POZNAŃ UNIVERSITY OF ECONOMICS AND BUSINESS

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Factors influencing Israeli women entrepreneurs' performance in SMEs

Czynniki wpływające na wyniki izraelskich kobiet-przedsiębiorców w MŚP

Doctoral dissertation

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ABSTRACT

Small and Medium-sized Enterprises (SMEs) are an important foundation of the economy, supporting economic and business systems and creating jobs. Facilitating the development of the Small and Medium-sized Enterprise sector depends on advancing entrepreneurship. The women entrepreneur was chosen as the focus of this dissertation, since research on entrepreneurship has largely focused on men, despite women entrepreneurs' share in driving economic growth. Previous studies have shown gender differences that are apparent in all aspects of entrepreneurship, with gaps found between men and women concerning many of the key factors influencing entrepreneurship. Furthermore, limited research has been conducted to determine the factors influencing women's entrepreneur performance, which are of interest, both economically and socially.

This dissertation focuses on a holistic approach to examining the factors influencing women's entrepreneur performance in SMEs within the business environment in Israel. In addition, using the categorization of key influencing factors into internal (personal) factors and external (environmental) factors, opportunity recognition was explored as a mediator between internal and external factors and performance of women entrepreneurs. A quantitative research method was used to study the effects of internal and external factors on women entrepreneurs' performance and data was collected through an online survey. Online recruitment of women entrepreneurs with businesses in Israel resulted in a sample population of women entrepreneurs, representative of the population of women entrepreneurs in SMEs in Israel.

The findings from the study suggested that the influencing factors on women's entrepreneur performance in Israel were entrepreneurial orientation, one of the internal (personal) factors and two of the external (environmental) factors, economic factors and socio-cultural factors. The proposed mediating factor, opportunity recognition, was not found to mediate between the internal and external factors and entrepreneur performance. Findings related to the factors that influence women's entrepreneur performance addressed in this dissertation have added to the understanding of the affect

that influencing factors have on entrepreneurship and have provided additional insights into factors influencing women's entrepreneurship in SMEs in Israel.

DEDICATION

This dissertation is dedicated to the memory of my beloved parents, the late Yetti and Philip Berzaro. They were my inspiration to pursue my doctoral degree but were unable to see my graduation. This is for them.

Introduction

Entrepreneurship has been examined over the years in many studies, with different definitions for entrepreneurship emerging. Gartner [1989] defined entrepreneurship as the creation of new organizations, while Hisrich, Langan-Fox & Grant [2007] expanded on the definition by describing entrepreneurship as the process of creating something new with value by devoting the necessary time and effort, assuming the accompanying financial, psychic, and social risks, and receiving the resulting rewards. With the lack of a single comprehensive definition of entrepreneurship, the study of entrepreneurship over the years is sometimes influenced by its related context. Recognition of the importance of entrepreneurship has lain in its ability to leverage economic development and technological advancement [Elenurm and Vaino, 2011].

Entrepreneurship comes into play in the establishment and management of small and medium sized enterprises (SMEs). SMEs are an important foundation of the economy, supporting economic and business systems. Although entrepreneurship generally has been attributed to men, over the years there has been a constant growth in women entrepreneurship, with an increase in the contributions that women make to the national economy [Hassan, Ramli & Desa, 2014]. Currently, women own about 30% of small businesses in many countries, making an important contribution to the economy [Hodges et al., 2015].

Women entrepreneurs' performance has been shown to be influenced by a variety of factors, which may be further affected by cultural norms and values. Thus, the focus of this study is specifically to examine women entrepreneurship as it relates to SMEs in Israel.

Female entrepreneurship is a growing and driving force for economic growth, and thus a deeper understanding of the factors that influence women's business success is of interest economically and socially. Women entrepreneurs were chosen as the focus of this study, since gender differences are apparent in all aspects of entrepreneurship and earlier studies have found gaps between men and women concerning many of the key factors influencing entrepreneurship. Some of the differences that were shown in earlier studies are dependent on the women's expectations and motivations. Generally, women are more conservative in terms of their expectations for growth when they chose to

establish a small business. Furthermore, men and women are motivated by different motives, with women often wanting to start a business in order to achieve personal freedom, security, and satisfaction [Shabbir & Di Gregorio, 1996]. Women are also less motivated by the desire to earn money. Other differences originate in the different human capital that men and women bring to the business regarding aspects of their education and previous management experience [Fairlie & Robb, 2009]. Thus, women perceived a greater need for financial and accounting assistance than men did. In addition, there are differences in social capital between women and men [Efroni, 2017a]. Women are more involved with kin, while men are more connected to their co-workers. Women are less likely to utilize bridging and linking social capital for their businesses, since woman entrepreneurs encounter barriers in accessing traditionally male-dominated established networks. The findings were that women are under-represented in entrepreneurial networks. Economically, women are less likely to seek external finance for their business, and if they do, female entrepreneurs face tighter access to credit [Shabbir & Di Gregorio, 1996]. Female entrepreneurs also face higher charges from lenders when seeking funding for their enterprises [Wu & Chua, 2012].

Yet, despite these differences, current research on entrepreneurship has largely focused on men and has lacked a holistic representation of women's entrepreneurship [Hughes, Jennings, Brush, Carter & Welter, 2012]. Thus, this dissertation focuses on a holistic approach to examining women's entrepreneurship. Furthermore, earlier research has not examined the unique culture and business environment supporting women's entrepreneurship in Israel, so the study focuses on Israeli women entrepreneurs' performance in SMEs. The study aims to examine the influence of factors that are most influential on entrepreneurial performance on the entrepreneurship of women who are involved in SMEs in Israel. The research critically analyzes the following research question: *what are the effects of internal and external factors on Israeli women entrepreneurs' performance in SMEs?*

To study the effects of internal and external factors on women entrepreneurs' performance, online recruitment of women entrepreneurs with businesses in Israel resulted in a sample population of women entrepreneurs willing to participate in the study. These women are representative of the population of women entrepreneurs in

SMEs in Israel. Furthermore, the unit of analysis for the research was at the individual level, rather than relating to the level of the business.

Despite the factors influencing women's entrepreneurship's differing from those affecting men's, limited research has focused specifically on women entrepreneurs' performance. Hence, an aim of the current study is to add to the current knowledge on the subject of women's entrepreneurship, in general, in order to understand more clearly the factors influencing women entrepreneurs. The growing participation of women in the business environment provides support for focusing the research on women entrepreneurs and on the factors that influence women entrepreneur performance. Throughout the thesis, women's entrepreneurship is examined and the factors that influence entrepreneur performance are addressed to understand the effect that they may have on entrepreneurship.

More specifically, in this dissertation, research is conducted to fill the gap in the knowledge about women entrepreneurs' performance in SMEs in Israel. Based on earlier studies by Hasan & Almubarak [2016], key factors which have been shown to influence women entrepreneurs' performance are critically examined as they relate to women's entrepreneurship in Israel. Hasan & Almubarak's [2016] key influencing factors included both internal (personal) factors and external (environmental) factors. These factors were used in this study to examine the effect that they have on entrepreneur performance. Efforts are made to relate to the factors from a gender perspective, since gaps have been found to exist between men and women concerning the influence of many of the key factors on entrepreneurship.

The dissertation also includes the examination of a proposed mediating factor, opportunity recognition, for its effect in mediating between the internal (personal) and external (environmental) factors and entrepreneur performance. In earlier research, the exploitation and identification of opportunities has been examined, but recognition of the entrepreneurial opportunity phenomenon is still lacking, with few studies that have investigated both internal (individual) and external (environmental) factors as the antecedents of entrepreneurial opportunity recognition [Wang, Ellinger & Wu, 2013]. Hasan & Almubarak's [2016] Conceptual Model used to describe the influence of the key factors on entrepreneur performance has been adapted for use in the study. The

Modified Conceptual Model (see chapter 4, section 4.1.3) based on Hasan & Almubarak's [2016] Conceptual Model illustrates the proposed relationship between all the factors that are explored in the study.

The intent of the study was to obtain quantitative results from the sample population of women entrepreneurs in Israel to be used in testing the influence of internal (personal) and external (environmental) factors on entrepreneur performance. Furthermore, in this study, the proposed Modified Conceptual Model includes the influence of a mediating factor, opportunity recognition, which is examined for its mediating effect in the relationship between the internal (personal) and external (environmental) factors and the performance of women entrepreneurs.

The thesis that describes the study is composed of five chapters. A general introduction into the study, provides the background for the dissertation, the significance of the study and its aim and purpose.

The first chapter is the literature review, which reviews the current knowledge relating to the topic of the thesis and describes the substantial theoretical and methodological contributions of previous research to the topic, while identifying the expected contribution of the thesis to the existing body of knowledge. The literature review covers entrepreneurship in general, and then specifically topics related to women entrepreneurship. It should be underlined that the general theory of entrepreneurship presented in the work is based on the influential and holistic concepts developed by Shane [2003].

In the second chapter, a comprehensive review of entrepreneurship in Israel identifies key issues that are the focus of the research. The chapter examines the development of entrepreneurship in Israel and delves deeper into the role of women entrepreneurs in SMEs in Israel.

The third chapter presents the proposed conceptual model and the research hypotheses that will be examined in the research. Thereafter, the methodology used in the research to test the model and the research hypotheses is described, with justification for choosing the research methods. The chapter also includes descriptions of the research participants and measures used, including discussion of the verification of the reliability and validity of the measures. Data collection methods used in the research are described in detail.

The fourth chapter presents the results of the research. Quantitative data collected during the study underwent statistical analysis. Statistical analysis using descriptive statistics, statistical correlation techniques using the Pearson correlation coefficient, mediation testing and the Sobel test to verify validity and Ordered Logistic Regression were used to statistically analyze the relationships between the independent, dependent, and mediating variables.

The fifth and final chapter concludes the study and provides useful insights into women entrepreneurship in Israel. In closing, the dissertation outlines the contributions of the study to the understanding of women entrepreneurship in Israel, discusses the limitations of the study and provides recommendations for future research.

A summary of the dissertation concludes the thesis.

Chapter 1: Literature Review

In this chapter, a review of published literature that considers previous research provides the necessary background for understanding the field of entrepreneurship and outlines current knowledge about entrepreneurship. The literature review covers all aspects of entrepreneurship and then focuses on specific aspects of entrepreneurship among women. I chose to focus on women's entrepreneurship from a holistic perspective since the topic of women's entrepreneurship is represented scantily in the literature. The literature review serves to outline the context of the research as it relates to the relevant fields of literature. It identifies the novelty in the research and its contribution to the current body of knowledge.

1.1. Entrepreneurship

This part of the literature review deals with entrepreneurship in general. At first, I will review the various definitions of entrepreneurship, and then I will review the development of entrepreneurship as a research subject. At the end of this part, I will detail a general theory of entrepreneurship – the individual opportunity nexus that was developed by Shane [2003]. This theory forms the basis of the model on which my research is based.

1.1.1. Definition of Entrepreneurship

Entrepreneurship has no single definition. The word 'entrepreneur' derives from the French *entreprendre*, indicating the entrepreneur as literally an 'undertaker' [Courvisanos & Mackenzie, 2014]. *Entreprendre* was used in French in various senses from the fourteenth century. Richard Cantillon was the first to introduce the term entrepreneur into the economic theory in 1755. From Schumpeter, in 1934 the entrepreneurial function, as the prime force in economic development, is to innovate in five dimensions: new goods (product innovations); new production methods (process innovations); new markets for demands (for the outputs of enterprises); new markets for

supplies (of inputs to production); new industrial organization. Schumpeter's entrepreneur has a managerial or decision-making role. For Schumpeter, in order to be entrepreneurial, this management function must be management of innovation [Aspromourgos, 2012]. In the early 20th century, entrepreneurs were not frequently distinguished from managers and were viewed mostly from an economic perspective. With the integration of business, managerial, and personal terminology, the concept has evolved to include newness, creating, organizing, risk taking, and wealth [R. Hisrich, Langan-Fox & Grant, 2007].

Gartner [1989] suggests a simple definition of entrepreneurship: entrepreneurship is the creation of new organizations. Since entrepreneurs are found in all professions: architecture, business, education, engineering, law, medicine, and psychology, Hisrich, Langan-Fox & Grant [2007] defined entrepreneurship as the process of creating something new with value by devoting the necessary time and effort, assuming the accompanying financial, psychic, and social risks, and receiving the resulting rewards. They defined it to include all types of entrepreneurial behavior.

Over the years, a number of relevant studies have attempted to differentiate "entrepreneurs" and "business owners" on the basis of Schumpeter. For example, according to Carland, Hoy, Boulton, Carland & Carland [1984], the first category includes those individuals who establish and manage a business mainly led by growth and innovation objectives. Conversely, business owners are identified as those individuals establishing and running a business, using most of their resources to achieve personal goals, strictly related to their families' needs. However, a clear consensus on such differences has not yet emerged. [Poggesi, Mari & De Vita, 2016].

1.1.2. Entrepreneurship as a Research Subject

The study of entrepreneurship has become one of the fastest growing fields of research in the area of management over the last few decades. Many argue that entrepreneurship research can be regarded as a young field of research. They argue that it still suffers from insufficient resources for research and difficulties in being legitimated in comparison with more well-developed research fields. However, researchers have

discussed the concept of entrepreneurship for several centuries and there is a long tradition of research to be based on. Therefore, it is important to bring to light the historical review of entrepreneurship research [Landstrom, 1999].

Early entrepreneurship concepts

The concept first appeared 1437 in the French dictionary. The entrepreneur in this respect was associated with violent warlike activities and was described as tough and willing to risk life and fortune. In the early 17th century, the entrepreneur came to be regarded as a person who undertook activities associated with risk-taking. However, not everyone who took risks was regarded as an entrepreneur, the word determines only people who were involved in large-scale undertakings. The typical entrepreneur was a person who had a contractual relationship with the state to perform some service or provide the state with some type of benefit. The price in the contract was fixed, and the entrepreneur took the risk of possible profit or loss [Landstrom, 1999].

Entrepreneurship in an economic context

Richard Cantillon (1680-1734) and Jean Baptiste Say (1767-1832) are often given credit for introducing the concept of entrepreneurship into the literature of economic science. A basic characteristic of Cantillon's analysis was the emphasis on risk. Frank Knight (1885-1972) makes a distinction between risk and uncertainty and takes the view that the skill of the entrepreneur lies in his ability to handle the uncertainty. In the mid-18th century, changing production conditions, social relations, and a new way of thinking began to emerge. These changes also affected the academic environment. In the domain of economic science, "classical" economic theory developed by Adam Smith (1723-1790). Smith laid the foundation for the analysis of the way the market economy functions. Smith's work influenced the view taken of the entrepreneur in economic science; he did not deal with the entrepreneurial function in the economy, it was the capitalist who became the central actor in Smith's analysis. At the end of the 19th century a transition in economic science took place, from macroeconomic considerations towards a greater

focus on microeconomic considerations. This economic science was dominated by a theory of equilibrium where individuals were producers and consumers and search for equilibrium dominated the analyses. In this situation, they ignore the entrepreneur in the economic analysis.

Joseph A. Schumpeter (1883-1950) tried once again to make the entrepreneur a central figure. Schumpeter starts from the premise that equilibrium is dominant in the economic system. The entrepreneur tends to break this equilibrium by introducing innovations into the system in the form of new products, methods of production, markets, investment goods, or organization of industrial units and branches.

Later development is the Human Action Tradition represented by Frederick von Hayek (1906-1992) and Ludwig von Mises (1881-1973). Mises observed that people are not only calculating creatures, but they are also alerted to make use of opportunities, which caused him to introduce the concept of "human action" to describe this behaviour. Hayek pointed out that in a market economy, knowledge is often divided among different individuals, so that no one individual holds the same knowledge or information as another. This means that there are only a few people who know about special shortages or resources that are not used to maximum effect. This knowledge is unique since it is obtained through every individual's special situation, occupation or social network. Israel Kirzner has stood out as the leading representative of human action tradition. Kirzner develops arguments raised by Mises and Hayek. According to Kirzner, it is fundamental for an entrepreneur to show alertness in identifying and dealing with opportunities for profitmaking ("entrepreneurial alertness"). The entrepreneurial function, in this respect, involves coordination of information, which is based on identifying the gap between supply and demand, as well as acting as the mediator between supply and demand, making it possible to earn money from the difference. Kirzner see the entrepreneur as a person who is alert to identify imperfections in the market by means of information about the needs and resources of the different actors and with the help of this information to coordinate resources in a more effective way, thereby creating equilibrium. Kirzner's view of the entrepreneur opposed to Schumpeter's. Schumpeter saw the entrepreneur as a creator of imperfections in the market by generating new innovations. Kirzner, on the other hand, saw the entrepreneur as a seeker of imbalances and designed to remove these imperfections. Kirzner's entrepreneur does not create

anything new, whereas Schumpeter's does. According to Kirzner, the entrepreneur is a mediator who sees and utilizes what is already there, but which others do not see.

Mark Casson highlights the entrepreneur and argues for an additional entrepreneurial function - the entrepreneur as a "coordinator" of limited resources. Casson attempts to unite two lines of thought: ideas both from neo-classical economic theory and from the human action tradition. His premise is that an imbalance exists in the market, and the entrepreneur sees opportunities to coordinate resources in a more effective way, which will bring the market towards equilibrium. Like Kirzner, Casson emphasizes the importance of information and takes the view that the entrepreneur has the capacity to combine information in a way that creates opportunities for profit [Landstrom, 1999].

Changes in the environment, which may include changes to products or changes in the demands or needs of the customers were shown to be the major source of entrepreneurial opportunities in three case studies that were conducted in Canada. However, a firm needs to develop its entrepreneurial capabilities to recognize these opportunities [Aramand & Valliere, 2012].

Table 1 summarizes entrepreneurship in an economic context.

Table 1: Summary of Entrepreneurship in an Economic Context

Entrepreneurial role	Researcher
The entrepreneur as risk-taker/ risk-manager	Richard Cantillon Jean Baptiste Say Frank Knight
The entrepreneur as capitalist (Adam Smith did not use the term entrepreneur, but very often “speculative merchant” or “merchant”)	Adam Smith
The entrepreneur as implements and manages innovation	Joseph A. Schumpeter
The entrepreneur as alert seeker of opportunities	Frederick von Hayek Ludwig von Mises Israel Kirzner
The entrepreneur as coordinator of limited resources	Mark Casson

Source: Own elaboration

Entrepreneurship - from economics to behavioural sciences

After World War II, it was important to inspire individuals to start businesses. In order to do this, it was important to identify the individuals who had entrepreneurial skills. However, economists could not play a useful role in identifying and developing this ability. Instead, behavioural science researchers saw an open field, more and more science researchers took the responsibility for continuing the theoretical development. They assumed that some individuals have certain qualities which others do not have and because of this some individuals tend to start their own business, whereas others do not. Thus, in an attempt to understand the entrepreneur as an individual, behavioural science researcher have mainly asked the questions: who is the entrepreneur? Why does the entrepreneur act? The view of entrepreneurship in economics as a function of the market has shifted to the entrepreneur as an individual, where the definitions were particularly focused on the entrepreneur's personal traits. What has interested behaviorists most is what prompts people to start businesses [Landstrom, 1999].

An examination of the transitions of the self-employed into and out of self-employment in Germany showed that exempting the self-employed from educational entry requirements facilitated the entry into self-employment, while having no adverse effect on exit rates from self-employment [Rostam-Afschar, 2014].

Internal factors, that included the entrepreneurs' knowledge, the entrepreneurs' personal networks and the ability of the entrepreneurs to identify business opportunities were of more importance in conditioning corporate entrepreneurship than external factors [Urbano & Turró, 2013].

A large number of studies have been carried out with the focus on the entrepreneur as an individual. Shaver & Scott [1991] summarized this research in three themes.

1. Focus on the individual: This research presents much of the earlier behavioral entrepreneurship research-discovering the characteristics of the entrepreneur.
2. Focus on the process: The relation between the environment and the behavior of the individual.
3. Focus on the individual's freedom of choice: The individual's intentions and choices when starting businesses.

Entrepreneurship - an interdisciplinary field

Entrepreneurship developed as a business discipline through the adoption of theories from the field of sociology, psychology, anthropology, marketing, management, financing, organizational behaviour, and engineering. Entrepreneurship is an interdisciplinary field [Moroz & Hindle, 2012]. Kuratko, Morris & Schindehutte [2015] maintain that it is not correct to research the field from a narrow perspective and it is necessary to look at the entire constellation. They developed the framework of frameworks approach. This framework incorporates all the approaches in the field and illustrates the complexity of the research in the field of entrepreneurship, as demonstrated in Figure 1.

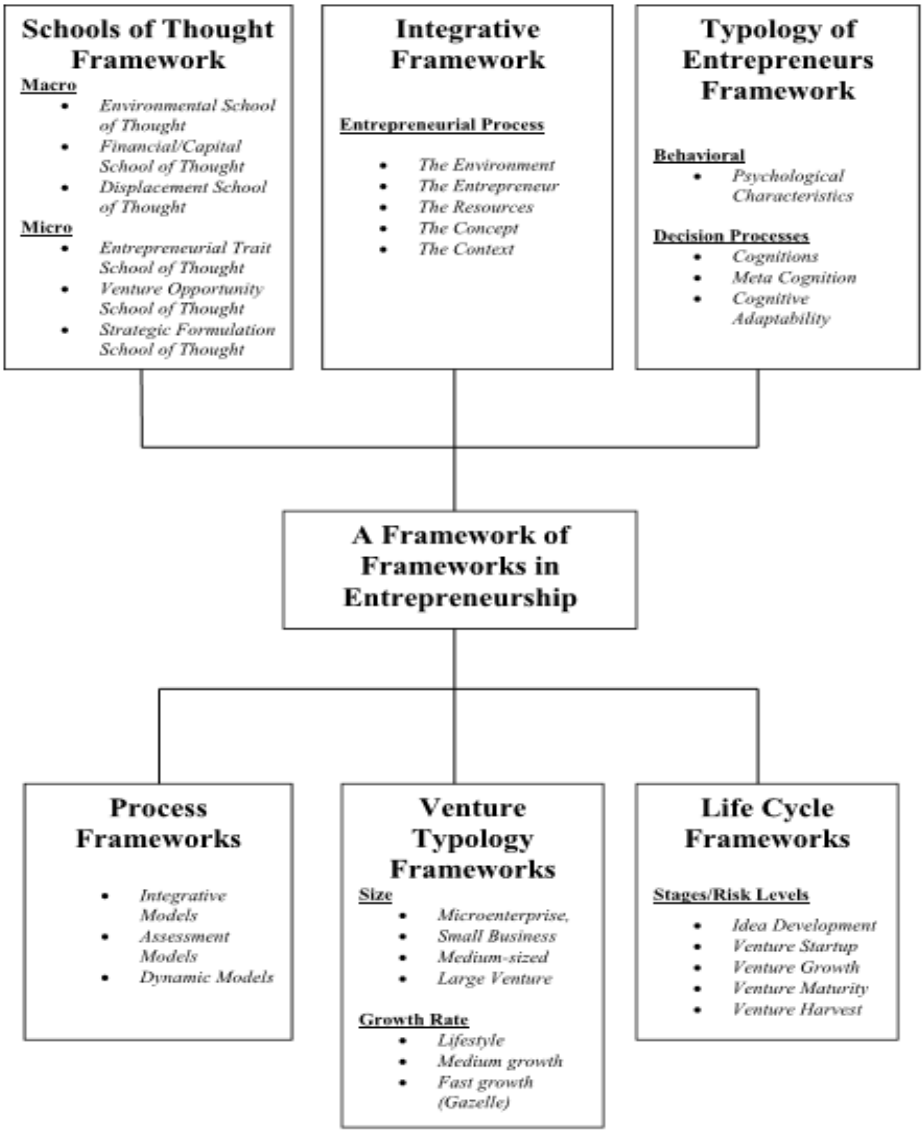

Figure 1: Framework of Frameworks Approach

Source: [Kuratko et al., 2015]

Kuratko et al. [2015] divide the field of entrepreneurship studies into eight topics, as follows:

1. Venture financing.
2. Corporate entrepreneurship (entrepreneurial actions within large organizations).
3. Social entrepreneurship and sustainability.
4. Entrepreneurial cognition (examining the great variety among types of entrepreneurs and the methods they have used to achieve success).
5. Women and minority entrepreneurs.
6. The global entrepreneurial movement.
7. Family businesses.
8. Entrepreneurial education.

1.1.3. The Individual Opportunity Nexus Theory of Entrepreneurship

General theory of entrepreneurship presented by Shane [2003], in the book *A General Theory of Entrepreneurship: The Individual-Opportunity Nexus*, outlined proposal of an individual-opportunity nexus framework as it relates to all parts of the entrepreneurial process. Shane developed his research into entrepreneurship around ideas that had been presented in earlier research by Venkataraman. Entrepreneurship was considered by Shane as the exploitation of opportunities, following exploration and assessment, for introducing new products and services [Shane, 2003].

The basis for Shane's [2003] conceptual framework for the individual-opportunity nexus can be explained "Because the economy operates in a continual state of disequilibrium and change, situations arise in which people can transform resources into a form (…) that they believe will have greater value than their cost to create [Venkataraman, 1997]. The entrepreneurial process begins with the perception of opportunities, or situations in which resources can be combined at a potential profit. Alert individuals, called entrepreneurs, discover these opportunities, and develop ideas for how to pursue them, including the development of a product or service that will be

provided to customers. These individuals then obtain the resources, design organizations or other modes of opportunity exploitation, and develop a strategy to exploit the opportunity.'' [Shane 2003, p. 10].

Opportunity has been explored widely in earlier research and plays a major role in entrepreneur activities. Shane [2003] elaborated on opportunities as being objective, occurring independently of the entrepreneurs who are perceiving the opportunities and that only individuals with the appropriate characteristics will be able to perceive these opportunities. Therefore, it could be supposed that entrepreneurial activity depends upon the interaction that is created between the characteristics of opportunities and the quality of the individuals that are exploiting the opportunities. This line of reasoning follows on earlier publications by Hayek [1937], and those by Knight in 1921 who also noted that opportunities are objective, but clarified that the perception of opportunity is subjective. Knight further distinguishes between risk, which is considered objective, and uncertainty, which is considered subjective. Knight introduced the uncertainty-bearing theory, identifying uncertainty-bearing as the economic function of the entrepreneur when providing explanations about phenomena of entrepreneurship [Shane, 2003; Hayek, 1937].

Shane [2003] proposed the framework for an individual-opportunity nexus as being based on an entrepreneurial process whose six stages driving performance are illustrated in Figure 2.

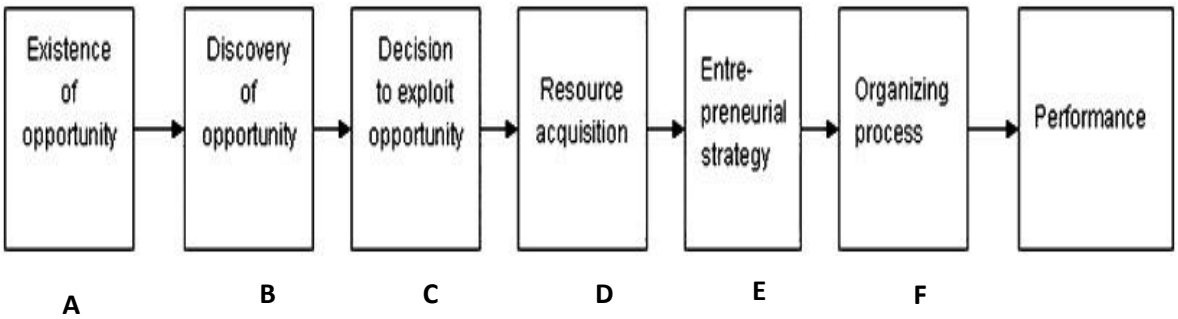

Figure 2: The Entrepreneurial Process

Source: [Shane, 2003, p.12]

As shown in Figure 2, the stages of the entrepreneurial process begin with the initial examination of the characteristics of the existing opportunity, and the entrepreneurs'

discovery of the opportunity and exploitation of the opportunity. Once the decision has been made to exploit the opportunity, resources are needed. Planning the strategy for exploiting the opportunity and organization of activities follow the previous stages.

Step A - Existence of opportunity

The first step of the entrepreneurial process according to Shane's [2003] entrepreneurship process is dealing with the existence of opportunity. Based on earlier literature, opportunities can be categorized in three ways. The first way to categorize the opportunity is according to the locus of the changes that lead to creation of the opportunity. The second way of categorization is based on the source of the opportunity, and the third way to categorize the opportunity is according to the initiator of the change [Eckhardt & Shane, 2010].

The value of categorizing opportunity according to the locus of changes results from the understanding that entrepreneurial opportunities can occur as a result of changes in many different sections of the value chain [Shane, 2003]. Five possible sources for changes were suggested by Schumpeter [1934; in Eckhardt & Shane, 2010]. These changes can result from the creation of new products or services, from the expansion into new geographical markets, from the discovery or development of new raw materials, from innovative methods of production and from changing organizational methods [Schumpeter, 1934; in Eckhardt & Shane, 2010].

