



EXPLORING WOMEN ENTREPRENEURIAL ECOSYSTEM WITH FACTORS AFFECTING STARTUP AND GROWTH: A SPECIAL EMPHASIS ON ENTREPRENEURSHIP DEVELOPMENT PROGRAMS

Adeebaa Zia, Dr. Rahul Sharma

Research Scholar, School of Management, University of Engineering & Management Jaipur
Email: adeebaazia@gmail.com

Associate Professor, School Of Management, University of Engineering & Management Jaipur
Email: rahulsr.sharma@uem.edu.in

Abstract

This systematic literature review examines the factors influencing women's entrepreneurial ecosystem, with a special emphasis on entrepreneurship development programs. Employing the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) methodology, a comprehensive search of the SCOPUS database to identify relevant studies has been conducted. The review is dedicated to gaining insights into the distinct challenges and opportunities encountered by women entrepreneurs in initiating and expanding their businesses.

Theoretical frameworks such as the entrepreneurial ecosystem theory and gender-specific perspectives are used to analyze literature. The factors influencing women's entrepreneurial ecosystem are categorized into social and cultural, economic, institutional, policy and regulatory, access to resources, networking, and support systems. Special attention is given to the role of entrepreneurship development programs in supporting women entrepreneurs in India & worldwide.

The review also examines the women entrepreneurial ecosystem with respect to different phases. In startup phase challenges faced and strategies employed by women entrepreneurs has been included while the growth phase is explored by highlighting factors influencing business growth like innovation and technology along with scaling challenges are mentioned.

The review concludes by outlining challenges for women entrepreneurs, suggesting opportunities for future research and policy development, and highlighting the importance of continued support for women in entrepreneurship.

Being a Research Scholar in this field for quite some time now, I have been conducting meaningful and cross-dimensional research in order to build and contribute my valuable insights into Women entrepreneurship field; thereby enriching my overall academic perspective along with contributing to the achievement of organizational goals.

Keywords: *Entrepreneurship development programs, PRISMA methodology, Support mechanisms, Policy implications, Systematic Literature Review*

1 Introduction

Entrepreneurship in the present times have emerged out as one of the interesting options to pursue. It has been able to generate awareness about the ways in which one can bridge the gaps of what is required among the individuals and what is provided in the market (Emmanuel, 2002). While entrepreneurship have been utilized as a source of livelihood for many individuals, but for a number of women this have opened a way of creating financial independence for themselves (Suseno & Abbott, 2021). Entrepreneurship have been pursued by a number of women including in a developing country such as India after realizing its scope and importance in the current times. WE come with its own set of challenges due to the way of life led by women in their respective countries. There have been many studies that focus on the



importance of generating WE at a larger level and investigating ways of encouraging initiatives (Brush et al., 2017; Kothawale, 2013; Owalla et al., 2021). These studies have been able to deliver several critical points that helped in understanding the scopes and challenges of WE to a large extent. Considering the situation of WE in India, the societal and cultural barriers that often surround women especially in rural areas are posed as inevitable challenges in the process (Koneru, 2017). This has led to creating a gender – specific configuration of the topic in hand. The study here is focused in providing an overview on the area of entrepreneurship from the perspective of a woman and highlight the necessary topics observed in the area.

In the process of encouraging entrepreneurship in general, the consideration of the entrepreneurship development programs (EDP) facilitated to ease the situations all around is essential. These programs can be understood as a process which is used to improve the set of entrepreneurial skills (Saini & Bhatia, 1996). It can help to sharpen the individual's position as an entrepreneur and learn the different facilities one can get as an entrepreneur. There are several entrepreneurial development programs that have helped entrepreneurs all through these years. The 500 start-ups are a venture that helps in providing the required mentorship to the early-stage start-ups. Google has also been providing such programs as Google for Start-ups, Google cloud for start-ups etc. Similarly, India has worked in the sector of entrepreneurial development programs and have come forward with a number of initiatives such as Start-up India where an ecosystem for innovation is established (Sharma & Rana, 2021). Through the Make in India initiative, the government have been encouraging to transform India into a global manufacturing hub. There is various incubation centers established such as Atal Tinkering labs and National Skill Development corporations which have been evident for promoting a vision of entrepreneurship among individuals. These development programmes although being generated have not been fully utilized by individuals and especially women in India. If women entrepreneurship (WE) is to be taken to new paradigms, it is crucial that the entrepreneurial development programs are recognized, utilized and promoted across the country. This would provide a chance to excel for the entrepreneurs and create a more inclusive environment for innovation among themselves. The study here will try to understand the situation of WE in relevance to entrepreneurship development programmes and the critical factors governing the same. The next section in the study is provided below to explain the method using which this objective set in the study would be achieved.

2 Theoretical Framework & PRISMA Methodology

As discussed in the previous section, the literature in the field have highly focused into deriving gender-specific perspectives in entrepreneurial ecosystem (Özsungur, 2019). This has resulted from the observation that the entrepreneurial ecosystem for women is quite different. This poses a number of additional challenges which makes it difficult to ensure a smooth processing of their journeys (Amrita et al., 2018). The need for researchers to look into entrepreneurial ecosystem from the perspective of a women itself established the importance of this concern.



It helps in building a more inclusive and detailed understanding of entrepreneurial environment. The study here would include all the research papers that have investigated into the domain of WE and have looked into the benefits of implementing a entrepreneurship development programme.

The study here is based on the use of a systematic literature review method using the PRISMA methodology. The use of this method for review provides a systematic way of establishing the requirements of the study.

The review process described above involves a comprehensive examination of existing literature, which includes an extensive search for relevant research articles in databases such as SCOPUS and Web Science, encompassing articles sourced from ScienceDirect. Notably, the Web of Science database falls under the SCOPUS umbrella, making it an integral part of the search process. Utilizing these databases ensures the inclusion of high-quality research from reputable journals. The identification of pertinent literature within these databases involves the use of specific keywords like "WE," "Entrepreneurship Development Programmes," "Innovation," and "Start-up." The subsequent section outlines the detailed process followed to select the research papers under consideration. The process followed for arriving at the research papers considered are mentioned in the following section.

