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(JEPM) *Assessing the Entrepreneurship Ecosystem in Egypt  
through a Gender Lens*



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## Assessing the Entrepreneurship Ecosystem in Egypt through a Gender Lens

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### Abstract

**Purpose:** According to the Egyptian Start-up Ecosystem Report (ITIDA, 2021), Egypt has one of the foremost start-up ecosystems on Africa, both in terms of levels of start-up activity and inward investments. Yet the country lags in terms of women's participation in founding start-ups. According to the latest Global Entrepreneurship Monitor report for Egypt, the entrepreneurial activity rate for women was 5.7%, while that of Egyptian men was 16.7%, despite women's positive attitudes towards entrepreneurship.

**Methodology:** The current research has an exploratory nature and aims at analysing entrepreneurship ecosystem in Egypt through a gender lens to highlight the factors that are hindering Egyptian women from exploiting the different elements of the ecosystem. To achieve this, it adopts the exploratory research approach combining semi-structured interviews with ten women entrepreneurs chosen using expert sampling and an online survey distributed via Egyptian entrepreneurs' online communities.

**Findings:** Analysis shows that Egyptian women entrepreneurs do not believe that the ecosystem discriminates against them, but there are some practices that are gender-insensitive which poses challenges to women hence impact their presence and activities within the ecosystem.

**Unique contribution to theory, policy and practice:** The results add to the literature of both entrepreneurship ecosystem and women entrepreneurship in Egypt and it provides practical implications to leverage Egyptian women participation in entrepreneurship.

**Keywords:** *Entrepreneurship, Women Entrepreneurs, Entrepreneurship Ecosystem, Gender lens*

### Statements and Declarations

1. "The author confirms that all data generated or analysed during this study are included in this published article".
2. "The author confirms that there are no financial or non-financial interests that are directly or indirectly related to the work submitted for publication"

3. “The author confirm that all the interviewees provided their consent participate in the paper, yet agreed to keep their identity and name of business anonymous”

## 1 Introduction

It has been widely acknowledged that entrepreneurship is vital to the economic and social development of countries. It provides a pathway for job creation, income generation and poverty reduction. It has been used to describe the set of actions that lead to the creation of new products and services rather than being an attribute of a certain profile of people and interests (Ward, Hernández-Sánchez and Sánchez-García, 2019). However, the literature on the topic has shown variations among men and women in terms of their motives to start the business, the challenges and opportunities they face and their growth aspirations. Hence, a new stream has emerged focusing on women entrepreneurs and has been expanding exponentially since then (Poggesi, Mari and De Vita, 2016), coupled with an increase in number of women emerging as entrepreneurs both in developed and developing economies.

Woman entrepreneur is viewed as any woman who takes an action to organize and manage resources and bears all the risks to establish and grow an enterprise and derive profit out of it (Tiwari, 2017). Being an entrepreneur has a lot of benefits to women themselves; it serves as an equalizing factor against social and economic inequalities (Rashid and Ratten, 2020), it increases their mobility, assists them in being economically empowered, and enable them to achieve greater independence and self-assertion. Moreover, their impact extends beyond themselves to contribute immensely to improving poverty levels, increasing per capita income and employment creation. However, the gap in entrepreneurial activities between males and females remains persistent. In the Women’s Entrepreneurship 2020-2021 report (Elam et al., 2021), the global average of the Total Early-stage Entrepreneurial Activity rate (TEA), which is the percentage of adults between the ages of 18 and 64 who are in the process of starting a business or already started a business less than 3.5 years, for women entrepreneurs was 10.4%, which is about three-quarters the rate of men, whose TEA is 13.6%.

This pattern is witnessed in Egypt, where the gender gap in entrepreneurship has been consistent over the years (Rizk and Rashed, 2022; Mahrous, 2019; Hattab, 2012; El-Hamidi, 2011), not only this, but the percentage of Egyptian women entrepreneurs is one of the lowest in the MENA region (Shorbagi et al., 2017). According to Global Entrepreneurship Monitor (GEM) for Egypt 2020-2021 (Ismail et al., 2022), the total entrepreneurial activity rate among Egyptian women was 5.7%, while that of Egyptian males was 16.7%, despite they have positive attitudes towards entrepreneurship as they perceive it as a good career choice, they believe they have the required start-up skills and have an intention to start their businesses (Elam et al., 2022). Thus, these figures are alarming as it signals a wasted opportunity.

Although there is an argument that the challenges faced by women entrepreneurs are not gender-specific, and all entrepreneurs face significant challenges, however, women entrepreneurs face higher barriers based on their gender that might” jeopardize women’s capacity to start and grow businesses and thereby limit their ability to act as agents of change in their communities and societies” (UNICEF, 2021, p. 1). Shankar, Elam and Glinski (2020)

summoned the barriers facing women entrepreneurs on accessing and mobilizing economic, social and cultural capital, which goes against the general assumption behind entrepreneurial ecosystems stating that all entrepreneurs, irrespective of their gender, have equal access to the elements, resources, and opportunities that lie within the ecosystem (Brush et al., 2019).

Entrepreneurial ecosystems (EE) are defined as a “set of interdependent actors and factors coordinated in such a way that they enable productive entrepreneurship within a particular territory” (Stam and Spigel, 2016, p. 1). Within this framework, the EE in Egypt has been growing over the past years due to the increase in the key players, quantitatively and qualitatively, who enabled and supported Egyptians in their attempt to start and grow their businesses. This has resulted in a continuous increase in the number of entrepreneurs; nevertheless, women apparently did not get their fair share of support as numbers indicate. Thus, it is deemed imperative to understand entrepreneurship ecosystem in Egypt from women entrepreneurs’ level of perception to reveal the reasons that might prevent them from utilising and benefitting from all these programmes and services within the ecosystem. Hence, the current research aims at answering the following question “how do women entrepreneurs in Egypt perceive the entrepreneurial ecosystem?”

The women entrepreneurship research stream in Egypt has been evolving over the last years, but it is not fully investigated, so by answering this question, this study adds to this stream and opens the door for further research considering its findings. Moreover, the study contributes to the entrepreneurial ecosystem literature, specifically in Egypt. Despite of the increasing interest, it is still a nascent topic in Egypt; hence this paper improves our understanding of EE in the country. The study has a practical implication as it will enable the policy makers and key players of the entrepreneurship ecosystem in Egypt to cater to the needs of women entrepreneurs and focus their efforts on the direction deemed necessary by women themselves; hence leverage their participation and improve their performance.

The paper is divided into the following parts, the first part, which is the theoretical background, briefly presents the entrepreneurship ecosystem in terms of definition to pave the way to featuring entrepreneurship ecosystem in Egypt. This part as well introduces the current situation of women entrepreneurs in Egypt highlighting the challenges they face. The second part introduces the methodology utilized to fulfil the research’s aim, while the third part presents the analysis of data and the final part concludes the study and provides some recommendations.

## **2 Theoretical Background**

### *2.1 Entrepreneurship Ecosystem*

With the growing interest in entrepreneurship and acknowledging its powerful impact, calls were made to further our understanding of the phenomenon, in light of variations among countries in their entrepreneurial activities or even within the same country. This was accompanied with the acknowledgement that focusing only on the entrepreneur may be too narrow (Acs, Szerb and Autio, 2014) and inefficient in explaining why certain countries/regions are more nurturing to entrepreneurship than others. In 2010 Isenberg discussed the entrepreneurship ecosystem (Stam, 2015) describing the environment in which

entrepreneurship can thrive, claiming that success cannot be achieved depending on one factor only (Khattab and Al-Magli, 2017). Moreover, Isenberg (2011) developed what is known as ‘entrepreneurship ecosystem for economic development.