When relating to the second way of categorizing opportunities, according to the source of the opportunities, earlier research suggests four important ways of categorizing opportunities by sources. The first of the four ways to categorize opportunity depended on the use of the differences in the opportunities arising from the existing knowledge of market participants and the opportunities created by the exogenous shock of new information into the market. A comparison between the demand and the supply in the market is a second possibility for categorizing opportunity, while the comparison between productive and unproductive entrepreneurship provides the third way of categorizing opportunities. Lastly, categorization can be facilitated by identifying the agents that drive the change which produces the opportunity [Shane, 2003].

Differences exist in the views of Kirzner [1973] and Schumpeter [1934; in Eckhardt & Shane, 2010] about the sources of entrepreneurial opportunity and the role exogenous shocks of information play in the catalysation of entrepreneurship. According to the Schumpeterian view changes occurring in technology, politics, regulations, and demographics generate new information which enable resources to be recombined into more valuable forms. Changes in the available information alters the equilibrium price for resources, and thus, entrepreneurs with access to the new information are able to purchase needed resources at below-equilibrium prices, and when the resources are recombined and their value increases, the products may be sold at an entrepreneurial profit. Furthermore, the entrepreneur is considered the initiator of changes in the economy and can shock the economy by disturbing the economic equilibrium during times of change. The Kirznerian view argues that opportunities exist even when new information does not emerge. Based on information that is accessible, individuals make decisions that lead to shortages and surpluses of resources. Entrepreneurs that are alert to these fluctuations can purchase, recombine, and resell resources for a profit. According to the Kirznerian view, the entrepreneur secures profits through capatilization of asymmetries in information and knowledge [de Jong & Zoetermeer, 2010; Shane, 2003].

Table 2 summarizes the differences between Schumperterian and Kirznerian opportunities.

Table 2: Schumpeterian vs. Kirznerian Opportunities

Schumpeterian opportunities	Kirznerian opportunities
Disequilibrating	Equilibrating
Requires new information	Does not require new information
Very innovative	Less innovative
Rare	Common
Involves creation	Limited to discovery

Source: [Shane, 2003, p.21]

When categorizing opportunities using a comparison between the demand and the supply in the market, the classification of opportunities depend on whether the changes that occur and thus generate the opportunity, originate from factors connected

to demand or supply. Changes on the side of the supply side could involve methods of organization, production processes, or products that affect the supply [Shane, 2003]. Changes to demand, which alter the allocation of resources, are influenced by customer preferences and purchasing habits. Demand that changes as a result of customers' perceptions and tastes can expand available opportunities. Growing markets can create opportunities for the enterprise to specialize [Geroski, 2001].

Step B - Discovery of opportunity

As the second step in the entrepreneurial process proposed by Shane [2003], discovery can be driven by access to information and opportunity recognition. Each entrepreneur displays differences in the discovery process. Access to information is made possible via life experiences, using social networks and through search processes. Opportunity recognition, under conditions where the same amount of information is available, can be driven by absorptive capacity and by cognitive processes, referred to as alertness to opportunity [Shane, 2003]. Absorptive capacity has been shown to be dependent on prior knowledge about markets. Entrepreneurial alertness was described by Kirzner [1979, p.48, in Hassannezhad & Valliere, 2021] as "the ability to notice without search opportunities that have hitherto been overlooked". Alertness has been linked to the discovery and exploitation of entrepreneurial opportunities, often through receptiveness to information and the ability to use that information to create new frameworks. The discovery of entrepreneurial opportunities and making changes accordingly has been described as an ability stemming from cognitive roots [Hassannezhad & Valliere, 2021].

Step C - Decision to exploit opportunity

The third step in the entrepreneurial process as described by Shane [2003] explains the decision of the entrepreneur to exploit an opportunity after it has been discovered. The decision leads to the taking of action to arrange the necessary resources to pursue an opportunity. Acting on a decision follows on from recognizing and evaluating the

opportunity which are mental activities. Shane divided the factors that affect the exploitation process into groups of individual factors and environmental factors. The individual factors related to non-psychological and psychological influences, while the environmental factors, included the effects of industry and the macro-environment [Shane, 2003]. Individual factors that are associated with non-psychological influences include such factors as education, marital status, age, career experience, social ties etc. The psychological influences relate to personality traits, like extraversion, need for achievement, self-efficacy and others, and to motivation and cognitive characteristics. Some of these factors are presented in Figure 3.

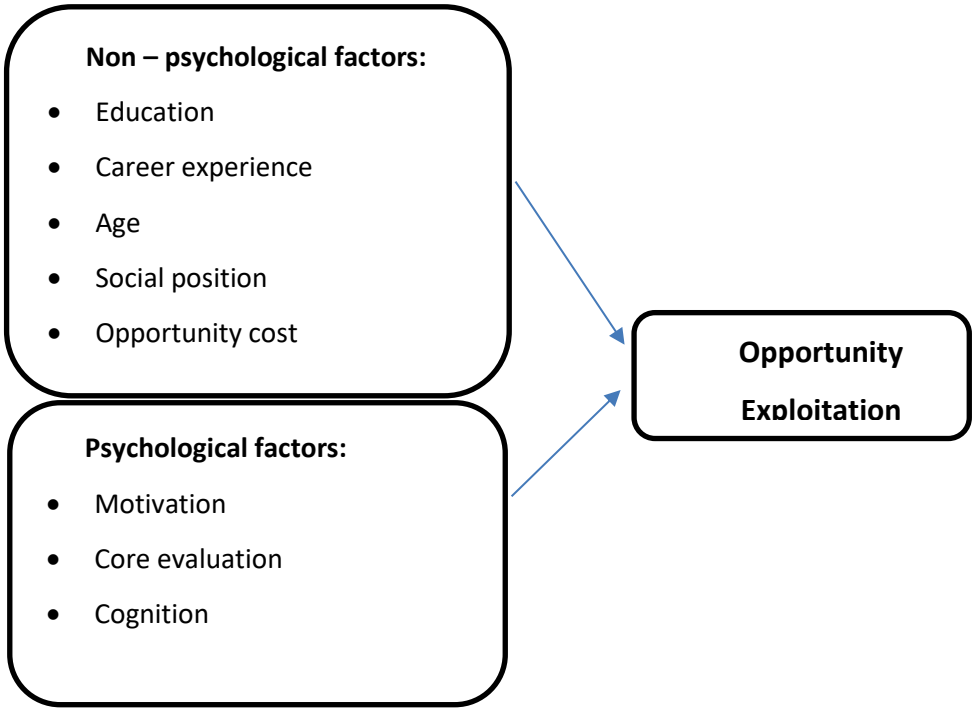

Figure 3: The Effect of Individual Attributes on Decision to Exploit

Source: [Shane, 2003, p.62]

Industry is one of the environmental factors that affect the exploitation process and the decisions to exploit entrepreneurial opportunities are influenced by the industry in which the entrepreneurs operate. The environmental factors that affect the exploitation process can result from different conditions in the industry that have a variety of effects on opportunity exploitation. The five industry conditions mentioned by Shane [2003] include knowledge conditions, demand conditions, industry lifestyles, appropriability

conditions and industry structure. Knowledge conditions – firm formation is more common in industries that are more R&D intensive, in which extra-value chain source of innovation are more important, that have a greater level of small firm innovation and are less uncertain. Knowledge conditions affect the decisions to exploit entrepreneurial opportunities, with formation of firms occurring more often when the industry is more R&D intensive. Demand conditions increase firm formation in larger, faster growing and more segmented industries. Industry life cycles also influence firm formation, with younger industries which have not yet formulated a dominant design, driving firm foundation. Appropriability conditions influence firm formation since firm formation was found to be more common in industries where importance is placed on patents. The industry structure has importance for firm formation, with profitable industries that have lower cost inputs, use less capital, are less concentrated and whose average firm size is lower leading in firm formation [Shane, 2003].

Table 3 summarizes the industry differences that influence opportunity exploitation based on Shane [2003].

Table 3: The Industry Differences that Influence Opportunity Exploitation

Knowledge conditions	• R&D intensity • Locus of innovation • Size of the innovating entities • Uncertainty of the industry
Demand conditions	• Market size • Market growth • Market segmentation
Industry life cycles	• Industry age • Dominant design • Presence of a density of firms
Appropriability conditions	• Strength of patents • Importance of complementary assets
Industry structure	• Profitability of industry • Cost of inputs • Capital intensity of the industry • Advertising intensity of the industry • Industry concentration • Average firm size

Source: own elaboration on the basis of Shane [2003, p.121]

The macro-environment is the second of the environmental factors that affect the exploitation of entrepreneurial opportunities. The economic, political and socio-cultural environments all make up the macro-environment. Each aspect in the macro-environment has a different effect on exploitation of entrepreneurial opportunities. Some aspects in the economic environment, for example, that increase the level of opportunity exploitation include capital availability, societal wealth, and economic stability. On the other hand, rates of taxation are shown to reduce the level of opportunity exploitation. Table 4 summarizes the macro-environment aspects that increase opportunity exploitation according to Shane [2003].

Table 4: The Effect of the Macro-Environment on Opportunity Exploitation

Aspects of the macro-environment	Increase the level of opportunity exploitation
Economic environment	• Societal wealth • Economic stability • Capital availability
Political environment	• Freedom • Property rights • Decentralization of power
Socio-cultural environment	• Socio desirability of entrepreneurship • Present of entrepreneurial role models • Specific culture beliefs that encourage entrepreneurial actions and behaviors

Source: own elaboration on the basis of Shane [2003, p.147]

Step D - Resource acquisition

Once the decision has been taken to exploit opportunity, resources must be mobilized and recombined. A variety of resources can be the source for the enterprises' capital. Financial capital can be acquired through loans from a bank, for example. Skills of employees can make up human capital, while social capital can be gained through the information gathered from social contacts. Entrepreneurship is advanced through balancing opportunities and resources and the acquisition of resources enables the entrepreneur to execute an opportunity. Mobilization of the initial resources for

exploitation of an opportunity is of importance for the life chances of the enterprise and the enterprise's long-term development [Clough, Fang, Vissa & Wu, 2019].

Financing is needed to acquire and recombine resources, even before the sale of the recombination of the resources has materialized. The entrepreneur may finance the resource acquisition process or may seek financial capital from external sources [Shane, 2003]. Irrespective of the source or amount of financing, the resource acquisition process is surrounded by information asymmetry and uncertainty [Shane, 2003].

Prior knowledge, reinforced by experience, creates resources that can be valuable in exploiting opportunities. When converted into resources, asymmetries in knowledge, benefit the firm and create a competitive advantage [Barbaroux, 2014]. Yet, despite some benefits, certain problems can be caused by information asymmetry and uncertainty in acquiring resources and exploiting opportunities. To overcome these problems, several strategies are used to finance a venture, in addition to self-financing. These solutions may include contractual solutions, whereby the ownership rights are divided between entrepreneurs and resource providers, and certain pre-investment and post-investment tools. Strong social ties can also drive resource acquisition, as can entrepreneurial behaviour. Table 5 summarizes some of the problems and solutions to acquire financial resources to exploit entrepreneurial opportunities according to Shane [2003].

Table 5: Financial Resource Acquisition to Exploit Entrepreneurial Opportunities

Problems		Solutions
Information asymmetry	Disclosure difficulties	• Self-financing • Contractual solutions • Pre-investment tools • Post-investment tools • Social ties • Entrepreneurial behavior • Quality Signaling
	Opportunism	
	Excessive risk taking	
	Adverse selection	
Uncertainty	Inability to evaluate	
	Bargaining problems	
	Need for collateral	

Source: Own elaboration on the basis of Shane [2003]

Step E - Entrepreneurial strategy

Shane [2003, p.194)] defines entrepreneurial strategy as those efforts to obtain and preserve private value from the exploitation of opportunities. Strategic entrepreneurship has been described as organizational innovations resulting from the integration of opportunity into enterprises through the involvement of advantage-seeking behaviours [Mazzei, 2018].

Entrepreneurial strategy involves two different facets as described by Shane [2003]. The strategy to preserve profit involves secrecy and barriers. Firstly, the enterprise develops its competitive advantage by impeding the competitors' use of the opportunity by preserving secrecy, through precluded access and understanding. Secondly, the enterprise creates value from uncertainty and information asymmetry to support the opportunity. Competitive advantage can be created by erecting barriers that limit the competitors access to the opportunity. The enterprise can gain control of the resources that are expected to be necessary for the opportunity exploitation. The enterprise can develop legal barriers that prevent imitation of the innovation, through the enforcement of patents, creating exclusive control or requiring government permits. The enterprise can develop opportunities at a scale that dissuades imitation since other enterprises are not able to afford the costs of imitation. Enterprises can also develop a reputation to maintain their competitive advantage. Fig. 4 summarizes how entrepreneurs protect their opportunities against competition [Shane, 2003].

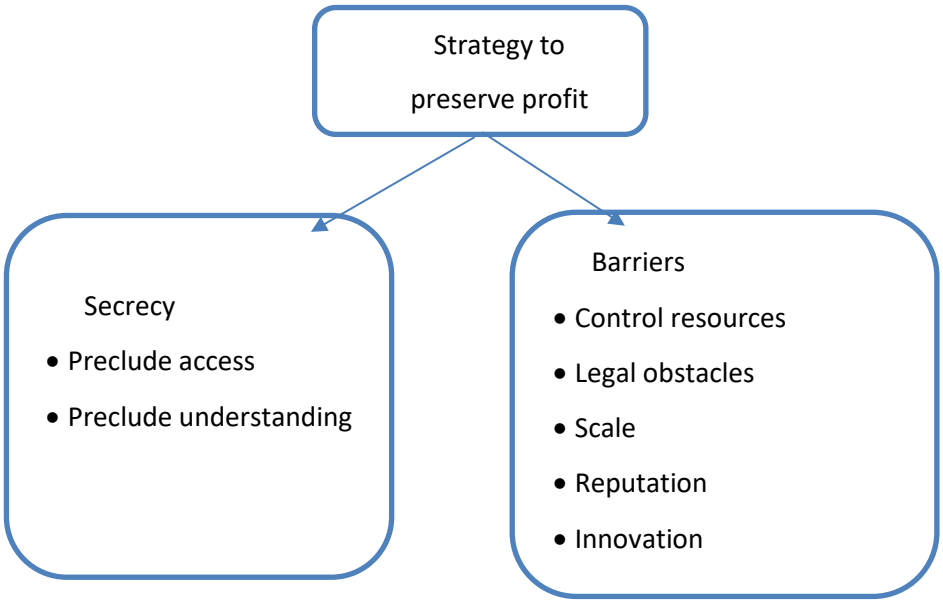

Figure 4: Protecting Entrepreneurs' Opportunities against Competition

Source: [Shane, 2003, p.196]

Step F - Organizing process

The final step of Shane's [2003] entrepreneurship process is engaging in organizing to exploit an opportunity. Organizing takes place over time and is a process. Organization involves developing routines and structures aimed at supporting the enterprises' goals. Planning is an integral part of the organizing process and it can overcome some of the problems that result from uncertainty and information asymmetry [Shane, 2003]. Using information gathered, the entrepreneur can gain a better understanding about what can be planned to ensure the success of the business. Planning can result in faster decision-making, more efficient management of supply and demand for resources and effective organization of operational activities [Delmar and Shane, 2003]. The value of planning is increased when uncertainty exists and the individual making the decisions does not possess previous experience on which to make decisions and process the information [Cox, 2014]. Planning can also consider the human, physical and financial resources that are needed by the venture. The empirical literature validates the value attributed to planning within the organizing process [Shane, 2003].

The choice of the mode of opportunity exploitation is another factor influencing the organizing process. One possibility is that the individual who identified the opportunity proceeds with exploiting the opportunity on their own. Alternatively, the individual may utilize a market mechanism, which may be the use of licensing or franchising to facilitate the exploitation of the opportunity. According to Shane [2003], four common types of entrepreneurial activity can be described. These modes of activity include independent start-up, conducted independently by the entrepreneur. Most interest is placed in the independent start-up since most entrepreneurs independently exploit opportunities when they organize a new enterprise. Acquisition or licensing relates to entrepreneurial activities where discovery is carried out independently and exploitation of the opportunity involves an organization. Spin-off is a third possible mode of activity, where discovery is carried out by an organization and exploitation is conducted independently. Lastly, corporate venturing where discovery and exploitation is carried out by the

organization. The choice of type of entrepreneurial activity depends on whether the discoverer of the opportunity was within or external to an existing firm and whether the exploiter of the opportunity is within or external to an existing firm. Figure 5 shows the four common types of entrepreneurial activity according to Shane [2003].

		Discovery	
		Independent individual	Organization member
Exploitation	Independent individual	**Independent start-up**	**Spin-off**
	Organization member	**Acquisition / Licensing**	**Corporate venturing**

Figure 5: The Modes of Exploitation

Source: [Shane, 2003, p.224]

Summing up this section of the chapter, I have discussed that entrepreneurship has no single definition, that researchers have discussed the concept of entrepreneurship for several centuries and that there is a long tradition of research to be based on. As we can see, the general theory of entrepreneurship – the individual opportunity nexus that was developed by Shane [2003] is an overarching conceptual framework for entrepreneurship that explains the different parts of the entrepreneurial process in a coherent way. Therefore, this theory forms the basis of the model on which my research is based.

1.2. Women Entrepreneurship

This section of the literature review deals with women entrepreneurship. At first, I will review the participation of women in entrepreneurship and women entrepreneurship as a research subject. Then, I will summarize the differences between women and men entrepreneurs. I will also focus on three main types of entrepreneurial gaps that were found between women and men: human capital, financing capital and social capital. I will continue this section with reference to women entrepreneurial performance and finally, I will refer to factors affecting women entrepreneurship.

1.2.1. Participation of Women in Entrepreneurship

While entrepreneurship and innovation are regarded as important factors in driving growth and development, certain sections of the population are under-represented in entrepreneurial activities. A gender gap exists between men and women resulting from differences in the opportunities for entrepreneurial activities available to each of the genders. These differences are found both in activities that are considered early-stage entrepreneurial activities associated with the establishment of new firms, as well in the activities of established businesses, where male owners and managers of firms are found in greater numbers than those that are female [Lindberg, Lindgren & Packendorff, 2014].

The value of women entrepreneurs to society can be reflected in the many benefits that their entrepreneurial activity has not only for themselves, but often also for their communities. Self-employed women entrepreneurs, for example, establish their own source of income and in addition, may support their families. Furthermore, by creating a value network, the women can bestow benefits on other participants in their network. When the women expand their enterprises, they can create new job opportunities for others within their communities, while innovation introduced by women's enterprises offer new types of solutions to the existing markets. Through these various activities, women entrepreneurs become an integral part of many different industries [GEM, 2019].

Global Entrepreneurship Monitor [GEM] is an ongoing international study that assesses entrepreneurship and the contribution of entrepreneurship to economic growth in participating countries across the world. It also examines the social impact that entrepreneurship has on entrepreneurs and the business environment [GEM, 2020]. The GEM 2018/2019 Women Entrepreneurship Report shows that the participation of women in entrepreneurship differs around the world, as does their impact on job creation and innovation. The studied the estimated 231 million women located in 59 economies across the globe that were starting or running new enterprises worldwide. An examination of sole proprietorship worldwide, which examined businesses with no employees or where the entrepreneur was self-employed, showed that women sole proprietorship constituted 37.6% of enterprise ownership in comparison to 27.8% for sole proprietorship for men. Even when the data collected was compared according to three income levels, the rates for self-employment amongst the women remained above 32% while those of the men dropped below 30% [GEM, 2019].

University students from three countries, the United States of America, China and Belgium, participated in a study that examined the influence of gender and culture on the perceptions about barriers to becoming an entrepreneur and intentions to become an entrepreneur in the future. While the study found that differences exist between the genders in their perceptions of barriers to entrepreneurship, this gap between genders was not consistent across the cultures. [Shinnar, Giacomin & Janssen, 2012].

Gawel [2013] analyzed the changes in the rates of female entrepreneurship in Poland between the years 1993 and 2010 against the background of the job market situation. It was discovered that the rates of female self-employment and entrepreneurship are not only lower, but also more dynamic and more susceptible to changes in the overall economic situation than the corresponding rates among men. This greater susceptibility means that during economic upturns the rates for women increase faster than the rates for men and during economic downturns; they tend to decrease more sharply than the rates of male entrepreneurship.

In a comparative study across countries, it was found that there are three institutional and cultural factors that most strongly influence the decisions of women to establish and grow a business. These three factors were the legal and social status of the women in their country, the institutional presence, and the empowerment of

the women economically [Muntean, 2013].

In an area of England where the completion of higher education was limited and the level of entrepreneurship was low, the barriers to women's entrepreneurship were examined. The level of awareness of the women to the business support available to women entrepreneurs in the region was explored. Although accessibility to training was perceived as one of the barriers for the women, the perception of financial risk associated with establishing a business was a greater challenge for the women. The pressures involved in running the business also added to the concerns of the women in all that related to entrepreneurship [Lockyer & George, 2012]. Sullivan and Meek's [2012] review found that barriers exist for women to engage in entrepreneurship which are based on socialization processes and current societal attributions. The barriers are created through an uneven distribution of assets between the sexes, the expectations from women about their daily activities and the focus of education for the women [Sullivan & Meek, 2012].

Noguera, Alvarez & Urbano [2013] examined women's entrepreneurship in Catalonia, Spain using data from the GEM project. The findings of the study found that the main socio-cultural factors that limited the women's entry into entrepreneurship activities were the women's perception of their capabilities as entrepreneurs and their fear of failure to establish and operate their own enterprises [Noguera, Alvarez & Urbano, 2013].

Other factors limited women's establishment of entrepreneurial activities in Malaysia, where development of women's entrepreneurship is limited by gender inequality and insufficient support from the women's spouse, characteristics often ingrained in cultural barriers. The women also suffer from a lack of self-confidence and the limited use of social and business channels for networking. The women are further impacted by scant support of laws to reinforce working families [Ming Yen Teoh & Choy Chong, 2014].

A study conducted in Canada focused on women entrepreneurs active in the technology sector, which has traditionally been dominated by males. The findings from interviews with a sample of women entrepreneurs showed that the women face social pressures to maintain their work-family balance. In addition, in the technology business sector, the women perceived gender stereotypes and experiences

resistance from their peers. In many cases, the women also lacked female role models [Ezzedeen & Zikic, 2012].

In most countries, women have owned about 30% of small businesses. Women who own small businesses make a very important contribution to the economy [Hodges et al., 2015]. Data from 2012 showed that a projected 48 million female entrepreneurs and 64 million female business owners were employing one or more people in their businesses [Kelley, Brush, Greene & Litovsky, 2012].

The Female Entrepreneurship Index (FEI) 2015 report published by the Global Entrepreneurship and Development Institute (GEDI) collected data from 77 countries relating to women entrepreneurship. While the USA attained a score of 82.9 out of 100 points, and Australia scored 74.8 points, 61% of the 77 countries achieved a score that was less than 50. Thus, despite the value of women's entrepreneurship, most women entrepreneurs are still lacking support and the necessary infrastructure to succeed in their entrepreneurial activities [Terjesen & Lloyd, 2015].

Since small businesses are the pillar of the economy, entrepreneurship is the growth engine of the economy. Women constitute about 50% of the population, it is therefore important to research businesses and entrepreneurship among women so as to strengthen the economy. Although women entrepreneurs contributed significantly to the gross national products, jobs, and innovations, there is limited information about women entrepreneurship. Only 10% of research focused on studies of women entrepreneurs [Brush & Cooper, 2012]. Most of the researches were men centered and failed to represent a holistic picture of women entrepreneurship [Hughes, Jennings, Brush, Carter & Welter, 2012].

1.2.2. Female Entrepreneurship as a Research Subject

Until the 1970s only men were the research subject of researchers in the field of entrepreneurship [Gomes, Santana, Araújo & Martins, 2014]. In recent decades the field of women entrepreneurship is receiving steadily increasing attention in entrepreneurship research. It is possible to see this in comprehensive research studies that investigate women entrepreneurship on the global level. Thus, for example, take the GEM Report

[Kelley et al., 2012], the Diana project – multi-university research [Lewis, Henry, Gatewood & Watson, 2014], The Business Project that provides objective measures of business regulations and their enforcement across 189 economies ("Doing Business – Measuring Business Regulations," n.d.) and extensive reviews of the literature [Ahl, 2006; Brush, Welter & Welter, 2006; Bruin & Brush, 2007; Brush, de Bruin & Welter, 2009 ; Terjesen, Elam & Brush., 2011; Sullivan & Meek, 2012; Jennings & Brush, 2013; Henry, Foss & Ahl, 2016; Poggesi, Mari & De Vita, 2016].

In academia the gender factor in entrepreneurship emerged in the late 1970s [Amutha, 2015]. Especially since the 2000s there has been a significant growth in the field's investigation [Poggesi et al., 2016]. In the female entrepreneurship research domain, the terminology is still fuzzy: "female/women entrepreneurs", "female/women small business owners" and "female/women owners/managers" are often used interchangeably. Figure 6 presents the growing number of publications about female entrepreneurship according to Web of Science Core Collection. This trend increases over time and points to a growing academic interest.

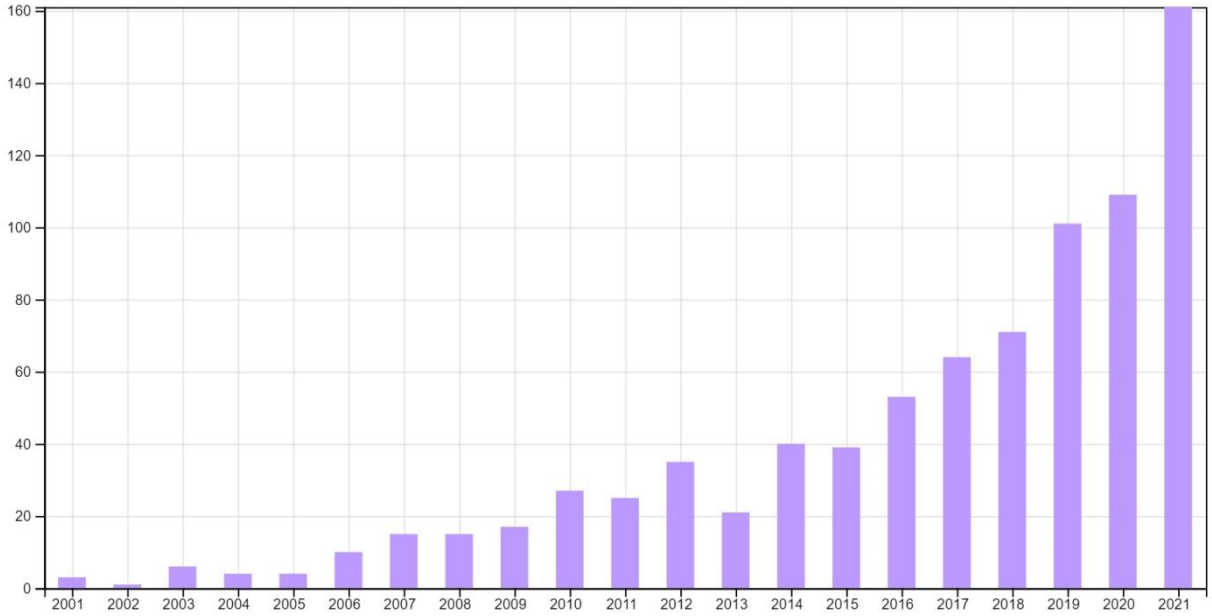

Figure 6: Publications with topic "female entrepreneurship" in 2001-2021 period

Source: [Web of Science Core Collection, access: 31 March 2022]

Research in the field of women entrepreneurship is significantly developing from descriptive research lacking in theoretical focus towards the aspiration to analyze

research findings in a highly informed conceptual framework [Henry, Foss & Ahl, 2016]. Greene et al. organized the existing field of research in ten categories, as follows:

1. Gender (feminist theory, sex roles)
2. Entrepreneurs' personal attributes
    - Human capital (education and experience)
    - Demographics (age, marital status, children)
3. Motivations (aspirations and goals)
4. Founding strategies (strategies and management teams)
5. Initial capital resources (debt, equity, financing)
6. Investment process (structure, stage)
7. Networks (family and social)
8. Inhibiting factors (barriers and obstacles) ·
9. International (countries, international comparisons)
10. Public Policy/Government

These topics can be aggregated by the unit of analysis:

- Entrepreneur: Personal attributes, motivations
- Business unit: Founding strategies, initial capital resources, investment process
- Context: Social networks, inhibiting factors – barriers and obstacles, international setting, public policy issues
- Research Perspective: Feminist theory, sex roles [Greene, Hart, Gatewood, Brush & Carter, 2003]

Until recently, the focus of the research studies in the field was placed on the business owner's experience. The research focused on the woman herself and on the way in which she behaves in the world of entrepreneurship, which was then perceived as a field that is available and accessible to all equally. Most of the research studies focused on the comparison between men and women. The researchers invested efforts in proving that women do not belong to this field. They maintained that businesses owned by men showed better performances than did businesses owned by women. There was a discussion on the following questions. Why can the woman not be more like a man? How can we make women become more similar to men? [McAdam M., 2013]. Today,

researchers in the field recognize the unintentional tendency of a number of accepted research methods to contribute to the perception of women entrepreneurs as inferior in comparison to men entrepreneurs [Henry, Foss & Ahl, 2016].