The following keywords and combinations were used for the search:

- Search String Set 1 — (“Women Entrepreneurship”) AND (“Entrepreneurship Development Programmes”)
- Search String Set 2 — (“Women Entrepreneurship”) AND (“Entrepreneurship Development Programmes”) AND (“Start-up”)
- Search String Set 3 — (“Women Entrepreneurship” OR “Entrepreneurship Development Programmes”) AND (“Start-up”)

To systematically review and achieve the defined objectives, a crucial step involves the extraction of the most pertinent articles from the databases. The study employs a two-step approach to finalize the articles for inclusion. Initially, the search results obtained using the specified keywords undergo scrutiny based on their titles. Articles found to align with the study's focus are shortlisted for further evaluation. Subsequently, in the second step, the shortlisted articles undergo screening based on their abstracts. Once this process is completed, the final list of articles for the review is compiled, initiating the review process. The study adopts the PRISMA method to systematically arrive at the conclusive list of articles, and the accompanying flow chart illustrates the sequential steps involved in this process.

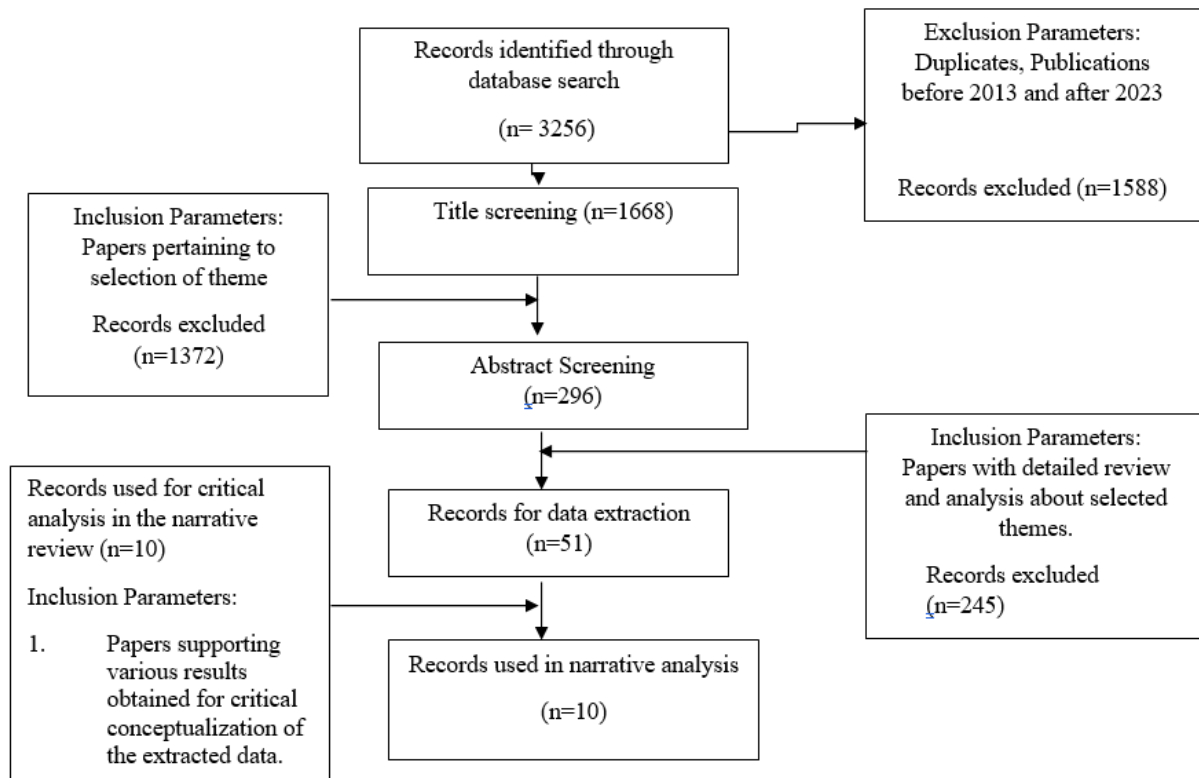


Figure 1

Out of the extensive database of 3256 papers initially identified, a thorough review process resulted in the inclusion of 51 papers for detailed analysis. The attempt is to extract the main factors highlighted in the role of EDPs in enhancing WE.

Table 1- Paper Type Used in Review

Database Used	Type of Article	No. of studies
Scopus	Conference paper	1
	Research articles	46
	Book Chapters	4

3 Result & Discussion

As discussed above, a total of 51 papers have been reviewed in detail to arrive at the desired factors to be investigated in the study. The detailed review followed in the study are being discussed below in a tabular format.

3.1 Factors Influencing Women's Entrepreneurial Ecosystem

The study here has been conducted to list out the factors that would help in building WE ecosystem while understanding the role of Entrepreneurship Development Programs. In the systematic review method followed here, there are * papers being located talking about WE



from which the factors being highlighted are extracted to fulfil the objectives of this study. A detailed tabular format is followed below to extract the factors. The table is provided below.



Table 2 – Detailed Review of Literature

Sl No.	Author	Description of the Study	Methodology Used	Extracted Factors
1	(Ozasir Kacar et al., 2023)	To understand the situation of women entrepreneurs in Turkey. In the study the importance of institutional factors and especially the political considerations are being put forward in the study	Qualitative	Economic & Institutional factors
2	(Chakraborty & Biswal, 2023)	To explore the perspective of WE in the light of social media participation. The study showed in this digital era, the focus on reducing the economic barriers can help the women entrepreneurs further for development	Quantitative	Economic & Institutional factors
3	(Gadzali et al., 2023)	To understand about the role of government support in WE. It highlighted how the economic and other institutional factors pose critical in the enhancement of knowledge skills among women entrepreneurs.	Qualitative	Economic & Institutional factors
4	(Mensah & Derera, 2023)	To investigate about the policies governing WE in Ghana. The study has established the importance of such policies which causes the governance of WE and need for institutional regulatory frameworks to govern the same	Qualitative	Policy and regulatory factors
5	(Tiwari & Shastri, 2023)	To investigate the domain of WE during the pandemic. The study understanding the requirements in that area is able to generate the importance of social capital	Qualitative	Access to resources (financial, human, social capital)



		requirement during Covid-19 for women entrepreneurs.		
6	(Mashapure et al., 2023)	To talk about WE in Zimbabwe with respect to sustainable rural livelihoods. The study shows the importance of financial and social capital to be able to achieve the same.	Quantitative	Access to resources (financial, human, social capital)
7	(Yap et al., 2023)	To figure out about the entrepreneurial performance among the indigenous women of Malaysia located in the rural areas of Sarawak. The empirical study shows the impactful role of social capital along with highlighting the importance of financial resources in sustaining the same.	Quantitative	Access to resources (financial, human, social capital)
8	(Chaker & Zouaoui, 2023)	To understand the regulation of WE in Tunisia during the social media era. The study in its investigation found that women entrepreneurs like to build networking in their ventures especially with the people they trust the most	Qualitative	Networking and support systems
9	(Dewitt et al., 2023)	To discuss about family dynamics in terms of female entrepreneurship ventures. In this context the role of networking and support systems is found to be quite evident for female successors	Qualitative	Networking and support systems
10	(Al-Kwafi et al., 2020)	To determine the factors generating success among the women entrepreneurs in Saudi Arabia. Among the extracted factors, the economic aspect	Quantitative	Economic & Institutional factors