There were many attempts to define the concept. For example, Sussan and Acs (2017) defined EE as a “...dynamic institutionally embedded interaction between entrepreneurial attitudes, abilities and aspirations, by individuals, which drives the allocation of resources through the creation and operation of new ventures” (p.61). While Spiegel (2017) defined it as a “combination of social, political and cultural elements within a region that support the development and growth of innovative start-ups and encourage nascent entrepreneurs and other actors to take the risks of starting, funding, and otherwise assisting high-risk ventures.” (p. 50), in addition to many other definitions that are available in the literature (Audretsch and Belitski, 2017; Acs et al., 2017; Stam, 2015; Isenberg, 2011). Following that, many researchers attempted to clarify the constituents of the entrepreneurship ecosystem but due to differences in its definition, some direct and indirect elements and indexes were developed yet the empirical evidence of a unified definition and constituents remain limited (Liguori et al., 2019). Thus, for the sake of the current study, the researcher is adopting Isenberg’s view (2011) that the ecosystem is composed of core domains, which are policy, markets, finance, culture, support, and human capital. Those six domains have been the base of many studies and models described and discussed the ecosystem (Stephens et al., 2022).

Over the past few years, entrepreneurship in Egypt has been gaining a tremendous interest, due to its importance in reducing unemployment especially among youth and its overall positive impact. This interest was reflected in the flourishing entrepreneurship ecosystem (Ismail et al., 2022; Ali et al., 2021; Ismail, 2020; Zaki and Zeini, 2019), to extent it positioned Egypt as the fourth largest start-up ecosystem on Africa (ITIDA, 2021) and Cairo, the capital, has been acknowledged among the top 10 best cities in the world to create a new venture (Ragab, Ragab and Monaghan, 2020). This has been the outcome of the rapid evolving of support programs (for example incubators and accelerators), the increase in the number of funding mechanisms, establishments of governmental entities with mandate to support entrepreneurship, in addition to the development of entrepreneurship educational programmes targeting students at different stages of education as well as technical and vocational education and training (TVET).

## *2.2 Women entrepreneurship in Egypt*

As a result of the work of different parties in the country, Egyptian women have achieved advancements in different areas including entrepreneurship. Government of Egypt (GoE) has been exerting great efforts in diminishing gender gaps across various business sectors, through the multiple initiatives and organisations that support women, in addition to the laws and regulations that promote gender equality and support women’s participation in the labour force.

There are several initiatives designed to promote women entrepreneurship to help them overcome biases and obstacles in the Egyptian context in addition to improving the socio-economic environment. For example, establishing the National Council for Women (NCW) by Presidential Decree No. 90 of 2000, with an authorization from the government to advance the

status of Egyptian women by enhancing their social, economic and political status. Moreover, in 2017, the GoE declared the “Year of Egyptian Women” and National Women’s Strategy 2017-2030 was launched (Hassan and Zahria, 2021) to grant the Egyptian woman more rights and gains while taking measures that ensure her fair civil and political rights and representation in all decision - making positions. Another government-backed programme is “Heya Ra’eda”, by the Technology Innovation and Entrepreneurship Center (TIEC) to support early-stage women entrepreneurs operating in the ICT sector (Al-Din, 2021). Supporting women entrepreneurs is not exclusive to the government (El-Fiky, 2021), as there are other parties who are either collectively or individually work towards supporting women through financial and non-financial services, for example, the European Bank for Reconstruction and Development, the Canadian International Agency (CIDA), the Micro, Small and Medium-Sized Enterprises Development Agency, and the Ministry of Trade and Industry, in addition to many banks now who should have quotas to fund SMEs as well as women-led businesses.

Despite these initiatives and efforts to boost women entrepreneurship, the percentage of Egyptian women entrepreneurs is one of the lowest in the MENA region (Shorbagi et al., 2017). According to Global Entrepreneurship Monitor (GEM) for Egypt 2020-2021 (Ismail et al., 2022), the total entrepreneurial activity rate among Egyptian women was 5.7%, which is not only lower than that of Egyptian men, but if compared to other GEM cycles between 2008 and 2022, it is lower than it was in in 2008, which was 6% then (Hattab, 2008). Not only this, but of all entrepreneurs who manage to grow their businesses beyond three years, women’s share is 14.6% only, which is lower than the global average and MENA average (Ismail et al., 2022). Moreover, Egypt ranks 64 out of 65 according Mastercard Index of Women Entrepreneurs 2021 global ranking (Mastercard, 2021).

According to (Welsh, Kaciak and Shamah, 2018), Egyptian women entrepreneurs face a hostile environment, which is characterized of being unpredictable and constraining. In such environment, the economic, political, and cultural aspects pose huge pressure that impacts negatively the performance and sustainability of women-owned businesses (Al-Dajani and Marlow, 2013). They have difficulties in accessing finance from formal institutions such as banks (Adly and Kathib, 2014). Moreover, the Egyptian cultural norms perceive starting businesses to be risky and should not be perused by women; it is men’s job while the women should be responsible for the household (Beninger et al., 2016). This is even more evident in rural areas (Elkafrawi and Refai, 2022) where the prevalent customs and traditions play a significant role in hindering rural women’s entrepreneurial activities through the prevailing patriarchal culture, where women should seek men’s consent to their economic activities. Another challenge as well as is the insufficient social services which would allow women to work after starting a family (Jochaud, 2013).

Other challenges that are facing women entrepreneurs but not much highlighted, access to resources, time burden, intra-household decision making, and limited control over resource as well as markets, etc (El-Hamidi, 2011). Egyptian women have reported discrimination against them in regulations related to business rules and regulations (Beninger et al., 2016). Moreover, women have hardships in forming social network that could support them later (MoF, 2007) which leads them to work in isolation and stops them from being able to reach other

associations or access vital information on policies and requirements, ultimately hindering their growth and sustainability.

It is evident that the systematic interventions are not yielding the expected results in supporting women entrepreneurs in Egypt as the numbers over the years have shown, which suggests the presence of a gap between how the ecosystem is thriving to support women and what women need to start and grow their businesses. Hence, it is imperative to investigate and assess the ecosystem via a gender lens to bridge this gap, which is the main aim of the current study.

### **3 Methodology**

The current research aims at analysing entrepreneurship ecosystem in Egypt through a gender lens to highlight the factors that are hindering Egyptian women from exploiting the different elements of the ecosystem. To achieve this, it adopts the exploratory research approach combining qualitative and quantitative methods to collect primary data.

#### *3.1 Data collection*

The research has been conducted based on secondary and primary data. The secondary data was presented in the theoretical background attempted to introduce entrepreneurship ecosystem, specifically in Egypt and the status of Egyptian women entrepreneurs and the different initiatives and programmes targeting them. This has been based on different sources available in the entrepreneurship literature, including books, articles, reports, and academic journals.

The primary data was collected utilizing a mix of quantitative and qualitative techniques. Combining the two approaches allows for dual validation of data and findings (Kelle, 2006), and provide a coherent and complete picture of situation under investigation.

Regarding the quantitative method, data were collected using an online survey that was shared with respondents which later was followed by a reminder. It was chosen for its convenience, flexibility, and speed (Evans and Mathur, 2018). The online questionnaire was divided into three main sections. The first section aimed at exploring the profile of women entrepreneurs in Egypt, hence included questions about age and education. The second part aimed at revealing the profile of businesses owned by women entrepreneurs, hence included questions about the start date, industry, number of employees and products and services and sources of funding. The third part aimed at discovering women's perception of the ecosystem, hence included statements about the six elements of the ecosystem (Isenberg, 2010) which are finance, policy, human capital, markets, support, and culture. The statements were adapted from the work of Stam (2018), Stephens et al. (2022) and National Experts Survey by the Global entrepreneurship Monitor (Elam et al., 2021). Each statement in the online questionnaire was rated on a 5-point Likert scale, from "totally disagree" to "totally agree". Cronbach's Alpha has been calculated for each element to ensure that the statements adopted for the research fit the purpose. However, the values for human capital and policy were 0.5 or less hence it was disregarded from the analysis since it is less than the acceptable value of 0.70 (Tavakol and Dennick, 2011). Moreover, two lists were included within the survey with instructions to

women entrepreneurs to choose the elements that have an impact on their businesses, one for the challenges and one for the opportunities.