In the 1990s, there was a desire to look for a solid theoretical framework that would help decipher women's entrepreneurship and explain why different businesses owned by women may differ from male counterparts. These theories encouraged the use of feminist theories such as liberal feminism and social feminism [Fischer, Reuber & Dyke, 1993].

The liberal feminist approach holds that men and women are essentially equal in their ability. Therefore, the theoretical explanation for the differences observed between men and women is based on discrimination or the existence of structural barriers such as education, employment opportunities, social networks and counselors. In a different way, social feminism states that men and women are not essentially similar, and focuses on unique needs, experience, and skills. Social feminism holds that the differences between men and women are in the process of early and ongoing socialization that shape the identity of the individual, affect its behavioural characteristics rather than their biological characteristics. For example, the concept of low self-efficacy may limit the possibility of women identifying business opportunities or getting external funding [Poggesi et al., 2016]. In the US, female-owned firms were found to be less likely to receive private investment for supporting the development of new technologies then male-owned [Gicheva & Link, 2015].

The category of gender is found today at the centre of different areas of research that acknowledge that without the gender perspective it is not possible to explain main phenomena in society. This happens also in the field of the research of entrepreneurship. In contrast to the thesis that determines that entrepreneurship is an open and accessible effort in which personal effort alone determines reward and status, it was proven that there is a gender bias also in the entrepreneurship discourse [Ahl, 2012].

Despite this distinct change in feminist analysis of entrepreneurial activity, the literature continues to report on studies comparing only men and women. In addition, a number of methodological weaknesses were noted, including small sample sizes, inappropriate or gender measures, or a combination of comparative studies between men and women, where women's inferiority is consistently highlighted [Bruin & Brush,

2007]. Since 2000, we have witnessed a development in the discussion of the relationship between gender and entrepreneurship, and there is an awareness among researchers that gender is a social construction and acquired behaviours that result from being male or female [Poggesi et al., 2016]. However, theoretical or empirical analyzes are not always able to properly reflect gender knowledge. In many studies, the term "gender" is still considered measurable and serves as an independent variable, and thus researchers continue to compare entrepreneurs with men and women, mainly judging the activities of women through male norms [Henry, Foss & Ahl, 2016].

There is a discussion whether separate theories for men entrepreneurs and for women entrepreneurs are needed. The conclusion is that as long as the existing theories are extended, take into account the gender perspectives, and are aware of the differences that are derived from them among men and women entrepreneurs, it will not be necessary to develop separate theories [Candida G. Brush et al., 2009].

1.2.3. Differences between Female and Male Entrepreneurs

** Some of the text in chapter 1.2.3 was previously made public in form of Working Paper [Efroni, 2017b].*

In findings from the Center for Women's Business Research in 2004, women were found to have been establishing businesses at an annual rate greater than that of men [CWBR, 2004]. This trend has also been observed in developing countries. Yet, fewer businesses are owned and managed by women entrepreneurs than by men. The reasons behind these differences are multifaceted, possibly originating in the behaviours of the women entrepreneurs and other differences between the genders [Minniti & Naude, 2010]. Furthermore, in developing countries, enterprises owned by women are much smaller than enterprises owned by men. Some possible reasons for these differences are that many of the women are involved in enterprises in low performing business sectors and are less likely to seek financial assistance than the men [Bardasi, Sabarwal & Terrell, 2011].

While over the years many national-level institutions have moved towards greater gender equality, equality has had a negative effect on the self-employment

choices of women, with a lower participation of women in self-employment than the men. The impact of equality on women's self-employment choices was greater in the developed countries and in industries that were dominated by men [Klyver, Nielsen & Evald, 2013].

Women who have already decided to engage in entrepreneurship encounter many challenges, both in the stage of the establishment of the venture and in its management in the continuation. Some of these challenges are shared by both male and female entrepreneurs and some are relevant only to women [Loscocco & Bird, 2012] . Fairlie & Robb [2009] found that businesses owned by women succeed less than do businesses owned by men since they have less initial capital, less business human capital acquired through previous work experience in a similar business, and less previous work experience in a family business.

In a study using data across 11 countries taken from the 2001 GEM adult population survey, Elam and Terjesen [2010] compared business creation between men and women. They examined the effects of soft measures, such as values, expectations, and beliefs, as well as hard measures, like institutional norms and practices in the 11 countries. The influence of perceptions and gender on the decision to establish a business was indirectly associated with gender wage inequality, public financing of childcare and female business leadership [Elam & Terjesen, 2010].

Changes have been occurring over the past few decades in the farms in Sweden. More service production has been introduced to the farms as a diversification to bolster the production from agriculture. While farming had largely been a dominantly male occupation, many of the newer farm tourism and hospitality entrepreneurs are women. The motivation for the women to become entrepreneurs originated in economic needs or was associated with personal or social reasons. In the study in Sweden, the division of labour between the men and the women on the farms remained unchanged despite the move to entrepreneurship of the women [Pettersson & Heldt Cassel, 2014].

In China, family characteristics had a different effect on the participation of men and women in self-employment. Married women experienced lay-offs from state-sector jobs, resulting in their entry into unskilled self-employment, while men were more likely to enter family businesses. Women were found to have lower rates of entry into self-employment than the men [Zhang & Pan, 2012].

Furthermore, the number of women entrepreneurs in every country is less than the number of male entrepreneurs. Estrin and Mickiewicz [2011] examined the effect that institutions had on the decisions of male and female entrepreneurs to establish their enterprises. Data was taken from the Global Entrepreneurship Monitor survey (GEM). While in countries with a larger state sector, women seemed less likely to take on entrepreneurial activities, it was more specific institutional components that limited the women's entrepreneurial motivations. These institutional components included discriminatory aspects against the women, such as limitations on the women's movement away from their homes. Such limitations lowered the women's aspirations for entrepreneurial growth, even in those situations where the women had begun entrepreneurial activities [Estrin & Mickiewicz, 2011].

While some socio-cultural factors may provide gender-based explanations for women's choices for self-employment, Saridakis, Marlow and Storey [2014] found that the self-employment choices of men and women were influenced by economic factors in a similar manner and suggested that the emphasis on the effect of social factors on women's choices for self-employment was not always justified. Macro-economic factors were shown to influence women's participation in self-employment in a similar way to which these macro-economic factors influenced the men, both in the short and the long run [Saridakis, Marlow & Storey, 2014].

The gender gap in entrepreneurship is explained in women's structural disadvantages regarding the achievement of the resources relevant to the success of the business [Thebaud, 2010]. Three main types of entrepreneurial gaps were found between women and men: human capital, financing capital and social capital [Efroni, 2017a].

Human Capital

The interest in human capital in the framework of entrepreneurship literature is of long standing and has greatly increased in the past two decades. Human capital developed as a highly utilized theoretical lens through which the researchers succeed in better understanding entrepreneurship [Marvel, Davis & Sproul, 2016]. Human capital theory was originally developed to learn the value of education and indicated that people

have varying knowledge and skills that have economic value [Schultz, 1971]. Human capital theory developed in the field of entrepreneurship and consistently links human capital attributes to entrepreneurial success [Unger, Rauch, Frese & Rosenbusch, 2011]. Therefore, human capital constitutes a main criterion among venture capitalists when evaluating potential venture performance [Zacharakis & Meyer, 2000]. Table 6 summarizes articles that found human capital gaps [Efroni, 2017b].

Education and Experience

Orser, Riding & Manley [2006] maintain that women and men bring different human capital to the business in aspects of education and previous management experience. It was found that women have less formal education in business or financial topics in comparison to men [Hisrich & Brush, 1984; Candida G Brush, 1992; Coleman, 2007]. Kourilsky & Walstad [1998] demonstrated that both men and women displayed a low level of knowledge in entrepreneurship. However, the women were more aware of the lack in this field of knowledge than their fellow men. In aspects of previous experience, it was found that women bring less management experience to the business than do men [Boden & Nucci, 2000; Coleman, 2007; Shaw, Marlow, Lam & Carter, 2009]. K. A. Loscocco, Robinson, Hall & Allen [1991] found that women lacked experience in the specific industry. This lack constitutes a disadvantage in comparison to their fellow men.

Self-Confidence

Thebaud [2010] maintains that the gender gap in self-assessments constitutes a considerable part of the gender gap in entrepreneurship. Women have significantly lower self-confidence relative to men [Birley, 1987]. Men report a significantly higher level of entrepreneurial self-efficacy in comparison to women [Chowdhury & Endres, 2005; Wilson, Kickul & Marlino, 2007; Malach-Pines & Schwartz, 2008; Kirkwood, 2009; Thebaud, 2010]. A lack of confidence is perhaps the greatest barrier to women's progression into business ownership [Fielden, Davidson, Dawe & Makin, 2003]. Self-efficacy has a stronger effect on entrepreneurial interest for girls than for boys [Kickul,

Wilson, Marlino & Barbosa, 2008]. Self-efficacy addresses the person's belief about his abilities. The person's degree of belief in his ability has decisive impact on his motivation and choices. In addition, self-efficacy has decisive impact on the ability to cope with difficulties, the ability to persevere, and the scope of the effort that will be invested. Therefore, self-efficacy has a decisive impact on the level of performances [Bandura, 1991]. Chowdhury & Endres [2005] found that perceived financial knowledge has a significant positive influence on entrepreneurial self-efficacy among men and women. Only among women does the level of education have significant positive influence on the entrepreneurial self-efficacy.

The 2015 United States GEM Report states that one key attitude related to entrepreneurship is the perceived capability to start a business. People who believe they have the business skills and competencies to launch a venture, build a team, and run the business are more likely to plan to start a business. When comparing women and men in the United States, perceived capabilities for starting a business vary significantly, with 62% of men believing they are capable compared to 50% of women. This suggests that men have more confidence in their ability to start a business or have had more training that is relevant or more experience.

Risk Taking

The higher risk aversion among women explains a large share of the entrepreneurial gender gap [Caliendo, Fossen, Kritikos & Wetter, 2015]. Nascent women entrepreneurs perceive more risk than nascent male entrepreneurs [Dalborg, von Friedrichs & Wincent, 2015]. Women tend to hate taking risks more than do men [Powell & Ansic, 1997; Harris, Jenkins & Glaser, 2006; Dawson & Henley, 2015]. When faced with social and technological hazards, women are more risk-averse than men [Olsen & Cox, 2001], even when decision makers of both genders have the same level of expertise and experience [Dwyer, Gilkeson & List, 2002]. The 2015 United States GEM Report states that one key attitude related to entrepreneurship is the fear of failure. Fear of failure encompasses fear of social failure (What will others think?), fear of personal failure (psychic risk), fear

of monetary failure (What if I lose all my money?) and several other concerns. Women exhibit a higher perceived rate of failure of 33% compared to 27% for men.

Motivation

The 2015 United States GEM Report states that one key attitude related to entrepreneurship is intention to start a business. The gaps between women and men in attitudes towards capabilities and failure are comparable to intentions to start a business. Women significantly prefer less than do men to establish their own business [Kourilsky & Walstad, 1998; Wilson, Marlino & Kickul, 2004; Zhao, Seibert & Hills, 2005]. Men and women who choose entrepreneurship are motivated by different motives. Women wanted to start a business in order to achieve three types of personal goals: personal freedom, security, and satisfaction [Shabbir & Di Gregorio, 1996]. Women are less motivated by the desire to earn money. Frequently they choose entrepreneurships because of dissatisfaction in their career. Many women see entrepreneurship as a means of integrating a career and the raising of children [Cromie, 1987].

Commitment

Women are committed first to the home, to the family, and to the community [Loscocco & Bird, 2012]. Women business owners work fewer hours in the business in comparison to men business owners and have different preferences regarding the business goals, which have implications on the business's outcomes [Fairlie & Robb, 2009].

Table 6: The Human Capital Gaps between Women and Men Entrepreneurs

	Study	Sample	Data Source	Conclusions
Human Capital **Education and Experience**	[R. D. Hisrich & Brush, 1984]	468 usable questionnaires were returned	Questionnaires were mailed to 1,151 women entrepreneurs in 18 states. The survey included women from all areas of the country.	Women have less formal education in business or financial topics in comparison to men – only 22 percent of the women entrepreneurs had

	Study	Sample	Data Source	Conclusions
				undergraduate business training.
	[K. A. Loscocco et al., 1991]	540 usable questionnaires were returned	Questionnaires were mailed to the 1,742 members of the Smaller Business Association of New England (SBANE).	Women lacked experience in the specific industry. This lack constitutes a disadvantage in comparison to their fellow men.
	[Kourilsky & Walstad, 1998]	490 females and 477 males	The Gallup organization collected the survey data by telephone from a national random sample of about 1,000 youth, ages 14-19 years old. Logistic regression analyses were used to explore the relationship between response probability and gender.	Both men and women displayed a low level of knowledge in entrepreneurship. However, the women were more aware of the lack in this field of knowledge than were their fellow men.
	[Boden & Nucci, 2000]	A sample of approximately 130,000 business owners	The data used in this study were drawn from the 1982 and 1987 Characteristics of Business Owners surveys conducted by the U.S. Bureau of the Census.	Women bring less management experience to the business than do men.
	[Coleman, 2007]	605 firms owned by white women and 2,190 firms owned by white men	Data for this study were drawn from the 1998 Survey of Small Business Finances (SSBF) and included information on 3,561 small U.S. firms defined as firms having 500	Women have less formal education in business or financial topics in comparison to men.
				Women bring less management experience to the business than do

	Study	Sample	Data Source	Conclusions
			or fewer employees.	men.
	[Shaw et al., 2009]	A sample of 30 matched pairs of business owners (30 males, 30 females) was created.	Data were collected in two stages involving a telephone survey followed by face to face semi-structured interviews.	Women bring less management experience to the business than do men.
Human Capital-Self - Confidence	[Chowdhury & Endres, 2005]	Undergraduate and graduate business students in their final semester before graduating were used as subjects for data collection	Data from participants of a computer venture strategy simulation	Men report a significantly higher level of entrepreneurial self-efficacy in comparison to women.
				Perceived financial knowledge has a significant positive influence on entrepreneurial self-efficacy among men and women. Only among women does the level of education have significant positive influence on the entrepreneurial self-efficacy.
	[Wilson et al., 2007]	Study1: 4,292 middle/high school students Study2: 993 MBA students	Study1: survey of 4,292 middle/high school students Study2: survey of 993 MBA students in seven graduate programs	Men reported higher levels of self efficacy and entrepreneurial intentions than women did.
	[Kickul et al., 2008]	5,000 middle and high school students	A larger study of 29 middle and high schools	Self-efficacy has a stronger effect on entrepreneurial interest for girls than for boys.
	[Malach-	1. 514 adults,	Study 1: phone	Men perceive

	Study	Sample	Data Source	Conclusions
	Pines & Schwartz, 2008]	51 % women 2. 313 management students, 52 % women 3. 101 small business owners, 32 % women	survey of 514 adults (51 % women) Study 2: 313 management students (52 % women) Study 3: interviews with 101 small business owners (32 % women)	themselves as more suitable for entrepreneurship than women do.
	[Kirkwood, 2009]	25 women and 25 men	Interviews with entrepreneurs	Women exhibit a lack of self-confidence in their own abilities as entrepreneurs compared to men.
	[Thebaud, 2010]	15,242 respondents	Global Entrepreneurship Monitor (GEM) data from the United States over five years (2001–2005)	Men report a significantly higher level of entrepreneurial self-efficacy in comparison to women.
	[The 2015 United States GEM Report, n.d.]	In 2015, more than 190,000 individuals were surveyed across 62 economies, including 5,944 in the United States	The 2015 United States GEM Report	When comparing women and men in the United States, perceived capabilities for starting a business vary significantly, with 62% of men believing they are capable compared to 50% of women. This suggests that men have more confidence in their ability to start a business or have had more relevant training or experience
Human Capital	[Powell & Ansic, 1997]	64 male and 62 female volunteers	Computerized laboratory experiments	Women tend to hate taking risks more than do

	Study	Sample	Data Source	Conclusions
Risk Taking		from the undergraduate and postgraduate population		men.
	[Olsen & Cox, 2001]	The first group consisted of 209 anonymous Chartered Financial Analysts (CFA) of whom 42 or 20% were women. The second group consisted of 274 Certified Financial Planners (CFP) of whom 99 or 36% were women	Data was gathered in survey form from two groups of professional investors.	When faced with social and technological hazards, women are more risk-averse than men.
	[Dwyer et al., 2002]	2000 mutual fund investors	A national survey	Women exhibit less risk-taking than men even when decision makers of both genders have the same level of expertise and experience.
	[Harris et al., 2006]	389 females and 268 males	Undergraduate psychology classes at the University of California	In the health, recreational, and gambling domains, women reported a lower likelihood of engaging in risky behaviours.
	[Caliendo et al., 2015]	Over 22,000 individuals in approximately 12,000 households	The German Socio-Economic Panel (SOEP).	The higher risk aversion among women explains a large share of the entrepreneurial gender gap.
	[Dalborg et al., 2015]	103 women and men who,	The organization ALMI, a	Nascent women entrepreneurs

	Study	Sample	Data Source	Conclusions
		in the period 2008 through 2011, intended to start a business	Swedish public company founded in1994 to promote small business development.	perceive more risk than nascent male entrepreneurs.
	[Chris Dawson & Henley, 2015]	628 students	Analyzing survey data drawn from a number of UK and European universities	The level of venture creation intent is higher among male students than female ones, and female students do view risk less positively.
	[The 2015 United States GEM Report, n.d.]	In 2015, more than 190,000 individuals were surveyed across 62 economies, including 5,944 in the United States	The 2015 United States GEM Report	Women exhibit a higher perceived rate of failure of 33% compared to 27% for men.
Human Capital-Motivation	[Cromie, 1987]	35 men and 34 women	Personal interviews	Men and women who choose entrepreneurship are motivated by different motives. Women are less motivated by the desire to earn money. Frequently they choose entrepreneurships because of dissatisfaction in their career. Many women see entrepreneurship as a means of integrating a career and the raising of children.
	[Shabbir & Di Gregorio, 1996]	16 women who started a business 17 women did not start a business	In-depth interviews of 33 participants of an entrepreneurship development	Women wanted to start a business in order to achieve three types of personal goals: personal

	Study	Sample	Data Source	Conclusions
			program. 16 women who started a business 17 women did not start a business, although they had originally intended to do so	freedom, security and satisfaction.
	[Kourilsky & Walstad, 1998]	490 females and 477 males	The Gallup organization collected the survey data by telephone from a national random sample of about 1,000 youth, ages 14-19 years old Logistic regression analyses were used to explore the relationship between response probability and gender.	Women significantly prefer less than do men to establish their own business.
	[Wilson et al., 2004]	1971 teens reporting high levels of interest in becoming entrepreneurs	Data were drawn from a national study of career interests of adolescents	Interest in entrepreneurship as a career was lower among girls than boys.
	[E., 2005]	265	265 master of business administration students across 5 universities	Women reported lower entrepreneurial career intentions.
	[The 2015 United States GEM Report, n.d.]	In 2015, more than 190,000 individuals were surveyed across 62 economies, including 5,944 in the United States.	The 2015 United States GEM Report	One key attitude related to entrepreneurship is intention to start a business. The gaps between women and men in attitudes toward capabilities and failure are comparable to intentions to start

	Study	Sample	Data Source	Conclusions
				a business.
Human Capital- **Commitment**	[Fairlie & Robb, 2009]	The survey was sent to more than 75,000 firms and 115,000 owners.	Confidential microdata from the U.S. Census Bureau	Women business owners work fewer hours in the business in comparison to men business owners and have different preferences regarding the business goals, which have implications on the business's outcomes.
	[K. Loscocco & Bird, 2012]	573 business owners	Respondents were drawn randomly from lists of small businesses in upstate New York.	Women are committed first to the home, to the family, and to the community.

Source: [Efroni, 2017b]

Financing Capital

Financing capital constitutes a central component in the entrepreneur's resources. Many research studies address the analysis of the financial aspect of new business [Cooper, Gimeno-Gascon & Woo, 1994]. Women perceived a greater need for financial and accounting help than men did [Jones & Tullous, 2002]. Men invest significantly larger amounts of capital when establishing and operating their business [Carter & Rosa, 1998; Verheul & Thurik, 2001; S. Fielden, Dawe & Woolnough, 2006]. The 2015 United States GEM Report states that women entrepreneurs launch their businesses with half of what men do (an average of $10,000 versus $20,000).

One reason for the gap in the amount of capital invested can derive from the difference in sectors. Starting a business in consumer services requires less capital in comparison to starting a venture in manufacturing or business services. Another reason for the gap is that they accumulated less financial capital in their lives because of the breaks they took in the career or because of the gaps in salary between men and women [Boden & Nucci, 2000]. Another reason for the gap in the amount of capital is that

women business owners use less credit than do men. The women owners of businesses have a lower rate of loans in general and bank loans in particular [Carter & Rosa, 1998; Coleman, 2007]. Some of the researchers maintained that women owners of businesses do not request credit. It was found that women are less likely to seek external finance for business start-ups [Orser et al., 2006; Sena, Scott & Roper, 2012].

Women business owners who did request credit from the bank encountered difficulties [Pellegrino & Reece, 1982; Buttner et al., 1992; Fabowale, Orser & Riding, 1995; Coleman, 2000]. Some maintain that there is no evidence of discrimination on the part of the bank regarding loan conditions and loan approval, and therefore women who seek a bank loan are not expected to be rejected more than are men [G. H. Haines Jr. et al., 1999; Orser et al., 2006; Treichel & Scott, 2006; Coleman, 2007; Sena et al., 2012].

Conversely, there are conflicting research studies on the topic. Some found evidence of discrimination. It was found that businesses owned by women were required to pay higher interest rates and were required to have greater collaterals [Coleman, 2000]. Some also argued that female entrepreneurs face tighter access to credit, even though they do not pay higher interest rates [Bellucci, Borisov & Zazzaro, 2010].

The reason women use less credit can derive from the fact that women tend to be risk-averse and less secure in themselves relative to men, especially in the areas of making financial decisions and investments [Powell & Ansic, 1997]. Women tend to have less confidence in taking financial risks [S. Fielden et al., 2006]. Some also assert that women perceive stronger financial barriers to business start-up than men do, and this may be discouraging them from seeking external financial support [Sena et al., 2012]. Roper & Scott [2009] report that women have financial barriers, which derive from their perception of their access to finance. They were less likely to apply for loans because they assumed they would be denied [Coleman, 2007]. Table 7 summarizes articles that found financing capital gaps [Efroni, 2017b].

Table 7: The Financing Capital Gaps between Women and Men Entrepreneurs

Study	Sample	Data Source	Conclusions
[Pellegrino & Reece, 1982]	21 female entrepreneurs were randomly selected from	Semi-structured interviews	Women business owners who did request credit from the bank encountered difficulties.

Study	Sample	Data Source	Conclusions
	a list of 138.		
[Buttner et al., 1992]	108 entrepreneurs, 53 males and 55 females	280 questionnaires mailed to members of entrepreneurial networking organizations on the East Coast of the United States	Women business owners who did request credit from the bank encountered difficulties.
[Fabowale et al., 1995]	759 females and 1,974 males, responses were received	A total of 14,980 questionnaires were mailed	Women business owners who did request credit from the bank encountered difficulties.
[Powell & Ansic, 1997]	64 male and 62 female volunteers from the undergraduate and postgraduate population	Computerized laboratory experiments	The reason women use less credit can derive from the fact that women tend to be risk-averse and less secure in themselves relative to men, especially in the areas of making financial decisions and investments.
[Carter & Rosa, 1998]	600 300 male-owned and 300 female-owned	British businesses, part of a 3-year study on the impact of gender and small business management	Men invest significantly larger amounts of capital when establishing and operating their business.
			Another reason for the gap in the amount of capital is that women business owners use less credit than do men. The women owners of businesses have a lower rate of loans in general and bank loans in particular.
[G. H. Haines Jr. et al., 1999]	105 cases in which the principal owner of the firm could be identified as a woman 835 instances	Data are drawn from a national random sample of 1,393 bank loan files	There is no evidence of discrimination on the part of the bank regarding loan conditions and loan approval, and therefore women who seek a bank loan are not

Study	Sample	Data Source	Conclusions
	in which the principal owner of the firm could be identified as a man		expected to be rejected more than are men.
[Boden & Nucci, 2000]	1982: 1802 men 2174 women 1987: 454 men 451 women	The data used in this study were drawn from the 1982 and 1987 Characteristics of Business Owners surveys conducted by the U.S. Bureau of the Census.	Women use less financial capital than men to start firms.
			One reason for the gap in the amount of capital invested can derive from the difference in sectors. Starting a business in consumer services requires less capital in comparison to starting a venture in manufacturing or business services.
			One reason for the gap is that they accumulated less financial capital in their lives because of the breaks they took in the career or because of the gaps in salary between men and women.
[Coleman, 2000]	Random sample of over 4,000 small businesses: 3797 men 840 women	Data from the 1993 National Survey of Small Business Finances (NSSBF)	Businesses owned by women were required to pay higher interest rates and were required to have greater collaterals.
			Women business owners who did request credit from the bank encountered difficulties.
[Verhe	1,500 men	2,000 Dutch starting	Men invest

Study	Sample	Data Source	Conclusions
ul & Thurik, 2001]	500 females	entrepreneurs	significantly larger amounts of capital when establishing and operating their business.
[Jones & Tullous, 2002]	133	A sample of 133 clients of a regional Small Business Development Center (SBDC)	Women perceived a greater need for financial and accounting help than men.
[S. Fielden et al., 2006]	18 women and 14 men	32 interviews were conducted with people seeking business start-up capital.	Men invest significantly larger amounts of capital when establishing and operating their business.
			Women tend to have less confidence in taking financial risks.
[Orser et al., 2006]	The final sample comprised 2,844 firms, of which 2,357 were owned by men and 487 firms were owned by women	Canadian small and medium enterprise (SME) owners seeking external financing.	Women are less likely to seek external finance for business start-ups.
			There is no evidence of discrimination on the part of the bank regarding loan conditions and loan approval, and therefore women who seek a bank loan are not expected to be rejected more than are men.
[Treichel & Scott, 2006]	There were 1,921 respondents in the 1987 survey, 3,642 in the 1995 survey and 2,223 in the 2001 survey	The data in this study come from the Credit, Banks and Small Business (CBSB) survey conducted by the National Federation of Independent Business (NFIB) in 1987, 1995, and 2001	There is no evidence of discrimination on the part of the bank regarding loan conditions and loan approval, and therefore women who seek a bank loan are not expected to be rejected more than are men.

Study	Sample	Data Source	Conclusions
[Coleman, 2007]	605 firms owned by white women and 2,190 firms owned by white men	Data for this study were drawn from the 1998 Survey of Small Business Finances (SSBF) and included information on 3,561 small U.S. firms defined as firms having 500 or fewer employees.	There is no evidence of discrimination on the part of the bank regarding loan conditions and loan approval, and therefore women who seek a bank loan are not expected to be rejected more than are men.
			Another reason for the gap in the amount of capital is that women business owners use less credit than do men. The women owners of businesses have a lower rate of loans in general and bank loans in particular.
			Women were less likely to apply for loans because they assumed they would be denied.
[Roper & Scott, 2009]		The Global Entrepreneurship Monitor (GEM) 2004 database	Women have financial barriers that derive from their perception of their access to finance.
[Bellucci et al., 2010]	7,800 credit lines made available to individually owned small businesses	A major Italian bank	Female entrepreneurs face tighter access to credit, even though they do not pay higher interest rates.
[Sena et al., 2012]	10,002 individuals	The data provided by the Household Survey of Entrepreneurship database that surveys individuals' intentions of becoming self-employed in England, UK	Women are less likely to seek external finance for business start-ups.
			There is no evidence of discrimination on

Study	Sample	Data Source	Conclusions
			the part of the bank regarding loan conditions and loan approval, and therefore women who seek a bank loan are not expected to be rejected more than are men.
			Women perceive stronger financial barriers to business start-up than men, and this may be discouraging them from seeking external financial support.
[The 2015 United States GEM Report, n.d.]	In 2015, more than 190,000 individuals were surveyed across 62 economies, including 5,944 in the United States	The 2015 United States GEM Report	Women entrepreneurs launch their businesses with half of what men do (an average of $10,000 versus $20,000).

Source: [Efroni, 2017b]

Social Capital

Social capital is the set of resources that inhere in family relations and in community social organization and that are useful for the cognitive or social development of a child or young person. These resources differ for different persons and can constitute an important advantage for children and adolescents in the development of their human capital. While human capital is embodied in the skills and knowledge acquired by an individual, social capital is embodied in the relations among persons [Coleman, 1990]. Human capital refers to individual ability, social capital refers to opportunity [Burt, 1998]. Social capital refers to features of social organization, such as networks, norms, and trust, which facilitate coordination and cooperation for mutual benefit [Putnam, 1993].

