao, Junguang; Cheng, Yuan; Hui He and Fuzhen Gu	Entrepreneurship Research Journal

4. Entrepreneurial Traits, Competency, Performance, and Sustainability of Micro-Enterprises In Kelantan, Malaysia (2021) Abdullah Al Mamun Syed Ali Fazal International Journal of Asian Business and Information Management
5. Entrepreneurial Competencies of Women Entrepreneurs Pursuing Business Growth (2013) Siwan Mitchelmore; Jennifer Rowley Journal of Small Business and Enterprise Development
6. Entrepreneurial Competency, Competitive Advantage and Performance of Informal Women Micro-Entrepreneurs In Kelantan, Malaysia (2018) Zainol, Noor Raihani; Al Mamun, Abdullah Journal of Enterprising Communities-People and Places In The Global Economy
7. Effect of Entrepreneurial Orientation on Competency and Micro-Enterprise Performance (2019) Al Mamun, Abdullah; Fazal, Syed Ali Asia Pacific Journal of Innovation and Entrepreneurship
8. Impact Of Cultural Intelligence on SME Performance The Mediating Effect of Entrepreneurial Orientation Kadam, Raavee; Rao, Srinivasa; Abdul, Waheed Kareem; Jabeen, Shazi Shah Journal of Organizational Effectiveness: People and Performance
9. A Mediating Role of Innovation Capability Between Entrepreneurial Competencies and Competitive Advantage (2020) Raavee Kadam; Srinivasa Rao; Waheed Kareem Abdul; Shazi Shah Jabeen Technology Analysis & Strategic Management
10. Entrepreneurial Orientation, Entrepreneurial Competencies, Innovation, and Performances In SMEs of Pakistan: Moderating Role of Social Ties (2022) Aftab, Junaid; Veneziani, Monica; Sarwar, Huma; Ishaq, Muhammad Ishtiaq Business Ethics The Environment & Responsibility
11. Sources of Competitive Advantage For Malaysian Micro-Enterprises (2018) Al Mamun, Abdullah; Nawi, Noorshella Binti Che; Permarupan, P. Yukthamarani; Muniady, Rajennd Journal of Entrepreneurship In Emerging Economies
12. Entrepreneur's Intrapersonal Resources and Enterprise Success Among Micro and Small Scale Women Entrepreneurs (2015) Katongole, Celestine; Munene, John Ngoma, Muhammed; Dawa, Samuel; Sserwanga; Sserwanga, Arthur Journal of Enterprising Culture
13. Entrepreneurial Competence In Managing Partnerships and Partnership Knowledge Exchange: Impact on Performance Differences In Export Expansion Stages (2015) Khalid, Saba; Bhatti, Khalid Journal of World Business
14. The Entrepreneurial Competency, Innovation Capability, and Business Success: The Case of Footwear Industry In Indonesia (2020) Pranowo, Agus Setyo; Sutrisno, Joko; Sulastiono, Pudjo; Siregar, Zulkifli Musannip Efendi Quality-Access to Success
15. The Role of Transformations Leadership, Entrepreneurial Competence and Technical Competence on Enterprise Success of Owner-Managed SMEs (2016) Ng, Hee Song; Kee, Daisy Mui Hung; Ramayah, Thurasamy Journal of General Management
16. The Core Competence of Successful Owner-Managed SMEs (2018) Ng, Hee Song; Kee, Daisy Mui Hung Management Decision
17. Examining The Mediating Role of Innovativeness In The Link Between Core Competencies and SME Performance (2020) Ng, Hee Song; Kee, Daisy Mui Hung; Thurasamy Journal of Small Business and Enterprise Development

18. Survival Skills In SMEs-Continuous Competence Renewing and Opportunity Scanning (2014) Taipale-Eravalta, Kyllikki; Lampela, Hannele; Heilmann, Pia Journal of East-West Business
19. Competence and Commitment: Employer Size and Entrepreneurial Endurance (2011) Sorensen, Jesper B.; Phillips, Damon J. Industrial and Corporate Change
20. Is Entrepreneurial Competency and Business Success Relationship Contingent Upon Business Environment? A Study Of Malaysian SMEs (2010) Ahmad, Noor; Thurasamy; Wilson, Carlen; Kummerow, Liz International Journal of Entrepreneurial Behavior & Research
21. Performance of Ghanaian Women Businesses Community: The Moderating Role of Social Competence (2022) Cynthia Ayorkor Sallah; Livingstone Divine Caesar Journal of Enterprising Communities-People and Places In The Global Economy
22. Supporting Entrepreneurial Business Success At The Base of Pyramid Through Entrepreneurial Competencies (2015) Rahman, Syed Abidur; Amran, Azlan; Ahmad, Noor Hazlina; Taghizadeh, Seyedeh Khadijeh Management Decision
23. Perceived Usefulness of Business Coaching on The Relationship Between Entrepreneurial Competencies and Business Success (2020) Bin Idris, Mohd Mahfudz; Bin Abu Bakar, Saridan Journal of Asian Finance Economics and Business
24. Entrepreneurial Competencies Effect on SMEs Performance Through The Mediating Effect of Psychological Contracting of Outsourcing (2015) Noha. A. Bendary Aisha El Minyawhi International Journal of Business and Economic Development
25. Entrepreneurial Competencies, Institutional Voids and Performance of Small and Medium Enterprises: Evidence From an Emerging Economy (2021) Kovid, Raj K.Asend Mail To Kovid R.K.; Bhati, Babitab; Sharma, Gunjan Mohanc Vision: The Journal of Business Perspective
26. Entrepreneurial Competencies and The Performance of Informal SMEs: The Contingent Role Of Business Environment (2021) Ibidunni, Ayodotun Stepheana, Ibidunni A.S.; Ogundana, Oyedele Martinsd; Okonkwo, Arinzea Journal of African Business
27. Cultures and Entrepreneurial Competencies; Ethnic Propensities and Performance In Malaysia (2020) Tehseen, Shehnazasend; Anderson, Alistair R. Journal of Entrepreneurship In Emerging Economies
28. Entrepreneurial Competences and Growth Of Female-Owned Enterprises: The Mediation Role Of Absorptive Capacity (2020) Dawa, Samuela; Namatovu, Rebecca; Mulira, Fionaa; Kyejjusa, Saraha; Kyejjusa S.; Arinaitwe, Mercya; Arinaitwe M.; Arinaitwe, Alice International Journal of Gender and Entrepreneurship
29. Do Competencies of Entrepreneurs and Managers Influence Internationalization Processes? Investigation of Lithuanian SMEs (2015) Korsakiene, Renataa; Diskiene, Danuta Proceedings of The European Conference on Innovation and Entrepreneurship, Ecie
30. The Effect of Technology on Learning During The Acquisition and Development Of Competencies In Technology-Intensive Small Firms (2013) Linton, Jonathana; Walsh, Steven International Journal of Entrepreneurial Behaviour and Research
31. The Influence of Entrepreneurial Competencies on Small Firm Performance (2012) Sánchez, Josésend Revista Latinoamericana De Psicología
32. Entrepreneurial Strategy Making and Performance In China's New Technology Li, Haiyanga; Zhang, Yana; Zhang Y.; Chan, Tsang-Sing Journal of High Technology Management Research

Ventures - The Contingency Effect of Environments and Firm Competences (2005)

33. Characteristics of Polish Entrepreneurship In The Tourism and Hospitality Industry (2004) Zapalska, Alina M.A; Brozik, Dallasa; Rudd, Denis Tourism