**Table 1 Cronbach's Alpha**

| EE's elements                | Cronbach's Alpha |
|------------------------------|------------------|
| Finance (5 statements)       | 0.8              |
| Markets (4 statements)       | 0.73             |
| Culture (5 statements)       | 0.68             |
| Policy (5 statements)        | 0.51             |
| Support (6 statements)       | 0.77             |
| Human Capital (5 statements) | 0.47             |

Source: Calculations are based on survey results

Regarding the qualitative method, the researcher opted to conduct semi-structured interviews with women entrepreneurs. The number of interviewed women entrepreneurs reached ten. According to (Hennink and Kaiser, 2021), this number is enough to reach the saturation point in qualitative research especially in small size populations, which is the case in Egypt as the theoretical framework showed. Moreover, the outcomes of the interviews became similar and did not result in identification of new issues. The interviews were conducted online to fit the schedules of the interviewees which as well enabled the audio recording, after receiving the permission from respondents, and lasted between 60-90 minutes each. Since the interviews were conducted after the analysis of the survey results, questions were formed to validate the results and explore some issues further, however, other topics aroused during the interviews as per each informant's background and experience. All interviews were translated, transcribed, and coded. A thematic analysis then was used to analyse the answers. This type of analysis can be performed without a software (Nowell et al., 2017; Braun and Clarke, 2006), and allows the researchers to examine the perspectives of different research participants, which is the core of the current research.

There was one question that has been asked in both approaches, which is "Do you believe that the entrepreneurial ecosystem in Egypt is discriminating against women?" to complement the assessment. During the interviews, it was asked towards the with a follow-up question requesting women to give their reasons behind their belief.

### *3.2 Sampling*



For the online survey, the sample was chosen randomly. The researcher reached out to Egyptian entrepreneurs' online communities and with the assistance of the administrators of those communities, the link was posted, preceded with an introduction about the study and requesting women entrepreneurs, who have been in the business for not less than a year and registered with the authorities, to take part in it. Then a reminder post was made to increase the response rate. This has yielded 57 surveys, however, 13 were discarded as either were incomplete or the business was established less than a year and/or not registered.

The ten interviewed women were chosen using expert sampling as it enabled the researcher to identify and select information-rich cases (Palinkas et al., 2015). This type of sampling is a purposive sampling technique that is used to garner knowledge from individuals who have expertise in a particular field (Bhardwaj, 2019). Thus, women were chosen for their expertise in starting and growing business within the entrepreneurship ecosystem in Egypt. They were chosen from different sectors to have a representative sample. Moreover, a predetermined criteria were developed before selecting the respondents, which included:

1. Owner/manager of a business that has been at least one year in the market. *The rationale is to ensure that the woman entrepreneur has interacted with the ecosystem sufficiently to be able to judge its implications on herself and her business.*
2. The business is formally registered. *The rationale is that for an entrepreneur to make use of programmes, funding opportunities, etc.. the business must be registered with the relevant authorities.*

#### **4 Data Analysis**

The study investigates the perception of Egyptian women entrepreneurs of the entrepreneurial ecosystem to highlight the issues of the current ecosystem, and where it lags in catering to their needs. The research is of exploratory nature as mentioned in the Research Methodology part, so it aims at answering the following questions in depth:

1. What are the characteristics of women-owned businesses in Egypt?
2. How does Egyptian women entrepreneurs perceive the entrepreneurship ecosystem in the country?

The following sub-sections presents the findings of data analysis using the relevant tools.

##### **4.1 Analysis of the online survey**

###### **4.1.1 Profile of women entrepreneurs and their businesses**

Table 2 displays the profile of Egyptian women entrepreneurs, who have founded businesses for more than one year and are actively involved in managing/leading this business. In terms of age, it is interesting to notice that Egyptian women at all ages are actively involved in their businesses, yet the majority are in the age bracket 31-40 years old, followed by the younger group, 20-30 years. The majority are married, where those who are not married represented 30% of the responses. In terms of education level, the majority are university graduate with first degree, however, there is a high percentage of women entrepreneurs with graduate degrees (MA or PhD). Moreover, most women entrepreneurs are Business Administration graduates,

followed by STEM, particularly Engineering and Computer Science. Another interesting finding is the employment status of women entrepreneurs. Most of women were employed before starting their own business, where 70% stated that they had jobs prior to turning into entrepreneurship. In terms of their motives to start a business, it is noticeable that they are driven by market opportunity followed by seeking an alternative for their unemployment status. To a less extent, they are driven by their passion for their talent, determined to utilize it in a business or continue their family's sage in business. This general profile of women entrepreneurs shows that women entrepreneurs in Egypt are more opportunity driven rather than necessity, which is against the general notion that Egyptians and women in particular start their businesses out of necessity, i.e. as they have no other alternative to support their selves and families (Krafft and Rizk, 2021; El Assar and Said, 2015; Hattab, 2012).

**Table 2 Profile of Women Entrepreneurs**

| Variables         |                                     | Frequency | Valid Percent (%) |
|-------------------|-------------------------------------|-----------|-------------------|
| Age Category      | 18-20                               | 0         | 0                 |
|                   | 21-30                               | 15        | 34                |
|                   | 31-40                               | 16        | 36                |
|                   | 41-50                               | 9         | 20                |
|                   | above 50                            | 4         | 9                 |
| Marital Status    | Not Married                         | 13        | 30                |
|                   | Married                             | 31        | 70                |
| Educational level | Secondary certificate/still student | 0         | 0                 |
|                   | BSc../BA                            | 24        | 55                |
|                   | MSc.MA                              | 16        | 36                |
|                   | PhD                                 | 4         | 9                 |
| Area of study     | Business Administration /Management | 17        | 39                |
|                   | Arts and Humanities                 | 5         | 11                |
|                   | Law                                 | 3         | 7                 |

|   |                                     |    |    |
|---|-------------------------------------|----|----|
|   | STEM                                | 14 | 32 |
|   | Mass Communication                  | 5  | 11 |
| Employment prior to starting the business | no                                  | 13 | 30 |
|   | yes                                 | 31 | 70 |
| Reasons of starting your business         | Not employed                        | 13 | 30 |
|   | Market Opportunity                  | 17 | 39 |
|   | Family Business                     | 5  | 11 |
|   | I have a talent and I am passionate | 5  | 11 |
|   | Personal reasons                    | 4  | 9  |

Source: Calculations are based on survey results

In terms of the business profile of Egyptian women entrepreneurs, it is noticeable that women start businesses in all industries, although the majority are in the consumer-oriented businesses, for example, training, consultancy, wellness/nutrition/fitness, and education and to a less extent in the VC investment/brokerage and manufacturing. Women also are found in the IT/mobile applications, a field that has been male dominated. Although the GEM Egypt report for 2021 (Ismail et al., 2022) showed that a very low percentage of women continue their businesses beyond three years, the results indicate that most of women succeeded in doing so, to extent some of them have been in the business for more than 10 years. As earlier research on women entrepreneurship indicated, women start small businesses, but they create jobs. Results have shown that women usually employ between 1-5 employees; although when summed up, the majority will be having more than 5 employees. Half of them indicated that they have witnessed an increase in the number of employees, over the past five years. When it comes to number of products and service produced/offered by women entrepreneurs, the majority has 1-5 products/services; though when summed up, the majority will be having more than 5 products, which is expected as a good number of entrepreneurs are in fields that require multiple offerings (for example, jewellery and fashion). However, results have shown that the majority did not increase their initial offering over the past five years. Although a good number of women starting businesses in the IT industry, 57% of women entrepreneurs indicated that their offerings are not IT-based. In terms of source of funding, most women indicated that they depended on their personal savings to fund their businesses or taking loans from their families.