Anderson & Park [2007] claim that it is difficult, if not impossible, to study social capital without looking at social networks. The two are so entwined that neither one would survive without the other.

Social capital helps people and firms to improve performance. The entrepreneurial benefits of social capital are becoming well established. The importance of social capital for the founding, survival, and success of entrepreneurial has been widely acknowledged and empirically demonstrated [Davidsson & Honig, 2003; Maurer & Ebers, 2006; Anderson & Park, 2007; Aarstad, Haugland & Greve, 2010].

Brüderl & Preisendörfer [1998] found that network resources, networking activities, and network support are strongly used to establish new firms. Those entrepreneurs who can use a broad and diverse social network and who receive much support from their network are more successful. Network support increases the probability of survival and growth of newly founded businesses. Entrepreneurial networks provide vital information for the entrepreneur; they provide a perspective to the entrepreneur that contributes to the evaluation of his performances and goals and even lower the barriers in the acquisition of bank loans [Verheul & Thurik, 2001]. Maurer & Ebers [2006] found that social capital provides information and learning benefits, increased legitimacy, power and control, and coordination benefits. Social capital has potential value because it provides an opportunity for actors to access information and resources in their social network [Maurer & Ebers, 2006].

Heterogeneity and composition are crucial in understanding personal discussion network. Heterogeneity is the most direct indicator of diversity. High diversity implies integration into several spheres of society. Network composition refers to the mixture of members in a social network. The category of kin includes spouse, parents, siblings and in-laws. The category of non-kin includes friends, neighbours, co-workers, consultants, and group of association members [Marsden, 1987]. The opinion and behavior are more homogeneous within than between groups, so people connected across groups are more familiar with alternative ways of thinking and behaving, which gives them more options from which to select and synthesize [Burt, 2004]. Actors with networks with high heterogeneity and a low percentage of family are much more likely to start a new business [Renzulli, Aldrich & Moody, 2000]. In addition, new ventures with founders

having direct and indirect relationships with venture investors are most likely to receive venture funding and are less likely to fail [Shane & Stuart, 2002].

Part of the difference in business start-up rates between men and women might be explained by differences in social capital [Renzulli et al., 2000]. Women tend to have more relatives as people with whom they "discuss important matters", [Marsden, 1987]. Women have a larger number, higher proportion, and greater diversity of kin ties in their personal networks than men. Women are more involved with kin, men with co-workers [Fischer & Oliker, 1983; Moore, 1990]. In a study examining the influence of gender differences on social capital women are found to be less likely to take advantage of the use of linking social capital to leverage their businesses, [Manolova, Manev, Carter & Gyoshev, 2006; Kim, 2014]. The woman entrepreneur may enforce sex-based stereotypes as she attempts to develop business networks, thus she encounters barriers in accessing traditionally male-dominated established networks [Candida G Brush, Wong-MingJi & Sullivan, 1999; Blisson & Rana, 2001; Gamba & Kleiner, 2001; Godwin, Stevens & Brenner, 2006]. Dodd & Patra [2002] found that women are under-represented in entrepreneurial networks. Constantinidis, Cornet & Asandei [2006] found in their research study that 40% of the women entrepreneurs were not members of any network or professional association.

Female entrepreneurs' social networks, which are largely connected to family and friends, do not positively leverage the business's access to funding. Yet, the women are not well versed in the use of tools or taking advantage of their connections to create social networks with a business focus. Women are shaped by various socialization experiences, which may lead to lower expectations of their growth possibilities. With women more reliant on kin, their social capital is largely created based on themselves, their family and friends [Wang, Cai, Zhu & Deng, 2020].

Female entrepreneurs spend less time networking than their male counterparts [Verheul & Thurik, 2001]. Since the venture capital industry is found under male control and since generally men have more men in their networks, it is less reasonable that networks of women entrepreneurs will overlap with investors or with factors that can help them achieve capital investments. Venture capitalists bring more than dollars; they also bring together resources in the way of technical experts, management consultants,

and finance [Brush, Carter, Gatewood, Greene & Hart, 2001]. Table 8 summarizes articles that found social capital gaps [Efroni, 2017b].

Table 8: The Social Capital Gaps between Women and Men Entrepreneurs

Study	Sample	Data Source	Conclusions
[C. S. Fischer & Oliker, 1983]	1050 interview	Adults, eighteen and over, living in fifty localities	Women are more involved with kin, men with co-workers.
[Moore, 1990]	1534	The 1985 General Social Survey	Women have a larger number, higher proportion, and greater diversity of kin ties in their personal networks than men, even when compared with men in similar social structural position.
[Renzulli et al., 2000]	First wave: 1. 659 questionnaires, 444 returned 2. 353 telephone interviews Second wave: 1. 353 questionnaires, 328 returned 2. 328 telephone interview	First wave: 1. Mailed questionnaire 2. In-depth telephone interview Second wave: 1. Mailed questionnaire 2. In-depth telephone interview	Actors with networks with high heterogeneity and a low percentage of family are much more likely to start a new business.
[Blisson & Rana, 2001]	5-8 female entrepreneurs	In-depth interviews in focus group sessions	The main barrier is the difficulties in attempting to network with others in the business groups.
[C.G. Brush et al., 2001]		The Diana Project - more than 300 researchers from 35 countries are	Since the venture capital industry is found under male control and since

Study	Sample	Data Source	Conclusions
		involved with Diana International.	generally men have more men in their networks, it is less reasonable that networks of women entrepreneurs will overlap with investors or with factors that can help them achieve capital investments.
[Verheul & Thurik, 2001]	1,500 men 500 females	2,000 Dutch starting entrepreneurs	Female entrepreneurs spend less time networking than their male counterparts
[Dodd & Patra, 2002]	149 entrepreneurs	The questionnaire used in the Northern Irish study by Birley et al. (1991)	Women are under-represented in entrepreneurial networks.
[Constantinidis et al., 2006]	1,100 questionnaires 25 in-depth individual interviews Several focus groups with Belgian female entrepreneurs	Approximately 1,100 questionnaires were distributed, mainly by post, to female entrepreneurs randomly selected from the file provided by the National Social Security Institute for the Self Employed	40% of the women entrepreneurs were not members of any network or professional association.
[Manolova et al., 2006]	Men and women new venture owners in Bulgaria (n =555)	Entrepreneurs who satisfied the following three conditions: (a) the businesses had to be started in the past six years (b) half of the entrepreneurs had to be men, and half had to be women (c) the businesses had to have fewer than 250	Men make a better use of their social networks to secure sources of external financing.

Study	Sample	Data Source	Conclusions
		employees	
[Kim, 2014]	(n=830) Nascent entrepreneurs who are in the process of starting up a business	The Panel Study of Entrepreneurial Dynamic (2001–2004)	Women are less likely to utilize bridging and linking social capital for their businesses.

Source: [Efroni, 2017b]

All those differences are the reason why female entrepreneurship has become a separate field of research.

1.2.4. Women Entrepreneurial Performance

Entrepreneurial performance is defined in relation to the output of the entrepreneur. It refers to the level of achievement of the entrepreneur in running the business enterprise. Sometimes, the achievement may be measured by the number of employees, sales volume or level of profit [Nneka, 2015]. In much of the research that has been conducted, the performance of males and females' firms are statistically compared. Although the results of the comparisons conducted in the studies may differ slightly, the female firms were more likely to be shown to underperform in comparison to the male firms [Poggesi et al., 2016].

Businesses owned by women are found to be significantly smaller than businesses owned by men in terms of total sales, total assets, and total number of employees [Coleman, 2007]. Furthermore, the women's expectations for growth are more modest and they generally have conservative predictions for growth and development firms [Poggesi et al., 2016].

Roomi, Harrison & Beaumont-Kerridge [2009] found in their research study that most of the women business owners did not choose ahead of time to establish growth-oriented businesses. Instead, they chose to establish a small business, which could not be expanded, a local and focused business. The growth aspirations among women business

owners may be motivated by other factors, aside from human capital and financial capital [Coleman, 2007].

Roomi et al. [2009] identified that the two most important goals for women business owners in the establishment of their businesses were to create sufficient revenues so as to support themselves and their families and to achieve balance between work, family commitments, and other areas of life. Among women entrepreneurs, personal considerations take precedence over economic considerations in decisions pertaining to business expansion. Women entrepreneurs tend more to delineate the size of their business. The size of the business that women tend to delineate is smaller than that of their fellow men. The size of the business represents the size at which the entrepreneur feels comfortable, which enables him/her to maintain control of the business, requires of him/her the investment of a reasonable amount of time and energy in the business, and enables balance between work and personal life. Moreover, it is apparent that women entrepreneurs are more concerned than are men entrepreneurs about the risks associated with rapid growth, and therefore they tend to adopt a slow and stable pace of growth [Cliff, 1998].

Often women business owners can define the business performances in ways distinct from those of their fellow men. For women business owners, performances may be defined by personal development and sense of independence and not by the number of workers and the turnover [Cliff, 1998; Shaw, Marlow, Lam & Carter, 2009]. Poggesi et al. [2016] found that in the evaluation of their business performances women tend to pay attention to additional factors, aside from economic indicators, such as self-realization, flexibility, and contribution to the community. Women business owners measurement of success come from prioritizing the balance of business and personal life [Chlosta, Patzelt, Klein & Dormann, 2012; Roth, Purvis & Bobko, 2012].

Cho and Honorati [2014] conducted a review of the effect of entrepreneurship programs used to support entrepreneurship in developing countries and found that offering financial support to women entrepreneurs and providing training in business for entrepreneurs which have established enterprises were the interventions with the most impact on business performance.

Watson [2002] found in his research study that after controlling for industry, age of business, and the number of days a business operated, no significant differences were

found between male and female businesses with respect to total income to total assets , the return on assets or the return on equity.

1.2.5. Factors Affecting Women Entrepreneurship

Considering that women entrepreneurship is an important force for economic growth, knowing what factors influence women's business success is of interest to economic and social. Several investigations have tried to identify the factors that affect women's entrepreneurship. Cabrera & Mauricio [2017] gather the publications produced since January 2010 until October 2015 about the factors that affect success at the individual level and environmental. In the literature reviewed, the most considered factors are: at the internal level, human capital, education and experience and at the environment level access to resources.

Brush et al. [2009] propose the 5M model which organize the factors affecting women's entrepreneurship according to five dimensions. The first three "Ms" are "management", referring to human and organizational capital; "money", which alludes to financial resource availability and access; and "market", which concerns market access and the possibility for opportunity identification. The fourth M is "motherhood", which refers to the micro environment (the female entrepreneur's social context, home and family, contact networks as a source of resources and emotional support, counselling or orientation, as well as learning possibilities dependent on the social values of business venturing). The fifth M is the "meso/macro" environment, in which the meso environment refers to the region, sector and facilities and networks in them that have an impact on opportunity identification and learning. Iakovleva, Solesvik & Trifilova [2013] examined female entrepreneurship in Russia and Ukraine with a focus on the entrepreneurial environment. Interviews were conducted with entrepreneurs, representatives from government organizations and bank officers to explore government support for women entrepreneurship and the women's accessibility to financial resources. Based on the findings from the study, and through examination of two of Brush, et al.'s [2009] constructs, Iakovleva, Solesvik & Trifilova [2013] suggest adding an additional

dimension to the 5M model. The suggested dimension is “motherland” which will draw attention to the historical context of entrepreneurship [Iakovleva, Solesvik & Trifilova, 2013].

Using multiple case studies of women entrepreneurship, Agarwal and Lenka [2016] conducted qualitative research into the external and internal factors driving women into entrepreneurship in India. Women in India largely depend on internal resources and their own capabilities to establish and sustain their businesses. In addition to the personal skills and abilities of the women entrepreneur, support from family, friends and society are additional factors influencing the establishment and growth of the businesses. In addition, governmental and non-governmental support and assistance from financial institutions are factors that affect the development of women enterprises [Agarwal & Lenka, 2016[.

Dawson & Henley [2012] divide the internal and external factors into push and pull to distinguish those that push the enterprise from the other factors that attract the entrepreneur.

Internal factors

The factors identified at the level of the individual (internal factors) are the competencies proposed by Mitchelmore & Rowley [2013] grouped into managerial, entrepreneurial, labor and personal experience, educational level and personality characteristics. They developed a competencies model for women’s entrepreneurship with four categories:

Personal and relationship-based competencies (inter-personal skills, oral communication, relationship building, networking, integrity, self-confidence, political skills, being active, pursuit of success and perseverance)

Business and management competencies (for budget preparation and control, for business operations, for management system development, for opportunity exploitation, strategy formulation and implementation, for business plan preparation and drafting and for financial management)

Business venturing competencies (idea generation, innovative capacity, foresight, product redesign, creativity, risk assumption willingness, environmental opportunities analysis, opportunity visualization and risk taker)

Human resource management competencies (personal development, performance management, organizational human resource management and labor relations management, hiring, leadership, motivational capacity, managerial style and managerial skills)

In female entrepreneurship, in addition to their competencies, women's self-perception is also important. Cabrera & Mauricio [2017] reveals that all factors at the level of the individual affect the success of the business venture positively from both the experimental and theoretical viewpoints.

External factors

External or environmental factors relate to a range of factors, such as cultural factors that involve religious and cultural values, social factors which are influenced by family and friends, economic factors, legal and administrative factors, and attention to time management. External factors may alter the women's perceptions of market opportunity and can positively affect the performance of the women entrepreneurs [Bugawa & Aljuwaisri 2021].

Some researchers proposed to divide the external factors into macro, meso and micro environmental levels. Table 9 summarizes what each environment includes according to Cabrera & Mauricio [2017].

Table 9: External environment divided into environmental levels

Environmental levels	The environment includes
Macro	• Values and attitudes of the society that determine the collective and individual perception of entrepreneurial women, stereotypes, gender roles • Culture • Government politics for entrepreneurship support • Public expense in services for children care • Legal frame and government politics

	• National system of investigation and innovation • Size of the state sector • Rule of law (violence against women and mobility restrictions of women) • Presence of woman in business leadership positions • Female work rate in industrial, agricultural and services • Salary gap between men and women
Meso	• Conditions for businesses (legal frame, infrastructure, services, in between others) • Attitude towards women inside the formal financing system • Lack of alternative and unemployment
Micro	• Family ties and close contacts, network of social contacts • Antecedents and family support • Professional and entrepreneurial networks • Family demands • Resource's availability • Capital restrictions and initial costs • Cost of resources • Predominating economic activity

Source: Own elaboration on the basis of Cabrera & Mauricio [2017].

In the Jobs Working Paper of the World Bank Group from 2018, several external constraints to female entrepreneurship were examined. These external constraints included constraints caused by the legal system, by social norms and culture, by financial discrimination, by labour market discrimination and by constraints caused by family and social responsibilities. In certain countries, the legal system places restrictions on the economic activities of the female population. The legal disparities created between men and women lead to the creation of barriers to facilitating female entrepreneurship. Social norms and culture also have a limiting effect on women entrepreneurship. The beliefs, informal rules and attitudes ingrained in a society can influence the behaviour of the women and their career choices. In societies where women carry defined responsibilities in caring for the family, the women may not receive the support needed to develop their businesses [Carranza, Dhakal & Love, 2018].

The results from a study conducted in the US with second-generation immigrants showed variations in the rates of self-employment according to national origin. Although

culture was shown to significantly effect rates of self-employment in both men and women, the effect of culture on self-employment was found to be greater in men [Marcén, 2014].

Findings from research that has investigated financial discrimination against women entrepreneurs show mixed results, with some studies showing evidence of discrimination, while others did not distinguish financial discrimination against women. Nevertheless, women entrepreneurs use less external finance when establishing and running their businesses than male entrepreneurs [Coleman, 2007]. The reasons behind women's hesitation in using external finances is not clear. The behaviors of the financial organizations towards women may be just one of the factors influencing women's decisions [Carranza, Dhakal & Love, 2018].

Labor market discrimination is found in most job markets, in both developed countries and in developing ones. Women often earn lower salaries for performing the same job as the men and may encounter greater difficulties in getting a job. Gender segregation in the workplace results in women fulfilling different roles than that of the men attaining a lower status or with women being clustered into different occupations than those available to men. Even amongst the self-employed women, their positions are of lower quality and the women entrepreneurs receive less renumeration for their efforts. Furthermore, in most societies, women take on a greater share of family and social responsibilities, making it difficult for them to maintain a formal job which doesn't offer flexible hours. Self-employment is often viewed by the women as an alternative option to a paid job, due to the flexibility involved. Nevertheless, although greater family responsibility may drive women to entrepreneurship, it also limits the entrepreneur potential of the women in their businesses [Carranza, Dhakal & Love, 2018].

From a positive angle, families are able to provide the women with both material and non-material support, which assists the women in establishing and developing their businesses. The most common type of assistance provided to the women by their families is in the form of non-material assistance, such as through emotional support and the giving of advice [Welter & Smallbone 2010]. An examination of the relative scarcity of female succession in family businesses indicated that the women were often unaware of the possibility for succession, often resulting from gender norms. The facilitation of

female succession more likely occurred when the women received parental support and mentoring [Overbeke, Bilimoria & Perelli 2013].

To sum up, the second section of this literature review chapter deals with women entrepreneurship. I discuss the participation of women in entrepreneurship and review women entrepreneurship as a research subject. Three main types of entrepreneurial gaps that were found between women and men are outlined and these include human capital, financing capital and social capital. Finally, I explored women entrepreneurial performance and factors affecting women entrepreneurship. In the next chapter, I will delve into Israel in general and the Israeli women entrepreneurs, in particular in alignment with the focus of my study on women entrepreneurship in Israel.

Chapter 2: Entrepreneurship in Israel

This chapter will present the background and research relevant to Israel in general, Entrepreneurship in Israel and women entrepreneurs in Israel in particular. This chapter will describe what the motives to become an entrepreneur for women in Israel are, what the characteristics of Israeli women entrepreneurs are and what the factors associated with successes of Israeli women entrepreneurs are.

2.1. The Development of Entrepreneurship in Israel

The Israeli economy is considered one of the more developed in the world. Israel is part of the OECD organization, ranks 16 of 187 world nations in the UN's human development index, and 19th developed economy in the world according to international institute for management development. Israel is the 27th in the world in GDP per capita - 31,514$ in 2011. As for any developed economy, entrepreneurial businesses are known is Israel to contribute to economy stability and growth, employment and new job creation and economic development [Marom & Lussier, 2014]. As of 2017, Israel further advanced its economy –it was ranked 20th in the world in its GDP, which was 40,272$ per capita [World bank, 2017]. The Israeli economy is very open and structurally suited for entrepreneurial businesses, as it is based on businesses that are knowledge and funds intensive, compared with other economies, which are based on labor-intensive business sectors. Also, Israel, being "the start-up nation", is open to technological entrepreneurship [Yemini, 2009], and high-tech entrepreneurs are highly respected and considered social heroes which drives many Israelis to try their abilities as entrepreneurs [Malach-Pines & Schwartz, 2008]. The openness to entrepreneurial businesses can be demonstrated by Israel's being 20th in the global competiveness index out of 140 countries ranked, and the most competitive economy in its geographical region, which is the Middle East and North Africa [World economic forum, 2018]. It also holds a relatively high rank (54 of 190 countries) in the World Bank's Ease of doing business report [World Bank group, 2018]. In 2009, Israel had the second highest number of companies listed on the NASDAQ, topped only by the US. Over the past forty years, 250 Israeli companies

have appeared on the NASDAQ The number of NASDAQ-listed companies, in 2009, exceeded those of China, India and Europe combined. Israel has maintained its strong position, although by 2016, both the US and China had more public companies on the NASDAQ. Furthermore, multi-national companies have acquired many of the successful technology companies launched in Israel [Senor & Singer, 2009].

Data collected for the Global Startup Ecosystem Report showed that there were approximately 3,000 active startups in Israel in 2016. Between 2,200 and 2,700 startups were located in Tel Aviv in 2017, creating an ecosystem with one of the highest startup densities in the world. Jerusalem was the second largest urban entrepreneur ecosystem in Israel, with 500-700 tech startups active in the capital city [The Global Startup Ecosystem Ranking, 2017].

As a result, Marom & Lussier [2014] describe Israel as a "world class player in innovation and entrepreneurship" (p.65), and Almor & Heilbrunn [2013] state that since the 1990s, Israel has been characterized by a high degree of entrepreneurship. This is confirmed by an OECD [2016] report statement that 10% of Israelis are actively engaged in early stage entrepreneurship activities, which is more than many OECD states. Importantly, the OECD report stresses that although Israel is known for its high-tech entrepreneurship, not all the entrepreneurship in Israel is technological, and many entrepreneurial businesses operate in traditional business or the service industries.

In the Global Startup Ecosystem Report of 2017 published by Startup Genome, Tel Aviv was ranked as sixth out of twenty of the top startup ecosystems. Tel Aviv displays a continuous and robust growth rate year-over-year. The Global Startup Ecosystem index is created using five major components to rank the urban ecosystems. These components relate to performance, funding, talent, market reach and startup experience. The Global Startup Ecosystem Report of 2017 also related to the gender inequality that exists in startup enterprises. All twenty top startup enterprises had an unequally large proportion of men founders of enterprises as compared to the number of female founders. While year-over-year, the proportion of women founders was always found to be lower than that of the men in the twenty top startup enterprises, the reports showed that the proportion of women founders rose from 10% of the founders being women in 2012, to 18% in 2015 for the twenty top startup enterprises.

Specific demographics for the Tel Aviv entrepreneur ecosystem found that 8% of the founders in Tel Aviv were women, which is approximately half of the global average and one of the lowest percentages of women founders in the world. Immigrant founders made up 16% of the Tel Aviv entrepreneur ecosystem, as opposed to the global average of 19% in 2017. Although the Jerusalem ecosystem is smaller than that of Tel Aviv, entrepreneurship in Jerusalem has been boosted by the diversity of its population. Ongoing collaboration between entrepreneurs, the academic institutions based in Jerusalem, multinational companies and with the strong support of the Jerusalem municipality the entrepreneur ecosystem in Jerusalem has experienced rapid growth. Women founders make up 15% of the startup founders in the Jerusalem entrepreneur ecosystem, which is a larger proportion than that of women in the Tel Aviv ecosystem. Furthermore, immigrant founders make up 34% of the startup founders in the Jerusalem entrepreneur ecosystem, more than twice that of Tel Aviv. Globally, Jerusalem has the seventh highest rate of immigrant founders in startup enterprises [The Global Startup Ecosystem Ranking, 2017].

In the Global Startup Ecosystem Report [2021] published by Startup Genome, Tel Aviv was ranked seventh out of out of thirty of the top startup ecosystems.

Factors are tiered from 10-1

	Ranking	Performance	Funding	Connectedness	Market Reach	Knowledge	Talent
Silicon Valley	#1	10	10	10	10	10	10
New York City	#2 (tie)	10	10	10	10	5	10
London	#2 (tie)	9	10	10	10	7	9
Beijing	#4	10	9	5	9	10	10
Boston	#5	9	9	9	9	5	10
Los Angeles	#6	9	10	3	9	7	9
Tel Aviv	#7	8	9	8	10	4	8
Shanghai	#8	10	7	1	9	10	9
Tokyo	#9	8	9	1	8	9	9
Seattle	#10	9	7	7	8	7	8
Washington DC	#11	7	7	6	8	1	8
Paris	#12	6	8	9	6	1	8
Amsterdam-Delta	#13	6	6	9	7	1	7
Toronto-Waterloo	#14 (tie)	5	8	7	3	2	6
Chicago	#14 (tie)	5	6	6	6	1	7
Seoul	#16	6	5	9	5	10	5

Figure 7: Global Startup Ecosystem Ranking (Top 30 + Runners-Up)

Source: The Global Startup Ecosystem Report, 2021

Figure 8 demonstrates the trends in Israeli entrepreneurship activity over time and demonstrates that there is a steady net growth of businesses numbers every year (which is the number of businesses opened minus those that were closed).

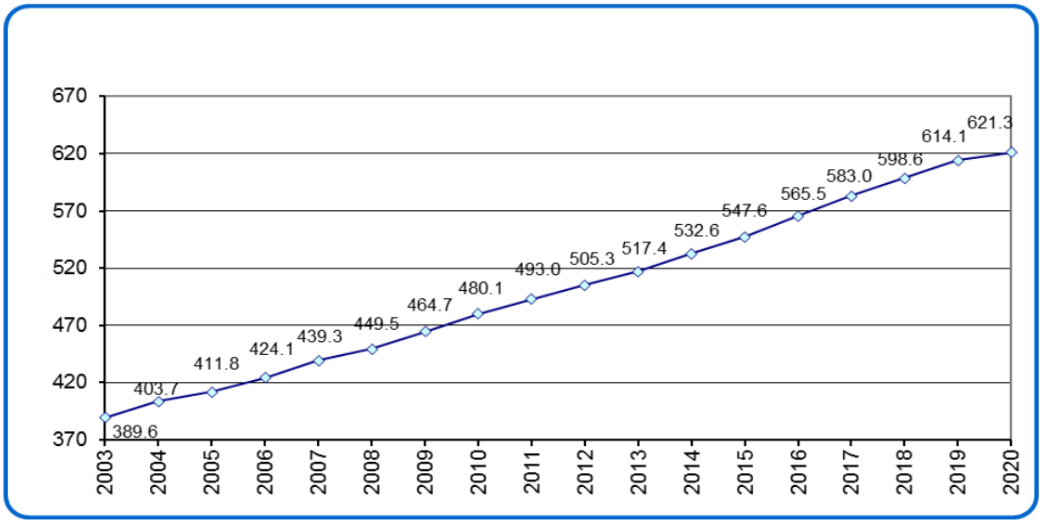

Figure 8: Number of Enterprises in Israel (in 1000)

Source: CBS, Business Demography – A Collection of Statistical Data from the Business Register, 2011–2020

According to Israel Economic Snapshot – Summary of 2020 and forecast for 2021 [Dun & Bradstreet, 2020]: "Regarding business closures, in 2020 under the coronavirus crisis almost 75,000 businesses were closed, a figure that represents a 65% increase in the number of business closures compared to 2019, when around 45,000 businesses were closed. Accordingly, the probability of closing a business increased by about 12%, compared with a probability of closing of about 7.5% in 2019. Among the prominent branches in which a high number of business closures were recorded: restaurants (around 4,000 restaurants and food stalls closed), building and renovation contractors (some 2,000 businesses closed in this field), transport and transportation (some 1,200 businesses closed the field), fashion and clothing stores (around 950 closed in this field), and more." Figure 8 demonstrates the trends in business openings and closures, and the probability of closing a business in Israel.

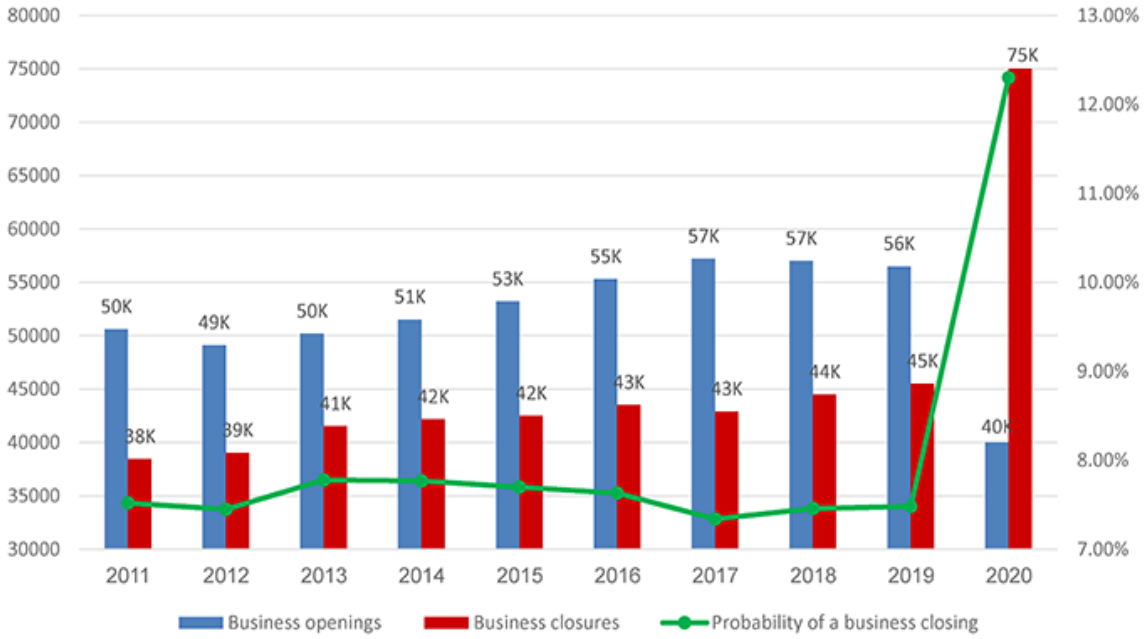

Figure 9: Business openings and closures, and the probability of closing a business
Source: Dun & Bradstreet [2020]

Israeli culture supports entrepreneurial activity, as Israelis are known to hold an innovative spirit and are open to experience entrepreneurial activity. The entrepreneurship spirit of Israel is also evident by the fact that it is the home of the largest international, as well as domestic, high-tech businesses, as well as numerous entrepreneurial high-tech start-ups [Marom & Lussier, 2014]. These trends are evident from the OECD [2016] report on entrepreneurship in Israel. The report states that 80% of Israelis believe that engaging in entrepreneurship will yield high status in society, 60% of them consider entrepreneurship as a desirable career choice and one quarter of Israelis express their will to open a business in the next three years, a figure which is high above the number for other OECD states. A large proportion of Israelis (47%) see good opportunities for opening a new business in their living place.