34. The Founder's Self-Assessed Competence and Venture Performance (1992) Chandler, Gaylen N.A; Jansen, Erik Journal of Business Venturing

35. Entrepreneurial Competencies and SMEs' Growth The Mediating Role of Network Competence (2019) Tehseen, Shehnaz; Ahmed, Farhad Uddin; Qureshi, Zuhaib Hassan; Uddin, Mohammad Jasima; Ramayah T.D Asia-Pacific Journal of Business Administration

36. Impact of Network Competence on Firm's Performances Among Chinese and Indian Entrepreneurs: A Multigroup Analysis (2018) Tehseen, Shehnaza; Qureshi, Zuhaib Hassanb; Ramayah T.C, D International Journal of Entrepreneurship

37. Entrepreneurial Competencies and The Performance of Small and Medium Enterprises: An Investigation Through A Framework of Competitiveness (2012) Thomas W.Y. Man; Theresa Lau; Ed Snape Journal of Small Business & Entrepreneurship

38. Impact of Entrepreneurial Orientation Dimensions On Performance of Small Enterprises: Do Entrepreneurial Competencies Matter? (2021) Mukaram Ali Khan; Syed Sohaib Zubair; Kashif Rathore; Maryam Ijaz; Sumreen Khalil; Muhammad Khalil; Iman Rahimi Cogent Business & Management

39. E-Commerce and SME Performance: The Moderating Influence of Entrepreneurial Competencies (2022) Arsalan Hussain, Minhas Akbar, Arfan Shahzad, Petra Poulouva , Ahsan Akbar, Rohail Hassan Administrative Sciences

40. Effect Of Entrepreneurial Competencies On Micro-Enterprises Income and Assets In Malaysia (2020) Wan Nurulasiah Wan Mustapha; Abdullah Al Mamun; Shaheen Mansori; Sudesh Balasubramaniam Asia Pacific Journal of Innovation and Entrepreneurship

Source: Authors

Table 2. Method, Sample, Country of Study, Industry, Type of Firm

ARTICLE NUMBER / METHOD	SAMPLE	COUNTRY	INDUSTRY	TYPE OF FIRM
1. Empirical / Quantitative / Questionnaire / Cross-sectional Study Design	-	Senegal	Informal sectors	Micro and Small Enterprises
2. Quantitative/ Questionnaire/ Cross-sectional Study Design/ Structural equation modeling	297 SMEs	Pakistan	Consumer goods such as consumer goods, electronics, surgical instruments, textiles, leather and sports	SME
3. Correlation analysis and regression analysis /Qualitative/ Semi-structured interview 14 entrepreneurs + GEM content analysis	Content analysis + interview with 14 entrepreneurs	-	Unspecified	

4.	Quantitative/ Questionnaire/ Cross-sectional Study Design	403 micro entrepreneurs	Malaysia	Various sectors (Mixed)	Micro entrepreneurs
5.	Quantitative/ Questionnaire/ Cross-sectional Study Design	210 women entrepreneurs	UK	Various sectors (Mixed)	Women entrepreneurs
6.	Quantitative/ Questionnaire/ Cross-sectional Study Design	384 women entrepreneurs	Malaysia	Informal sectors	Micro entrepreneurs
7.	Quantitative/ Questionnaire/ Cross-sectional Study Design	403 micro entrepreneurs	Malaysia	Informal sectors	Micro entrepreneurs
8.	Quantitative/ Questionnaire/ Cross-sectional Study Design	106 entrepreneurs	United Arab Emirates	Oil and gas, construction, retail, banking and insurance, food and beverage, tourism, media, accomodation services	SME
9.	KOTEC evaluated SMEs on 33 indices measured on a five-point Likert-type scale.	504 cases	-	Leading technology companies in emerging sectors such as autonomous vehicle and mobile health sectors	SME
10.	Quantitative/ Survey/ Cross-sectional Study Design / Structural equation modeling	297 SMEs	-	Unspecified	SME
11.	Cross-sectional study design/ structured interview/ structural equation modeling based on variance (PLS-SEM)	417 female micro-business owners or managers	Malaysia	Unspecified	Women Entrepreneurs /Micro Business
12.	Quantitative/ Survey/ Cross-sectional Study / Structural Equation Model	303 micro and small business owners/managers	Uganda	Tourism and Accommodation Sector	SME
13.	Quantitative/ Questionnaire/ Cross-sectional Study (questionnaire was sent in two rounds, 25 questionnaires were collected in the first round and 75 questionnaires were collected in the second round)	100 SMEs	Scandinavia, Asia Pacific, USA and UK	Information Communication Technology (ICT) sector	Medium-Sized Internationalized Firms
14.	Quantitative/ Questionnaire/ Cross-sectional Study / Structural equation modeling	340 SMEs	Indonesia	Shoe Industry	SME
15.	Quantitative/ Questionnaire/ Cross-sectional Study (SPSS)+ Structural equation	178 owners / managers	Malaysia	Unspecified	SME
16.	Quantitative/ Questionnaire/ Cross-sectional Study Structural equation/ Self-report questionnaire	178 owners / managers	Malaysia	Manufacturing and service industry	SME
17.	Quantitative/ Questionnaire/ Cross-sectional Study SPSS + Structural equation model	178 owners / managers	Malaysia	Unspecified	SME
18.	Qualitative / Comparative Case Analysis / Semi-Structured Interview	Interview with 10 Finnish + 10 Russian SMEs	Finland and Russia	Metal and Forest Products Industry	SME
19.	Data/content analysis / From the Integrated Database for Danish Labor Market Research	Organizational level	Denmark	Unspecified	SME

20.	Quantitative/ Questionnaire/ Cross-sectional Study / SEM	212 SME/Business Owner-Founder	Malaysia	Service and manufacturing sector	SME
21.	Data were collected by mixed method / qualitative semi-structured interview + quantitative survey	Semi-structured interview with 9 women entrepreneurs + survey with 211 women entrepreneurs	Gana	Unspecified	SME/Women Entrepreneurs
22.	Quantitative/ Survey/ Cross-sectional Study	134 BOP/LPO	Bangladesh	Unspecified	-
23.	Quantitative/Individual analysis level/ Questionnaire/ SEM	261 women entrepreneurs	Korea	Unspecified	Women Micro entrepreneurs
24.	Quantitative/Individual analysis level/ Questionnaire/ Cross-sectional Study	200 senior manager	Egypt	Software Companies	SME
25.	Quantitative/ Survey/ Cross-sectional Study	204 SME / founder / owner	India	Unspecified	SME
26.	Quantitative/ Survey/ Cross-sectional Study / Structural Equation model	296 SMEs	Nigeria	Informal sectors	SME
27.	Quantitative/ Survey/ Cross-sectional Study / Structural Equation model	600 SMEs	Malaysia	Unspecified	SME
28.	-	232 women entrepreneurs	Africa	Informal sectors	SME (women)
29.	Quantitative/ Survey/ Cross-sectional Study	SME/Senior executives	Lithuania	Trade and Service Sector	SME
30.	Primary and secondary source data were used	Manager of 35 high-tech startups		Semiconductor silicon industry	Start-Up
31.	Quantitative/ Survey/ Cross-sectional Study	460 SMEs / owners	Spain	Unspecified	SME
32.	Quantitative/ Survey/ Cross-sectional Study	300 New Technology startups	China	Technology Sector	New Technology Initiative
33.	Quantitative/ Survey/ Cross-sectional Study	-	-	Tourism and Accommodation Sector	Family Businesses
34.	Quantitative/ Survey/ Cross-sectional Study	Owners	-	Unspecified	SME
35.	Quantitative/ Survey/ Cross-sectional Study /PLS-SEM	80 SMEs / Owners	Malaysia	Wholesale and retail-based SMEs	SME
36.	Quantitative/ Survey/ Cross-sectional Study /PLS-SEM	200 Entrepreneurs	China and India	Wholesale and retail-based SMEs	SME
37.	Qualitative / Interview form	153 SME owners / managers	Hong Kong	Unspecified	SME
38.	Quantitative/ Survey/ Cross-sectional Study / SPSS+ Amos	386 SMEs	Pakistan	Unspecified	SME
39.	Quantitative/ Survey/ Cross-sectional Study /Structural Equation/7-point Likert Scale	250 SME's Senior/Mid Level Managers	Pakistan	E-commerce SMEs	SME
40.	Quantitative/ Survey/ Cross-sectional Study	300 Micro Businesses	Malaysia	Unspecified	Micro Business