### Table 3 Business Profile of the Respondents

| <b>Variable</b>                                  | <b>Category</b>              | <b>Frequency</b> | <b>Valid Percent (%)</b> |
|--|------------------------------|------------------|--------------------------|
| Industry   | Training                     | 4                | 9                        |
|  | VC investment/Brokerage      | 2                | 5                        |
|  | Events Planning              | 1                | 2                        |
|  | Fashion/jewellery/handcrafts | 5                | 11                       |
|  | Consultancy/Marketing Agency | 5                | 11                       |
|  | Manufacturing                | 3                | 7                        |
|  | IT / Mobile Application      | 7                | 16                       |
|  | Social Enterprise            | 5                | 11                       |
|  | Education                    | 3                | 7                        |
|  | Healthcare                   | 2                | 5                        |
|  | Nutrition/Fitness/Wellness   | 5                | 11                       |
|  | Retail                       | 2                | 5                        |
| No. of years the business has been running       | 1 year                       | 6                | 14                       |
|  | more than 1 - less than 3    | 12               | 27                       |
|  | 3 and less than 5            | 11               | 25                       |
|  | 5 and less than 10           | 11               | 25                       |
|  | more than 10 years           | 4                | 9                        |
| Number of current Employees (excluding yourself) | 0                            | 0                | 0                        |
|  | 1 - less than 5              | 19               | 43                       |
|  | 5 - less than 10             | 11               | 25                       |

|   |                         |    |    |
|---|-------------------------|----|----|
|   | 10 - less than 25       | 8  | 18 |
|   | More than 25            | 6  | 14 |
| Increase in number of employees         | No                      | 22 | 50 |
|   | yes                     | 22 | 50 |
| Number of products/services             | 1 - less than 5         | 21 | 48 |
|   | 5 - less than 10        | 15 | 34 |
|   | 10 and more             | 8  | 18 |
| Increase in number of products/services | no                      | 20 | 45 |
|   | yes                     | 24 | 55 |
| Technology-based                        | No                      | 25 | 57 |
|   | Yes                     | 19 | 43 |
| Source of funding                       | Grants and competitions | 6  | 14 |
|   | Investors               | 4  | 9  |
|   | Loan from the bank      | 1  | 2  |
|   | Loan from family        | 12 | 27 |
|   | Savings-Personal        | 21 | 48 |

Source: Calculations are based on survey results

#### 4.1.2 Women Entrepreneurs' Perception of the Entrepreneurship Ecosystem

In terms of assessing the different elements of the ecosystem, Table 4 presents the results of the sub-elements of each one of the remaining elements after disregarding human capital and policies. In terms of culture, results show that women perceive entrepreneurs in a positive way, as they indicated that entrepreneurs have a good reputation, however, fear of failure and risk taking are two major concerns for women entrepreneurs in Egypt, which is a common concern (Lockyer and George, 2012). In terms of markets, women entrepreneurs had somehow negative perception of this element, had a problem in accessing market information (for example information about customers and their preferences, market statistics, suppliers, etc..), which might threaten woman's ability to perform in a certain market and grow her market share. In terms of support, women had varying perceptions of this elements, for example, they struggled to access technical experts (lawyers, accountants, etc..) who could provide her with assistance

and advise to support her business; however, they regarded the events and summits as an enabling factor as they stated its useful, while they were neutral about the easiness of access of networks, experts, and incubators. In terms of finance, women indicated that raising funds was not an easy task and expressed their preference for female investors.

**Table 4 Assessment of Entrepreneurship Ecosystem Elements in Egypt**

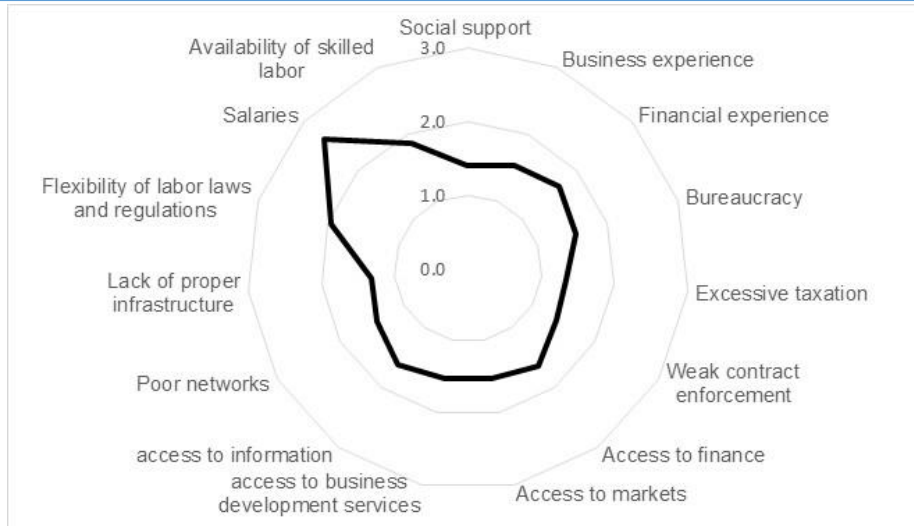
| <b>Entrepreneurship Ecosystem Elements</b> | <b>Entrepreneurship Ecosystem sub-elements</b>  | <b>N</b> | <b>Min.</b> | <b>Max.</b> | <b>Mean</b> | <b>Std. Dev.</b> |
|--|---|----------|-------------|-------------|-------------|------------------|
| Culture                                    | Entrepreneurs and founders have a good reputation   | 44       | 2.0         | 5.0         | 3.9         | 0.8              |
|  | Culture in Egypt is highly supportive of individual success achieved through own personal efforts | 44       | 1.0         | 5.0         | 2.9         | 1.1              |
|  | Culture in Egypt encourages creativity and innovativeness   | 44       | 1.0         | 4.0         | 2.2         | 0.9              |
|  | Culture in Egypt encourages entrepreneurial risk-taking   | 44       | 1.0         | 4.0         | 2.0         | 0.7              |
|  | Most people and institutions tolerate failure and give others a second chance                     | 44       | 1.0         | 4.0         | 2.0         | 0.7              |
| Market                                     | There are chances to access the local Markets   | 44       | 0.0         | 5.0         | 3.2         | 0.9              |
|  | There are chances to access the international Markets   | 44       | 1.0         | 5.0         | 2.7         | 1.1              |
|  | Market Information is available   | 44       | 1.0         | 5.0         | 2.0         | 0.8              |
|  | Companies can afford the cost of market entry.  | 44       | 1.0         | 4.0         | 2.8         | 0.9              |
| Support                                    | The services provided by non-governmental organisations are fitting for my needs                  | 44       | 1.0         | 5.0         | 2.6         | 1.3              |
|  | I can easily access networks or support groups for my business                                    | 44       | 1.0         | 5.0         | 2.5         | 1.1              |
|  | I have access to the technical experts who could assist in the development of my business         | 44       | 1.0         | 4.0         | 1.9         | 0.9              |

|         |  |    |     |     |     |     |
|---------|--|----|-----|-----|-----|-----|
|         | The infrastructure is assisting me in doing my business  | 44 | 1.0 | 5.0 | 3.2 | 1.2 |
|         | Incubators/accelerators are designed considering the needs of women entrepreneurs                        | 44 | 1.0 | 5.0 | 2.8 | 1.4 |
|         | I find enterprise conferences/events take place in Egypt to be useful                                    | 44 | 1.0 | 5.0 | 4.0 | 0.9 |
| Finance | Without access to financial assistance, the development of my business would have been a major challenge | 44 | 1.0 | 5.0 | 4.5 | 1.1 |
|         | Raising funds from investors was a challenge   | 44 | 1.0 | 5.0 | 4.0 | 1.2 |
|         | I believe women investors would understand our needs more than male investors                            | 44 | 1.0 | 5.0 | 4.5 | 1.1 |
|         | Amounts of funds raised do not always match my ask nor needs   | 44 | 1.0 | 5.0 | 4.0 | 0.9 |