The GEM (Global Entrepreneurship Monitor) of 2017 also shows that entrepreneurship is an integral part of Israeli culture: it puts Israel in the top 10 countries regarding the entrepreneurial spirit, and second of all countries in high social status given to entrepreneurs. Moreover, Israel is in the top ten in the entrepreneur businesses out of the business services sector – which is 27.3%. Israel is described in this report as an

innovation-driven country and is the third country in the world regarding the percentage of the adult population engaged with entrepreneurial activity.

The growth of entrepreneurial activity in Israel may be a result of several factors. Firstly, the Israeli population is a rich mix of cultural diversity, since it is made up of residents originating in over 100 countries [Gutterman, 2017]. The international mix forms a melting pot of cultures within an isolated society [Grotsky, 2010]. Besides the variety of cultures, entrepreneurial activity has been influenced by government policy. Since the 1990s, the Israeli government's policy is to encourage entrepreneurship and the venture capital industry by actively investing in the development of the entrepreneurship industry. This is done by establishing a large number of incubators for entrepreneurship industry, giving tax refunds to investors in the industry, and directly funding the industry via grants and loans given by the Chief Scientific Office [Almor & Heilbrunn, 2013]. In addition, there has been an emphasis on education. Israelis are generally highly educated, since education is compulsory for youth aged 6 to 16 years old. Furthermore, with education free until age 18, literacy rates are around 97% [Gutterman, 2017]. Israel has eight universities and fifty-seven colleges. Amongst the workforce, of every 10,000 individuals, 135 have qualified in engineering, the sciences or hold a PhD [Abrar, 2013].

The influence of the military can also be seen in the entrepreneurial activity that is occurring in Israel. Israel's military is strongly technology-orientated [Grotsky, 2010]. Israel has mandatory military service and during their service, recruits gain useful experience in leading and problem solving which puts them in a good position when attempting to launch and manage an entrepreneurial business. Ronen & Shenkar [1985] addressed another factor during their mapping of country clusters based on patterns of employee work attitudes. In their mapping, Israel could not be grouped into any of the eight clusters, which contained most of the countries, but Israel was defined as an independent according to the uniqueness of its language, religion, and history.

The physical infrastructure in Israel available for new and growing businesses also is well established in terms of transportation, communications, power etc. [Menipaz, Avrahami & Lerner, 2007]. Furthermore, the workplace environment in Israel is also conducive to entrepreneurship, since it is generally more informal, and companies often have flat organizational structures [Grotsky, 2010]. Dr. A.S. Gutterman [2017]. The founding Director of the Sustainable Entrepreneurship Project summarized his findings

about entrepreneurship in Israel in his publication, *Sustainable Entrepreneurship*, which addressed regional and countries in Latin Europe. The Sustainable Entrepreneurship Project encourages research and education that relates to entrepreneurial ventures. Israel maintains high levels of expenditure on research and development (R&D). In 2013, 5% of Israel's GDP was spent on R&D, a percentage higher than any other Western country. Although Israel has traditionally focused on entrepreneurship in technologies related to defense and the military, more recently entrepreneurship activities have also been focused on healthcare technologies and applications that are based on artificial intelligence [Gutterman, 2017].

There are several challenges that growth-oriented entrepreneurs must overcome in Israel to achieve success in their endeavors. With a population of over eight million residents, there is only a small local market. Furthermore, Israel is geographically isolated from its potential customers, with language barriers coming into play. Israel also deals with political conflicts that test its stability in the region, as well as internal political instability. Despite all these odds, Israeli entrepreneurs succeed in the global context [Gutterman, 2017].

Although the entrepreneurial activity is well routed in the Israeli economy, there are also weak points of the industry: the OECD [2016] report also points out that nearly half of those who are willing to open a business will not do it because they are afraid of failure; this is a higher rate of fear of failure compared to other OECD states. This high fear of failure could be explained by low willingness to take risks by Israelis or by the stigma that most of the entrepreneurial businesses fail. In addition, only 36% Israelis think they have the skills to open such a business, a low figure compared to other OECD states. Data has shown that in the start-up entrepreneur environment, technical skills stand the founders in good stead. In the Tel Aviv entrepreneur ecosystem, for example, 93% of start-up founders, have a technical background. In Jerusalem, only 74% of the hi-tech founders have acquired technical skills [The Global Startup Ecosystem Ranking, 2017].

Business statistics show that the Israelis' fear of entrepreneurial businesses failure is supported in reality: according to CBS [2017], only 88% of the established businesses survive two years, and only 33% survive after 12 years of business. The rate of failure is even higher in high-tech start-up businesses [Telecomnews, 23/3/17]: 95% of these

businesses will fail and will not produce a profit for their owners. As demonstrated, the rate of failure in such businesses is much higher than the typical rate of failure in other countries. Half of the start-ups in Israel do not even survive their first year.

Another weak feature of the Israeli economy regarding development of the entrepreneurship sector is specialized education. Although education has been proved in the literature as a catalyser of knowledge and skills needed to open new businesses, the Israeli high-education system has not yet incorporated entrepreneurship education as an integral part of business studies. Only a few of the academic institutions offer extensive entrepreneurial education programs, and the academic system does not encourage professors to actively specialize in entrepreneurship teaching [Almor & Heilbrunn, 2013]. GEM [2017] supports the notion that the education system in Israel does not support the entrepreneurship industry enough: Israel is ranked 32nd of 54 countries in entrepreneurial education at school stage and for entrepreneurial education at the post-school stage.

More barriers to the entrepreneurship industry come from the exaggerated extent of bureaucracy and regulation involved in opening a new business in Israel. According to a GEM [2017] report, although the government policy is to support the entrepreneur industry, it seems it does not do so efficiently, as Israel is ranked 49th of 54 countries in support of relevance of government support to the industry (with a score of 3.1 of 9). The OECD [2016] report explains that investments in the venture capital industry in Israel are the highest in OECD and investment in the venture capital industry as part of GDP is second in OECD. However, almost all these investments are from private money, and are not governmentally supported. In addition, Israel is also ranked 49th in the level of taxes and bureaucracy and number 38 in governmental entrepreneurship programs [GEM, 2016], and an OECD report [2016] states that the regulatory system in Israel inhibits the establishment and development of small and medium enterprises (which are the entrepreneurial businesses).

As a conclusion to this section of the chapter, Israel is a very entrepreneurial society, as seen by the positive attitudes towards entrepreneurship and entrepreneurs, and the large number of citizens engaging in entrepreneurial activity. Entrepreneurship activity in Israel is very successful, attracting major investors from all over the world, and is supported by an innovative and business-oriented culture and governmental policy. Although being regarded as a success, there are also some weaker sides to the industry.

These weaknesses include below-average willingness of Israelis to take the risk associated with opening a business, an educational system that is not entrepreneurship oriented and government policies that make it hard to establish and maintain a business in Israel. The next section of this chapter of the literature review will focus on the Israeli women entrepreneurs.

2.2. Women Entrepreneurs in Israel

Women entrepreneurs in Israel have seen many successes. An article about the most successful women entrepreneurs in Israel presents us with some of the successful women. Several women are mentioned in the article, including Alona Shehter, aged 50, who founded a cosmetics company and later plastic operations businesses and Grandma Gamila, aged 71, who has a soap factory exporting to 30 countries around the world, hotels and airlines. Also mentioned are Maya Efrati, who invented a patent to reuse plastic waste; Gada Zoabi, who founded an internet portal for Arab Israeli women; Rojet Hinawi, who is the owner of a chain of nine shops selling wines and also operates a coffee shop; and Natalia Kurazon who exports cosmetics to her native country Russia, etc. [Yamin, 11/12/11].

The GEM 2019/2020 report on entrepreneurship and innovation in Israel focused on overcoming national and personal crises through entrepreneurship and innovation. This GEM study was conducted by the Ira Center for Business, Technology and Society, located at Ben-Gurion University in Israel, and receives additional support from the Israel Small and Medium Enterprises Authority of the Ministry of Economy and Industry. The study is carried out with a focus on the entrepreneurial behavior of individual entrepreneurs. In the 2019/2020 GEM study, 2,036 entrepreneurs from Israel were included in the study. The largest percentage of entrepreneurs was from the veteran Jewish sector (61%), with the Arab sector being represented by 19% of the entrepreneurs. Immigrants to Israel from the CIS made up 11% of the entrepreneur participants, with the Jewish Orthodox sector making up the remaining 9% [GEM, 2020].

The findings from the study reported that the level of entrepreneurship in Israel had doubled over the last ten years, with some of the increase being driven by women. An

indication of the latest annual changes in the level of entrepreneurship is indicated in the GEM report by an increase in Total Early-Stage Entrepreneurial Activity Rate (TEA) for women from 9.14% to 10.37% in 2019. In comparison, the overall TEA level increased from 10.93% to 12.7% in 2019. TEA measures the percentage of adult entrepreneurs, between the ages of 18-64 that are found either in the formation stage of their enterprise or at the early stages of the enterprises' operation [GEM, 2020].

In addition to the increase in the level of entrepreneurship, in 2019, more of the study participants (21.8%) believed that it was easy to open a business than the 17.8% of participants that had perceived it to be easy in 2018. Nevertheless, these low percentages indicate that overall, 78.2% of the entrepreneurs perceive difficulties in starting an enterprise in Israel. The findings also showed that only 3.77% of the entrepreneurs participating in the study closed their enterprises, which was less than the previous year. However, these findings do not take into account changes that could occur due to the impact of the COVID-19 pandemic [GEM, 2020].

The fear of failure of establishing a business amongst the entrepreneurs was less than in the previous year with a noted decrease from 60.2% to 53.51%. In men the fear of failure decreased to 50.63%, with the women displaying a decrease to 56.3%. [GEM, 2020]. Yet, the state of Israeli women entrepreneurs in the Israeli society is not always bright and there are some negative aspects to women entrepreneurship in Israel. These aspects are reflected by the tendency of women to engage in entrepreneurial activity less than men, to be less inclined to take up a career in entrepreneurship because of their socialization which makes them believe they are less talented as managers and to face structural barriers when trying to establish a business [OECD, 2016]. This section of the chapter will extensively review the phenomenon of women Israeli entrepreneurs, focusing on the motives of women to become entrepreneurs, characteristics of Israeli women entrepreneurs and the factors associated with successes of Israeli women entrepreneurs.

2.2.1 Motives to Become an Entrepreneur for Women in Israel

The Israeli work market gives fewer opportunities to women compared with men, regarding compensation for work, variety of occupation field the work in and the adjustment of the workplace for mothers. Being self-employed might compensate women for the discrimination against them in the work field [Lerner, Brush & Hisrich, 1997], as would be explained herein.

Discrimination against women in the work market in Israel exists although the gender gap in participation in the work force is smaller in Israel compared to other OECD countries. The last decades have seen growth in the number of working women: in 2014, 59% of women 15-years-old or older worked, compared with 44% in 1990 and 51% in 2000. As a comparison, the employment rate of men in 2014 was 69% [Mizrahi-Simon, 2015].

Discrimination against women in the Israeli market is visible when considering the occupational segregation: women are legally allowed to engage in any profession, but the reality is that most women work in traditionally feminine jobs like education, nursing, secretarial work etc. While women comprise two-thirds of the work force in the low paying and less esteemed lines of work, men are over-represented in well-paying high-esteem lines of work, like hi-tech. The segregation in the work field is tied to another issue that has a negative impact on the ability of women to integrate into the work force. The structural support for working mothers in Israel is weak; so mothers have to choose between their careers and their children. As raising children has been the main task of Israeli women in Israeli culture, women usually compromise on their career choices to be able to raise their children. [Mizrahi-Simon, 2015]. In fact, 15% of women aged 25-44 do not work at all because they prefer to take care of their children, compared with 0.3% among men [Yemini, 2009].

With the occupational segregation comes another way of discrimination in the Israeli work force: women are paid less per hour for their work. Salaried and employed women earn 85% of what men earn per hour of work. Women also work fewer hours per week compared with men, as they have to take care of their children. Yet another way women are discriminated against in the Israeli working market is their under-representation in managerial roles in their workplace: only 33% of the managers in Israel were women in

the year 2014 [Mizrahi-Simon, 2015]. Although nowadays there are many women managers on important impact positions on the Israeli business sector, women still feel there is a glass ceiling that prevents them from being promoted to senior positions in their workplace [Yemini, 2009].

Israeli women see engaging in entrepreneurship and becoming self-employed as a way to overcome discrimination in the work market [Lerner, Brush & Hisrich, 1997]. These findings are consistent with studies from Europe that reported that opening a small business is an efficient way for women to escape workplace discrimination, to gain independence from their spouses and social status, and to escape poverty. These studies have shown that self-employment is better for women than being salaried, because they could use their talents and abilities to make a profit for themselves regardless of the discrimination in the working market, while having better flexibility in working hours which allows them to raise their children and manage a business at the same time [Yemini, 2009].

Besides a way to overcome discrimination in the workplace, entrepreneurship activity in Israel serves another important goal of reducing poverty and allows more women to make a living in the less-privileged social groups in society, who, for various reasons, lack resources to compete in the work market. Poverty is more common among women compared with men in Israel, so engaging entrepreneurial activity might be very relevant for them. Micro-entrepreneurship is ideal to the needs of those women as it provides them with flexible working hours, a place of work which is very close to home or situated in their family's home, an opportunity to make a living from their unique and individual talents. Another advantage for those low-income women, who are usually under-educated, is that many of these micro-entrepreneurships do not require special training, and are based on the women's own experience, including businesses like sewing, hairdressing, cosmetics, art craft, kindergartens etc. These businesses need minimal funds to be established, which is another advantage is for those low-earning women [Celganik, 2006].

Micro-entrepreneurship might be even more relevant for women with low incomes who are geographically located in the periphery. An OECD organization identifies entrepreneurship as an avenue for stimulating diversification and growth in rural areas, as well as for creating employment in those areas, which are in the economic periphery.

These areas have to contend with a lack of resources and job openings, since the traditional agricultural work that supported women in these areas is disappearing, because of urbanization which reduced the land open for agriculture and due to the introduction of modern technology which needs less working hands in the agricultural businesses [Heilbrunn & Palgi, 2015]. However, the economic periphery in Israel is not bounded only to certain geographical regions because some social groups are peripheral to the core of the Israeli economy for cultural and ethnical reasons [Heilbrunn, Abu-Asbeh & Abu Nasra, 2014]. The Israeli work market is very heterogeneous, as the Israeli society is comprised from many ethnic groups. Entrepreneurship might be a way for the under privileged social groups in the Israeli society to gain economic and social mobility, as it gives them an opportunity to integrate into the economic system and use their culturally learned abilities and talents to earn for themselves a living [Heilbrunn, Abu-Asbeh & Abu Nasra, 2014].

Entrepreneurship might be especially beneficial for three main under-privileged groups in Israel, which are immigrants from the former Soviet Union, Arab-Israeli women and Haredi (ultraorthodox) women. As for the first group, in 1990, Israel saw massive integration of Jews from the Soviet Union into the country. Over the last 30 years, these immigrants have become integrated in the social and economic life in Israel, still they earn less than other groups in the population. Their high human capital (members of this group are typically well-educated and strive for success) makes them good candidates for using entrepreneurship as an avenue to equalization of their economic status to that of the general population in Israel [Heilbrunn, Abu-Asbeh & Abu Nasra, 2014]. Arab-Israeli and Haredi women are less integrated in Israeli economic life for cultural and religious reasons, which make them less engaged in the work market. Israeli-Arab women are not generally expected to leave their home and travel to work and Haredi women in Israel are not allowed to work in places in which they come in contact with men [Mizrahi-Simon, 2015]. This narrows the working options for these women, and some of them see micro-entrepreneurship as a way of working in accordance with their cultural limitations, and as a way to escape poverty for them and their family [Yemini, 2009]. Regarding this aspect, Monnickendam-Givon, Schwartz & Gidron [2016] assert that the establishment of micro-business is recognized in the literature as a way of coping with poverty and creating more income for families that are economically vulnerable or peripheral.

Heilbrunn & Palgi [2015] have investigated the motivations of peripheral women entrepreneurs to open a business. They found that one main motivation is economic needs, with both Jewish and Arab entrepreneurs testifying that their family income is low, and more money is needed to be earned to support the family, which was the motivation to open a business. However, two additional motivations for opening a new business stated by these women are similar to those of any entrepreneur: the first was a need for independence from tight working hours and flexibility in working hours compared with time dedicated to other tasks (like taking care of children) as well as not taking orders from managers. The second need that was fulfilled for these women and is a general need for entrepreneurs was self-actualization: pursuing a career in a field that they like.

2.2.2 Characteristics of Israeli Women Entrepreneurs

Globally, women are under-represented in the technological fields and generally, there are less growth opportunities for women entrepreneurs. The Dell Women Entrepreneur Cities (WE Cities) Index is a global study that rates cities across the globe for their ability in attracting and supporting women entrepreneurs. These women entrepreneurs are interested in growing and expanding the scale of their businesses. When compared with the Dell Women Entrepreneur Cities score from 2017, all 50 cities included in the listing demonstrated progress when relating to their overall index score. Despite this progress, the San Francisco Bay Area, which was top in the ranking only scored 63.7 points out of the maximum 100 points. These results indicate that progress has been made in the support of women entrepreneurs. The supply of resources to the women entrepreneurs has increased, yet women entrepreneurs still lack sufficient funding and capital for their businesses, and a disparity exists between the amount of funding that men entrepreneurs have available and the funding available to women. In terms of venture dollars, teams founded by women have raised only 5% of global venture dollars. By comparison, men entrepreneurs have successfully raised 86% of venture dollars globally. When taking into consideration teams with a mix of men and women co-founders, the of venture dollars raised was calculated as 9% of global venture dollars. Other issues have been considered to hinder the growth of women

entrepreneurship in the cities that were listed in the index, including few women that fulfilled leadership roles and limited government policies to support women entrepreneurs [Dell WE Cities Index, 2019].

Yet, in the 2019 rankings, Tel Aviv was ranked 32nd out of 50 top cities, down from 24th position out of 50 cities in 2017, despite a continual increase in the number of female entrepreneurs involved in startup ventures in Israel. An increasing presence of women can also be found in venture capital and investment firms over the years. The Dell Women Entrepreneur rankings are based on five characteristics. These characteristics are markets, talent, capital, culture, and technology. Within this grouping of five characteristics, 71 different indicators were examined. Forty-five of these 71 indicators included a gender-based component. Tel Aviv appeared as one of the cities where more than 25% of corporate boards are made up of women and thus, Tel Aviv was included in the list of cities deserving of Honorable Mention [Dell WE Cities Index, 2019].

Many Israeli women open an entrepreneurial business on their own, building on their experience and knowledge in their field of work and their managerial skills. However, these women usually belong to medium-to-low socio-economic groups, well-educated and have the funds to establish a business [Yemini, 2009]. A comparison was made between native-born Israeli women and immigrant women with entrepreneurial businesses in Israel. While the Israeli-born women are owners of one-third of native businesses, the immigrant women own half of the immigrant businesses [Menipaz, Avrahami & Lerner, 2009], The Global Entrepreneurship Monitor (GEM) studies conducted in 2007 and published in 2008 assessed the rates of entrepreneurship in 43 different countries. The percentage of male and female entrepreneurs within the Israeli population was found to differ. A report from the 2008 Global Entrepreneurship Monitor (GEM) studies showed that amongst the Jewish population, 4.4% of the entrepreneurs were males, while only 2.2% were female. These figures are different amongst other populations in Israel. Many of the immigrants to Israel were from the Former Soviet Union. 1.7% of the immigrant men were entrepreneurs as opposed to 1.4% of the women. Furthermore, it was reported that 2.1% of the male Palestinian-Israelis were entrepreneurs, while only 0.6% of the women were entrepreneurs. The gap in the rate of entrepreneurship between men and women was largest in the Palestinian-Israeli

population, with 28 women entrepreneurs to every 100 men entrepreneurs [Menipaz et al., 2009].

Other differences were found between Jewish-Israeli entrepreneurs and their Palestinian-Israeli counterparts. Amongst 236,000 entrepreneurs who were engaged in total early-stage entrepreneurial activity (TEA), only 25,000 entrepreneurs were Palestinian-Israelis. Within the group of entrepreneurs engaged in TEA, there were 29 entrepreneurs for every 100 men [Pines, Lerner & Schwartz, 2010].

Technological entrepreneurship, which is very common is Israel, is the theme of many of such women initiatives [Yemini, 2009]. Women from lower socio-economic groups can also benefit from opening an entrepreneurial business, but seldom have the human and financial capital to do so. This problem is approached by several non-profit organizations that encourage women from lower socio-economic groups to open their own businesses, teaching the basics of business planning and managing, helping them to write a business plan and open a business that does not need much initial funding. Some of these organizations are motivated by feminist ideas, some are semi-governmental owned and are aimed at lowering poverty rates among Israeli women [Yemini, 2009].

Although women entrepreneurship is more common today compared with previous decades [Heilbrunn, Abu-Asbeh & Abu Nasra, 2014], still most of the entrepreneurs are men. In 2014, only 32% of Israeli self-employed entrepreneurs were women [Mizrahi-Simon, 2015]. The number of men engaged in entrepreneurship was twice that of women in the adult population, and threefold for the Arab population. Interestingly, in the immigrant population the number of men and women entrepreneurs was similar [Heilbrunn, Abu-Asbeh & Abu Nasra, 2014].

OECD [2016] figures show that while the number of Israeli women engaging in entrepreneurship is on a rise, the level of the gender gap in entrepreneurial activity is of the highest among OECD countries, because of the high prevalence of men entrepreneurs in Israel. Celganik [2006] also mentions that Israeli women entrepreneurs' motives are different than men: one-third of the women engage in entrepreneurial activity because of economic necessity, compared with one-fifth among men. Nevertheless, OECD [2016] data shows that about 6% of the female population in Israel is engaged in early-stage entrepreneurial activity, which places them in the top half of OECD countries when regarding female entrepreneurship, as shown in Figure 10.

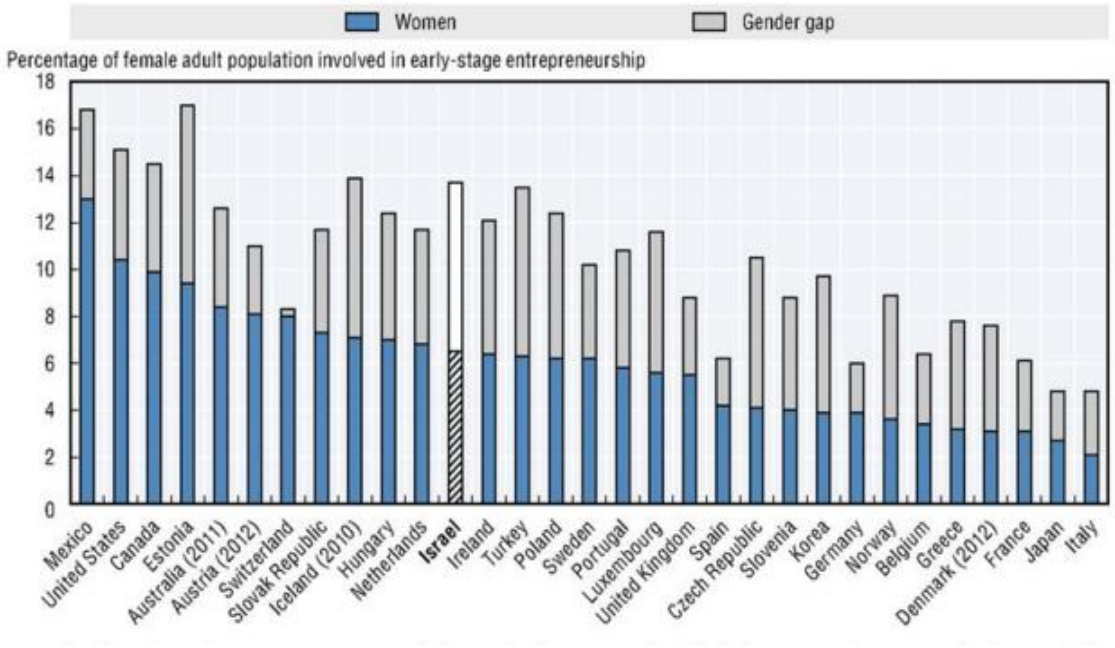

Figure 10: Female Early Stage Entrepreneurial Activity and Gender Gap in OECD Member States

Source: OECD, 2016

OECD [2020] data shows women entrepreneurs are less likely to be employers and the gender gap is growing in most OECD countries. Figure 11 shows that the gender gap in Israel is not growing.

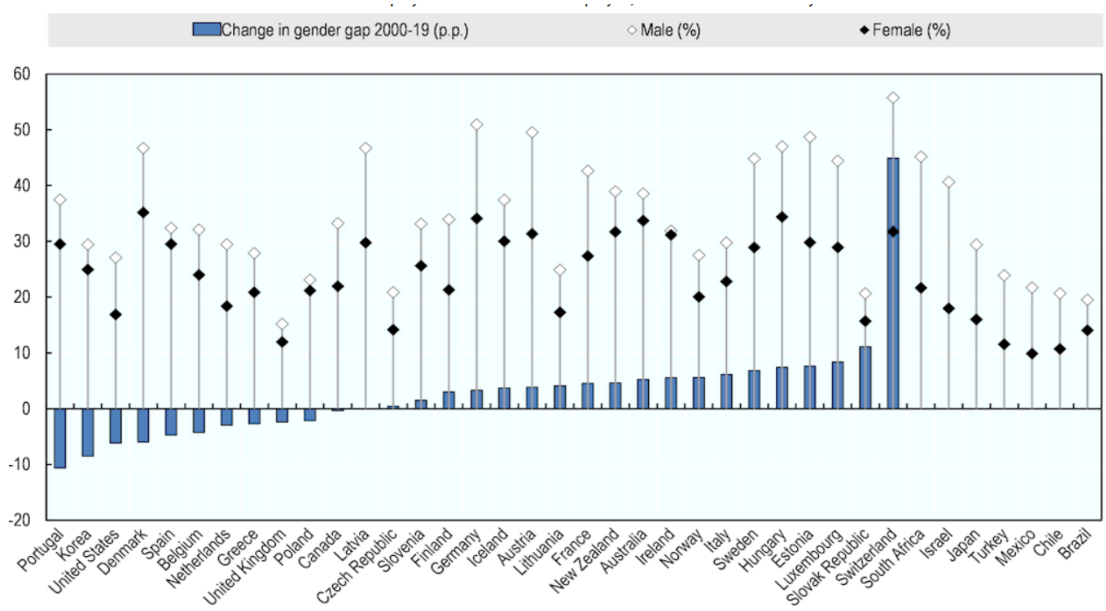

Figure 11: Share of self-employed with at least one employee, 2019 or latest available year

Source: OECD, 2020

Although Israel is called "the start-up nation", women are only 10% of the total inventors in Israel. Figure 12 refer to the share of women from the total inventors. Total inventors refer to the total number of inventors of IP5 patent families. A patent family is a collection of patent applications filed to protect a same invention in different jurisdictions.

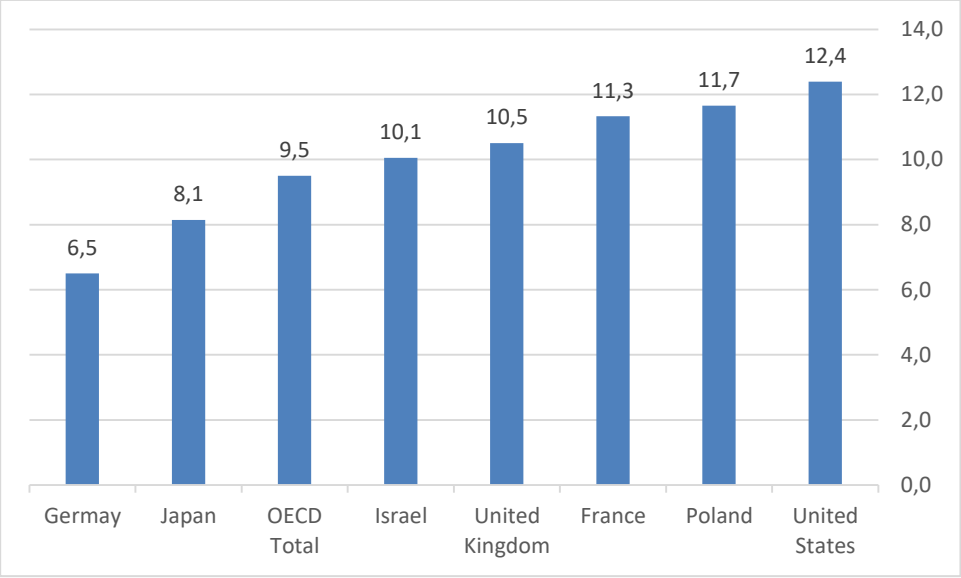

Figure 12: Inventors women as % of total inventors (2019 or latest available)

Source: OECD, 2022

Also, the tendency to engage in entrepreneurship activity is different in various social groups in Israel: in 2008, 2.2% of veteran Jewish-Israeli women have engaged in entrepreneurship, compared with 1.4% among women who are immigrants from the Soviet Union, and 0.6% among Arab-Israeli women [Heilbrunn, Abu-Asbeh & Abu Nasra, 2014]. Recent data [OECD, 2016] have shown a change in the patterns of female entrepreneurship activity by social group: 5.7% of the Arab-Israeli women were engaging in entrepreneurship, much more than eight years before. Also, 2.1% of women immigrants from the former Soviet Union States and 3.6% of veteran Jewish women were

engaging in entrepreneurship, which represents a rise in women entrepreneurs in the Jewish women population.