Source: Authors

Table 3. Context, Theme, Sub-Themes

ARTICLE NUMBER / CONTEXT / THEME /MAIN TOPIC	SUB-THEMES
1. Resource-Based Approach/ Sustainability Performance and Entrepreneurial Competencies	Financial capital, human capital, social capital, government support and business environment, Opportunity recognition and government support
2. Resource Arrangement Theory/ Entrepreneurial Orientation, Entrepreneurial Competencies, Innovation and Performance	Social, financial and environmental performance, social networks
3. Social network theory (SNT) and resource-based approach/ Entrepreneurship Competence, Innovation Performance, Social Networks of Entrepreneurs	innovative initiatives, social networks, entrepreneurial competence, entrepreneurial motivation, innovation performance
4. Resource-Based Approach/ Entrepreneurial Competence, Performance, Sustainability	focus of control, tolerance for ambiguity, vision, persistence and flexibility entrepreneurship competency, performance and sustainability
5. Female Entrepreneur Competence/ Entrepreneurship Competencies, Firm Performance	Women entrepreneurs, personal and relationship competencies, business and management competencies, entrepreneurial competencies, human relations competencies, firm performance
6. - /Entrepreneurial Competence, Competitive Advantage, Performance	Opportunity recognition, relationship, competitive advantage, conceptual competence, organizational competence, strategic competence, corporate performance
7. Resource-Based Approach/ Entrepreneurial Competence, Entrepreneurial Orientation, Performance	Creativity, innovation, risk-taking propensity, proactivity, autonomy, entrepreneurial competence, corporate performance
8. Upper Echelons Perspective / Cultural Intelligence, Performance, Entrepreneurial Orientation, Entrepreneurial Competence	Company size, number of languages known by the owner, nationality and gender of the owner
9. - / Entrepreneurial Competence, Innovation Capability, Competitive Advantage, Firm Performance	Technical expertise, R&D capability, competitive advantage, management skills, complementary capabilities, firm performance
10. - / Entrepreneurial Orientation, Entrepreneurial Competencies, Innovation and Performances	Entrepreneurial orientation, financial, social and environmental performance, innovation and entrepreneurial competencies
11. Resource-Based Approach / Social Capital, Entrepreneurial Competence, Business Innovation, Competitive Advantage	Social capital, structural competencies, cognitive competencies, relational competencies, entrepreneurial competencies, commitment competencies, conceptual and organizational competencies, micro business innovation, innovation, absorptive capacity, micro business, competitive advantage
12. Human Capital Theory / Personal Resources, Entrepreneurial Competence, Business Success	Formal education, formal entrepreneurship education and training, informal entrepreneurship education and training, social emancipation, financial success, non-financial success, entrepreneurial competence
13. - /Entrepreneurial Competence, Relational Capabilities, Partnership Management, Partnership Information Exchange, Firm Performance	Initial export performance, export expansion performance, subsequent export performance, overall performance
14. - /Entrepreneurial Competence, Innovation Capacity, Business Success	Strategic competencies, Opportunity competencies, Relationship competencies, Conceptual competencies, Organizing competencies, Commitment competencies, increase in profitability, increase in capital, market development, increase in sales, personal income or wealth; process-structural-product innovation
15. - / Entrepreneurial Competence, Firm Success, Transformational Leadership	Technical competence, financial and non-financial performance
16. - / Entrepreneurial Competence, Firm Performance, Transformational Leadership	Product, Process, Behavioral innovation, Transformational leadership, entrepreneurial competence, technical competence, financial and non-financial performance
17. - / Entrepreneurial Competence, Firm Performance, Transformational Leadership	Product, process, Behavioral innovation, transformational leadership, entrepreneurial competence, technical competence, financial and non-financial performance
18. Entrepreneurship Competence / Environmental Changes, Opportunity Recognition, Entrepreneurial Competence, Business Survival	Competencies related to internal operations, entrepreneurial competencies, individual competencies, competencies related to the

- external environment, operational competencies, relational competencies
19. - / Entrepreneurial Competence, Venture Resilience, Venture Commitment, Venture Performance
Employer size, entrepreneurial competence, entrepreneurial commitment, entrepreneurial motivation, venture income and venture expense
20. Entrepreneurial Competence Theory/ Business Environment, Business Success, Entrepreneurship Competencies
Strategic, Conceptual, Opportunity, Relationship, Learning, Personal, Ethics and Family, business success, perceived work environment
21. Resource-Based Approach / Entrepreneurial Competence, Business Success, Social Competence
Human capital, business growth, social competence, social capital, reputation capital, individual reputation capital, corporate reputation capital, women entrepreneurs
22. -
Knowledge/technical/educational support, entrepreneurial competence, business success, financial and non-financial performance
23. - / Micro Entrepreneurs, Entrepreneurial Competence, Business Success, Business Coaching
Strategic, commitment, conceptual, opportunity, organization and leadership, relationship, personal and technical competencies, business success, perceived usefulness of business coaching
24. Resource-Based Approach / E-commerce, Firm Performance, Entrepreneurial Competence, Moderator Effect
E-commerce, entrepreneurial competencies, small and medium enterprises, technological readiness, resource-based outlook, diffusion of innovation, Pakistan, Cost of Adaptation, Environmental Factors, Technological Factors, Organizational Factors, E-commerce use, government support, firm performance
25. - / Entrepreneurial Competencies, Outsourcing Relationship Components, SME Success
Opportunity Seeker competence, relationship building competence, conceptual competence, organizational competence, strategic thinking competence, commitment competence, psychological contract, establishing effective inter-organizational relations, authority structure, project scope and special project personnel, taking responsibility, knowledge sharing, psychological contract of international outsourcing, SME success
26. Resource-Based Approach / Entrepreneurial Competencies, Firm Performance, Business Environment
Innovation and innovation performance, environmental dynamism, environmental complexity, entrepreneurial competency, risk-taking entrepreneurship competencies, strategic entrepreneurship competencies, relational entrepreneurship competencies, opportunity entrepreneurship competencies
27. - / Entrepreneurship, Entrepreneurial Competence, Firm Performance, Institutional Gaps, SMEs
Financial Performance, Non-Financial Performance, SME, Organizational Gaps
28. Resource-Based Approach/ Entrepreneurial Competencies, Firm Performance, Business Environment
Innovation and innovation performance, environmental dynamism, environmental complexity, entrepreneurial competency, risk-taking entrepreneurship competencies, strategic entrepreneurship competencies, relational entrepreneurship competencies, opportunity entrepreneurship competencies
29. - / Entrepreneurial Competence, Cultural Difference, Firm Performance
Entrepreneurship competencies; strategic competence, opportunity competence, conceptual competence, learning competence, ethical competence, family competence and personal competence, job growth, ethnic groups
30. Resource-Based Approach / Entrepreneurship Competence, Business Growth, Women Entrepreneurs
Absorptive capacity, entrepreneurial, managerial, personal and human relations competencies, business growth
31. - / Entrepreneurship Competence, Internationalization, Performance
Entrepreneurial competencies such as ethical competency and the ability to recognize and exploit opportunities, the ability to plan and organize, the ability to coordinate the implementation of various tasks and supervise their own and other work, and the ability to persuade and motivate people
32. - / Entrepreneurship, Innovation, Innovation and Technology Management, Learning, Nanotechnology, Strategy, Technology Entrepreneurship
Institutional learning, risk, uncertainty, status, prevalence, observability, disruptiveness and centralization, technological features that affect learning modes chosen by a firm
33. - / Entrepreneurial Competence, Firm Performance, Competition Scope, Organizational Capability, Firm Performance
Financial and non-financial performance, innovative talent, quality, cost effectiveness and organicity, opportunity, relationship, analytical, innovative, operational, people, strategic, commitment,