Source: Calculations are based on survey results

Figure 1 and Figure 2 present the results of assessing the factors of entrepreneurship ecosystem from the perception of women entrepreneurs in Egypt. Figure 1 illustrates the challenges and hindering factors women encounter while they are managing and attempting to grow their businesses. Women entrepreneurs identified availability of skilled labour, their abilities to pay salaries and labour laws and regulations as their top challenging factors; all are related to the human capital. Finance came second where women identified access to finance and their own financial experience in the fourth and fifth ranks.

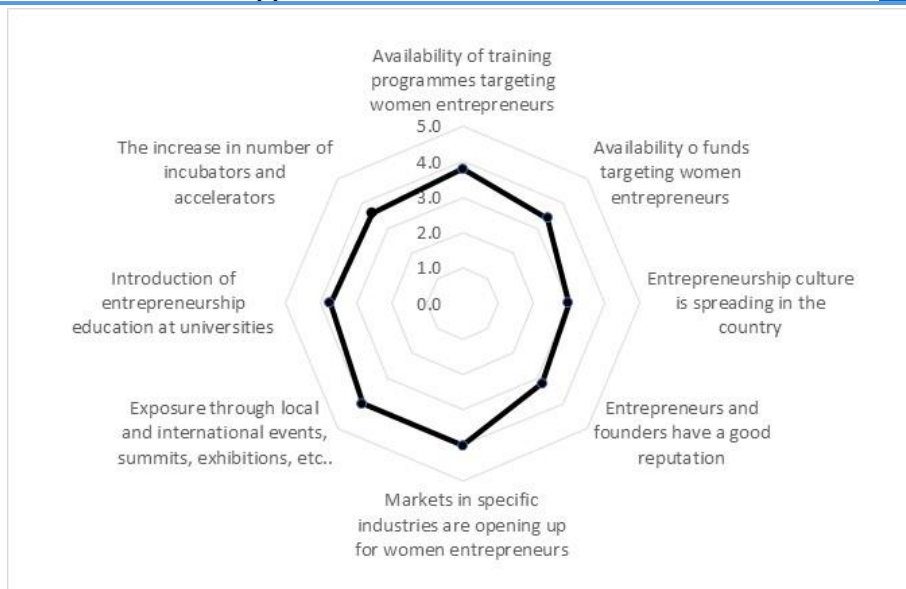




Source: Calculations are based on survey results

**Fig. 1 Assessment of Entrepreneurship Ecosystem – Challenges and hindering factors to growth**

Figure 2 illustrates the opportunities availed to women entrepreneurship through the entrepreneurship ecosystem in Egypt. Women identified exposure through international events, summits, and exhibitions as one of the top opportunities for them. Over the last few years, there has been an increase on entrepreneurship events that brought renowned speakers and different players together to share their experience and expertise with the general audience and Egyptian entrepreneurs, for example RiseUp, Techne Summit, etc., this clearly had a positive impact on women. They as well identified the openness of markets in certain industries as an opportunity availed to them through the ecosystem. As table 2 showed, women are starting businesses in manufacturing and IT industries, which was not the case compared to few years ago (Hattab, 2012). Another element that was perceived as an opportunity is the introduction of entrepreneurship education at universities, equally with the availability of training programmes targeting women entrepreneurs.



Source: Calculations are based on survey results

**Fig. 2 Assessment of Entrepreneurship Ecosystem – Opportunities**

The last question in the survey attempted to garner women entrepreneurs’ general feeling towards the ecosystem by asking them whether they feel the entrepreneurship ecosystem in Egypt is discriminating against women or not. The analysis was done incorporating the number of years since the business was established (Table 5) since experience impacts the decision-making process, the perception of entrepreneurs and their judgement. It is noticeable that women with less years in business perceive the ecosystem to be discriminating against them, however, those who have been in the business for more than 5 years perceive it the opposite way.

**Table 5 Women Entrepreneurs’ General feeling towards Ecosystem**

| When was your business established? | Do you believe that the entrepreneurial ecosystem in Egypt is discriminating against women? |     |       |
|-------------------------------------|---|-----|-------|
|                                     | No  | yes | Total |
| 1 year                              | 2   | 4   | 6     |
| more than 1 - less than 3           | 5   | 7   | 12    |
| 3 and less than 5                   | 6   | 5   | 11    |
| 5 and less than 10                  | 7   | 4   | 11    |

|                    |    |    |    |
|--------------------|----|----|----|
| more than 10 years | 3  | 1  | 4  |
| Total              | 23 | 21 | 44 |

Source: Calculations are based on survey results

#### 4.2 Analysis of the semi-structured interviews

The outcomes of the survey analysis were supported by the analysis of the in-depth semi-structured interviews. The thematic analysis coding exercise yielded the following themes/results, which were guided by Isenberg (2010):

1. Culture and social norms
2. Finance
3. Networks and support programs
4. Government policies, rules, and regulations

In terms of culture and social norms, it was noticeable how this issue has been raised through all the interviews even when discussing other aspects of the ecosystem. It was demonstrated through the expected gender role, society’s perception of women’s work and family support. All women interviewed reported that one of the main issues they encountered was their marital status, especially when they were attempting to raise funding, as summed up by one respondent:

*“when we started to raise seed capital, I faced so many biased questions, till now VCs are asking female entrepreneurs whether they plan to get married, to have children and when, etc.. my co-founder, he is a male, he has never been asked such a question. He is married and has a daughter, but no one asked him about his wife nor his kid, unlike me!!”.*

This perception of women’s role impacts women’s ability as well to communicate and interact with some of ecosystem players, mentors for example. Although there are no official figures of male to female mentors, investors, etc.. but it is noticeable that the ecosystem in Egypt is male dominated. Some of interviewees expressed their concern over this, especially when some mentors doubted their abilities to run the business hence neglect their presence as one respondent mentioned:

*“Some mentors made me feel frustrated. I remember we had a good mentor with technology background. First time I met him, he made me feel I am in a test. So, anything I would do, I must do it great, or else I am a loser, I am nobody. He couldn’t imagine women doing something right. This guy never looked at me, never addressed anything to me, and any question he had, he would totally ignore me and direct it to the male co-founder”.*

In male dominated societies, it is expected that women’s main role is to raise a family and take full responsibility for it. This kind of sociocultural environment poses serious challenges for

women entrepreneurs (Nasir et al., 2019), that might drive them to put their business on hold, as one respondent stated

*“Another challenge I faced was getting married and the need to balance between my work and my new family to ensure I am not missing anything here or there. It was not easy, I just juggling all the time, and everyone was expecting me to prioritize my family, which I did, business now in stagnant stage till I am to balance things again”.*

However, family support plays an important role in enabling women to achieve the balance and access resources, especially financial, in addition to moral support. According to Neneh (2017) women entrepreneurs’ firms perform better when emotionally, instrumentally, and financially supported by their families, as confirmed by one of respondents:

*“everything I done was a result of my family’s support. They encouraged me to do what I want to do, to go out and explore even when I told them I want to quit my work at the bank. My family always believed in me, and this gave me the self-confidence to look forward and take step forward. Same applies to my husband; it’s because of this, my journey is positive; otherwise, I would be wired with so many problems that will affect me personally, hence affecting the business”.*

In terms of access to finance, women entrepreneurs have confirmed previous research findings about the difficulties in accessing finance that impact all entrepreneurs regardless of their gender (Saadallah and Salah, 2019) and the hardships facing women in particular (Mahrous, 2019; Beninger et al., 2016), which had a negative impact on their growth aspirations as one respondent indicated:

*“Funding is another issue when expanding as there was an increase in demand on the services we provide. I have been trying to find different mechanisms to raise money but was not always successful, hence failing to execute my plans”*

The results showed two main intertwined issues facing women entrepreneurs when they attempt to raise funding, the amount of funding and the accessibility to funds, indicating that prejudice against women entrepreneurs still exists stemming from investors’ preconceived bias toward the ability of women entrepreneurs to handle the business and financials (Brooks et al., 2014). This as well arises from the sociocultural factors that were discussed earlier, as stated by one of respondents:

*“Within the talk about funding, it is not only access to finance is the challenges, but the amount as well. There is a huge gap between the amounts given to women compared to men; yes women are being funded, but the ticket size is less than what they need and for sure less than (almost 60-70% less). Investors don’t have much of trust in women. We are also asked questions about how you will make business work while men are being asked about the opportunities, so the assumption here that women will cause the business to stumble into challenges.*

In terms of support programs, women expressed their satisfaction with the increase in the number of programmes designed particularly for women to connect them with other women

key players in the ecosystem, for example female investors and mentors, and its impact that extends beyond them to reach their communities, as one entrepreneur stated

*"I had a big problem when I initiated the registration process, but with the support of one the mentors from the programme, it was resolved. I wouldn't have been able to do it by myself. When my family attended the demo day, their attitude changed, I felt their pride. Later when my cousin wanted to start her business, my father initiated the talks with her parents to convince them to allow her to pursue her dreams".*

Further than all-women programmes, women had difficulties in networking with other entrepreneurs, suppliers, etc.. which deprived them from access to information and opportunities (Memon, 2020), which has been confirmed by one respondent

*"It is all about connections and networking and sometimes it is not something easy for women to be engaged in, even if they wish, rarely they are invited to be part of such circles. Usually, they start for example late like 12 am, which is not something possible for women. Thus, there are lost opportunities here for women".*

In terms of government policies, rules, and regulations, there was a consensus among women entrepreneurs that the Government of Egypt through its different agencies is more concerned with entrepreneur; yet they all agreed that the government must launch cross-cutting intervention to face cumbersome routine especially in the processes and procedures, to reduce the steps needed to register the business, especially it is impacting all entrepreneurs irrespective of their gender.

*"Though this is not dealing with the government, but I believe it has to do with the regulations, we had a big problem when we wanted to have a bank account. Many banks refused to open an account for us as we are a startup. The process was very bureaucratic, and the process took more than one month. But I don't think it has to do with the gender, as both me and my co-founder who were opening the account".*

In reference to the question of whether the ecosystem is discriminating against women or not, there was a lack of consensus among the interviewees. An excerpt from one respondent"

*"The ecosystem from gender lens (for women) is like 5 years behind, if compared to men. This is reflected on all practices within the ecosystem".*

The main issue with the ecosystem lies in some practices that, although not directly targeted towards women, disadvantage them. For example, the networking or access to trained human capital. One respondent mentioned:

*"The ecosystem is always favouring those who are accessible 24/7. When you have family to take care of or when your family opposes the idea of staying out late, then you don't qualify for their support. So eventually it is all more males than females who make use of the opportunities of the ecosystem"*

However, there was an agreement that the ecosystem is now more open towards women entrepreneurs, with an increase in the number of programmes targeting women specifically and

providing them with training, education, mentorship, incubation, and funding. An excerpt from one respondent

*“The ecosystem just very recently started to consider women entrepreneurship. There are a lot of programmes out there, telling women to start”.*

## **5 Discussion, Conclusions and Recommendations**

There has been an increase in number of women emerging as entrepreneurs both in developed and developing economies. This has been facilitated by the growth in various programmes and initiatives directed towards supporting women throughout their entrepreneurial journey. However, the gap in entrepreneurial activities between males and females remains persistent, whereas the numbers of women entrepreneurs around the world are less than their fellow males. Although there is no consensus among researchers explaining this gender gap (Markussen and Røed, 2017), yet some evidence shows that this is due to the barriers facing women entrepreneurs on accessing and mobilizing economic, social, cultural capital (Shankar, Elam and Glinski, 2020) which goes against the general assumption behind entrepreneurial ecosystems.

Entrepreneurial ecosystem (EE) comprises multiple interdependent elements synchronised in such a way to drive the entrepreneurial activity in a certain territory. In Egypt, the EE has been flourishing over the past few years as a result of public and private sectors' interventions. However, the gender gap in entrepreneurship has been consistent over the years (Rizk and Rashed, 2022; Mahrous, 2019; Hattab, 2012; El-Hamidi, 2011). Although women in Egypt have a positive perception of entrepreneurship and an intention to start their businesses (Elam et al., 2021), the total entrepreneurial activity rate among Egyptian women was 5.7%, compared to that of Egyptian males, whose TEA rate was 16.7%. The figures are alarming considering the efforts directed towards women in Egypt, indicating a gap between what the ecosystem is offering to women and what women need.

Hence it was deemed vital to assess the entrepreneurship ecosystem from women entrepreneurs' perception to identify why is this gap present and persist. Results have shown that women do not believe that the ecosystem is decrementing against them, however, it has some practices that are unfavourable to them based on their gender. Networking was one of the challenging factors that women have identified as hindering their growth; although they felt it was not intended towards them, but how networks are built and nurtured is disadvantaging them. Networks in Egypt are built during informal setups that do not fit women nor their schedules due to social norms, for example, casual gathering in the late hours of the day, which deprives them from grasping information and opportunities that are usually shared during these meetups. Another factor that has negatively impacted women, was the lack of skilled labour. Although this has been identified as an issue facing all entrepreneurs, but for women it was also tied with their gender, as some employees refused to join/work under the supervision of a female and at some instances they were called “aggressive” and “bossy” while referring to the way how they manage the company.

Women have acknowledged that there are multiple sources of funding, however, it is challenging for them due to the amounts they manage to secure and the experience itself.

Results have shown that the amounts they receive are less than what they ask for, hence they depend more on their personal savings which limits their abilities to grow their businesses. In some contexts, women were asked by investors some personal questions related to their marital status or children, which they felt unpleasant and has been an irritating experience, especially their male co-founders were not asked similar questions. This was a reason that some of them refrained from seeking money from investors as they felt they were questioning their abilities to manage the funds. Interestingly, in 2007, the Ministry of Finance issued a report about the challenges facing Egyptian women entrepreneurs, one of which was the personal questions asked by investors about marriage and kids (Ministry of Finance, 2007).

One of factors that had an impact on women was the culture. The expected gender role and sociocultural norms put huge pressures on women entrepreneurs, that, in some cases, they had to put business on halt. The norms are more prevalent in rural areas, especially if the woman entrepreneur must travel or spend some days away from the house. On the other hand, family support, which is one item of culture, is acknowledged to play an important role on women's success in their businesses. Women entrepreneurs rely on their families in securing money to cover the needs of their businesses; results have shown the family comes second as a source of finding, while others were helped by their families to achieve the work-life balance especially the young entrepreneurs.