Heilbrunn & Davidovitch [2011] studied the impact of the family-work conflict on Israeli women entrepreneurs from three ethnic groups of Israeli women: veteran Jewish-Israelis, Jewish immigrants from the former Soviet Union, and Arab-Israeli women. They used a convenience sample of Israeli women entrepreneurs. The sample provides some indication of the different demographic factors that represent the typical women entrepreneur in Israel. The sample included 40 Israeli-Jewish women, 35 Jewish women who had emigrated from the former Soviet Union and 36 Israeli women from the Arab sector. Two of the factors that may influence the woman's perceptions of the conflicts that her entrepreneurship activities have with her family life are her marriage and her children. In the study sample, 91 of the 111 (82%) of the women entrepreneur participants were married or living with a partner. The percentage of married Arab women (92%) was much higher than that of married women from the former Soviet Union (71%). The mean for the number of children under the age of 18 years old for all the women was 1.41 (S.D. 1.34). The Arab women were reported to have on average 1.8 (S.D. 1.79) which was significantly higher than the average number of children under the age of 18 that the women from the former Soviet Union had 1.0 (S.D. 0.84) [Heilbrunn & Davidovitch, 2011].

Not only did the family demographics indicate the differences between the different groups of women entrepreneurs in Israel who participated in the study, but also the average education level of the women differed between the groups of women. Whereas on average about two-thirds of the women entrepreneurs (56%) had undergone some type of vocational training or completed an academic degree, an examination of each one of the groups of women entrepreneurs according to their cultural sector showed differences in the educational level. Amongst the Arab women participants, less than half (47%) had received vocational or formal training, with the other women having only completed 12 years of schooling. All of the women entrepreneurs from the former Soviet Union had completed some sort of educational training following their completion of 12 years of schooling. Amongst the Israeli-born Jewish women, 55% had completed vocational or formal education following the completion of 12 years of schooling [Heilbrunn & Davidovitch, 2011].

Findings from Heilbrunn & Davidovitch's [2011] study also outlined several differences relating to the entrepreneur business itself. The majority of the women's entrepreneur business (65.8%) was in the services sector. Over a quarter (27.9%) of the businesses was in trade and only 4.5% were in production. The entrepreneur businesses that the women ran were generally not based from home with only 36% of the women indicating that their businesses were home-based. A financial investment was required from the women to start up their businesses. The scope of initial investment differed amongst the women. Only 17.1% of the women had invested less than 5,000NIS (approx. $1,400) in their entrepreneur business. Over one quarter of the women (27.9%), invested between 5,001 to 25,000 NIS (approx. $1,400 - $7,000) in their businesses, while the largest proportion of women (38.7%) invested between 25,001 to 100,000 NIS (approx. $7,000 - $28,000) in the establishment of their entrepreneur business. Some of the women (13.5%) invested more than 100,000 NIS (more than $28,000) in the business. While the highest proportion of Israeli-born Jewish women and of Arab women invested between 25,001 to 100,000 NIS in their businesses, amongst the women from the former Soviet Union the largest proportion of women (42.4%) invested lesser amounts of between 5,001 to 25,000 NIS. Fewer of the women from the former Soviet Union (6.1%) invested more than 100,000NIS [Heilbrunn & Davidovitch, 2011].

Another indication of the size of a business is the number of employees. All the women's entrepreneur businesses were small in terms of employees. The mean number of employees employed in the Israeli Jewish women's business was 2.46 (S.D. 3.01), while the Arab women employed 3.03 (S.D. 2.22) employees on average. By comparison, the Jewish women from the former Soviet Union had businesses that were smaller than their contemporary's businesses and employed only 1.43 (S.D. 1.99) on average [Heilbrunn & Davidovitch, 2011].

As mentioned by Yemini [2009] this rise in the tendency of Israeli women (especially Arab-Israeli women) to entrepreneurial activity can be attributed to many programs aimed with encouraging women to open their own businesses. One of the studies that has investigated the phenomenon of entrepreneurship among Arab-Israeli women was conducted by Abu-Asbah & Heilbrunn [2011] focusing on Arab-Israeli women entrepreneurs in northern Israel. These women are described by the authors as suffering from double discrimination as women (enduring cultural and structural limitations on

their ability to work outside home or learn) and as a national minority (which is geographically and economically segregated from the Jewish majority), and as a result suffer from labor market disadvantage and resource disadvantage.

Findings show that on the one hand, the difficulties facing Arab-Israeli women in opening a business makes the number of businesses opened by them extremely small. On the other hand, those women who do open business use micro-entrepreneurship to help their household in creating income. Most of these businesses are registered small businesses, mainly small shops, while the minority of businesses is illegal businesses in the sense that they are not reported to the authorities. Most of these businesses are community based and sell traditional products or services.

Monnickendam-Givon, Schwartz & Gidron [2016] studied micro-entrepreneurship activity among another peripheral group in the Israeli economy: the ultra-orthodox (Haredi) women. Their findings are that in an economic environment in which most men do not work because they dedicate themselves to theological studying, women fill the gap in the family economy by establishing micro-businesses, a phenomena that is well rooted in the tradition of this community, so there are no cultural barriers towards its growth over time. The process of inspiring under-privileged women who are low on human and financial resources is lengthy, as reported by Sa'ar [2011], who has investigated intervention groups aimed with helping low-income women to escape poverty by opening micro-entrepreneurship businesses. A course aimed to empower them to open a business and teach them the business rationale took place one a week for half a year, followed by writing a business plan for their new business by the participants. These women received personal consulting about the practicalities of opening their business for another half a year. The sessions of the course concentrated mainly on learning how to think about business opportunities, write a business plan, marketing, pricing, managing a business with fixed and changing expenses and dealing with authorities.

The course also dealt with personal empowerment of the women and changes in their primary beliefs in themselves as not being able to run a business to a sense of ability in doing so. In these sessions, women were encouraged to speak about social, cultural and personal barriers they see to opening a business, and these barriers were discussed while giving the women the business perspective about these barriers. Woman were

moved to perceive their cultural background that may hinder opening a business (like preferring love of altruism over making money) as an advantage when opening a business which will reflect these values.

2.2.3 Factors Associated with Successes of Israeli Women Entrepreneurs

The under-representation of women in the entrepreneur activity denies them the benefits that might arise out of entrepreneurship, as described below. In addition, this under-representation might suggest that the economic system loses productivity and growth opportunities when not fully taking advantage of women's talents and intellect. That is why there is a growing interest in research regarding the obstacles women may experience in engaging entrepreneurial activity, with the purpose of creating interventions which would encourage them to get involved in entrepreneurship [Malach-Pines & Schwartz, 2008; Yemini, 2009]. This part of the literature review will detail the findings of studies conducted regarding this subject, focused on Israeli women.

Lerner, Brush & Hisrich [1997] investigated the factors that influence the business success of Israeli women entrepreneurs, claiming that most of the research done on this topic is from USA and Europe, and these factors might be different for Israel, as there the culture in Israel us different compared to other countries. The research was done on a sample of 220 Israeli businesswomen. On the theoretical level, the research employed five different perspectives that might influence the performance of the businesswomen. These include individual motivation and goals of the businesswoman, social learning (the experience of the woman with establishing and doing businesses), network affiliation (number of contacts and memberships in organization the businesswoman holds), human capital (level of education, business skills) and environmental factors including location, business sector, sociopolitical factors [Lerner, Brush & Hisrich, 1997].

Results of the study show that in accordance with previous studies made in countries other than Israel, motivations for establishing a business were strongly correlated with business performance. It was shown that the women's achievement motivation contributes to the women's personal income from the business, economic necessity as a motivation to open a business contributes to business' profitability and revenue, while

establishing a business that was triggered by the motivation for independence does not influence business performance factors [Lerner, Brush & Hisrich, 1997]. Results also show that social learning was not related to business' performance, network affiliation was significantly correlated profitability, and hiring outside advisors was correlated with business' revenue. As for human capital, level and fields of education aren't related to the business' success, while previous experience in the industry and previous salaried employment in the field of business strongly contribute to the business success, As well as the woman's business skills [Lerner, Brush & Hisrich, 1997]. Concerning environmental factors, a unique phenomenon to Israeli culture found in the study is that the profitability of the business was significantly correlated to the woman's children age. This is explained with the importance of taking care of children in the Israeli culture, which postpones the women entrepreneurs start of the business after the children are grown-ups. The line of business was also positively connected to performance. Authors comment that most perspectives tested in the study, the same influences on women's business were found for Israel and other countries, with the exception that network affiliation was a stronger contributor to business success in Israel compared with abroad [Lerner, Brush & Hisrich, 1997].

Heilbrunn & Palgi [2015] also investigated which circumstances are needed for Israeli women to succeed in their entrepreneurial efforts. The study has been conducted among Jewish and Arab women from the periphery that open a business and revealed that maintaining a business among these women requires help in many levels. On the national level, such women make use of non-profit organization helping them to become entrepreneurs and used help by grants given by these organizations to women entrepreneurs. On the local level, these women received help in opening a business from organizations aimed at helping women entrepreneurs and are not nationally spread. They had to get financing for the business from local subsidies by the municipality, cope with the bureaucracy involved in opening a business, on the local and national level. The women entrepreneurs have mentioned social support as a central resource helping them to cope with all of the above: women that were appreciated by their surroundings for opening a business, and for their work – have managed their business better that women who did not get such support. The social support the entrepreneur women got was from their family, social network or from other women entrepreneurs [Heilbrunn & Palgi,

2015]. Finally, women have mentioned their personal qualities as influencing the successes of their entrepreneurial business: level of education, past experience with running a business and the power of will to success were the main human capital issues raised by the women [Heilbrunn & Palgi, 2015].

Celganik [2006] has also conducted a study among low-income women that opened businesses as a way of escaping poverty, with similar results: she found that a lack of financial resources is a major obstacle, making it hard for those women to open a business. She also claims that these women are low in human capital traits like managerial knowledge or talents. The solution to these problems, she says, is making it easier for women to get financial support by lowering the preconditions to get credit and encouraging these women to open their businesses by an intervention program to overcome the lack of human resources.

The micro-enterprise is a small business, which together with the owner, have fewer than five employees. The social network structure of the owners has been shown to affect the successful management of the business [Kim & Sherraden, 2014]. In Israel, Monnickendam-Givon, Schwartz & Gidron, [2016] examined the use of social networks amongst Ultra-Orthodox women for leveraging their small entrepreneur businesses. The Ultra-Orthodox (Haredi) are a distinct group within Israeli society, not because of their ethnicity, or because they are an immigrant minority, but rather because of their religious practices. They generally live in separated enclaves in some urban areas following their own social norms and include ten percent of the Israeli population. The Ultra-Orthodox men generally devote themselves full-time to religious studies and do not work. The women take care of their children while they also may support the family financially from their employment largely in education. The Ultra-Orthodox woman may often use the establishment of a micro-business to expand her source of income and to assist in avoiding poverty in her family. The Ultra-Orthodox women are limited by religious rules, resulting in their segregation by gender in public places and their restriction to work with other women within their communities. Micro-enterprises in the orthodox communities cover a wide range of different areas and may include the selling of scarves or handkerchiefs or the designing of wigs or other such activities that are expected to add extra income for the women and their families [Monnickendam-Givon, Schwartz & Gidron, 2016]. The entrepreneurship of the women results in the establishment of

enterprises which are expected to contribute to economic growth within their communities, and as a result to contribute to Israeli society.

As mentioned before, although an Israeli woman has access to many resources that help her start an entrepreneur business, there is a large gender gap in Israel regarding pursuing an entrepreneur career [OECD,2016], with fewer women becoming entrepreneur compared with men. This triggered a line of research focusing on the reasons for that phenomenon. A recent study by Heilbrunn, Abu-Asbeh & Abu Nasra [2014] investigated what the difficulties faced by women entrepreneurs from three social groups in Israel are: immigrant women from the former Soviet Union, who came to Israel around 1990, Arab-Israeli women and Jewish-Israeli women who are the majority in the population. A number of 477 women entrepreneurs from these groups were interviewed as part of the study. The results show that Israeli women entrepreneurs face difficulties developing their business in several areas including handling laws and regulation, raising funds for the business, handling competition in the market and managing the business. Results also show that ethnic differences exist in the level of difficulty experienced by women entrepreneurs. The larger ethic differences are in the area of recruiting capital for the business: Arab woman face stronger difficulties in this area compared with the two Jewish groups. Large ethnic differences exist for the managerial area as well: women from the veteran group find it more difficult than women from the other two groups to manage their business, maybe because their businesses employ more workers compared with the other two group businesses [Heilbrunn, Abu-Asbeh & Abu Nasra, 2014].

Ethnic differences are moderate in the area of handling laws and regulation, which is more challenging for Arab woman compared with the other two groups. Finally, no ethnic differences in the market competition that the groups face were found. Demographic variables (family status, number of children and education) did not affect the level of difficulties faced by the woman entrepreneur. Results show that women in different ethnic groups face different challenges when engaging in entrepreneurship, so they need other intervention plans aimed with encouraging them to be entrepreneurs [Heilbrunn, Abu-Asbeh & Abu Nasra, 2014]. As explained before, this notion is accepted by the Israeli government and non-commercial organizations aimed with promoting entrepreneurship, which run ethnic-specific ventures to cater for different ethnic groups needs on that issue [Yemini, 2009].

Heilbrunn & Palgi's [2015] findings also suggest, like the former study discussed, that handling bureaucracy is of the toughest challenges a woman entrepreneur must face when opening and managing a business. Arab women found it especially hard to deal with all the laws and regulation a business has to obey in order to be operated. Also, with accordance to the finding of the previous study discussed, another challenge for these women was to find financial support for the operation of the business.

In the Arab sector, women entrepreneurs reported a challenge they had to overcome in their community: the public criticism of their being entrepreneurs, which makes them behave in a way that is not in accordance with tradition like traveling far away from home or meeting with strange men for business meetings. Jewish women entrepreneurs mentioned discrimination against women in the business arena as a challenge when operating a business [Heilbrunn & Palgi, 2015]. On the personal level, these women reported that a lack of training experience and knowledge was a challenge for them in running a business, and also the lack of interest in the public for their product. On the personal level, low self-confidence was also a problem that hindered the successes of their businesses.

Also, on the personal level, these women reported the family-work conflict as a problem when operating a business [Heilbrunn & Palgi, 2015]. Family-work conflict refers to the competition of resources most working women feel between their role at home as mothers and household workers and their role outside home working in a paid job. Several family characteristics play a role in creating the work-family conflict that many of the women entrepreneurs' experience. Within the family, parental demands on the women and their involvement with the family are compounded by the time commitments needed to balance their time between their work and the family while running a business. The marriage status of the women and the number and age of the children affect the work-family conflict [Heilbrunn & Davidovitch, 2011]. Support from the women's family is advantageous to the women in their entrepreneur activities. In addition to the positive attitude of the women's spouses to their entrepreneurship endeavours, which may lessen the work-family conflict, the support of other family members and the assistance of domestic help may also contribute to reducing the work-family conflict [Heilbrunn & Davidovitch, 2011].

Despite the gradual change in gender roles within the home environment, women are still expected to take responsibility for a larger share of family and home tasks, which interferes with their ability to fully devote themselves to their paid job careers. Women are also discriminated against in the workplace, with the labour market not being truly competitive, but rather maintaining political and structural segmentation. The level of disadvantage of the woman in the labor market can be considered as one of the driving forces for the women to move towards self-employment. A positive correlation exists between the move of women to become entrepreneurs and their disadvantage in the labor market [Heilbrunn & Davidovitch, 2011].

Women need constantly to balance between these two areas of life in an effort to meet expectations and their expectations from work and family are not always compatible, hence the conflict. Each role has its own demands on the time, commitment and energy of the women making it difficult for the woman to perform the role to the best of her ability. This conflict in roles is common in women, where the commitment to work makes it difficult for the woman to fulfil her obligations in the home [Heilbrunn & Davidovitch, 2011].

Since women entrepreneurs have to manage every aspect of their business on their own, they are responsible for ensuring the success of their business and often employ other workers, for whom they are responsible. By comparison, salary-employed women share the managerial burden with other workers, so for the entrepreneur woman, the competition for her resources in balancing between duties is greater than with salary-employed women. Thus, with the added commitment to her business, the family-work conflict might be more evident for the women entrepreneurs [Heilbrunn & Davidovitch, 2011]. The women entrepreneurs become women managers, juggling their family relationship, with the business and the community, creating a relationship dependent business system. This connected system adds to the conflicts experienced by the women when they balance work commitments with their family obligations.

Demographic statistics from the Israeli Central Bureau of Statistics showed that in 2020, 4,677,700 females (49.8%) were living in Israel out of the total population of 9,291,000. Around 60% of the women were aged between 15 and 64 years old. The population consists of 73.9% Jews, 21.1% Arabs and 5.0% others. In 2020, 2,030,000 men

and 1,884,000 women were employed. 4.1% of the women in Israel were unemployed in comparison to 4.5% of the men [CBS, 2021].

The study conducted by Heilbrunn & Davidovitch [2011] sought to examine whether differences were observed between the different groups of women in Israeli society. They also investigated the influence that different factors have on the work-family conflicts experienced by the women.

In the study, one hundred and eleven women entrepreneurs responded to the research questionnaire. Results show that family-work conflict is a major issue for women entrepreneurs in Israel. However, the level of conflict is negatively associated with family support, meaning that emotional and instrumental support of the partner and other family members may reduce the conflict. On the other hand, there is a positive correlation between the intensity of the conflict and the number of children the women has, which make sense because every child is competing for the resources of the women making it difficult to allocate time for business management. On the same note, business size is positively correlated with the intensity of the conflict, because a larger business takes more resources from the entrepreneur women, leaving her less time to fulfil her home duties [Heilbrunn & Davidovitch, 2011].

As for the differences in the intensity of the conflict between ethnic groups, immigrants from the former Soviet Union experienced less conflict than the other two groups in the study, and authors suspect that this is due to the egalitarian socialization these women had in their former environment. Veteran Jewish women experience the conflict in the strongest way, because their family support is low. Arab-Israeli women experience the conflict as being less strong than veteran Israeli women, because most of their businesses are operated from their home, so they can freely combine work and home duties, and because their family support is strong [Heilbrunn & Davidovitch, 2011].

The studies detailed up to now focused on difficulties encountered in entrepreneurial activity for women who already decided to engage in such activity. Another line of research focuses on the cultural and social environmental factors that influence the decision making of women to start entrepreneurial activity. It seems that women engagement rates in entrepreneurial activity is higher when they face the necessity to do so, but they generally believe that the society favors men over them in terms of entrepreneurial ability and environmental support, so they have less motivation

to be entrepreneurs. Three studies in the Israeli society were conducted with the aim of finding if such gender differences in supporting entrepreneurial activity exist, and what their magnitude is [Malach-Pines & Schwartz, 2008].

The first study was a survey of the general Israeli population in which men and women were asked to report their tendency to open a high-tech entrepreneurial business. Results show that women appear to rate themselves very similarly to men on most entrepreneurial values. However, some gender differences do exist: women describe themselves less as risk takers, challenge-loving and like to manage compared with men – traits that are essential for entrepreneurs. Authors attribute these differences to the different socialization men and women get in Israeli society, which make men more than women believe they have the qualities needed to be entrepreneurs [Malach-Pines & Schwartz, 2008].

The second study shows that such differences are also present among management students: men perceived themselves suitable to be business owners or holding entrepreneurial traits more than women and planned more than women to open a new business. The gender differences disappeared when comparing current business owners, which suggests that women are more hesitant to be entrepreneurs due to their socialization but gain confidence in their abilities as soon as they open a business. This was also supported by the third study, in which small business owner that are no long students were interviewed: the study has revealed that there are almost no gender differences in their business characteristics and perceptions of entrepreneurship. The authors conclude that the tendency of women to open an entrepreneurial business is weaker than men, which can be mended with intervention programs encouraging young women to open businesses [Malach-Pines & Schwartz, 2008].

Sa'ar [2011], focusing on low-income women who pursue micro-entrepreneurship as a track for social mobility, also claims that women in Israel are socialized to hold traits that are not compatible with entrepreneurship, like being a second supporter of the family. As a result, it is legitimate to pay them less than men or preferring social and family ties over making money. Research among these women has found that the process of educating these women and giving them the resources needed to open a business must include work on changing these perceptions of women on their place in society and their values.

The OECD [2016] report supports this notion by stating that the high gender gap (the number of Israeli men vs. women engaging in entrepreneurship) can be explained by the lower interest of Israeli women in entrepreneurial careers compared with men, and the lower confidence of Israeli women that they could be good entrepreneurs. This situation is evident in the fact that only 29% of Israeli women say they have the right skills to open a business compared with 49% among men.

Pfefferman & Frenkel [2015] contribute to the understanding of socialization on women's tendency to open businesses by asserting that an entrepreneur is socialized in the Israeli society to bare the traits of a man which are: "heroic, assertive, task-oriented, white and masculine" (p.551), thus women feel that entrepreneurship is not meant for them, only for men. They further suggest that there is a state discrimination against women as entrepreneurs because the structural support for entrepreneurship is based on large enterprises that keep formal network relationship with the authorities. Women tend to open smaller businesses than men and often have less social capital of ties with the government compared with men, so they are denied of state-sponsored venture capital. The authors conclude with the remark that the "image of the ideal entrepreneur also shapes states' policies that directly and indirectly determine the probability of men and women's engagement in entrepreneurship and the type of enterprises they undertake" (p.551), and women are discriminated against in both these fields. They recommend that gender effects on entering entrepreneurship should be neutralized, steps would be taken to make it easier for women to open a business and support women's entrepreneurial businesses [Pfefferman & Frenkel, 2015].

Kariv [2012] studied the question of whether the gender gaps discussed in this section affect overall successes of the business. She found out that two major strategies contribute to growth of an entrepreneurial business: empowering the staff and being a role model for the staff. According to her findings, men typically use the first mentioned strategy for creating growth, while women typically use the last. Nevertheless, she found that these gender issues do not affect the overall successes of the business. The conclusion of the author is that "gender per se is an insignificant determinant of business growth; rather, it is imperative to include the strategies used in the business pursuit to understand the different angles of the genders' business growth" (p. 177).

To sum up this section of the chapter, despite some successful Israeli women entrepreneurs, the general picture is not that bright for Israeli women engaging in entrepreneurship. The main reason for women engaging in entrepreneurial activity is to escape the discrimination in the work market or to provide funds for their family to overcome poverty. The number of Israeli women engaging in entrepreneurship is high compared with other OECD countries, still, there remains a gender-gap regarding entrepreneurial activity, as women are educated to believe that they are less talented than men as entrepreneurs. In addition, women face many obstacles when opening a business, including lack of finance, human resources, and the need to cope with laws and regulation.

Chapter 3: Conceptual Model and Methodology

This chapter will present first the background to the research, gaps in current entrepreneurship research, the research objective and the research question, theoretical framework and research hypotheses. The methodology will then be presented as: the research design, the survey administration, sampling method, confidentiality and ethics approval, survey preparation and pilot studies. Then the measures and the data validity and reliability will be presented. Finally, data analysis will be presented.

3.1 Background to the Research

The purpose of this study is reflected in the research question which examines the effects of internal and external factors on Israeli women entrepreneurs' performance in SMEs. The study seeks to examine the effects of internal (personal) factors, like entrepreneurial orientation, human capital, entrepreneurial goals and motivations, and the external (environmental) factors, like business characteristics, economic factors, socio-cultural factors, and legal and administrative factors on Israeli women entrepreneurs' performance in SMEs. Furthermore, it investigated the relationship between these internal (individual) and external (environmental) factors and opportunity recognition to discover the effect on women entrepreneurs' performance and to study the challenges that women may face when conducting their business. The mediating effect of opportunity recognition is also examined.

Some earlier studies have investigated selected factors influencing women entrepreneurs' performance. This chapter will begin by outlining the existing gaps in current entrepreneurship research relating to women entrepreneurs. Cabrera & Mauricio [2017] identified and organized factors that affect women's entrepreneurship at different stages of the entrepreneur process at the internal (individual) and external (environmental) level. In this dissertation, a Modified Conceptual Model is proposed, based on an adaptation of Hasan & Almubarak's [2016] Conceptual Model which describes the factors affecting women entrepreneurs' performance in SMEs in Bahrain. The Modified Conceptual Model is used as the basis in this research for studying the

influence that internal and external factors have on Israeli women entrepreneurs' performance in SMEs. Also, presented are the research objectives and research question of this thesis, as well as the theoretical framework for the research, which includes a description and explanation of the model chosen. Based on the proposed Modified Conceptual Model, the research hypotheses are posited. The section on methodology provides a description of the survey developed to enable the data collection for the study, as well as the sample population used for the study. The research method involved data that was collected from a sample population of women entrepreneurs in Israel. Also included in the chapter is a section about maintaining the confidentiality of the research participants.

The following sections of the chapter discuss the data validation methods used to test validity and reliability. Finally, the section on analysis of the data describes the statistical analysis that will be conducted in the study to test the proposed model and the hypotheses posited.

3.1.1 Gaps in Current Entrepreneurship Research

Considering that women entrepreneurship is a driving force for economic growth, knowing which factors influence women's business success is of interest to economic and social agents. Although women entrepreneurs contributed significantly to the gross national product, jobs, and innovations, there is little published information about women entrepreneurship. Only 10% of entrepreneurship research focused on studies of women entrepreneurs [Brush & Cooper, 2012]. Most of the studies focused on men and failed to represent a holistic picture of women entrepreneurship [Hughes, Jennings, Brush, Carter & Welter, 2012]. Factors that affect different stages of women entrepreneurs' process have been identified and organized at the internal (individual) and external (environmental) level [Cabrera & Mauricio, 2017].

In entrepreneurship studies, opportunity recognition is defined as the cognitive process that enables individuals to understand that they have identified an opportunity and it is widely recognized as a critical factor in entrepreneurship [Bao, Zhou & Chen, 2017]. Identifying and selecting the right opportunities are among the most important

abilities of a successful entrepreneur. Opportunity Recognition is described as an activity that occurs before, as well as after, founding a firm. Opportunity Recognition is considered the most important step in the entrepreneurial process—one from which, in many cases, all else follows [Sambasivan, Abdul & Yusop, 2009]. Despite the emergence of entrepreneurial Opportunity Recognition as a core construct and independent research area within the entrepreneurship literature, the process of entrepreneurial opportunity recognition has long been viewed as a black box. Although prior research has explicated how entrepreneurs engage in exploiting and identifying opportunities, the entrepreneurial Opportunity Recognition phenomenon is still poorly understood. Therefore, scholars have drawn upon different social science disciplines, including economics, psychology, and sociology to create theoretical frameworks to explain the nature and process of Opportunity Recognition. In the entrepreneurial Opportunity Recognition literature, antecedents of entrepreneurial Opportunity Recognition have covered a wide range of factors from internal (individual) to external (environmental) factors. Few studies however, have considered both individual and environmental factors in exploring the antecedents of entrepreneurial Opportunity Recognition [Wang, Ellinger & Wu, 2013].

Despite several studies that have related to women entrepreneurs, a gap exists in the research of women entrepreneurs, since no extensive research has been conducted on women entrepreneurs in Israel to date that deals with the challenges faced by women entrepreneurs in small and medium enterprises. Previous studies have also not examined the influence of internal and external factors on Opportunity Recognition and women Entrepreneurs' Performance amongst the Israeli women entrepreneurs.

3.1.2 Research Objective and Research Question

Based on the current literature and gaps that exist in the research, this research project will:

a) focus on small and medium enterprises (SMEs) which face unique challenges in the business environment;

b) investigate women entrepreneurs in Israel, since despite a growing presence of women entrepreneurs in Israel, very little is known about women entrepreneurs' performance in Israel;
c) rely on internal (individual) and external (environmental) factors, which were identified in previous research and are acknowledged in the literature as factors influencing Entrepreneur Performance.

With a lack of knowledge about women Entrepreneurs' Performance in Israel, the objective of this study is to fill the gap in the subject and to contribute towards understanding the factors that influence the performance of Israel women entrepreneurs. The purpose of this research is to examine the effects of influencing factors on women entrepreneurs' performance in Israel to help increase their performance and to enable the women to efficiently and effectively take advantage of their business environment. The study also explores the Opportunity Recognition factor as a mediator between influencing factors and performance of women entrepreneurs.