		lying around the situation have been mentioned by the authors to be crucial		
11	(Bullough et al., 2022)	To relate WE with culture to understand the gender expectations. It suggests that socio-cultural factors explore entrepreneurial environment in case of women.	Quantitative	Social and cultural factors
12	(Martínez-Rodríguez et al., 2022)	To understand the public policies in Europe in terms of WE. The study have been able to find the significant role of public policies such as stringer networks, optimisation of government spending etc. to enhance the WE levels	Quantitative	Policy and regulatory factors
13	(Maseda et al., 2022)	To understand women leading family firms based on bibliographic analysis. The study shows that such women use the networking and supporting systems for their use to a large extant	Qualitative	Networking and support systems
14	(Khan et al., 2021)	To reveal the factors that influence the success of women entrepreneurs in small and medium sized enterprises in Pakistan. The study highlights the importance of socio-cultural factors being crucial including religious, psychological and cultural factors.	Quantitative	Social and cultural factors
15	(Touissate & AZDIMOUS, 2021)	To talk about WE in the MENA region. The study highlighted the role of political and economic reforms happening in the region and the impact it has been	Qualitative	Economic & Institutional factors



		causing upon the development pf WE.		
16	(Ariffin et al., 2021)	To understand about the WE development framework in Malaysia. The study enquired on the basis of policy gaps that exists in the country and are found to impact on the development of WE	Quantitative	Policy and regulatory factors
17	(Nziku & Henry, 2020)	To investigate the WE situation in Tanzania. The study have found that the policies in favour of WE in a developing nation such as this is of utmost importance.	Quantitative	Policy and regulatory factors
18	(Roos, 2021)	To explore the role of networking in terms of female entrepreneurship context. The study highlighted the effective role of networking and generating a supportive system in developing the women led ventures.	Qualitative	Networking and support systems
19	(Ogundana et al., 2021)	To talk about WE in developing economies. The study while providing a gender-based model to provide the growth of WE found that entrepreneurship policy development initiatives being taken over are crucial	Qualitative	Policy and regulatory factors
20	(Cullen, 2019)	To investigate upon the role of socio-cultural factors as the antecedents of developing business strategies among female entrepreneurs. The business strategies are found to be driven by cultural dimensions of individualism	Quantitative	Social and cultural factors



21	(Agarwal et al., 2020)	To understand the crucial factors that impact on the sustainability levels of social entrepreneurship among women. The role of socio-cultural factors has been highlighted here.	Qualitative	Social and cultural factors
22	(Adom & Anambane, 2019)	To determine the gender stereotyping method in terms of WE. The study has posed socio-cultural factors as components of gender stereotyping occurring in WE.	Qualitative	Social and cultural factors
23	(Cardella et al., 2020)	To understand the outlining boundaries of WE through scientific literature. The study stated economic factors such as the growth of the respective country to be crucial in the development of WE	Qualitative	Economic & Institutional factors
24	(Ojediran & Anderson, 2020)	To talk about WE in the south of the globe by understanding its level of empowerment across. The role of institutional factors such as political situations along with economic aspects are being highlighted in the study.	Qualitative	Economic & Institutional factors
25	(Kamberidou, 2020)	To investigate about the women entrepreneurs in the digital economy. The study focused on the multitasking aspects of women while highlighting the interventions of various political and economic programs	Qualitative	Economic & Institutional factors
26	(Rudhumbu et al., 2020)	To talk about the challenges and opportunities derived by women entrepreneurs in Botswana. While visiting the situation of WE in the region, the legal and regulatory environment have	Quantitative	Policy and regulatory factors



		been highlighted as an essential factor		
27	(Alene, 2020)	To explore the performance of female entrepreneurs within micro and small enterprises situated in Ethiopia. The factors seen also included the regulations and the legal barriers that existed around the country and influence on the situation of WE	Quantitative	Policy and regulatory factors
28	(Rosca et al., 2020)	To identify the role of women entrepreneurs as agents of change in terms of emerging markets. The study establishes the need for access to resources including financial, human and social capital in the process	Quantitative	Access to resources (financial, human, social capital)
29	(Dal Mas & Paoloni, 2020)	To understand WE in Italy with respect to social sustainability. The study highlights the factors of financial, human and social capital and its access to drive the relational capital perspective		Access to resources (financial, human, social capital)
30	(Kimbu et al., 2020)	To investigate the role of collaborative networks in terms of WE in the tourism sector. The study reveals that networking can help to build a sustainable management of human capital among women entrepreneurs.	Qualitative	Networking and support systems
31	(Kurtege Sefer, 2020)	To understand about the situation of rural WE in Turkey. The study has been able to provide the insights that these women entrepreneurs often are implementers of macro-policies	Qualitative	Policy and regulatory factors



		and they can cause a significant influence		
32	(Neumeyer et al., 2019)	To understand entrepreneurship ecosystem with respect to women entrepreneurs. Taking a social approach, the study has pointed out that access to resources in the form of financial, human and social capital are essential	Quantitative	Access to resources (financial, human, social capital)
33	(McAdam et al., 2019)	To understand how WE can achieve capital through networking. The study suggests that women entrepreneurial ecosystems can be derived by the networking systems inculcated by these women.	Qualitative	Networking and support systems
34	(Panda, 2018)	To review the constraints faced by the women entrepreneurs in a developing nation. The access to financial, human, social capital can act as a hindrance in the process	Qualitative	Access to resources (financial, human, social capital)
35	(Gupta & Mirchandani, 2018)	To investigate about the success of women owned SMEs in the UAE. Entrepreneurial success in these ventures is found to be driven by their supporting systems and the networking that they have built.	Quantitative	Networking and support systems
36	(Spiegler & Halberstadt, 2018)	To determine the role of network relationships in building idea generation process among female entrepreneurs. The study agrees that networking and such other supporting systems cause a positive idea generation situation among women.	Qualitative	Networking and support systems