Women are facing interlinked issues that have multi-layered impacts, hence there is a need for certain gender-responsiveness actions at different fronts. In terms of mentoring and support services, there is a need to prepare more female mentors to help women overcome the problem of accessibility and get connected to other women who understand the needs. Also create programmes for males to enable them to not only provide females with mentoring but do so based on understanding their needs and the methodology to follow when delivering mentorship session to women. In terms of access to funding, there are multiple actions to be taken. First, women entrepreneurs must be trained on investment-readiness, not only their businesses but they need to understand how to approach investors, how to address them and answer their questions, especially if it is related to their personal lives and how to close the deals. The scene has very few female investors, thus an increase in their numbers is needed through, for example, awareness campaigns, incentive programmes or establishment of a network. Another action is targeting male investors on addressing women entrepreneurs, evaluating their businesses rather than focusing on their capabilities based on their gender. It is recommended that the government through its different entities to take a major role in leading and orchestrating the different activities in collaboration with the other organizations to ensure a nurturing and inclusive ecosystem.

## **6 Limitations and Future Research**

Although the study succeeded in answering the research questions, but there are limitations that have implications for future research. The study attempted to assess the ecosystem through gender lens, however data was collected from women entrepreneurs only, which might offer a biased perception while writing up the analysis, thus as a recommendation for future research is to incorporate and compare male entrepreneurs' perception in the analysis. The sample size

and structure can be a limitation to generalize the findings, thus future research that has a larger sample can give a better insight, especially if comprised those who opted not to register their businesses or those who had to shut down the businesses earlier.

## References

Acs, Z. J., Stam, E., Audretsch, D. B., & O'Connor, A. (2017). The lineages of the entrepreneurial ecosystem approach. *Small Business Economics*, 49(1), 1-10.

Acs, Z. J., Szerb L., & Autio, E. (2014). Global entrepreneurship index, The GEDI Institute, Amazon, LLC

Adly, A., & Khatib, L. (2014). Reforming the entrepreneurship ecosystem in post-revolutionary Egypt and Tunisia. *CDDRL Policy Briefs*.

Al-Dajani, H., & Marlow, S. (2013). Empowerment and entrepreneurship: a theoretical framework. *International Journal of Entrepreneurial Behaviour & Research*, 19(5), 503–524. <https://doi.org/10.1108/ijebr-10-2011-0138>

Al-Din, S. G. (2021). Implications of the Fourth industrial revolution on Women in Information and Communications Technology: In-depth analysis on the Future of work. The National Council for Women, The World Bank and Baseera. <https://en.enow.gov.eg/Report/133.pdf>

Ali, Mohamed Abouelhassan, Moaaz Kabil, Rahaf Alayan, Róbert Magda, and Lóránt Dénes Dávid. "Entrepreneurship Ecosystem Performance in Egypt: An Empirical Study Based on the Global Entrepreneurship Index (GEI)." *Sustainability* 13, no. 13 (2021): 7171. <https://doi.org/10.3390/su13137171>

Audretsch, D. B., & Belitski, M. (2017). Entrepreneurial ecosystems in cities: establishing the framework conditions. *The Journal of Technology Transfer*, 42(5), 1030–1051. <https://doi.org/10.1007/s10961-016-9473-8>

Beninger, S., Ajjan, H., Mostafa, R. B., & Crittenden, V. L. (2016). A road to empowerment: social media use by women entrepreneurs in Egypt. *International Journal of Entrepreneurship & Small Business*, 27(2/3), 308. <https://doi.org/10.1504/ijesb.2016.073987>

Bhardwaj, P. (2019). Types of sampling in research. *Journal of the Practice of Cardiovascular Sciences*, 5(3), 157. [https://doi.org/10.4103/jpcs.jpcs\\_62\\_19](https://doi.org/10.4103/jpcs.jpcs_62_19)

Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology*, 3(2), 77–101. <https://doi.org/10.1191/1478088706qp063oa>

Brooks, A. W., Huang, L., Kearney, S. W., & Murray, F. E. (2014). Investors prefer entrepreneurial ventures pitched by attractive men. *Proceedings of the National Academy of Sciences*, 111(12), 4427-4431.

Brush, C., Edelman, L. F., Manolova, T., & Welter, F. (2019). A gendered look at entrepreneurship ecosystems. *Small Business Economics*, 53(2), 393–408. <https://doi.org/10.1007/s11187-018-9992-9>



Elam, A. B., Brush, C. G., Greene, P. G., Baumer, B., Dean, M., & Heavlow, R. (2021) Global Entrepreneurship Monitor 2018/2019 women's entrepreneurship report. Babson College, Smith College, and the Global Entrepreneurship Research Association (GERA). <https://www.gemconsortium.org/reports/womens-entrepreneurship>

El Assar, H., & Said, H. (2015, August). Measuring the Impact of Tourism Education on Empowering Women Entrepreneurship in Egypt. In *Proceedings of the 10th European Conference on Innovation and Entrepreneurship* (pp. 175-184).

El-Fiky, S. (2022). Shattering the second glass ceiling: an empirical study on women entrepreneurs in Egypt. *International Journal of Gender and Entrepreneurship*, (ahead-of-print).

El-Hamidi, F. (2011, September). How do women entrepreneurs perform? Empirical evidence from Egypt. In *Economic Research Forum (ERF) Working Paper* (No. 621).

Elkafrawi, N., & Refai, D. (2022). Egyptian rural women entrepreneurs: Challenges, ambitions and opportunities. *The International Journal of Entrepreneurship and Innovation*, 23(3), 203–214. <https://doi.org/10.1177/14657503221086098>

[Evans, J.R.](#) and [Mathur, A.](#) (2018), "The value of online surveys: a look back and a look ahead", *Internet Research*, Vol. 28 No. 4, pp. 854-887. <https://doi.org/10.1108/IntR-03-2018-0089>.

Hassan, H. E., & Zaharia, R. M. (2021). Women Access to The Labour Market In Egypt: The View Of Private Sector Experts. *Transformations in Business & Economics*, 20(2).

Hattab, H. (2012). Towards understanding female entrepreneurship in Middle Eastern and North African countries: A cross-country comparison of female entrepreneurship. *Education Business and Society Contemporary Middle Eastern Issues*, 5(3), 171–186. <https://doi.org/10.1108/17537981211265561>

Hattab, H. (2008). Global Entrepreneurship Monitor. *Egypt Entrepreneurship Report*.

Hennink, M., & Kaiser, B. N. (2022). Sample sizes for saturation in qualitative research: A systematic review of empirical tests. *Social Science & Medicine* (1982), 292(114523), 114523. <https://doi.org/10.1016/j.socscimed.2021.114523>

ITIDA (2021). The Egyptian Startup Ecosystem Report 2021. The Egyptian Government. [https://mcit.gov.eg/Upcont/Documents/Reports%20and%20Documents\\_26102021000\\_Egyptian-Startup-Ecosystem-Report-2021.pdf](https://mcit.gov.eg/Upcont/Documents/Reports%20and%20Documents_26102021000_Egyptian-Startup-Ecosystem-Report-2021.pdf)

Jochaud, P. (2013). Youth productive employment through entrepreneurship development in the Arab Region: State of the art of interventions in Egypt and Tunisia. *United Nations Industrial Development Organization (UNIDO)*, 05, 1–113

Khattab, I., & Al-Magli, O. O. (2017). Towards an integrated model of entrepreneurship ecosystem. *Journal of Business & Economic Policy*, 4(4), 80-92.