To achieve these research objectives, the following research question is addressed in this dissertation:

What are the effects of internal and external factors on Israeli women entrepreneurs' performance in SMEs?

3.1.3 Theoretical Framework

Several studies have been conducted using different variables to construct an entrepreneurship performance model [Ekype et al., 2010; Teoh and Chong, 2007]. For this research, the conceptual framework chosen is a continuation of Hasan & Almubarak's [2016] model that was based on Shane's [2003] theory with some modifications. Hasan & Almubarak's [2016] model aims to describe different factors affecting women Entrepreneurs' Performance (EP) and challenges that they may face when conducting their business. In the earlier model proposed by Shane [2003], Opportunity Recognition (OR) is one of the eight independent factors affecting the performance of women entrepreneurs. The other factors included Entrepreneurial Orientation (EO), Human

Capital (HC), Entrepreneurial Goals and Motivations (EGM), Business Characteristics (BC), Economic Factors (EF), Socio-Cultural Factors (SCF), Legal and Administrative Factors (LAF). In Hasan & Almubarak's [2016] study, these factors were grouped into internal (personal) factors and external (environmental) factors, while OR was investigated in its role of mediator variable, as illustrated in Figure 13, The Conceptual Model in Hasan & Almubarak's [2016] study.

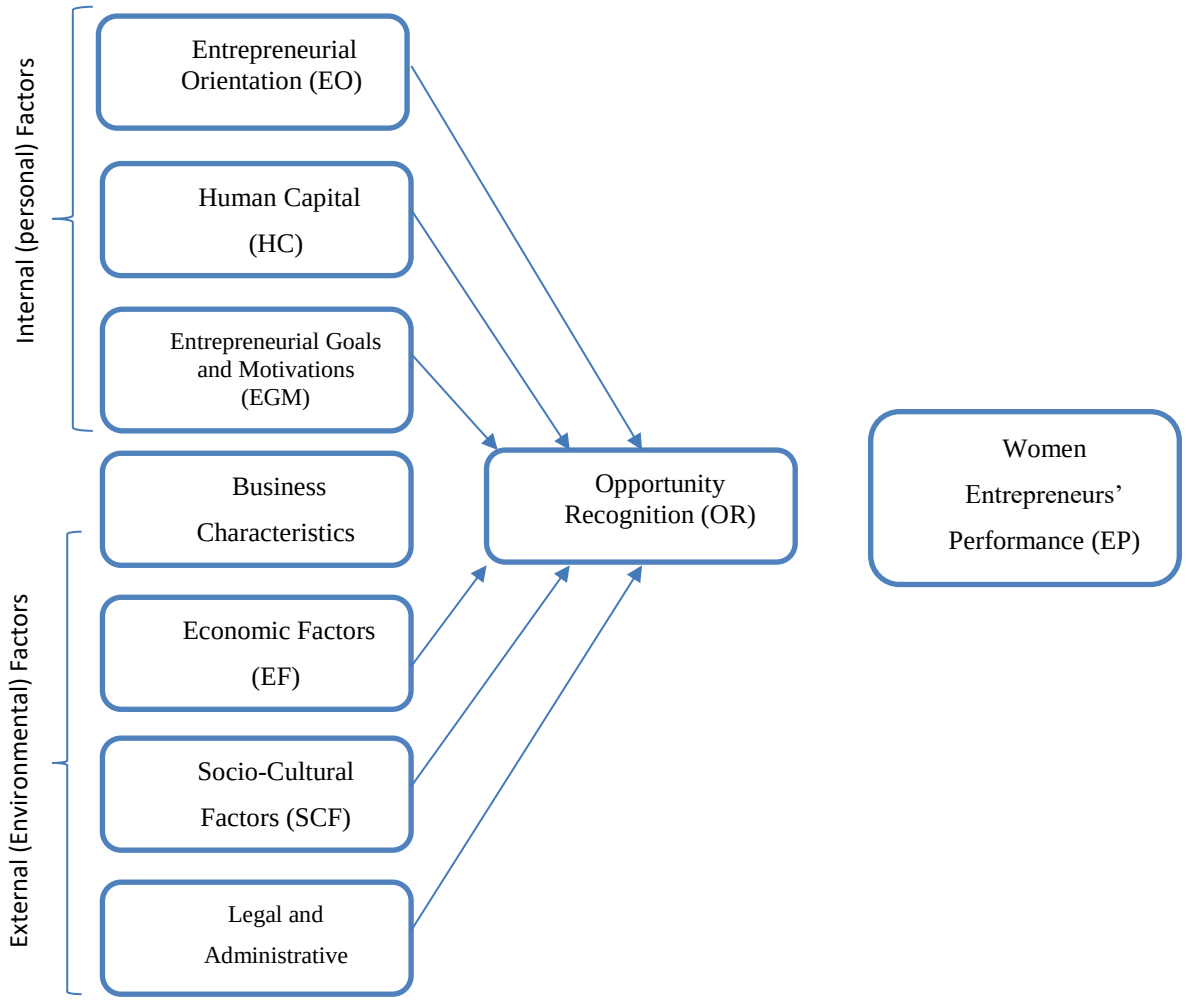

Figure 13: The Conceptual Model

Source: Hasan & Almubarak's [2016]

To clarify the meaning of mediation, the mediation pathway is illustrated in Figure 14: Mediator. This model assumes a three-variable system, such that there are two paths leading to the dependent variable: the direct effect of the independent variable (pathway

C) and the effect of a mediator (pathway B). There is also a pathway from the independent variable to the mediator (pathway A). Since in the research, I address phenomena that are influenced by multiple factors, a goal is to look for mediators that significantly lower the C-path and will not eliminate the relationship between independent and dependent variables.

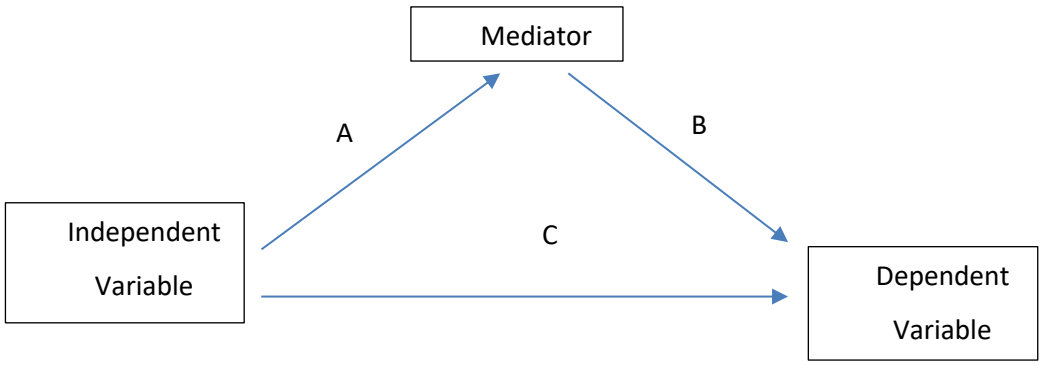

Figure 14: Mediator

Source: own elaboration

I chose to base my thesis research on Hasan & Almubarak's [2016] model, because it provides a comprehensive framework of factors influencing women's business success, including both internal (personal) factors and external (environmental) factors. It also focuses on OR and refers to this factor as a mediator variable to success. Since factors affecting the success of women's business ventures have been demonstrated as being the same world-wide, with the only difference being the intensity of the effect [Cabrera & Mauricio, 2017], I chose to examine the effects of different factors on Israeli women entrepreneurs' performance, based on this model.

Nevertheless, in addition to my research study's focus on the effect of all variables on Entrepreneur Performance (EP), the study also analyzes Opportunity Recognition (OR) as a mediator variable. Therefore, the proposed model for my study combines Hasan & Almubarak's [2016] model, Figure 13: The Conceptual Model and adds a reference to the direct effect of the variables on Entrepreneur Performance (EP), irrespective of

the mediator variable, as proposed in The Modified Conceptual Model illustrated in Figure 15. In the proposed Modified Conceptual Model, as in Hasan & Almubarak's [2016] Conceptual Model, the internal (personal) factors include: Entrepreneurial Orientation (EO), Human Capital (HC), Entrepreneurial Goals and Motivations (EGM). The external (environmental) factors include: Business Characteristics (BC), Economic Factors (EF), Socio-Cultural Factors (SCF), Legal and Administrative Factors (LAF).

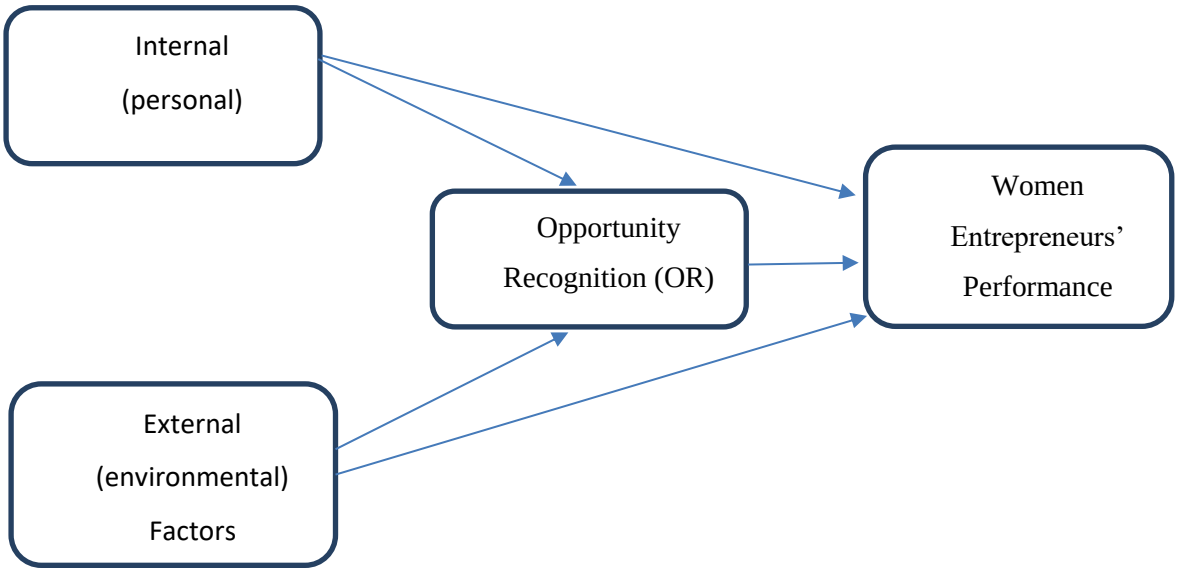

Figure 15: The Modified Conceptual Model

Source: Based on Hasan & Almubarak's [2016]

The Modified Conceptual Model is used to study the effects of the factors described in the model on women entrepreneurs' performance. The factors in the modified model include opportunity recognition, the internal (personal) factors, like entrepreneurial orientation, human capital, entrepreneurial goals and motivations, and the external (environmental) factors, like business characteristics, economic factors, socio-cultural factors, and legal and administrative factors.

3.1.4 Research Hypotheses

Based on the above Modified Conceptual Model, I posit the following hypotheses:

H1: Opportunity Recognition (OR) mediates the relationship between internal factors and women Entrepreneurs' Performance (EP);

H2: Opportunity Recognition (OR) mediates the relationship between external factors and women Entrepreneurs' Performance (EP);

H3: Internal factors influence women Entrepreneurs' Performance.

- **H3a**: Entrepreneurial Orientation (EO) influences women Entrepreneurs' Performance (EP).
- **H3b**: Human Capital (HC) influences women Entrepreneurs' Performance (EP).
- **H3c**: Entrepreneurial Goals and Motivations (EGM) influences women Entrepreneurs' Performance (EP).

H4: External factors influence women Entrepreneurs' Performance

- **H4a**: Business Characteristics (BC) influence women Entrepreneurs' Performance (EP).
- **H4b**: Economic Factors (EF) influence women Entrepreneurs' Performance (EP).
- **H4c**: Socio-Cultural Factors (SCF) influence women Entrepreneurs' Performance (EP).
- **H4d**: Legal and Administrative Factors (LAF) influence women Entrepreneurs' Performance (EP).

3.2 Methodology

3.2.1 Research Design

The current study is a continuation of a study by Hasan & Almubarak [2016], which aimed at investigating the factors influencing women entrepreneurs' performance in

SMEs in Bahrain. According to the authors of the study, "as the study is conducted in Bahrain, it may lack generalization" [Hasan & Almubarak, 2016 p.82]. Thus, the current study continues Hasan & Almubarak's [2016] study with adaptations to the Israeli culture and business environment, with the aim of investigating whether similar factors influence SME women entrepreneurs in both countries.

Recurrent with the original study, which proposed a conceptual model describing the influence of key factors on women entrepreneurs' performance, in this study a modified conceptual model suggesting the relationship between several factors that might influence the women entrepreneurs' performance is tested. The Modified Conceptual Model is shown in Figure 15 and is tested in the study. The model describes the independent variables, internal (personal) factors and external (environmental) factors that influence women entrepreneurs' performance and entrepreneur's opportunity recognition, which, in turn, influences women entrepreneurs' performance.

The empirical model is mediated, based on the hypothesis that seven different factors (which are the independent variables in the model) are influencing the entrepreneurs, some of which are internal (influenced by the entrepreneurs' personality) and some of which are external (influenced by the business environment). All these factors are expected to change the entrepreneurs' opportunity recognition (the mediator variable of the model), which later impacts women entrepreneur's performance, which is the dependent variable in the model.

The study used a qualitative (positivist) research approach using a survey to test the model, since the role of the researcher involved data collection and objective interpretation. The quantitative paradigm advocates one absolute reality, one truth, having no connection to time, that can be evaluated through statistical means. This approach examines selected characteristics of phenomena or processes in a controlled environment. A careful mathematical, logical approach helps in the formulation of scientific generalizations, and the researcher has to be impartial, objective, and to not affect or distort the studied phenomena or processes [Shkedi, 2003]. Hereafter, all the procedures carried out in the study to satisfy the requirements of a well-managed quantitative study will be detailed.

3.2.2 Survey Administration

Quantitative and qualitative research in the social and behavioral sciences involve different methods of data collection. One of the popular methods used to gather data has been the survey, which may be especially effective for research that requires the gathering of information from large population groups. New methods for conducting surveys have emerged following the development of Internet technology, which enables the use of the email survey and the web survey [Bajpai, 2011]. The Internet survey format enables the collection of data from its respondents pertaining to their thoughts, opinions, attitudes, behaviors and interests. Some of the advantages to the use of the Internet to conduct surveys lies in the quick response time expected, the lowering of costs involved in collecting responses, the ease for follow-up and the increased possibilities to ensure anonymity for the respondents [Weber & Bradley, 2006; Bajpai, 2011]. However, despite the advantages, online surveys have their limitations. Distributing surveys via the Internet leads to sampling bias, whereby specific groups in the population, most especially those groups without access to computers and the Internet, are underrepresented. Nevertheless, the advantages of electronic surveys have counterbalanced the disadvantage of its use and pen-and-paper surveys have largely been replaced by online methods [Weber & Bradley, 2006].

To facilitate data collection in this study, women SME entrepreneurs were approached via several channels, including WhatsApp, e-mails, web sites and a paid campaign on Facebook, the page of the Small and Medium Business Agency of the Ministry of Economics and Industry and non-profit organizations that promote women and were asked to participate in the study. They were informed of the goal of the study, they were promised that the answers that they would provide would be used for academic purposes only, and that the results of the study would be provided to them, upon request. The women contacted were also asked to send the survey as a snowball sample to peers or friends.

The female entrepreneurs who agreed to participate in the study were provided a link to a computerized version of the questionnaire and were able to answer the study questionnaire online. The survey software chosen for use in the study was SurveyNuts application, due to its friendly user interface, the requirement for completion of all the

questions, the provision of a post survey URL on social media, on the website and via email and because the survey can be completed either on the computer or on the phone. The participants had access to the researcher contact details, in case one of them would encounter any problems while answering the survey.

Data collection was carried out over a two-month period between 24 Nov. 2017 and 16 Jan. 2018. Recruitment of women to participate in the survey encountered difficulties, as the relevant interviewees were very busy with managing their businesses and the questionnaire was lengthy, requiring the participant to invest a considerable amount of time to complete the survey. As responding to the survey was anonymous, response rates are not known.

3.2.3 Sampling Method

The research focused on entrepreneurs who have launched and have an ongoing involvement in their businesses. Another important parameter for consideration was the inclusion of only Israeli women entrepreneurs in the research. There have been disagreements on the need for comparison with men in studies on entrepreneurship and gender. Henry [2016] in his comprehensive paper on methodologies in research on entrepreneurship and gender, suggests that future researchers in the field could abandon male–female comparative studies because comparing men and women entrepreneurs reinforces a static view of gender and entrepreneurship. The actual challenge of future scholars is to delve deeper from a feminist angle, in order to better understand, rather than criticize women entrepreneurship. For these reasons, in this study, the survey was not distributed among men and results were not compared to male business owners.

With an increase in the use of social networking sites, individuals are able to maintain a profile within a system and then share their connections and form new connections with others in the system. With the possibility to create these connections, the Internet has become a readily available tool for virtual snowball sampling [Ellison, 2008]. In this study, a convenience sample was used, based on the virtual snowball recruitment method. One hundred and fifty-nine Israeli women SME entrepreneurs participated in

interviews for the study. Since there is no listing of all the women entrepreneur's in Israel, a probability sample was not possible.

Virtual snowball sampling occurs when the researcher contacts one group of people who then help the researcher to establish contact with other people [Bryman, 2004]. There are several advantages to the virtual snowball sampling method. Firstly, it is advantageous in hard-to-reach and hard-to-involve populations where it can increase the number of responses. Furthermore, online sampling may allow for the expansion of the geographical scope of the studies. According to Baltar & Brunet [2012] who used Facebook to search for participants for their study to conduct the research, it was possible to reduce the time necessary for building trust between the participant and the researcher. Participants were more likely to share their personal information because the researcher was also sharing personal information on his/her Facebook profile. Online sampling may increase the level of confidence of the respondents, which can contribute to higher response rates and lastly, it is a less costly method than many other sampling methods. Even though the virtual sampling method can increase representativeness of the results, one disadvantage of the virtual snowball sampling method is that the sample selection is biased towards the characteristics of online population, including their age, education level, and socioeconomic level. Another disadvantage is the fact that the target population might not always have access to the Internet.

3.2.4. Confidentiality and Ethics Approval

During the study, trust was quickly built up between the participant and the researcher since the researcher was sharing her personal information on her Facebook profile with the research participants. The women participants were assured of confidentiality when taking the survey, with participants generally more readily accepting assurances of confidentiality when surveys are completed online. Online sampling may also increase the level of confidence of the respondents, which can contribute to higher response rates. The participants were informed that the responses collected would be anonymous. When the women were asked to participate in the study, they were informed of the goal of the study. Furthermore, they received explanations that their

responses would be used for academic purposes only. They were also informed that the results of the study would be provided to them if they so requested and that the responses would be reported in an aggregate form.

3.2.5. Survey Preparation

The research instrument was a structured questionnaire consisting of two sections. The first section of the questionnaire contained statements that evaluated the variables. Each statement was measured on a five-point Likert scale, ranging from 1= "strongly disagree" to 5= "strongly agree". Since the development of the Likert scale [Likert, 1932], researchers have incorporated the use of the Likert scale into a variety of instruments to measure specific attributes or traits of individuals or groups. The instruments require respondents to indicate their level of agreement or disagreement, along a scale that usually ranges from 1 to 5, to statements or questions relating to the attribute or trait that is being measured.

The second section focused on demographic characteristics of the sample population. The questionnaire was self-reporting and maintained the anonymity of the respondents.

The questionnaire used for the study included several items to address each factor in the model. In order to ensure a high level of reliability of the scale of the instrument, the variables in the study were tested using items that had previously been used and validated in other research. The questionnaire in this study was taken from Hasan & Almubarak's [2016] study and adapted for use in the study. Some of the questions were re-formulated. The questionnaire was translated to Hebrew and some of the items were re-formulated to maintain their clarity of meaning. In Table 10, details of the items in the questionnaire that address each variable are provided.

Table 10: Measurement of Research Variables by Items in the Questionnaire

Variable	The items in the questionnaire that address the variable
Entrepreneurial Orientation (EO)	1-6
Opportunity Recognition (OR)	7-9

Entrepreneurs Performance (EP)	10-14
Human Capital (HC)	15-22
Entrepreneur Goals and Motives (EGM)	23-26
Economic Factors (EF)	27-29
Socio Cultural Factors (SCF)	30-32
Legal and Administrative Factors (LAF)	33-36
Business Characteristics (BC)	37-38

Source: Author's Modified Questionnaire

3.2.6. Pilot Studies

Three pilot studies were conducted before launching the main data collection process, with the aim of improving the alignment of the questionnaire to the population in Israel, and to adjust the format of the questionnaire to one that was easy for the respondents to understand, read and answer. Pilot study 1 was conducted on 23 July 2017. The questionnaire was answered by 4 women entrepreneurs. As a result of this pilot study, some of the items were re-worded to be more clearly understandable to the respondents, and also it was discovered that the questionnaire was not properly displayed in the software used, so an alternate software was chosen. Pilot study 2 was conducted among 4 interviewees and the display of the alternate software used was tested (SurveyNuts application). Also, additional wording changes were made to the questionnaire after referring to the academic literature sources on surveying, and these changes were tested in the pilot. No significant issues had arisen during this pilot. Pilot study 3 was conducted on 14 October 2017 and was the final pilot before engaging in the full data collection process. Out of 12 potentials approached, nine of them answered the survey. Three items were added to the questionnaire of pilot study 3, and these items asked the respondents to rate the clarity of the survey, how interesting is was and how easy it was to answer. The respondents were also able to add their remarks to the survey. No significant issues were discovered, and the survey was reported as being very clear, understandable and fun to participate in. Thus, it was decided to advance to full distribution of the survey.

3.3. Measures

3.3.1. Dependent Variable

Entrepreneurs' Performance (EP) is defined in relation to the output of the entrepreneur. It refers to the level of achievement of the entrepreneur in running the business enterprise. The achievement may be measured by the number of employees, sales volume or level of profit [Nneka, 2015]. Generally, businesses owned by women are significantly smaller than businesses owned by men in terms of total sales, total assets and total number of employees [Coleman, 2007]. Women are more conservative in terms of expectations for growth, having modest plans for growth and expansion [Poggesi et al., 2016].

Roomi, Harrison & Beaumont-Kerridge [2009] found that most of the women business owners did not choose ahead of the time to establish growth-oriented businesses. Instead, they chose to establish a small business, which is local and focused, and which could not be expanded. Furthermore, the growth aspirations among women business owners may be motivated by other factors, aside from human capital and financial capital [Coleman, 2007].

Researchers can be challenged to find objective measures to assess enterprise performance. In smaller, privately-owned businesses relevant data may be unavailable. Thus, although objective measures have been a preferred source of data for measuring enterprise performance, when such data is not easily accessible, subjective perceptual measures might be considered. So that while it has been suggested that subjective performance measures should not be considered as directly exchangeable for objective performance measures, when objective measures are unavailable and there remains an interest in measuring entrepreneur performance, the use of subjective perceptual measures could be considered [Dess & Robinson, 1984].

Vij & Bedi [2016] conducted a study on businesses in India, aimed at justifying the use of subjective measures for assessing business performance instead of the use of objective measures. The focus of the study was on operational and financial indicators of the business performance. The study found a significant positive correlation between the subjective measures and the objective measures in assessing business performance,

justifying the use of subjective measures to examine business performance when operational and financial indicators are used. Thus, it was suggested that the use of both objective and subjective measures, or the use of either one or the other of the measures is possible when examining business performance [Vij & Bedi, 2016].

Therefore, in this research, performance was measured through the satisfaction of the entrepreneurs from both financial and non-financial indicators. Defining the financial and non-financial measures, I followed Fatoki [2011] and focused on satisfaction with sales growth and profitability growth for the financial measures and on increase in the number of employees, performance relative to competitors and satisfaction with overall business performance for the non-financial measures. The questions in the questionnaire related to this variable:

10 - I am satisfied with the increase in sales

11 - I am satisfied with the profitability growth

12 - I am satisfied with the increase in the number of employees

13 - I am satisfied with the performance relative to competitors

14 - I am satisfied with the overall business performance

3.3.2. Mediating Variable

Opportunity Recognition (OR) is a process whereby individuals identify, recognize, and discover potential opportunities to create and develop new business, ventures, markets, and technology [Wang, Ellinger & Wu, 2013]. The entrepreneurial process begins with the perception of opportunities, or situations in which resources can contribute to a potential profit. Alert individuals, called entrepreneurs, discover these opportunities, and develop ideas for how to pursue them. Opportunities are objective, independent of the entrepreneurs who perceive them. Only individuals with appropriate qualities will perceive them [Shane, 2003]. Alertness has been described as individual receptiveness and ability to use information to create new means-ends frameworks from pieces of information [Kirzner, 1997]. The individual differences in the discovery process may be divided by their access to information and opportunity recognition. There are three primary ways to gain better information: through life experiences, social networks

and search processes. Two factors influence the ability to recognize opportunities given the same amount of information: absorptive capacity and cognitive processes related to alertness to opportunity. Research suggests that the most important aspect of absorptive capacity is prior knowledge about markets, while the most important cognitive processes are intelligence, perceptive ability, creativity and seeing opportunity where others see risk [Shane, 2003].

Differences have been found between women and men regarding the reasoning behind their starting a business. Only 68.4% of women entrepreneurs reported that the reason behind their starting a business was the pursuing of an opportunity. In comparison, 74% of men entrepreneurs reported that pursuing an opportunity was the reasoning behind their starting a business. In addition, the GEM 2019 study reported that the gap between opportunity perceptions of women (42.1%) and that of men (47.3%) stood at around 10% when relating to data collected globally. Nevertheless, in sixteen of the countries participating in the study, the data indicated that the women had equal levels of positive opportunity perceptions to the men, while in two other countries, the levels of opportunity perception were higher for the women than the men. In the high-income counties, the gap between the opportunity perceptions of the women and those of the men reached 13% in favour of the men [GEM, 2019].

Opportunity recognition's role as a mediating variable has been examined in previous studies [Sambasivan, Abdul & Yusop, 2009]. Choudhary, Hashim, Ann & Sambasivan [2020] investigated the role of opportunity recognition as a mediating factor in the relationship between individual and institutional factors and venture creation in women entrepreneurs' small and medium-sized enterprises in India [Choudhary, Hashim, Ann & Sambasivan, 2020]

Since it was shown that the greater the awareness the higher the possibility of individuals' recognitions of entrepreneurial opportunity [Shamudeen, Keat & Hassan, 2017], in this research Opportunity Recognition (OR) refers to the alertness to opportunity – to the ability to notice without search opportunities. The questions in the questionnaire related to this variable:

7 - While going about routine day-to-day activities, I see potential new venture ideas all around me

8 - I have a special "alertness" or sensitivity toward new venture opportunities

9 - I can recognize new venture opportunities in industries where I have no personal experience

3.3.3. Independent Variables

Entrepreneurial Orientation (EO) has been described in Shane's [2003] theory of entrepreneurship as the capability of entrepreneurs to find out and utilize opportunity related to entrepreneurial performance, which varies among people and is based on individual situations regarding risk acceptance. The higher risk aversion among women explains a large proportion of the entrepreneurial gender gap [Caliendo, Fossen, Kritikos & Wetter, 2015]. Nascent women entrepreneurs perceive more risk than nascent male entrepreneurs [Dalborg, von Friedrichs & Wincent, 2015]. Women tend to demonstrate more risk aversion than do men [Powell & Ansic, 1997; Harris, Jenkins & Glaser, 2006; Dawson & Henley, 2015].

While Covin and Slevin's [1989] earlier study examined measures relating to the orientation of the firm, in the study conducted by Bolton and Lane [2012], an instrument for the measurement of individual entrepreneurial orientation was developed and tested. One thousand-one hundred university students participated in the study. The study used items relating to five entrepreneurial orientation dimensions that were taken from in a previous study conducted by Lumpkin and Dess [1996]. In the study, following exploratory factor analysis, the measures were found to be reliable and valid for three of the factors. These three factors were proactiveness, risk-taking and innovativeness. [Covin & Slevin, 1989; Bolton & Lane, 2012; Lumpkin & Dess, 1996].

The GEM 2019 report shows women's innovation rates at only 12.6% compared to the innovation rates of the men which were shown to be 18.7%. The gap in innovation rates between genders was slightly down from previous years, however in all the different regions, the innovation rate of women was always less than that of men and the differences between the genders lay in the range of 2% to 7%. In the countries that were considered to be high income, overall, the rates of innovation for the women were almost double the rates in the low-income countries [GEM, 2019].