37	(Cabrera & Mauricio, 2017)	To understand the factors that impact on the success of WE. The social and cultural factors are found to impact at micro, meso and even macro levels	Qualitative	Social and cultural factors
38	(Anggadwita et al., 2017)	To investigate the situation of women entrepreneurs in the emerging nation of Indonesia. The study highlights the importance of socio-cultural environment in promoting their entrepreneurial activities.	Quantitative	Social and cultural factors
39	(Mehtap et al., 2017)	To understand entrepreneurial intentions in young Arab women. The study has found that socio-cultural factors might pose its role as a barrier in the process.	Quantitative	Social and cultural factors
40	(F. S. M. A. Hasan & Almubarak, 2016)	To determine the factors that work towards the performance of women entrepreneurs in the SMEs. The study has been able to establish the significant role played by legal factors in enabling the performance of the women in SMEs.	Quantitative	Policy and regulatory factors
41	(Henry et al., 2016)	To evaluate the research on entrepreneurship and its relation to gender through methodological approaches. The study has been able to show that the factors of policy making along with legislative and regulatory aspects create an important element to drive the same.	Qualitative	Policy and regulatory factors
42	(Akinbami & Aransiola, 2016)	To study about the WE environment in rural Nigeria. The study has established cultural and social practices as	Qualitative	Social and cultural factors



		essential components of entrepreneurship development in the domain.		
43	(Carter et al., 2015)	To understand about barriers in building women enterprises by ethnic minority. The regulatory aspects derived by laid down policies can act as a barrier in such development.	Qualitative	Policy and regulatory factors
44	(Tinkler et al., 2015)	To investigate the decision-making abilities in a gender-based scenario for entrepreneurship ventures. The study finds that when it comes to WE the access to financial, human, social capital can cause an impact	Quantitative	Access to resources (financial, human, social capital)
45	(Tlaiss, 2014)	To estimate the barriers in WE through the cultural approach. The study in United Arab Emirates reflected the socio-cultural factors as significant influences in broadening the barriers.	Quantitative	Social and cultural factors
46	(De Vita et al., 2014)	To understand the women entrepreneurs from the developing regions specifically. The study has mentioned the important role of regulatory aspects and the policies in these regions that can influence on the WE levels	Qualitative	Policy and regulatory factors
47	(Noguera et al., 2013)	To understand the socio-cultural factors in terms of female entrepreneurship. The study has been able to establish the important role of both social and cultural factors in the formulation of educational and	Quantitative	Social and cultural factors



		other support policies to help the entrepreneurial activities		
48	(Griffiths et al., 2013)	To understand the social entrepreneurship situation among women through an empirical study. It reflects on the important role played by socio-cultural factors to support women in their business.	Quantitative	Social and cultural factors
49	(Ramadani et al., 2013)	To understand the perspectives of women entrepreneurs in the Macedonia region. The study found that these women are waiting for directions and the policies designed by the region can impact on their business development.	Quantitative	Policy and regulatory factors
50	(Naudé, 2013)	To evaluate the relation between entrepreneurship and economic development. The results mention that in driving female entrepreneurship as well, the role of policies can be very crucial	Qualitative	Policy and regulatory factors
51	(Sharma et al., 2012)	The indispensable role of women entrepreneurs in economic development is increasingly evident as they venture into diverse professions including trade, industry, and engineering, contributing significantly to national growth. Recognizing their pivotal role, initiatives to promote women entrepreneurship are underway. However, to thrive in the ever-evolving entrepreneurial landscape, women entrepreneurs must hone their skills and traits,	Quantitative	women entrepreneurs in economic development



		adapting to changing trends and global challenges while striving for excellence.		
--	--	--	--	--

The table above shows that based on the review conducted across the 51 articles, there are a total of five set of factors have been highlighted. These have been derived by conducting both qualitative and quantitative analysis. The factors include the social and cultural factors which refer to the influence of a woman's societal and cultural surroundings on her entrepreneurial venture. It is followed by economic and institutional factors which talks about the political and economic environment guiding the entrepreneurial venture led by a woman. Thirdly, the policy and regulatory factors are closely related to the Economic & Institutional factors where the policies and regulating guidelines led down by the government impact on a woman entrepreneur's journey. The fourth factor talks about the level of access to resources in the form of financial, human, social capital impact on WE and lastly, the need to have a networking and supporting system in WE is also found. All of these factors have been focused upon highly in the literature of WE and can be stated as the crucial factors when talking about the successful lead of women led enterprises. A discussion on the extracted factors in terms of the Entrepreneurship Development Programs are provided below.

3.2 Moderating role of Entrepreneurship Development Programs

Entrepreneurship Development Programs have been studied by researchers in various contexts. The need to facilitate entrepreneurs under such development programmes can cause several benefits. For example, its provision at an early stage such as at a higher education level can generate interest among individuals at an early age among students (Erlangga, 2019; Sk. M. Hasan et al., 2017). The use of Entrepreneurship Development Programs can also be done as a strategic move to make the entrepreneurs take a competitive advantage in the market (Cotoi et al., 2011; Nagayya & Rao, 2017). It is also deployed by government across countries to help their entrepreneurs achieve a support system to overcome the challenges of capital and resource raising (Tende, 2014). The use of Entrepreneurship Development Programs in economies can help them boost their position in the world as it encourages its entrepreneurs to compete at a global level with strong support system guiding them. (Sharma et al., 2012) The indispensable role of women entrepreneurs in economic development is increasingly evident as they venture into diverse professions including trade, industry, and engineering, contributing significantly to national growth.

Although the literature relating directly to Entrepreneurship Development Programs is limited, these programs can be effectively used to moderate the five factors extracted from the literature review above. The use of such programmes can act as a medium to systematize the path of entrepreneurship by overcoming the limitations with respect to the five factors. In the case of WE, the social and cultural factors are found to have greatly impact. This can be regularized



through the EDPs where it can provide a secure environment to work while maintaining work-life balance. The inclusion of a women entrepreneur into EDP can provide them an insight onto the possible solutions that they can take with respect to the regulatory and legal factors that govern their sector of work. It would help to derive economic understanding at a global level through channelized training by professionals. Networking by being a part of a programme automatically increases as it becomes a platform to interact with fellow entrepreneurs in the field. It broadens the scope to access resources and not only financial but also human and social capital through interaction with the right person guiding the EDP. The flow of information becomes routinised and concrete which would provide the women entrepreneurs a fair chance to compete with others in the market.

4 Entrepreneurship Development Programs & Women Entrepreneurial Ecosystem

4.1 Startup Phase

This phase refers to the initial phase in starting out an entrepreneurship venture. While each of the stages in an entrepreneurial journey has its own set of difficulties, the start-up phase can be stated as one of the most crucial. The first step towards developing a business venture among women are often surrounded by the difficulties of understanding the funding information and deciding from where to access the capital for their business (Welsh et al., 2016). Another crucial problem that arises are their ways of balancing their responsibilities with work (Paoloni & Dumay, 2015). Often women find lack of support to impact their start-up phases. It can lead to evolving lower confidence levels, experiencing role conflicts and struggling with their mental barriers.