Ismail, A., Tolba, A., Schott, T., Meshreki, H., Barakat, S. & Ghalwash, S. (2022). Egypt entrepreneurship Report. Cairo-Egypt. <https://www.gemconsortium.org/report/50913>

- Ismail, A. (2020). A framework for designing business-acceleration programs: A case study from Egypt. *Entrepreneurship Research Journal*, 10(2). <https://doi.org/10.1515/erj-2018-0196>
- Isenberg, D. J. (2010). How to start an entrepreneurial revolution. *Harvard business review*, 88(6), 40-50.
- Isenberg, D. (2011). The entrepreneurship ecosystem strategy as a new paradigm for economic policy: Principles for cultivating entrepreneurship. *Presentation at the Institute of International and European Affairs*, 1(781), 1-13.
- Kelle, U. (2006). Combining qualitative and quantitative methods in research practice: purposes and advantages. *Qualitative research in psychology*, 3(4), 293-311.
- Krafft, C., & Rizk, R. (2021). The promise and peril of youth entrepreneurship in the Middle East and North Africa. *International Journal of Manpower*, ahead-of-print(ahead-of-print). <https://doi.org/10.1108/ijm-05-2020-0200>
- Liguori, E., Bendickson, J., Solomon, S., & McDowell, W. C. (2019). Development of a multi-dimensional measure for assessing entrepreneurial ecosystems. *Entrepreneurship and Regional Development*, 31(1–2), 7–21. <https://doi.org/10.1080/08985626.2018.153714>
- Lockyer, J., & George, S. (2012). What women want: barriers to female entrepreneurship in the West Midlands. *International Journal of Gender and Entrepreneurship*, 4(2), 179–195. <https://doi.org/10.1108/17566261211234661>
- Mahrous, A. A., & Cairo University (Egypt). (2019). Female entrepreneurship in Egypt: New theoretical and public policy implication. *Marketing and Management of Innovations*, 151–160. <https://doi.org/10.21272/mmi.2019.1-12>
- Mastercard. (2021). Mastercard Index of Women Entrepreneurs (MIWE) 2021. <https://www.mastercard.com/news/media/phwevxcc/the-mastercard-index-of-women-entrepreneurs.pdf>
- Markussen, S., & Røed, K. (2017). The gender gap in entrepreneurship—The role of peer effects. *Journal of Economic Behavior & Organization*, 134, 356-373.
- Memon, A. (2020). Analyzing the entrepreneurial ecosystem for women entrepreneurs: A study of rural Jamshoro, Pakistan. *Indian Journal of Commerce & Management Studies*, XI(3), 45. <https://doi.org/10.18843/ijcms/v11i3/05>
- Ministry of Finance (2007). Women entrepreneur in Egypt, challenges, and opportunities. Cairo-Egypt.
- Nowell, L. S., Norris, J. M., White, D. E., & Moules, N. J. (2017). Thematic analysis: Striving to meet the trustworthiness criteria. *International Journal of Qualitative Methods*, 16(1), 160940691773384. <https://doi.org/10.1177/1609406917733847>
- Neneh, B. N. (2017). Family support and performance of women-owned enterprises: The mediating effect of family-to-work enrichment. *The Journal of Entrepreneurship*, 26(2), 196–219. <https://doi.org/10.1177/0971355717716762>

Palinkas, L.A., Horwitz, S.M., Green, C.A. *et al.* Purposeful Sampling for Qualitative Data Collection and Analysis in Mixed Method Implementation Research. *Adm Policy Ment Health* **42**, 533–544 (2015). <https://doi.org/10.1007/s10488-013-0528-y>

Poggesi, S., Mari, M., & De Vita, L. (2016). What's new in female entrepreneurship research? Answers from the literature. *International Entrepreneurship and Management Journal*, *12*(3), 735–764. <https://doi.org/10.1007/s11365-015-0364-5>

Ragab, Y., Ragab, M., & Monaghan, S. (2020). Investigating th Status of Egyptian Entrepreneurship in an era of Revolution and Reforms. In *European Conference on Innovation and Entrepreneurship* (pp. 504–512).

Rashid, S., & Ratten, V. (2020). A systematic literature review on women entrepreneurship in emerging economies while reflecting specifically on SAARC countries. In *Contributions to Management Science* (pp. 37–88). Springer International Publishing

Rizk, R., & Rashed, A. (2022). Entrepreneurship in Egypt. *The Egyptian Labor Market: A Focus on Gender and Economic Vulnerability*, 174.

Saadallah, E. M., & Salah, A. (2019). The impact of banking finance on financial performance of Egyptian small businesses in period from 2013 to 2016. *OAlib*, *06*(08), 1–14. <https://doi.org/10.4236/oalib.1105146>

Shankar, A., B. Elam, A., & Glinski, A. (2020). Strengthening the women's entrepreneurship ecosystem within the energy sector. *IDS Bulletin (University of Sussex. Institute of Development Studies : 1985)*, *51*(1). <https://doi.org/10.19088/1968-2020.104>

Shorbagi, S. A., Rizk, A., Kamal, A., & Sultan, P. (2017). Women's entrepreneurship development assessment: Egypt. [https://www.ilo.org/wcmsp5/groups/public/---ed\\_emp/---emp\\_ent/---ifp\\_seed/documents/publication/wcms\\_551168.pdf](https://www.ilo.org/wcmsp5/groups/public/---ed_emp/---emp_ent/---ifp_seed/documents/publication/wcms_551168.pdf)

Spigel, B. (2017). The relational organization of entrepreneurial ecosystems. *Entrepreneurship Theory and Practice*, *41*(1), 49–72. <https://doi.org/10.1111/etap.12167>

Stam, F. C., & Spigel, B. (2016). Entrepreneurial ecosystems. *USE Discussion paper series*, *16*(13).

Stephens, S., McLaughlin, C., Ryan, L., Catena, M., & Bonner, A. (2022). Entrepreneurial ecosystems: Multiple domains, dimensions and relationships. *Journal of Business Venturing Insights*, *18*(e00344), e00344. <https://doi.org/10.1016/j.jbvi.2022.e00344>

Sussan, F., & Acs, Z. J. (2017). The digital entrepreneurial ecosystem. *Small Business Economics*, *49*(1), 55–73. <https://doi.org/10.1007/s11187-017-9867-5>

Tavakol, M., & Dennick, R. (2011). Making sense of Cronbach's alpha. *International Journal of Medical Education*, *2*, 53–55. <https://doi.org/10.5116/ijme.4dfb.8dfd>

Tiwari, N. (2017). Women entrepreneurship in India: A literature review. *Amity Journal of Entrepreneurship*, *2*(1), 47–60.

UNICEF (2021). Addressing Gender Barriers to Entrepreneurship Among Girls and Young Women in South-East Asia. Bangkok: UNDP Bangkok Regional Hub and UNICEF East Asia

and the Pacific Regional Office. <https://www.unicef.org/eap/reports/addressing-gender-barriers-entrepreneurship-and-leadership-among-girls-and-young-women>

Ward, A., Hernández-Sánchez, B. R., & Sánchez-García, J. C. (2019). Entrepreneurial potential and gender effects: The role of personality traits in university students' entrepreneurial intentions. *Frontiers in Psychology, 10*, 2700. <https://doi.org/10.3389/fpsyg.2019.02700>

Welsh, D. H. B., Kaciak, E., & Shamah, R. (2018). Determinants of women entrepreneurs' firm performance in a hostile environment. *Journal of Business Research, 88*, 481–491. <https://doi.org/10.1016/j.jbusres.2017.12.015>

Zaki, H. M., & Zeini, N. T. (2019). *Descriptive Analysis of the Entrepreneurship Ecosystem in Egypt from a Start-up Perspective: Challenges and Opportunities*. <https://en.econostrum.info/attachment/1534319/>