	learning and personal power competencies, investment efficiency, business growth and relative performance
34. This study dealt with entrepreneurial competence at the firm level, not at the individual level./ Entrepreneurship Competence, New Firm Performance, Strategy Creation	Entrepreneurial strategy formulation, innovation, propensity to take risks and proactivity, Environmental uncertainty, Technological competence, Marketing competence, venture age, size, venture ownership, industry type, new venture performance, return on investment, return on sales, profit growth, return on assets and overall operations efficiency, sales growth, market share growth, cash flow from market operations, and overall reputation of the firm
35. - / Entrepreneurship Competence, Family Business, Life Cycle Model, Poland, Tourism and Hospitality Industry	
36. - / Entrepreneurial Competence, Enterprise Performance	Entrepreneurship, managerial and technical-functional competences, conceptual, interpersonal and political competence
37. Resource-Based Approach/ Entrepreneurial Competence, SME Growth, Network Competence	Strategic competence, ethical competence, network competence, firm growth
38. - / Network Competence and Firm Performance	Network competence, perceived financial performance, perceived non-financial performance, perceived business growth, perceived performance relative to competitors
39. - / Entrepreneurship Competencies, SME Performance, Competitiveness	Competitive scope and organizational competencies, opportunity, relationship, innovation, business performance
40. - / Enterprise Performance, Entrepreneurial Orientation, Entrepreneurial Competencies	Creativity and innovation, tendency to take risks, entrepreneurial competence and institutional performance of proactivity and autonomy

Source: Author

Viewing the journals in which the studies were published, it was seen that 3 articles were published in the Asia Pacific Journal of Innovation and Entrepreneurship; 2 articles were published in Business Ethics The Environment & Responsibility; 2 articles were published in the Journal of Enterprise Communities-People and Places In The Global Economy; 2 articles were published in the Journal of Small Business & Entrepreneurship and 2 articles were published in the Journal of Management Decision. The remaining articles were distributed as 1 publication in each of the journals shown in the table. It cannot be asserted that there is a tendency for publication in a particular journal for the 40 studies considered. Looking at the most cited studies; in 1992, Gaylen N. Chandler and Eric Jansen's study titled "The Founder's Self-Assessed Competence And Venture Performance" received 500 citations. In 2022, Samsidine Aidara, Abdullah Al Mamun, Noorul Azwin Md Nasir and Muhammad Mohiuddin's study titled "Sustainability Performance of Informal Micro-Enterprises: The Case of Senegal" received 102 citations. In 2013, Siwan Mitchelmore and Jennifer Rowley's study titled "Entrepreneurial Competencies of Women Entrepreneurs Pursuing Business Growth" received 99 citations.

Considering the context in which the studies are based, it is recognized that there is a concentration in the context of the Resource-Based Approach. Entrepreneurial competence is based on Resource Based Theory (Alvarez & Busenitz, 2001) (Kiwala, Oliver, & Kintu, 2021). In considerationog Entrepreneurial Competence is basically based on the Resource Based Approach, this result can be acknowledged as natural. However, in addition tothereof, the Upper Echelons Theory, Human Capital Theory, Entrepreneurial Competence Theory and Social Network Theory were other theories on which the studies were based.

When viewing the research methods adopted for the 40 articles examined, the use of quantitative research design is dominant. 33 of the studies were handled with a quantitative research design and the survey method was used in these studies. Again, in these studies, cross-sectional research design was benefited and structural equation modeling was considered as the primary analysis. Looking at the distribution of the remaining studies, a qualitative research design was adopted in 2 of the studies. 3 studies were composed with mixed method and 2 studies were composed using secondary data. In the studies handled with the mixed method, it was seen that semi-structured interview forms were benefited in addition to the questionnaire. It has been observed that interview forms were used in the studies handled with the qualitative research design. In the context of the 40 studies discussed, it can be declared that quantitative research, data collection using questionnaires, and cross-sectional research design constitute almost 82% of the studies.

In the evaluation carried out in the context of the themes, entrepreneurship competence, firm performance, entrepreneurial orientation, business success, micro business, SME success, performance themes stand out as the main themes used predominantly. In addition to these, other main themes covered in the research are sustainability, competitive advantage, cultural intelligence, cultural differences, innovation capability, innovation capacity, transformational leadership, environmental change, business coaching, business environment, and internationalization.

In the evaluation carried out in the context of sub-themes, the subjects that were mainly addressed are expressed as follows. However, when viewing the sub-themes that are the most common research subject, in the context of entrepreneurship competence, it is considered that opportunity recognition competence, entrepreneurial competencies, relational competence, conceptual competence, business management competence, technical competence, personal competence, and strategic competence are viewed as sub-themes. The most frequently researched topics in the context of company performance are firm performance, institutional performance, financial performance, non-financial performance, innovation performance, SME success, business success, and perceived business success.



Figure 3. Sub-Themes In The Relationship Between Entrepreneurial Competence and Firm Performance

Source: Authors

Reviewing the sample of the studies, it is seen that only one of the 40 studies was carried out at the organizational level and the remaining 39 studies were carried out at the individual level. At the individual level, the business owner and/or senior managers (CEO, CFO, etc.) were preferred as the sample. The preferred firm level was SMEs, micro enterprises, and women entrepreneurs/SMEs. Looking at the distribution, it is seemed that 7 (17.5%) of 40 studies are micro-enterprises; 6 (15%) of them are women entrepreneurs (SMEs); 26 (65%) of them were carried out at SME level, and 1 (2.5%) at the start-up level. When the countries where the research was conducted are examined, the most researches were in Malaysia. Out of the 40 studies evaluated, 11 were in Malaysia; 3 in Pakistan; 2 were made in England and 2 were made in India. Other studies were distributed as one study in each country. These countries are Senegal; United Arab Emirates; Uganda; Scandinavia; USA; Indonesia; Finland; Russia; Denmark; Ghana; Korea; Sweetcorn; Nigeria; Africa; Lithuania; Spain; China, and Hong Kong.