In the course of time, however, there are several strategies that have been used by women in the entrepreneurial space to overcome such problems. While sometimes it includes deriving empowering and generating confidence all by themselves, and in the other times looking up to and following a role model (Özsungur, 2019). The use of technologies and its different available platforms for information sharing have also helped women to overcome challenges. They are able to share, co-create and learn from the use of social media platforms and allied technological sources (Suseno & Abbott, 2021).

From the review conducted above, one of the strategies that can be suggested as an effective way of overcoming the challenges among women entrepreneurs in the start-up phase include getting enrolled into Entrepreneurship Development Programs. The EDPs can act as a moderator in the process of setting up the start-up phase. From providing information about capital raising to filling up the legal forms associated with the starting of the business, EDPs can be used to generate a varied scope of information. The women entrepreneurs can rely on the EDPs for accurate information sourcing about managing finances and operational efficiencies in the initial stages. It would also help them to reach out to the right person in the



context of regulatory and economic management of the ventures. The EDPs can come as a strategic partner to the women entrepreneurs when it comes to recognizing the right move to take the venture from the start-up phase to the growth phase.

4.2 Growth Phase

The previous section has been able to highlight the challenges faced by women in the start-up phase of their business. The growth-phase is another critical area where the business can be at junctions of its success or failure in the market. It has also been mentioned above that technology can play a vital role in making their position in the entrepreneurial ecosystem strong (Ge et al., 2022). To do so, the use of technology-based methods of growing the business can be quite impactful. They can use it to upgrade themselves according to the needs of the market. As the market today is highly fluctuated, the use of technology can help to keep a track of the recent course of events and act accordingly (Demartini, 2019). The skill development levels among women entrepreneurs can be highly derived from the use of innovation and technology facilitated methods (Ranga & Etzkowitz, 2010). Overall, the use of innovation and technology together can immensely help in the growth phase of women's entrepreneurial ventures.

It is quite evident that integration of innovation and technology into the arena of women entrepreneurial ecosystem is highly effective, there are other scaling challenges for women that await them in this journey. These challenges include the lack of proper support and mentorship which often result in these entrepreneurs not having an idea about the way to handle their growth phases (Kille et al., 2022). The access to resources, including those that can facilitate innovation and technology, also pose as a hindrance in their way of operation. Moreover, the problem of awareness towards different initiatives laid down by the government can go unheard in such a situation (Bhuiyan & Abdullah, 2007). All these challenges have been observed by the researchers and needs to be addressed to make the women entrepreneurial ecosystem better. The strategic approach in such cases have been suggested and used such as forming an idea about resource utilization, seeking financial advisory help and looking into similar businesses being run using social media platforms (Cochran, 2019; Ferdousi & Mahmud, 2019). However, these strategies are being used by only those entrepreneurs who are well-versed with information. In case of women especially in India who have a restriction in accessing information, these challenges can still be there.

In this instance, the use of Entrepreneurship Development Programs can act as an effective support mechanism to carry the business forward in the growth stage. The technological support that can emerge out of EDPs would be updated, trustworthy and appropriately suggested when considering the nature of the business. The EDPs consists of information from a large database and hence the suggestions made can be reliable for application by the women entrepreneurs. EDPs help to take ideas and suggestions from similar businesses and can provide with a number of innovative ideas to take forward the business. The use of social media to



create a network and a digital marketing platform can be optimized by the appropriate information generated through EDPs. They can help the women entrepreneurs to make sustainable use of such platforms to make their businesses grow and reach to many more people across the world. As EDPs can generate skills among the women entrepreneurs for developing an innovative mindset, their sustainability in the market with it can be highly increased.

5 Conclusion &Future Directions

The study here has been an approach with systematic literature review to understand the critical factors driving WE. With a detailed review of 51 papers, the study has been able to extract a total of five factors that dominate the research in the area. These include – social and cultural factors, economic and institutional factors, policy and regulatory factors, access to resources and networking and support systems. All these factors comply with different aspects of WE and are able to generate focus on to the most crucial aspects of the domain. These factors reveal that to sustain in the field of WE one has to focus upon them and omit any barrier arising in these contexts. As these factors emerge from the study of the area, literature portrays EDPs as essential tools to furnish the skills among entrepreneurs. As the challenges related to, WE are more, these can be overcome by using a systematized management process through EDPs. Based on the findings of the study the following key themes have been found with respect to the study.

Table 3 – Key Themes and Categories Identified

	Key Themes	Categories
75 Articles	Social and cultural factors	Factors
	Economic and institutional factors	
	Policy and regulatory factors	
	Access to resources (financial, human, social capital)	
	Networking and support systems	
	Qualitative Method	Methodology
	Quantitative Method	
	EDP use for competitive advantage in entrepreneurship	Strategy

In the future course of action, the implementation of EDPs into WE need to be increased as it can help in generating satisfactory results. A tailored structure in the EDPs with respect to the diverse challenges in WE need to be introduced. This can be in the form of special mentoring sessions, training modules by keeping in mind the demography of the women entrepreneurs, ability to network effectively. The need to design EDPs in an affordable and highly accessible domain is the prime requirement here. It must also include a holistic approach where along with business skill development, a focus into leadership and negotiation must also be taken. Lastly, the EDPs must be technologically driven so that these women entrepreneurs do not lack in creating a technologically advance environment for themselves.



The review here has generated a number of suggestions for further research as well. The integration of EDPs into WE is very scarce. As both concepts are on the rise future research should definitely focus on the same. A longitudinal study with the application of EDPs into WE can help in providing a holistic look into the domain. There can be conceptual model development and testing done with respect to the integration of EDPs into women entrepreneurial ventures so that a generalized approach can be put forward.