5. Conclusion

Around the world, SMEs make great contributions to economic growth and the participation of citizens in employment. This is true not only for developed economies, but also for developing economies (Ogundana, 2020). The survival, continuity and sustainability of SMEs, which are important actors of economic development, are shaped by many factors. One of the most important of these is the performance of the firm. However, SMEs also have to deal with the challenges of maintaining their performance and sustainability. Entrepreneurship competencies are conceived as an appropriate tool for SMEs to increase their performance, ensure their sustainability and cope with the difficulties related to them (Zizile & Tendai, 2018, p. 223). One of the most essential reasons for this is that individual performance affects firm performance (Koçyiğit & Çelik, 2021, p. 1129). In this context, entrepreneurial competencies are the abilities developed by entrepreneurs to sustain performance and improve their competitive position in the industry (Ibidunni, Ogundana, & Okonkwo, 2021, p. 469). Entrepreneurial competence can be defined as the knowledge, skills and attitudes required to initiate and participate in entrepreneurial practices (Bacigalupo, Kamylyis, Punie, & Brande, 2016, p. 20). Developing entrepreneurial competence involves understanding the individual's behavioral changes, as well as considering the performance outcome of that behavior against standard expectations (Mitchelmore & Rowley, 2010, p. 93). The intense interest in entrepreneurial competence stems mainly from the presumed link between competences and the birth, survival and growth of an enterprise (Bird, 1995). There is evidence to suggest that understanding the required competencies and the changing role of the entrepreneur throughout the different stages of a business's development will support competency development and have implications for successful business growth (Churchill & Lewis, 1983). From all this, entrepreneurial competencies are seen as crucial to the growth and success of the business, and understanding the nature and role of such competencies can have important implications for practice (Mitchelmore & Rowley, 2010, p. 93).

It has been observed that general business performance, innovation performance and corporate performance increase, the business growth is realized, the income of the business is increased, the disadvantages are overcomes in the internationalization process, and international growth is realized with the entrepreneurial competencies. In addition to these, there are studies showing that new opportunities are sought, recognized and evaluated by virtue of entrepreneurial competencies. For instance, Mamun and Fazal (2021) found that entrepreneurial competencies have a constructive impression on performance and business sustainability (Mamun & Fazal, 2021, p. 381). Concerning innovative performance, entrepreneurial competencies facilitate the ability of entrepreneurs to identify industry opportunities, leverage platforms of collaboration in industrial sectors, and determine a viable path for the future success of the firm (Ibidunni, Ogundan, & Okonkwo, 2021). According to Zizile and

Tendai (2018), the survival and success of SMEs are positively affected by their entrepreneurial competencies. Entrepreneurial competencies also serve as a critical element in achieving innovation performance among SMEs (Zizile & Tendai, 2018, p. 223). According to the results of Mustapha et al.'s (2020) study, it is seen that commitment competence and opportunity recognition competence have a significant positive effect on operating income (Mustapha, Mamun, Mansori, & Balasubramaniam, 2020). A study by Gümüşay and Bohné (2018) confirmed that entrepreneurial competencies also often aids a firm to allocate scarce resources reasonably and appropriately and have an impact on its overall performance (Gümüşay & Bohné, 2018, p. 368). Based on all this information, entrepreneurial competencies as a form of internally promoted growth mechanism of SMEs are considered as a practical interventionist to increase SMEs innovation (Ibidunni, Ogundana, & Okonkwo, 2021). In this context, businesses need to focus on developing their competencies in order to increase their income and wealth accumulation (Mustapha, Mamun, Mansori, & Balasubramaniam, 2020, p. 250).

As Mamun and Fazal (2019) revealed in their study with 403 entrepreneurs, entrepreneurial competencies have a positive effect on business performance. In addition, entrepreneurial competencies mediated the relationships between creativity, innovation, and autonomy and business performance. These results support the resource-based view (Abdullah Al Mamun, 2019, p. 380). In their study, Kadam, Rao, Abdul, and Jabeen (2019) determined that the entrepreneurial competencies of the SME owner have a direct impact on the performance of the firm, thus revealing the significance of the competencies that SME owners need to improve while operating in a multicultural environment. The skills of senior managers greatly influence the choices and decisions they make. Since this affects the impression of organizations, the role of managerial competencies that need to be developed among SME owners that will contribute to the growth of their businesses is extremely important (Kadam, Rao, Abdul, & Jabeen, 2019, p. 178). Mamun, Nawi, Permarupan, and Muniady (2018) in their study with 417 women entrepreneurs revealed that competent entrepreneurs are more innovative and have an immense capacity to scan for new opportunities by analyzing existing information. Therefore, it is emphasized that improving the level of entrepreneurial competencies should be at the core of SME business development programs and policies. In this framework, socio-economic development organizations and governments should concentrate on creating sector-specific platforms for local and national entrepreneurs. Creating industry-specific platforms will allow entrepreneurs to share their ideas and experiences, participate in trust-building programs, improve their values and norms, and improve the overall quality of relationships between key business players (Mamun, Nawi, Permarupan, & Muniady, 2018, p. 208). However, entrepreneurial competence allows entrepreneurs to elect what sort of activity they should focus on in each of the given stages, whether it is partnership management or partnership information exchange. For instance, entrepreneurial competence prompts entrepreneurs to concentrate on consolidating existing inter-firm relationships rather than establishing new ones in subsequent expansion in a foreign market. As firms reach the required threshold of competency in a foreign market, the learning process inherent in international growth appears to reduce the need to collaborate (Khalid & Bhatti, 2015, p. 605). SMEs are generally seen as disadvantaged in internationalization processes due to their limited capital resources that reduce the possibility of taking business opportunities in foreign markets and their lack of skills for these opportunities. For this reason, SMEs aiming for international growth have to rely on human resources, especially the competencies of entrepreneurs and managers. The development and use of entrepreneurial and management competencies contribute to the success of small firms. The entrepreneurial role of managers is concerned with observing the environment, selecting promising opportunities and formulating appropriate strategies. The managerial role, on the other hand, is concerned with obtaining the necessary resources and coordinating the activities of the entire organization. Therefore, entrepreneurship and management competencies are seen as

competencies to function effectively in these roles (Korsakiene & Diskiene, 2015, p. 601). On the other hand, it should be noted that entrepreneurial competencies are not only unique abilities as critical inputs for the growth of firms, but also act as mechanisms that enable entrepreneurs to build the capacity to learn the routines, skills and procedures that help them grow their firms (Dawa, et al., 2021, p. 42).

Some governments, especially in underdeveloped or developing countries, should attempt to support and increase the development of small businesses in order to achieve their development goals and address the problem of unemployment (Khan, et al., 2021, p. 4). However, considering the impact of entrepreneurial competencies on firm performance, it is extremely crucial to focus on developing competencies. In the new world order, companies that realize the importance of competencies will need to increase their competencies with government support in order to improve their competitiveness and technological infrastructure. On the other hand, it is also important for business owners to volunteer and make an effort to benefit from policies, measures and incentives organized in cooperation with the government and other stakeholders for the development of competencies. These people should benefit from financial and regulatory incentives, attend trainings, follow innovations, and be prepared for change and unexpected challenges. In managing multifaceted processes such as flexible and remote working, using information technologies at a good level, turning a crisis into an opportunity, which have become much more common in working life, especially after the COVID-19 pandemic, the importance of competencies that can be found in an entrepreneur such as negotiation, intuitive thinking, identifying and solving problems, networking, has been understood once again. Intrapreneurship practices that aim to increase the competitiveness of entrepreneurs and act as a catalyst can be expanded. In particular, a good technical, managerial and entrepreneurial education and experience is exceedingly important for the development of entrepreneurial competencies (Koçyiğit & Çelik, 2021, p. 1142). On the other hand, it is necessary to develop innovation capability and entrepreneurial competencies by training them to use technology to improve products and make the process more efficient (Pranowa, Sutrisno, Sulastiono, & Siregar, 2020, p. 20).