References

- Adom, K., & Anambane, G. (2019). Understanding the role of culture and gender stereotypes in WE through the lens of the stereotype threat theory. *Journal of Entrepreneurship in Emerging Economies*, 12(1), 100–124. <https://doi.org/10.1108/JEEE-07-2018-0070>
- Agarwal, S., Lenka, U., Singh, K., Agrawal, V., & Agrawal, A. M. (2020). A qualitative approach towards crucial factors for sustainable development of women social entrepreneurship: Indian cases. *Journal of Cleaner Production*, 274, 123135. <https://doi.org/10.1016/j.jclepro.2020.123135>
- Akinbami, C. A. O., & Aransiola, J. O. (2016). Qualitative exploration of cultural practices inhibiting rural WE development in selected communities in Nigeria. *Journal of Small Business & Entrepreneurship*, 28(2), 151–167. <https://doi.org/10.1080/08276331.2015.1102476>
- Alene, E. T. (2020). Determinants that influence the performance of women entrepreneurs in micro and small enterprises in Ethiopia. *Journal of Innovation and Entrepreneurship*, 9(1), 24. <https://doi.org/10.1186/s13731-020-00132-6>
- Al-Kwif, O. S., Tien Khoa, T., Ongsakul, V., & Ahmed, Z. U. (2020). Determinants of female entrepreneurship success across Saudi Arabia. *Journal of Transnational Management*, 25(1), 3–29. <https://doi.org/10.1080/15475778.2019.1682769>
- Amrita, K., Garg, C. P., & Singh, S. (2018). Modelling the critical success factors of WE using fuzzy AHP framework. *Journal of Entrepreneurship in Emerging Economies*, 10(1), 81–116. <https://doi.org/10.1108/JEEE-03-2017-0017>
- Anggadwita, G., Luturlean, B. S., Ramadani, V., & Ratten, V. (2017). Socio-cultural environments and emerging economy entrepreneurship. *Journal of Entrepreneurship in Emerging Economies*, 9(1), 85–96. <https://doi.org/10.1108/JEEE-03-2016-0011>
- Ariffin, A. S., Baqutayan, S. M. S., & Mahdzir, A. M. (2021). Enhancing WE Development Framework: Policy & Institution Gap and Challenges in the Case of Malaysia. *Journal of Science, Technology and Innovation Policy*, 6(2), 22–23.
- Bhuiyan, M. B., & Abdullah, R. (2007). Women empowerment through entrepreneurship development: Bangladesh perspective.



- Brush, C., Ali, A., Kelley, D., & Greene, P. (2017). The influence of human capital factors and context on women's entrepreneurship: Which matters more? *Journal of Business Venturing Insights*, 8, 105–113. <https://doi.org/10.1016/j.jbvi.2017.08.001>
- Bullough, A., Guelich, U., Manolova, T. S., & Schjoedt, L. (2022). Women's entrepreneurship and culture: gender role expectations and identities, societal culture, and the entrepreneurial environment. *Small Business Economics*, 58(2), 985–996. <https://doi.org/10.1007/s11187-020-00429-6>
- Cabrera, E. M., & Mauricio, D. (2017). Factors affecting the success of women's entrepreneurship: a review of literature. *International Journal of Gender and Entrepreneurship*, 9(1), 31–65. <https://doi.org/10.1108/IJGE-01-2016-0001>
- Cardella, G. M., Hernández-Sánchez, B. R., & Sánchez-García, J. C. (2020). WE: A Systematic Review to Outline the Boundaries of Scientific Literature. *Frontiers in Psychology*, 11. <https://doi.org/10.3389/fpsyg.2020.01557>
- Carter, S., Mwaura, S., Ram, M., Trehan, K., & Jones, T. (2015). Barriers to ethnic minority and women's enterprise: Existing evidence, policy tensions and unsettled questions. *International Small Business Journal: Researching Entrepreneurship*, 33(1), 49–69. <https://doi.org/10.1177/0266242614556823>
- Chaker, H., & Zouaoui, S. (2023). Meeting the Challenge of Entrepreneurship with Social Media: The Case of Tunisian Women Entrepreneurs. *Journal of Entrepreneurship and Innovation in Emerging Economies*, 9(1), 33–61. <https://doi.org/10.1177/23939575221138439>
- Chakraborty, U., & Biswal, S. K. (2023). Impact of social media participation on female entrepreneurs towards their digital entrepreneurship intention and psychological empowerment. *Journal of Research in Marketing and Entrepreneurship*, 25(3), 374–392. <https://doi.org/10.1108/JRME-03-2021-0028>
- Cochran, S. L. (2019). What's Gender Got to Do with It? The Experiences of U.S. WE Students. *Journal of Small Business Management*, 57(sup1), 111–129. <https://doi.org/10.1111/jsbm.12508>
- Cotoi, E., Bodoasca, T., Catana, L., & Cotoi, I. (2011). Entrepreneurship European development strategy in the field of education. *Procedia - Social and Behavioral Sciences*, 15, 3490–3494. <https://doi.org/10.1016/j.sbspro.2011.04.323>
- Cullen, U. (2019). Sociocultural factors as determinants of female entrepreneurs' business strategies. *Journal of Entrepreneurship in Emerging Economies*, 12(1), 144–167. <https://doi.org/10.1108/JEEE-04-2019-0046>
- Dal Mas, F., & Paoloni, P. (2020). A relational capital perspective on social sustainability; the case of female entrepreneurship in Italy. *Measuring Business Excellence*, 24(1), 114–130. <https://doi.org/10.1108/MBE-08-2019-0086>



- De Vita, L., Mari, M., & Poggesi, S. (2014). Women entrepreneurs in and from developing countries: Evidences from the literature. *European Management Journal*, 32(3), 451–460. <https://doi.org/10.1016/j.emj.2013.07.009>
- Demartini, P. (2019). Why and How Women in Business Can Make Innovations in Light of the Sustainable Development Goals. *Administrative Sciences*, 9(3), 64. <https://doi.org/10.3390/admsci9030064>
- Dewitt, S., Jafari-Sadeghi, V., Sukumar, A., Aruvanahalli Nagaraju, R., Sadraei, R., & Li, F. (2023). Family dynamics and relationships in female entrepreneurship: an exploratory study. *Journal of Family Business Management*, 13(3), 626–644. <https://doi.org/10.1108/JFBM-01-2022-0013>
- Emmanuel, C. L. (2002). *Entrepreneurship: A conceptual approach*. Concept Publications.
- Erlangga, H. (2019). The Meaning, Benefit and Importance of Development Entrepreneurship in Higher Education. *Asian Journal of Contemporary Education*, 3(2), 105–110. <https://doi.org/10.18488/journal.137.2019.32.105.110>
- Ferdousi, F., & Mahmud, P. (2019). Role of social business in WE development in Bangladesh: perspectives from Nobin Udyokta projects of Grameen Telecom Trust. *Journal of Global Entrepreneurship Research*, 9(1), 58. <https://doi.org/10.1186/s40497-019-0184-0>
- Gadzali, S. S., Harahap, M. A. K., Tarigan, I. M., Nasution, A. A., & Ausat, A. M. A. (2023). Women's entrepreneurship: an examination of government support and the role of knowledge skills. *Community development journal*, 4(1), 713–717.
- Ge, T., Abbas, J., Ullah, R., Abbas, A., Sadiq, I., & Zhang, R. (2022). Women's Entrepreneurial Contribution to Family Income: Innovative Technologies Promote Females' Entrepreneurship Amid COVID-19 Crisis. *Frontiers in Psychology*, 13. <https://doi.org/10.3389/fpsyg.2022.828040>
- Griffiths, M. D., Gundry, L. K., & Kickul, J. R. (2013). The socio-political, economic, and cultural determinants of social entrepreneurship activity. *Journal of Small Business and Enterprise Development*, 20(2), 341–357. <https://doi.org/10.1108/14626001311326761>
- Gupta, N., & Mirchandani, A. (2018). Investigating entrepreneurial success factors of women-owned SMEs in UAE. *Management Decision*, 56(1), 219–232. <https://doi.org/10.1108/MD-04-2017-0411>
- Hasan, F. S. M. A., & Almubarak, M. M. S. (2016). Factors influencing women entrepreneurs' performance in SMEs. *World Journal of Entrepreneurship, Management and Sustainable Development*, 12(2). <https://doi.org/10.1108/WJEMSD-09-2015-0037>