In this study, the studies examining the relationship between entrepreneurial competence and firm performance are approached with the literature review method, and 40 different studies that evaluate the relationship between these two variables in different contexts, subjects and categories are examined in detail. It is seen that the interest in these two subjects has commenced to increase again, especially in recent years. In the light of the information obtained within the scope of this study, it is striking that specifically the entrepreneurial competence is evaluated at the level of individual analysis in the studies where entrepreneurship competence and firm performance are considered collectively. Only one study addressed the concept of entrepreneurial competence at the organizational level. No study in which the concept of entrepreneurial competence is considered at both individual and organizational levels has been found. In this context, comparative analysis methods are immensely important, not only at the individual level but also at the firm level, especially in different regions (Sallah & Caesar, 2022). In this context, the studies that deal with both levels in the future may also be valuable. At the level of individual analysis, it is seen that the sample of the studies mainly consists of the owner of the enterprise and/or additionally senior managers. In this case, a perceptual result emerges based on the self-evaluation of the manager/business owner solely. In the selection of samples for future studies, it may be favorable to determine objective criteria in addition to self-evaluation of the individual and to evaluate the results in this context.

On the other hand, when an evaluation is made in the context of research methods, it is seen that the subjects are mainly handled by benefiting the survey method which is one of the quantitative research designs. While the number of studies conducted with the qualitative method is quite low, there are 3 studies conducted with mixed method. The generalizability and transferability of their results can be strengthened by conducting a mixed-method study that can overcome the limitations inherent with the methodological shortcomings of single-method research (Ng, Kee, & Ramayah, 2017). In addition, studies utilizing case analysis, one of the qualitative research designs, may also be significant. As case studies allow to consider firms in different contexts, they can be advantageous to explore the extent to which each dimension subsequently influences performance and the corresponding implications for such strategic moves (Urfa & Arslantaş, 2022, p. 196). Additionally, the studies examined were mainly designed as cross-sectional research. Cross-sectional studies may not establish very important relationships since they are conducted once and give the current view of a particular point in time (Reinartz, Echambadi, & Chin, 2002). Moreover, with cross-sectional analysis, hypotheses may not be disproved definitively. Only hypotheses may or may not be supported by these studies since observation of cause and effect variables in the same time frame can only provide coincidental relationships rather than cause by more than one variable (Thomas, Douglas, Yamada, & Senyard, 2021). In using longitudinal studies, data is collected at different moments or time intervals to make inferences about the evolution, determinants, and consequences of the study subject and this eases to see and identify changes that occur over time. At this point, it can be suggested that future studies should be considered as a longitudinal research design. When the concept of firm performance is examined, it can be asserted that the concept has been handled especially at the perceptual level. Studies using objective criteria can be extremely valuable due to the generalizability and measurability of the results. Studies dealing with the relationship between the two concepts have been mainly examined in the context of resource-based approach. The most studied variables regarding firm performance were “financial and non-financial performance” and “corporate performance”.

The study was carried out on only two databases. It may be suggested that future studies should study with a wider screening. Only articles in the field of business and management were included in the study. At the SMEs time, only articles written in English were evaluated in the search.

References

- Abdullah Al Mamun, S. A. (2019). Effect of entrepreneurial orientation on competency and micro-enterprise performance. *Asia Pacific Journal of Innovation and Entrepreneurship*, 12(3), 379-398. doi:DOI 10.1108/APJIE-05-2018-0033
- Ahmad, N., Ramayah, T., Wilson, C., & Kummerow, L. (2010). Is entrepreneurial competency and business success relationship contingent upon business environment? A study of Malaysian SMEs. *International Journal of Entrepreneurial Behavior & Research*, 16(3), 182-203. doi:DOI 10.1108/13552551011042780
- Ahmad, S. Z., Rani, N. S., & Kassim, S. K. (2010). Business challenges and strategies for development of Small- and Medium-sized Enterprises (SMEs) in Malaysia. *International Journal of Business Competition and Growth*, 1(2), 177-197.
- Alvarez, S. A., & Busenitz, L. W. (2001). The entrepreneurship of resource-based theory. *Journal of Management*, 27, 755–775. doi:DOI: 10.1177/014920630102700609

- Bacigalupo, M., Kamylylis, P., Punie, Y., & Brande, G. V. (2016). *EntreComp: The Entrepreneurship Competence Framework*. Seville, Spain. Retrieved 07 21, 2022, from <https://core.ac.uk/download/pdf/38632642.pdf>
- Bird, B. (1995). Towards a theory of entrepreneurial competency. *Advances in Entrepreneurship, Firm Emergence and Growth*(21), 51-72.
- Boyatzis, R. E. (1983). The Competent Manager: A Model For Effective Performance. *Strategic Management Journal*, 4(4), 385-387.
- Boyatzis, R. E. (2008). Competencies in the 21st century. *Journal of Management Development*, 27(1), 5-12. doi:DOI 10.1108/02621710810840730
- Churchill, N. C., & Lewis, V. L. (1983). The Five Stages of Small Business Growth. *Harvard Business Review*, 61(3), 1-12.
- Covin, J. G., & Miles, M. P. (1999). Corporate Entrepreneurship and the Pursuit of Competitive Advantage. *Entrepreneurship Theory and Practice*, 1(1). doi:<https://doi.org/10.1177/104225879902300304>
- Dar, M. S., Ahmed, S., & Raziq, A. (2017). Small and medium-size enterprises in Pakistan: Definition and critical issues. *Pakistan Business Review*, 19(1), 46–70. doi:<https://doi.org/10.22555/pbr.v19i1.1245>
- Dawa, S., Namatovu, R., Mulira, F., Kyejjusa, S., Arinaitwe, M., & Arinaitwe, A. (2021). Entrepreneurial competences and growth of female-owned enterprises: the mediation role of absorptive capacity. *International Journal of Gender and Entrepreneurship*, 13(1), 30-49. doi:DOI 10.1108/IJGE-02-2020-0028
- Demirci, A. (2014). Literatür Taraması. In E. Y. Arı, & İ. Kaya, *Araştırma Yöntemleri. Coğrafyacılar Derneği*. Retrieved 05 18, 2022, from file:///C:/Users/nyuceol/Downloads/3_Literaturtaramasi.pdf
- Doğan, H. (2004). Yetenek Tabanlı Stratejilerin Yükselişi: Kavramsal Bir Analiz Çalışması. *Gazi University Journal of Faculty of Economics and Administrative Sciences*, 6(3), 133 - 151.
- Feurer, R., & Chaharbaghi, K. (1994). Defining competitiveness: a holistic approach. *Management decision*, 32(2), 49-58. doi: <https://doi.org/10.1108/00251749410054819>
- Gerli, F., Gubitta, P., & Tognazzo, A. (2011). Entrepreneurial competencies and firm performance: an empirical study. In P. p. Management (Ed.), *Paper presented at VIII International Workshop on Human Resource Management*, (pp. 1-40). Retrieved 08 05, 2022, from https://www.researchgate.net/profile/Paolo-Gubitta/publication/228314296_Entrepreneurial_Competencies_and_Firm_Performance_An_Empirical_Study/links/00463526e019fdfeb9000000/Entrepreneurial-Competencies-and-Firm-Performance-An-Empirical-Study.pdf
- Grimmer, L., Miles, M. P., Byrom, J., & Grimmer, M. (2017). The impact of resources and strategic orientation on small retail firm performance. *Journal of Small Business Management*, 55(s1), 7-26. doi: <https://doi.org/10.1111/jsbm.12368>
- Gümüşay, A. A., & Bohné, T. M. (2018). Individual and organizational inhibitors to the development of entrepreneurial competencies in universities. *Research Policy*, 47(2), 363-378. doi:<https://doi.org/10.1016/j.respol.2017.11.008>
- Hallam, C. D. (2018). Culture and social capital network effects on the survival and performance of high-tech micro and small firms. *Journal of Small Business and Enterprise Development*, 25(1), 81-106. doi:<https://doi.org>
- Hwang, W.-S., Choi, H., & Shin, J. (2020). A mediating role of innovation capability between entrepreneurial competencies and competitive advantage. *Technology Analysis & Strategic Management*, 32(1), 1-14. doi:<https://doi.org/10.1080/09537325.2019.1632430>

- Ibidunni, A. S., Ogundan, O. M., & Okonkwo, A. (2021). Entrepreneurial Competencies and the Performance of Informal SMEs: The Contingent Role of Business Environment. *Journal of African Business*, 22(4), 468-490. doi:<https://doi.org/10.1080/15228916.2021.1874784>
- Ibidunni, A. S., Ogundana, O. M., & Okonkwo, A. (2021). Entrepreneurial Competencies and the Performance of Informal SMEs: The Contingent Role of Business Environment. *Journal of African Business*, 22(4), 468–490. doi:doi.org/10.1080/15228916.2021.1874784
- Idris, M. M., & Abu Bakar, S. b. (2020). Perceived Usefulness of Business Coaching on the Relationship between Entrepreneurial Competencies and Business Success. *The Journal of Asian Finance, Economics and Business*, 7(10), 329-338.
- Kadam, R., Rao, S., Abdul, W. K., & Jabeen, S. S. (2019). Impact of cultural intelligence on SME performance: The mediating effect of entrepreneurial orientation. *Journal of Organizational Effectiveness: People and Performance*, 6(3), 161-185. doi:DOI 10.1108/JOEPP-12-2018-0101
- Khalid, S., & Bhatti, K. (2015). Entrepreneurial competence in managing partnerships and partnership knowledge exchange: Impact on performance differences in export expansion stages. *Journal of World Business*, 50(3), 598-608. doi:<http://dx.doi.org/10.1016/j.jwb.2015.01.002>
- Khan, M. A., Zubair, S. S., Rathore, K., Ijaz, M., Khalil, S., Khalil, M., & Rahimi, I. (2021). Impact of Entrepreneurial Orientation Dimensions on Performance of Small Enterprises: Do Entrepreneurial Competencies Matter? *Cogent Business & Management*, 8(1). doi:<https://doi.org/10.1080/23311975.2021.1943241>
- Kiwala, Y., Oliver, J., & Kintu, I. (2021). Entrepreneurial competence and supply chain value creation in local procurement. *Development Southern Africa*, 38(3), 423-436. doi:<https://doi.org/10.1080/0376835X.2020.1855117>
- Koçyiğit, N., & Çelik, A. (2021). Girişimcilik Yetkinliklerinin İşletme Performansına Etkileri. *Turkish Studies - Social Sciences*, 1127-1145. doi:DOI: 10.47356/TurkishStudies.46627
- Korsakiene, R., & Diskiene, D. (2015). Do competencies of entrepreneurs and managers influence internationalization processes? Investigation of Lithuanian SMEs. *Proceedings of the European Conference on Innovation and Entrepreneurship, ECIE*. Genoa: University of Genoa.
- Kraja, Y. B., & Osmani, E. (2015). Importance of External and Internal Environment In Creation of Competitive Advantage To Smes.(Case Of Smes, In The Northern Region Of Albania). *European Scientific Journal*, 11(13).
- Krasniqi, B., & Branch, D. (2020). Institutions and firm growth in a transitional and post-conflict economy of Kosovo. *Journal of Entrepreneurship in Emerging Economies*, 12(2), 187-204. doi:DOI 10.1108/JEEE-05-2017-0034
- Lee, D. Y., & Tsang, E. W. (2001). The effects of entrepreneurial personality, background and network activities on venture growth. *Journal of Management Studies*, 38(4), 583-602.
- Lerner, M., & Almor, T. (2002). Relationships among Strategic Capabilities and the Performance of Women-Owned Small Ventures. *Journal of Small Business Management*, 40(2), 109-125. doi:<https://doi.org/10.1111/1540-627X.00044>
- Machado, H. P., Cazella, C. F., Piekas, A. A., & Carvalho, C. E. (2021). Entrepreneurship and Strategy: Analyzing Themes from Bibliometric Studies in the Light of the Concept of Strategic Entrepreneurship. *Brazilian Administration Review*, 18(3). doi: <https://doi.org/10.1590/1807-7692bar2021200036>
- Madichie, N. O. (2009). Breaking the Glass Ceiling in Nigeria: A Review of Women's Entrepreneurship. *Journal of African Business*, 10(1), 51-66. doi: <https://doi.org/10.1080/15228910802701361>