- Hasan, Sk. M., Khan, E. A., & Nabi, Md. N. U. (2017). Entrepreneurial education at university level and entrepreneurship development. *Education + Training*, 59(7/8), 888–906. <https://doi.org/10.1108/ET-01-2016-0020>
- Henry, C., Foss, L., & Ahl, H. (2016). Gender and entrepreneurship research: A review of methodological approaches. *International Small Business Journal: Researching Entrepreneurship*, 34(3), 217–241. <https://doi.org/10.1177/0266242614549779>
- Kamberidou, I. (2020). “Distinguished” women entrepreneurs in the digital economy and the multitasking whirlpool. *Journal of Innovation and Entrepreneurship*, 9(1), 3. <https://doi.org/10.1186/s13731-020-0114-y>
- Khan, R. U., Salamzadeh, Y., Shah, S. Z. A., & Hussain, M. (2021). Factors affecting women entrepreneurs’ success: a study of small- and medium-sized enterprises in emerging market of Pakistan. *Journal of Innovation and Entrepreneurship*, 10(1), 11. <https://doi.org/10.1186/s13731-021-00145-9>
- Kille, T., Wiesner, R., Lee, S.-Y., Johnson Morgan, M., Summers, J., & Davoodian, D. (2022). Capital Factors Influencing Rural, Regional and Remote Women’s Entrepreneurship Development: An Australian Perspective. *Sustainability*, 14(24), 16442. <https://doi.org/10.3390/su142416442>
- Kimbu, A. N., Ngoasong, M. Z., Adeola, O., & Afenyo-Agbe, E. (2020). Collaborative Networks for Sustainable Human Capital Management in Women’s Tourism Entrepreneurship: The Role of Tourism Policy. In *Sustainable Tourism Policy and Planning in Africa* (1st ed.).
- Koneru, K. (2017). WE in India - Problems and Prospects. *SSRN Electronic Journal*. <https://doi.org/10.2139/ssrn.3110340>
- Kothawale, C. P. (2013). WE Development: Problems & Prospects . *International Multidisciplinary Research Journal*, 2(1).
- Kurtege Sefer, B. (2020). A gender- and class-sensitive explanatory model for rural WE in Turkey. *International Journal of Gender and Entrepreneurship*, 12(2), 191–210. <https://doi.org/10.1108/IJGE-07-2019-0113>
- Martínez-Rodríguez, I., Quintana-Rojo, C., Gento, P., & Callejas-Albiñana, F.-E. (2022). Public policy recommendations for promoting female entrepreneurship in Europe. *International Entrepreneurship and Management Journal*, 18(3), 1235–1262. <https://doi.org/10.1007/s11365-021-00751-9>
- Maseda, A., Iturralde, T., Cooper, S., & Aparicio, G. (2022). Mapping women’s involvement in family firms: A review based on bibliographic coupling analysis. *International Journal of Management Reviews*, 24(2), 279–305. <https://doi.org/10.1111/ijmr.12278>
- Mashapure, R., Nyagadza, B., Chikazhe, L., Mazuruse, G., & Hove, P. (2023). WE development and sustainable rural livelihoods in Zimbabwe. *Arab Gulf Journal of Scientific Research*, 41(4), 557–584. <https://doi.org/10.1108/AGJSR-07-2022-0112>



- McAdam, M., Harrison, R. T., & Leitch, C. M. (2019). Stories from the field: women's networking as gender capital in entrepreneurial ecosystems. *Small Business Economics*, 53(2), 459–474. <https://doi.org/10.1007/s11187-018-9995-6>
- Mehtap, S., Pellegrini, M. M., Caputo, A., & Welsh, D. H. B. (2017). Entrepreneurial intentions of young women in the Arab world. *International Journal of Entrepreneurial Behavior & Research*, 23(6), 880–902. <https://doi.org/10.1108/IJEBr-07-2017-0214>
- Mensah, M. S., & Derera, E. (2023). Analysis of Ghana's and South Africa's women's entrepreneurship policies. . In *Women's Entrepreneurship Policy: A Global Perspective* (214th ed.).
- Nagayya, D., & Rao, B. A. (2017). Entrepreneurship Development: A New Strategy. *IUP Journal of Entrepreneurship Development*, 14(1).
- Naudé, W. (2013). Entrepreneurship and Economic Development: Theory, Evidence and Policy. *SSRN Electronic Journal*. <https://doi.org/10.2139/ssrn.2314802>
- Neumeyer, X., Santos, S. C., Caetano, A., & Kalbfleisch, P. (2019). Entrepreneurship ecosystems and women entrepreneurs: a social capital and network approach. *Small Business Economics*, 53(2), 475–489. <https://doi.org/10.1007/s11187-018-9996-5>
- Noguera, M., Alvarez, C., & Urbano, D. (2013). Socio-cultural factors and female entrepreneurship. *International Entrepreneurship and Management Journal*, 9(2), 183–197. <https://doi.org/10.1007/s11365-013-0251-x>
- Nziku, D. M., & Henry, C. (2020). Policies for supporting women entrepreneurs in developing countries: the case of Tanzania. *Journal of Entrepreneurship and Public Policy*, 10(1), 38–58. <https://doi.org/10.1108/JEPP-09-2020-0073>
- Ogundana, O. M., Simba, A., Dana, L.-P., & Liguori, E. (2021). WE in developing economies: A gender-based growth model. *Journal of Small Business Management*, 59(sup1), S42–S72. <https://doi.org/10.1080/00472778.2021.1938098>
- Ojediran, F. (Olufunmilola), & Anderson, A. (2020). Women's Entrepreneurship in the Global South: Empowering and Emancipating? *Administrative Sciences*, 10(4), 87. <https://doi.org/10.3390/admsci10040087>
- Owalla, B., Nyanzu, E., & Vorley, T. (2021). Intersections of gender, ethnicity, place and innovation: Mapping the diversity of women-led SMEs in the United Kingdom. *International Small Business Journal: Researching Entrepreneurship*, 39(7), 681–706. <https://doi.org/10.1177/0266242620981877>
- Ozasir Kacar, S., Essers, C., & Benschop, Y. (2023). A contextual analysis of entrepreneurial identity and experience: women entrepreneurs in Turkey. *Entrepreneurship & Regional Development*, 35(5–6), 460–481. <https://doi.org/10.1080/08985626.2023.2189314>
- Özsungur, F. (2019). A research on women's entrepreneurship motivation: Sample of Adana Province. *Women's Studies International Forum*, 74, 114–126. <https://doi.org/10.1016/j.wsif.2019.03.006>