- Mamun, A. A., & Fazal, S. A. (2018). Effect of entrepreneurial orientation on competency and micro-enterprise performance. *Asia Pacific Journal of Innovation and Entrepreneurship*, 12(3), 379-398. doi:DOI 10.1108/APJIE-05-2018-0033
- Mamun, A. A., & Fazal, S. A. (2019). Effect of entrepreneurial orientation on competency and micro-enterprise performance. *Asia Pacific Journal of Innovation and Entrepreneurship*, 12(3), 379-398. doi:DOI 10.1108/APJIE-05-2018-0033
- Mamun, A. A., & Fazal, S. A. (2021). Entrepreneurial Traits, Competency, Performance, and Sustainability of Micro-Enterprises in Kelantan, Malaysia. *International Journal of Asian Business and Information Management*, 12(3), 381-404. doi:DOI: 10.4018/IJABIM.20210701.0a23
- Mamun, A. A., & Lumpur, K. (2021). (Entrepreneurial Traits, Competency, Performance, and Sustainability of Micro-Enterprises in Kelantan, Malaysia. *International Journal of Asian Business and Information Management*, 12(3), 381-404. doi:DOI: 10.4018/IJABIM.20210701.0a23
- Mamun, A. A., Nawli, N. B., Permarupan, P. Y., & Muniady, R. (2018). Sources of competitive advantage for Malaysian micro-enterprises. *Journal of Entrepreneurship in Emerging Economies*, 10(2), 191-216. doi:DOI 10.1108/JEEE-05-2017-0037
- Manolova, T. S., Carter, N. M., Manev, I. M., & Gyoshev, B. S. (2007). The differential effect of men and women entrepreneurs' human capital and networking on growth expectancies in Bulgaria. *Entrepreneurship Theory and Practice*, 31(3), 407-426. doi:https://doi.org/10.1111/j.1540-6520.2007.00180.x
- Martins, I. (2016). Network usage, entrepreneurial orientation and their effectiveness on SMEs growth. *The Journal of Entrepreneurship*, 25(1), 18-41.
- Minai, M. S., Raza, S., Hashim, N. A., Zain, A. Y., & Tariq, T. A. (2018). Linking Entrepreneurial Education With Firm Performance Through Entrepreneurial Competencies: A Proposed Conceptual Framework. *Journal of Entrepreneurship Education*, 21(4).
- Mitchelmore, S., & Rowley, J. (2010). Entrepreneurial competencies: a literature review and development agenda. 16(2), 92-111. doi:DOI 10.1108/13552551011026995
- Mitchelmore, S., & Rowley, J. (2013). Entrepreneurial competencies of women entrepreneurs pursuing business growth. *Journal of Small Business and Enterprise Development*, 20(1), 125-142. doi:https://doi.org/10.1108/14626001311298448
- Mustapha, W. N., Mamun, A. A., Mansori, S., & Balasubramaniam, S. (2020). Effect of entrepreneurial competencies on micro-enterprises income and assets in Malaysia. *Asia Pacific Journal of Innovation and Entrepreneurship*, 14(3), 249-261. doi:DOI 10.1108/APJIE-01-2020-0009
- N.Chandler, G., & H.Hanks, S. (1993). Measuring the performance of emerging businesses: a validation study. *Journal of Business Venturing*, 8(5), 391-408.
- Namatovu, R., & Dawa, S. (2017). Motivation, competences and the moderating role of business discontinuance on the entrepreneurial effect of self-employment. *International Journal of Entrepreneurship and Small Business*, 30(3), 410-426.
- Ng, H. S., Kee, D. M., & Ramayah, T. (2017). The role of transformations leadership, entrepreneurial competence and technical competence on enterprise success of owner-managed SMEs. *Journal of General Management*, 42(1). doi:https://doi.org/10.1177/030630701604200103
- Ogundana, O. (2020). Obstacles facing women-owned enterprises: a case for Sub-Sahara African women. *World Review of Entrepreneurship, Management and Sustainable Development*.
- Osman, C. A., & Rahim, H. L. (2014). The Relationship of Entrepreneurial Competencies and Entrepreneurial Intention of. *Australian Journal of Basic and Applied Sciences*, 8(23), 62-69.

- Parida, V., Pesämaa, O., Wincent, J., & Westerberg, M. (2017). Network capability, innovativeness, and performance: a multidimensional extension for entrepreneurship. *Entrepreneurship and Regional Development*, 29(1/2), 94-115. doi:<https://doi.org/10.1080/08985626.2016.1255434>
- Pranowa, A. S., Sutrisno, J., Sulastiono, P., & Siregar, Z. M. (2020). The Entrepreneurial Competency, Innovation Capability, and Business Success: The Case of Footwear Industry in Indonesia. *GENERAL MANAGEMENT*, 21(78).
- Rahman, S. A., Amran, A., Ahmad, N. H., & Taghizadeh, S. K. (2015). Supporting entrepreneurial business success at the base of pyramid through entrepreneurial competencies. *Management Decision*, 53(6).
- Rauch, A., & Rijdsdijk, S. A. (2013). The effects of general and specific human capital on long-term growth and failure of newly founded businesses. *Entrepreneurship Theory and Practice*, 3(4), 923-941. doi:<https://doi.org/10.1111/j.1540-6520.2011.00487.x>
- Reinartz, W. J., Echambadi, R., & Chin, W. W. (2002). Generating Non-normal Data for Simulation of Structural Equation Models Using Mattson's Method. *Multivariate Behavioral Research*, 37(2), 227-244. doi:https://doi.org/10.1207/S15327906MBR3702_03
- Rosli, N. F., & Abdullah, N. (2015). Comparative study on the determinants on SMEs performances in Selangor and Sabah, Malaysia. *Handbook on the Emerging Trends in Scientific Research*(3), 107-111.
- Sallah, C. A., & Caesar, L. D. (2022). Performance of Ghanaian women businesses community: the moderating role of social competence. *Journal of Enterprising Communities-People and Places In The Global Economy*, 16(3), 450-471. doi:DOI 10.1108/JEC-12-2020-0209
- Shane, S., & Venkataraman, S. (2000). The Promise of Entrepreneurship as a Field of Research. *Academy of Management Journal*, 25(1), 217-226.
- Song, Y., D. R., Srivastava, M. K., & Asgari, E. (2018). In search of precision in absorptive capacity research: a synthesis of the literature and consolidation of findings. *Journal of Management*, 44(6), 2343-2374. doi:<https://doi.org/10.1177/0149206318773861>
- Taipale-Eravalta, K., Lampela, H., & Heilmann, P. (2015). Survival Skills in SMEs—Continuous Competence Renewing and Opportunity Scanning. *Journal of East-West Business*, 21(1). doi:<https://doi.org/10.1080/10669868.2014.959232>
- Tehseen, S., & Anderson, A. R. (2020). Cultures and entrepreneurial competencies; ethnic propensities and performance in Malaysia. *Journal of Entrepreneurship in Emerging Economies*, 12(5), 643-666. doi:DOI 10.1108/JEEE-10-2019-0156
- Tehseen, S., Ahmed, F. U., Qureshi, Z. H., Uddin, M. J., & T., R. (2019). Entrepreneurial competencies and SMEs' growth: the mediating role of network competence. *Asia-Pacific Journal of Business Administration*, 11(1).
- Tehseen, S., Ahmed, F. U., Qureshi, Z. H., Uddin, M. J., & T., R. (2019). Entrepreneurial competencies and SMEs' growth: the mediating role of network competence. *Asia-Pacific Journal of Business Administration*, 11(1), 2-29. doi:10.1108/APJBA-05-2018-0084
- Thomas, G. H., Douglas, E. J., Yamada, J.-I., & Senyard, J. (2021). A systematic bibliometric review of the strategic entrepreneurship domain. *Management Research Review*. doi:DOI 10.1108/MRR-11-2020-0709
- Tsai, K.-H., Chang, H.-C., & Peng, C.-Y. (2016). Refining the linkage between perceived capability and entrepreneurial intention: roles of perceived opportunity, fear of failure, and gender. *International Entrepreneurship and Management Journal*, 12(4), 1127–1145.

- Tunberg, M., & Anderson, A. R. (2020). Tunberg, M. and Anderson, A.R. (2020), “Growing a small firm; experiences and managing difficult processes”,. *International Entrepreneurship and Management Journal* volume, 16, 1445–1463.
- Urfa, A. M., & Arslantaş, C. C. (2022). Uluslararası Girişimsel Yönelim Üzerine Eleştirel Bir Literatür İncelemesi. *Anadolu Üniversitesi Sosyal Bilimler Dergisi*, 22(1), 181-208.
- West, G. P., & Noel, T. W. (2009). The impact of knowledge resources on new venture performance. *Journal of Small Business Management*, 47(1), 1-22.
- Wiklund, J., & Shepherd, D. (2005). Entrepreneurial orientation and small business performance: a configurational approach. *Journal of Business Venturing*, 20(1), 71-91.
- Zainol, N. R., & Mamun, A. A. (2018). Entrepreneurial competency, competitive advantage and performance of informal women micro-entrepreneurs in Kelantan, Malaysia. *Journal of Enterprising Communities: People and Places in the Global Economy*, 12(3), 299-321. doi:DOI 10.1108/JEC-11-2017-0090
- Zizile, T., & Tendai, C. (2018). The Importance Of Entrepreneurial Competencies On The Performance Of Women Entrepreneurs In South Africa. *The Journal of Applied Business Research*, 34(2).