- Panda, S. (2018). Constraints faced by women entrepreneurs in developing countries: review and ranking. *Gender in Management: An International Journal*, 33(4), 315–331. <https://doi.org/10.1108/GM-01-2017-0003>
- Paoloni, P., & Dumay, J. (2015). The relational capital of micro-enterprises run by women: the startup phase. *VINE*, 45(2), 172–197. <https://doi.org/10.1108/VINE-01-2014-0003>
- Ramadani, V., Gërguri, S., Dana, L. P., & Tašaminova, T. (2013). Women entrepreneurs in the Republic of Macedonia: waiting for directions. *International Journal of Entrepreneurship and Small Business*, 19(1), 95. <https://doi.org/10.1504/IJESB.2013.054330>
- Ranga, M., & Etzkowitz, H. (2010). Athena in the World of Techne: The Gender Dimension of Technology, Innovation and Entrepreneurship. *Journal of Technology Management & Innovation*, 5(1). <https://doi.org/10.4067/S0718-27242010000100001>
- Roomi, M. A. (2013). Entrepreneurial capital, social values and Islamic traditions: Exploring the growth of women-owned enterprises in Pakistan. *International Small Business Journal: Researching Entrepreneurship*, 31(2), 175–191. <https://doi.org/10.1177/0266242610397403>
- Roos, A. (2021). Chapter Embeddedness in context: understanding gender in a female entrepreneurship network. In *Understanding Women's Entrepreneurship in a Gendered Context* (1st ed.).
- Rosca, E., Agarwal, N., & Brem, A. (2020). Women entrepreneurs as agents of change: A comparative analysis of social entrepreneurship processes in emerging markets. *Technological Forecasting and Social Change*, 157, 120067. <https://doi.org/10.1016/j.techfore.2020.120067>
- Rudhumbu, N., du Plessis, E. (Elize), & Maphosa, C. (2020). Challenges and opportunities for women entrepreneurs in Botswana: revisiting the role of entrepreneurship education. *Journal of International Education in Business*, 13(2), 183–201. <https://doi.org/10.1108/JIEB-12-2019-0058>
- Saini, J. S., & Bhatia, B. S. (1996). Impact of Entrepreneurship Development Programmes. *The Journal of Entrepreneurship*, 5(1), 65–80. <https://doi.org/10.1177/097135579600500104>
- Sharma, R., & Rana, G. (2021). An overview of entrepreneurship development programs in India. *International Journal of Environmental Policy and Decision Making*, 3(1), 16. <https://doi.org/10.1504/IJEPDM.2021.119511>
- Sharma, S. C., Verma, V., & Kumar, S. (2012). A Review: Women Entrepreneurship "An era of transition." *Shiv Shakti, International Journal in Multidisciplinary and Academic Research (SSIJMAR)*, 1(3), September-October. ISSN: 2278-5973.



- Sharma, S. C., Verma, V., & Kumar, S. (2012). A Review: Women Entrepreneurship "An era of transition." *Shiv Shakti, International Journal in Multidisciplinary and Academic Research (SSIJMAR)*, 1(3), September-October. ISSN: 2278-5973.
- Spiegler, A. B., & Halberstadt, J. (2018). SHEstainability: how relationship networks influence the idea generation in opportunity recognition process by female social entrepreneurs. *International Journal of Entrepreneurial Venturing*, 10(2), 202. <https://doi.org/10.1504/IJEV.2018.092716>
- Suseno, Y., & Abbott, L. (2021). Women entrepreneurs' digital social innovation: Linking gender, entrepreneurship, social innovation and information systems. *Information Systems Journal*, 31(5), 717–744. <https://doi.org/10.1111/isj.12327>
- Tende, S. B. A. (2014). Government Initiatives Toward Entrepreneurship Development in Nigeria. *Global Journal of Business Research*, 8(1), 109–120.
- Tinkler, J. E., Bunker Whittington, K., Ku, M. C., & Davies, A. R. (2015). Gender and venture capital decision-making: The effects of technical background and social capital on entrepreneurial evaluations. *Social Science Research*, 51, 1–16. <https://doi.org/10.1016/j.ssresearch.2014.12.008>
- Tiwari, D., & Shastri, S. (2023). Women entrepreneurs during COVID-19 pandemic: does their social capital matter? *Continuity & Resilience Review*, 5(1), 36–52. <https://doi.org/10.1108/CRR-07-2022-0012>
- Tlaiss, H. A. (2014). Women's Entrepreneurship, Barriers and Culture: Insights from the United Arab Emirates. *The Journal of Entrepreneurship*, 23(2), 289–320. <https://doi.org/10.1177/0971355714535307>
- Touissate, H., & AZDIMOUS, H. (2021). WE in the MENA region: Factors influencing entrepreneurial motivation. *International Journal of Financial Accountability, Economics, Management, and Auditing (IJFAEMA)*, 3(3), 264–272. <https://doi.org/10.52502/ijfaema.v3i3.78>
- Welsh, D. H. B., Kaciak, E., & Thongpapanl, N. (2016). Influence of stages of economic development on women entrepreneurs' startups. *Journal of Business Research*, 69(11), 4933–4940. <https://doi.org/10.1016/j.jbusres.2016.04.055>
- Yap, C. S., Keling, W., & Ho, P. L. (2023). Determinants of entrepreneurial performance of rural indigenous women entrepreneurs in Sarawak, Malaysia. *Gender in Management: An International Journal*, 38(3), 337–356. <https://doi.org/10.1108/GM-06-2021-0170>.