In this research, Entrepreneurial Orientation (EO) is measured in terms of risk taking, pro-activeness and innovativeness. These measures have been widely used in a variety of research settings. The questions in the questionnaire related to this variable:

1 - In general, I prefer a strong emphasis in projects on unique, one-of-a-kind approaches rather than revisiting tried and true approaches used before

2 - I prefer to try my own unique way when learning new things rather than doing it like everyone else does

3 - I like to take bold action by venturing into the unknown

4 - I am willing to invest a lot of time and/or money on something that might yield a high return

5 - I tend to plan ahead on projects

6 - I prefer to "step-up" and get things going on projects rather than sit and wait for someone else to do it

Human Capital (HC) has long been of interest in the framework of entrepreneurship literature and has greatly increased over the past decades. Human Capital (HC) constitutes a primary criterion among venture capitalists when evaluating potential venture performance [Zacharakis & Meyer, 2000]. People who exploit entrepreneurial opportunities are not randomly distributed. Relating to the non-psychological factors, research has found that education and career experience are factors that increase the likelihood of becoming an entrepreneur. They also increase the likelihood of success [Shane, 2003]. Orser, Riding & Manley [2006] maintain that women and men bring different human capital to the business regarding aspects of education and previous management experience. It was found that women have less formal education in business or financial topics in comparison to men [Hisrich & Brush, 1984; Brush, 1992; Coleman, 2007]. Regarding aspects of previous experience, it was found that women bring less management experience to the business than do men [Boden & Nucci, 2000; Coleman, 2007; Shaw, Marlow, Lam & Carter, 2009].

In this research, Human Capital (HC) was measured using the following variables: education, working experience, related experience, managerial experience, business education and competency in the three management functional areas: financial

management, personnel management and marketing management [Fatoki, 2011]. The questions in the questionnaire related to this variable:

15 - My education background enables me to handle the business activities

16 - I have work experience prior to starting the business

17 - I don't have previous work experience related to this business before I start it

18 - I acquired managerial experience prior to starting the business

19 - I acquired business education

20 - I am competent in financial management

21 - I am competent in marketing management

22 - I am not competent in personnel management

Entrepreneurial Goals and Motivations (EGM) are the goals or positive results that someone expects to gain from performing reasoned behavior, while motivation is the process by which goal-directed activity is instigated and sustained [Hasan & Almubarak, 2016]. The role of entrepreneurial motivation is a key factor influencing venture performance [Kuratko, Hornshy & Naffziger, 1997]. Men and women who choose entrepreneurship are motivated by different motives. Women wanted to start a business in order to achieve three types of personal goals: personal freedom, security, and satisfaction [Shabbir & Di Gregorio, 1996]. Women are less motivated by the desire to earn money. Frequently they choose entrepreneurships because of dissatisfaction in their career. Many women see entrepreneurship as a means of integrating a career and the raising of children [Cromie, 1987].

The decisions taken by entrepreneurs when they decide to begin entrepreneurial activities may be driven by a variety of different motivations. In exploring entrepreneurial motivations, factors influencing motivations have been differentiated into push and pull factors. Gilad and Levine [1986] distinguished between the positive factors, which were considered the pull factors, as opposed to the negative factors, which were more likely to push entrepreneurs to start an enterprise. Pull factors that drive motivation include the desire for achievement, the drive for independence, the optimalization of the use of experience and skills and the creation of opportunities for developing socially. Motivation may be increased by push factors that arise from unemployment, pressure from kin, from the individual's feelings of dissatisfaction from their employment situation, that motivate

them to consider starting an enterprise [van der Zwan, Thurik, Verheul, et al., 2016; Salfiya & Gunapalan, 2013].

Carranza, Dhakal & Love [2018] suggested that since women seemingly would rather be employed as paid employees, than be self-employed, they might be pushed into entrepreneurship when finding themselves in a situation of economic necessity, driven by insufficient income for the family or the lack of job opportunities. Women may be pulled in entrepreneurship when a suitable opportunity arises, such as an idea for an innovative business. The growth aspirations of men and women are different, with the growth aspirations of the women pulled into entrepreneurship and greater than the women who are pushed into entrepreneurial activities [Carranza, Dhakal & Love, 2018].

Dawson and Henley [2012] investigated the reasons behind entrepreneurs' decisions to become self-employed. In 86% of the cases, entrepreneurs stated only one factor behind their reasoning for being self-employed. When differentiating between "push" and "pull" factors, "push" factors were found to account for up to 48% of the reasons to start a business. When two or more factors were given for starting an enterprise, the men attributed "pull" factors as their reasons for entrepreneurial activities, while the women combined "push" and "pull" factors [Dawson and Henley ,2012].

Other studies have shown that the women's motivation in developing counties often originates in a combination of push and pull factors. However, in a study conducted in Sri Lanka, push factors were found to provide greater motivation for the women entrepreneurs, in those families where the women are heading their families and the main provider of income [Salfiya & Gunapalan, 2013].

Kariv and Coleman [2015] studied the impact of the taking out of loans on the performance of newly established businesses, and found that determination of the loan was associated with the "push" or "pull" motivations of the entrepreneur. Necessity-based entrepreneurs are generally pushed into entrepreneurship, when entrepreneurship is viewed as their only alternative for employment and are more likely to depend on the use of a microloan for financial support. The opportunity-based enterpreneurs are pulled into entrepreneurship by opportunities that arise and these entrepreneurs are less likely to use microloans for support [Kariv & Coleman, 2015].

Women and men have been shown to have similar perceptions of entrepreneurship as serving as a good career for them. The GEM 2019 study reported that 61.9% of the

women viewed entrepreneurship as a good career, while a slightly greater percentage of men (62.2%) were reported to perceive entrepreneurship as a good career. In the high-income countries participating in the GEM study, the percentage of entrepreneurs perceiving entrepreneurship as a good career dropped below 60% to levels of 58-59% These differences could stem from the greater opportunity motivation available in high income countries with many different choices for a career, in comparison to the low-income countries where necessity might be the driving force behind entrepreneurship, with entrepreneurship offering a good way to create income for the family [GEM, 2019].

Kuratko et al.[1997] found that entrepreneurs seek to satisfy goals of both an intrinsic and extrinsic nature. Extrinsic goals concentrate on wealth such as acquiring personal wealth, increasing personal income, and increasing income opportunities. Intrinsic goals such as recognition, challenge, excitement, growth, and accomplishment were identified as important. Additionally, entrepreneurs seek employment autonomy from business ownership as well as some measure of security for their families. Therefore, this research measured Entrepreneurial Goals and Motivations (EGM) across four categories: extrinsic rewards, intrinsic rewards, independence/ autonomy and family security. The questions in the questionnaire related to this variable:

23 - I decided to make my own business to increase my personal income

24 - I decided to make my own business to personal growth

25 - I decided to make my own business to be my own boss

26 - I decided to make my own business to secure a future for family members

Business Characteristics (BC) in this study include business development services, training for entrepreneurs, firm size and firm age, as they are expected to have some impact on firm performance [Inmyxai & Takahashi, 2009]**.** Complete dependence on the enterprises' own resources has a limiting effect on the enterprise achieving its goals. Business development services were initially established to provide financial services to the enterprises. More recently, business development services have been expanded to provide support through many additional non-financial services, such as marketing, supplies, infrastructure, etc. Support of the managerial and operational requirements of the enterprise through business development services is expected to positively affect the

firm [Okeyo, Gathungu & K'Obonyo, 2016]. Business development services can be achieved through professional advisors. It was found that using those advisors was associated with revenue performance for Israeli female entrepreneurs [Lerner, Brush & Hisrich, 1997].

Training for entrepreneurs is important because the updating of knowledge and skills of entrepreneurs can increase firm performance. [Inmyxai & Takahashi, 2009]. Training can be provided at different stages of the business. Business development services supporting the business set up and training for the entrepreneurs on starting a business, may affect performance when provided in the early stages of business set up. After starting the business, training for the entrepreneurs can be of benefit to the entrepreneurs and to the performance of the business [Radipere & Dhliwayo, 2014].

The influence of business age and business size on the performance of firms has been examined, with a study by Wiklund and Shepherd [2005] showing a positive relationship between the business size and the performance of the firm. However, the performance of small businesses improves as they grow until they reach a certain size when performance slows down. With regards to age, while the small businesses are in the early entrepreneurial stage, they are likely to perform well, but are more likely to fail than the businesses who have been around for a length of time, if they no longer maintain entrepreneurial activities [Radipere & Dhliwayo, 2014].

Furthermore, firm size can be important to of firm performance. large firms can gain competitive advantage and better performance. Bigger firms can produce a larger quantity of outputs and thus spread out their fixed costs, they can access critical resources and they have access to low-cost capital. [Inmyxai & Takahashi, 2009]. Firm age can influence firm performance. Older firms tend to be larger, to establish good networks and relationships and enjoy a good reputation. Therefore, firm age represents the experience of the firm which can be an influential factor for firm success [Inmyxai & Takahashi, 2009]. The questions in the questionnaire related to this variable:

37 - I use business advice from a professional

38 - I tend to go to workshops and seminars on issues related to running the business

43 - What is the number of years since you established your businesses?

46 - What is the number of full-time employees in your business?

Economic Factors (EF) are an important factor since access to finance is a key issue for success. To exploit entrepreneurial opportunities capital is needed. Entrepreneurs with higher capital are more likely to survive, grow and become profitable [Carroll & Hannan, 2000]. In most cases, founders finance the exploitation of entrepreneurial opportunities out of their own savings. However, the financing of entrepreneurial opportunities can also involve the acquisition of capital from external sources. External financing can take a variety of forms including equity investment, debt financing, asset-based financing, grants from governments, not-for-profit agencies and crowd funding. The source of external financing can include friends and family members, business angels, banks, venture capital firms, government and public markets [Shane, 2003].

Women perceived a greater need for financial and accounting assistance than men did [Jones & Tullous, 2002]. Men invest significantly larger amounts of capital when establishing and operating their businesses [Carter & Rosa, 1998; Verheul & Thurik, 2001; S. Fielden, Dawe & Woolnough, 2006]. Some of the researchers maintained that women business owners did not request credit at all. It was found that women are less likely to seek external finance for business start-ups [Orser et al., 2006; Sena, Scott & Roper, 2012].

Women business owners who did request credit from banks encountered difficulties [Pellegrino & Reece, 1982; Buttner et al., 1992; Fabowale, Orser & Riding, 1995; Coleman, 2000]. Some maintain that there is no evidence of discrimination on the part of the bank regarding loan conditions and loan approval, and therefore women who seek a bank loan are not expected to be rejected more than men are [G. H. Haines Jr. et al., 1999; Orser et al., 2006; Treichel & Scott, 2006; Coleman, 2007; Sena et al., 2012]. However, there are conflicting research studies on the topic. Some found evidence of discrimination. It was found that businesses owned by women were required to pay higher interest rates and were required to have greater collaterals [Coleman, 2000]. Some also argued that female entrepreneurs face tighter access to credit, even though they do not pay higher interest rates [Bellucci, Borisov & Zazzaro, 2010].

Therefore, in this research, Economic Factors (EF) were measured through the satisfaction of the entrepreneurs from access to finance. The questions in the questionnaire related to this variable:

27 - I do not have enough capital to preserve and expand my business

28 - I'm struggling to get credit from the banks

29 - I am satisfied with the financial facilities given by lending institutions

Socio-Cultural Factors (SCF) involve a combination of social and cultural factors that affect women EP. Social capital refers to features of social organization, such as networks, norms, and trust, which facilitate coordination and cooperation for mutual benefit [Putnam, 1993]. Social capital helps people and firms to improve performance. The entrepreneurial benefits of social capital are becoming well established. The importance of social capital for the founding, survival, and success of entrepreneurial efforts has been widely acknowledged and empirically demonstrated [Davidsson & Honig, 2003; Maurer & Ebers, 2006; Anderson & Park, 2007; Aarstad, Haugland & Greve, 2010].

Brüderl & Preisendörfer [1998] found that network resources, networking activities, and network support are required for establish new firms. Those entrepreneurs who can use a broad and diverse social network and who receive much support from their network are more successful. Network support increases the probability of survival and growth of newly founded businesses. Entrepreneurial networks provide vital information for the entrepreneur; they provide a perspective to the entrepreneur that contributes to the evaluation of his performances and goals and even lower the barriers in the acquisition of bank loans [Verheul & Thurik, 2001].

A part of the difference in business start-up rates between male and women might be explained by differences in social capital [Renzulli et al., 2000]. Women have a larger number, higher proportion, and greater diversity of kin ties in their personal networks than men. Women are more involved with kin, men with co-workers [Fischer & Oliker, 1983; Moore, 1990]. Network categories of kin include spouse, parents, siblings and in-laws, while categories of non-kin include friends, neighbors, coworkers, consultants, and group of association members [Marsden, 1987].

The woman entrepreneur may face sex-based stereotypes when she attempts to develop business networks and encounter barriers in accessing traditionally male-dominated established networks [Candida G Brush, Wong-MingJi & Sullivan, 1999; Blisson & Rana, 2001; Gamba & Kleiner, 2001; Godwin, Stevens & Brenner, 2006]. Thus, the use

of connecting with networks for the business to increase social capital is less apparent in women than in men [Manolova, Manev, Carter & Gyoshev, 2006]. Dodd & Patra [2002] found that women are under-represented in entrepreneurial networks. Constantinidis, Cornet & Asandei [2006] found in their research study that 40% of women entrepreneurs were not members of any network or professional association. Female entrepreneurs spend less time networking than their male counterparts [Verheul & Thurik, 2001]. Since the venture capital industry is predominantly under male control and since generally men have more men in their networks, it is less reasonable that networks of women entrepreneurs will overlap with investors or with factors that can help them achieve capital investments. Venture capitalists bring more than dollars; they also bring together resources in the way of technical experts, management consultants, and finance [C.G. Brush, Carter, Gatewood, Greene & Hart, 2001].

Social capital could improve the business start-up rate only in cases where it is utilized for getting better information or resources for entrepreneurial activities [Kim, 2014], therefore in this research socio factors used include support from strong ties and support from business associates, colleagues, or others, who do not exhibit strong ties. Regarding cultural factors, the research studies the effect of gender discrimination [Hasan & Almubarak, 2016]. The questions in the questionnaire related to this variable:

30 - The support from strong ties (spouse, parents, friends and relatives) have a positive effect on my business growth

31 - The support from business associates, colleagues, or others, who are not spouses/partners/relatives/family members/friends have a positive effect on my business growth

32 - I suffer greatly from gender discrimination

Legal and Administrative Factors (LAF) refer to the various issues related to administrative bodies and government regulations affecting the performance of women entrepreneurs [Hasan & Almubarak, 2016]. According to Cabrera & Mauricio [2017] the external environment includes among others: government politics for entrepreneurship support, legal frame and government politics, national systems of investigation and innovation.

In this research, Legal and Administrative Factors (LAF) refers to the satisfaction with government assistance, legal, institutional and policy constraints, and tax laws. The questions in the questionnaire related to this variable:

33 - I have business assistance and supporters from government bodies

34 - I am a beneficiary of government incentives

35 - I have no legal, institutional and policy constraints

36 - The tax levied on my business is reasonable

3.4. Data Validity and Reliability

Despite the use of these variables in Hasan & Almubarak's [2016] study and their validation by the researchers, additional validation processes were conducted in the current study. The validation process included factor analysis aimed at testing that the specified items that are supposed to measure each variable, indeed measure the items, and reliability testing that was used to measure if all the items that are supposed to measure a certain variable indeed measure the same theme.

3.4.1 Factor Analysis

In this study, Factor Analysis used Varimax rotation in order to create factors that put together questions that measure common concepts. All other settings of the analysis were kept at default. The analysis yielded four factors that had an eigen value over 1 (indicating that loading of the questions on the factor was significant). These factors together had explained 35% of the question's variance. Table 11 details the findings of the factor analysis.

Table 11: Factor Analysis Results

Factor	Variance explained by the factor	Items included in the factor	Possible theme of the factor
1	10.1%	1-9	Entrepreneurial Orientation (EO)+ Opportunity Recognition (OR)

2	10.1%	10-14	Entrepreneurs Performance (EP)
3	7.6%	15-22	Human Capital (HC)
4	7.4%	23-26	Entrepreneur Goals and Motives (EGM)

Source: Analysis of the Modified Questionnaire

The factor analysis only partly confirmed the measurement of the study variables as included in the questionnaire: the measurement of three variables was confirmed (entrepreneurs performance, human capital, entrepreneur goals and motives). Regarding the entrepreneurial orientation items, it seems that they measured the same concepts as the items that measured the mediator variable of the model, which is opportunity recognition.

Moreover, no themes were found, no clusters were identified, in the items that are supposed to measure the environmental (external) factors influencing entrepreneur performance. In other words, it was not proven that there is a distinction between items that were intended to measure economic factors, socio cultural factors, legal and administrative factors and business characteristics. As a result, the questionnaire validated in Hasan & Almubarak's [2016] study is only partly validated in the current study [Hasan & Almubarak, 2016].

3.4.2. Reliability Analysis

Cronbach's alpha (α) is a coefficient of reliability or consistency. Cronbach [1951] demonstrated that it was possible to estimate the correlation between two random samples of items from a pool of items similar to those in the test. He showed the coefficient to be the average of all split-half coefficients that result from splitting the data in two in every possible way. According to Cronbach, alpha coefficient quantifies the dominant factor among the items, with coefficient alpha related to a test's internal consistency. Cronbach's alpha has been useful as a measure for scale reliability [Cronbach, 1951]. Cronbach's alpha is a statistic commonly quoted by authors to demonstrate that tests and scales that have been constructed for research are fit for purpose [Taber, 2018].

Cronbach's alpha scores were calculated for the items comprising the study's variables. The Cronbach alpha reliability would not drop below the acceptable value of 0.70. Table 12 details the results of the analysis.

Table 12: Reliability Alpha Cronbach Scores for Study Variables

Variable	Alpha Cronbach score
Entrepreneurial Orientation (EO)	0.71
Opportunity Recognition (OR)	0.89
Entrepreneurs Performance (EP)	0.87
Human Capital (HC)	0.70
Entrepreneur Goals and Motives (EGM)	0.72
Economic Factors (EF)*	0.52
Socio Cultural Factors (SCF)	0.17
Legal and Administrative Factors (LAF)	0.32
Business Characteristics (BC)	0.63

*item 29 was omitted from this variable, as it notably lowered the variable reliability score

Source: Analysis of The Modified Questionnaire

Reliability scores for the internal factors of influence on entrepreneur's performance were suitable, as well as the scores for the mediating variable in the model (Opportunity Recognition) and the dependent variable (Entrepreneurs Performance). On the other hand, the reliability scores for the external factors influencing entrepreneur's performance, suggested that not all the items that comprise a certain variable were measuring the same concept.

In summary, the items for internal variable measurement in the questionnaire, the mediator as well as the dependent variables were mostly validated by both the analyses conducted - factor analysis and Cronbach's alpha, while the items for the external variables in the questionnaire received less confirmation of their validity.

3.5. Analyzing Data

3.5.1 Statistical Analysis

The data analysis process included the use of a number of statistical methods. Using a statistical correlation technique, the researcher investigated the relationship between two variables by searching to provide answers to three questions about the relationship. The first question that is posed, questions whether a relationship exists between the variables. When the answer is yes, the next question to be answered relates to the direction of the relationship, whether the affect is positive or negative. Finally, the researcher needs to relate to the strength of the relationship or to what degree the variables influence one another [Cohen, et al., 2007]. In this study, the Pearson correlation coefficient (r) was used to measure the relationship between the variables.

While defining the correlation between variables may be important, it may not be sufficient when used alone to understand the true nature of the relationship [Preacher & Hayes, 2008].The mediation model has been introduced in the field of behavioral science to examine the process by which the independent variables in the study affect the dependent variables. In the mediation model, the assumption is that the independent variable affects the dependent variable through a process of mediation, which includes a mediating variable. There are two types of mediation –full mediation and partial mediation. In the full mediation process, the variable fully mediates the process so that if the mediating variable does not exist between the independent variable and the dependent variable, the relationship between the variables will not be significant. In the partial mediation process, the role of the mediating variable may be of assistance or hindrance to the relationship between the independent variable and the dependent variable. However, if the mediating variable is not present, the relationship between the independent variable and the dependent variable will nonetheless be significant.

Baron and Kenny [1985] described the procedure for the analyses that I used in this study to test the mediating hypotheses. According to Baron and Kenny, in the first stage of the process, the researcher is required to demonstrate that the independent variable correlates with the dependent variable and to test for a significant relationship between the independent variable and dependent variable that may be mediated. In the second stage, the researcher must demonstrate that there is a correlation between the

independent variable and the mediating variable. The third stage entails a demonstration of the correlation between the mediating variable and the dependent variable. Thereafter, if the first three stages have been validated, and the independent variable has correlated with both the dependent variable and the mediating variable, the last stage of the mediation could be conducted. This stage, according to Baron and Kenny, is the regression of the dependent variable on both the mediating variable and the independent variable. To confirm the existence of a mediating relationship, a simple regression of the independent variable and the dependent variable is conducted. A mediation relationship may be assumed when as a result of the procedure, the coefficient of the independent variable is shown to be lower in the multiple linear regression of the dependent variable, on both the mediating variable and independent variable, than it is shown to be in the simple linear regression of the dependent variable on the independent variable [Baron and Kenny, 1985].

To distinguish between a full mediation and a partial mediation, the researcher should examine the significance of the coefficient of the independent variable in the multiple linear regressions. When the significance $r < 0.05$, the mediation is partial. Once the variables have been tested and they have been found to fulfil the criteria for establishing mediation according to Baron and Kenny, a Sobel test may be conducted to verify the validity of the conclusions.

3.5.2 The Data Analysis Process

After data collection was completed, statistical analysis was conducted to test the study model. The analysis was carried out using the SPSS software. The statistical analysis process was conducted in phases according to a chosen sequence. In the first phase, descriptive statistical analysis of the study's variables was conducted. In the next phase, the model assumptions were checked using several steps. During this phase, univariate correlations were calculated between the variables to test for relationships between the external factors and the internal factors and the mediator variable of Opportunity Recognition (OR) and the dependent variable of Women Entrepreneur's Performance (EP). Then, the Sobel mediation test was used to check if, as claimed in the model,

Opportunity Recognition (OR) is indeed a mediator between the internal and external factor variables and the dependent variable Women Entrepreneur's Performance (EP). Lastly, a regression model was calculated without mediation on the researched factors on Entrepreneur's Performance (EP).

The final phase of the statistical analysis used the ordered logit model for the logistic regression of the ordinal response variables. The use of the ordered logit model was to test how well a response to an item can be predicted based on the responses to other items. The use of the ordered logit model was possible since the responses to the survey items were ranked according to an ordered interval scale. Once all the statistical tests had been run on the data available, the results were collected and data analysis was conducted.

At the beginning of this chapter, the Modified Conceptual Model, which forms the basis of this study was introduced, as were the research hypotheses. The construction of a survey adapted for use with Israeli women entrepreneurs enabled data collection from a sample of women entrepreneurs. The dependent, mediating and independent variables used in the study were defined. An additional section addresses the reliability and validity of the data. The chapter was summed up with an introduction to the statistical analysis that would be performed and the analytical process that was planned for the study. The next chapter of the thesis will present the results of the data analysis carried out on the data collected from the women entrepreneurs that took the survey for this study.

Chapter 4: Results

Following a comprehensive literature review of the key factors influencing women entrepreneurship, I shall now examine whether or not the factors have also an impact on Entrepreneur Performance of Israeli women. I have modified the original conceptual model presented by Hasan and Almubarak [2016], adapting it to the Israeli culture and business environment; I will henceforth refer to my model as the Modified Conceptual Model. The Modified Conceptual Model focuses on seven factors being the independent variables possibly influencing directly the dependent variable: women entrepreneurs' performance. The seven factors were divided into internal (personal) factors and external (environmental) factors. Similarly to Hasan & Almubarak's [2016], The Modified Conceptual Model also suggested that the independent variables would influence the mediating variable, the Opportunity Recognition, which in turn would affect the dependent variable.

In this chapter I will test the Modified Conceptual Model empirically. The collected survey data will be used in the regression analyses aiming at measuring the effect the internal (personal) as well as the external (environmental) factors have on women Entrepreneurs' Performance. Additionally, I will explore the Opportunity Recognition factor as a mediator between influencing factors and performance.

The female participants were enlisted for the study through several online channels and an online survey was used to collect data from the participants. The survey software used was the SurveyNuts application and the women completed the survey online, via a computer or mobile phone. The online survey provided a quick and low-cost way to collect data from Israeli women entrepreneurs for the study. Following completion of the online survey by the 159 Israeli women SME entrepreneur participants enlisted for the study, data from the survey was collected and statistical testing was conducted. This chapter presents the results and the data analysis.

4.1. Participant and Business Data from Survey

One hundred and fifty-nine Israeli women SME entrepreneurs participated in the interviews for the study. Analysis of demographic data collected from the survey showed that the women entrepreneurs who responded to the survey were aged between 30 and 66 years, with a mean of 48.42 years and 7.49 standard deviation. Regarding their academic background, 80% of the interviewees had completed different levels of academic training, 34% of them had earned a BA degree, 43% the MA degree, and 3% the doctoral degree.

The high percentage of interviewees that had completed academic training can be noted when compared with Heilbrunn & Davidovitch's [2011] study, which included three different ethnic groups of Israeli women entrepreneurs in the convenience sample. The mean age of the women was 40.44 years and standard deviation 8.60. Regarding their education, just a little over a half (56%) of the women entrepreneurs were found to have undergone vocational training or completed an academic degree [Heilbrunn & Davidovitch, 2011]. Chathurangani, Hemathilake & Samudrika [2019] examined factors affecting the performance of women entrepreneurs' in small and medium entities in Sri Lanka. One hundred women entrepreneurs in SMEs completed a structured questionnaire. The majority of the women (59%) were aged between 21 and 40 years old. Most of the women had matriculated from high school and had more than three years of entrepreneur experience [Chathurangani, Hemathilake & Samudrika, 2019].

In addition to demographic information about the women entrepreneurs, information was also gathered about the women entrepreneurs' businesses. The results showed that the businesses of the entrepreneurs interviewed in the study originated from many different business sectors, but they mostly were involved in sectors offering specialist consultation services (40% of the sample) or other services (30%). A smaller share of the women's businesses was found to deal with industrial production (5%) or was connected to education (3%). A similar structure was showed by Heilbrunn & Davidovitch's [2011], with 65.8% of female entrepreneurs active in the service sector, 27.9% dealing with trade, and only 4.5% with production.

The women interviewees established all the businesses themselves. Eighty-four percent of the interviewees were the sole owners of their businesses. The businesses

lifetime varied between one year to 31 years, with a mean of 9.65 years (std. deviation=7.66). In addition, the businesses employed 0 to 32 workers (excluding the entrepreneur herself), with a mean of 2.03 employees per business (std. deviation = 4.54).

Similarly, the Israeli women entrepreneurs included in Heilbrunn & Davidovitch's [2011] study had entrepreneur businesses that were small in terms of the number of employees, with a mean number of employees of 2.3 (std. deviation 2.5).

4.2 Statistical Analysis

The dependent variable Entrepreneur Performance was used as an indication of the success of the business initiatives. Based on the literature, previous research showed that several variables are expected to affect the performance of the entrepreneurial initiatives or Entrepreneur Performance (EP). These variables were sub-divided into two groups of independent variables: the internal (personal) factors and the external (environmental) factors.

The internal factors included three variables: the Entrepreneurial Orientation (EO), Human Capital (HC), and the Entrepreneurial Goals and Motivations (EGM). There were four variables grouped within the external factors, Business Characteristics (BC), Economic Factors (EF), Socio-Cultural Factors (SCF) and Legal and Administrative Factors (LAF). Furthermore, Opportunity Recognition (OR) has been selected as a mediating variable. Several procedures were performed in order to test the Modified Conceptual Model. First, the Pearson correlation coefficient (r) was estimated to preliminary define the sign and magnitude of the relationship between the modelled variables. The independent variables were grouped into internal and external factors, and within in group, the correlation between each variable, the mediating variable Opportunity Recognition (OR) and the dependent variable Entrepreneur Performance (EP) was tested. In addition, regression models were constructed in order to examine mediation effects. According to the proposed model, the independent variables should change the entrepreneurs' opportunity recognition, which in turn would impact women entrepreneurs' performance. In other words, the set of independent variables affects the

women entrepreneurs' performance through a process of mediation. Mediation testing was conducted using the Sobel test, by first carrying out the regression of the independent variable with the mediating variable and then the regression of both the independent and mediating variables with the dependent variable. The Sobel test is used to test the significance of the mediating effect by determining whether there was a significant reduction in the effect of the independent variable, resulting from the mediating variable, and thus whether the mediating effect was statistically significant. Lastly, the ordered logit model was introduced in the final phase of the statistical analysis to assess how well the response to an item is likely to be predicted based on the responses received in the other items. The application of the ordered logit model was possible, since the dependent variables, measured by responses to survey items, are ordered categories.

4.2.1. Descriptive Analysis

Initially, mean value and the standard deviation were calculated for each of the variables proposed in the Modified Conceptual Model. Details of the Descriptive Statistics of the study variables are shown in Table 13, which displays the results of the mean and standard deviation for each of the variables, which include internal and external factors.

Table 13: Descriptive Statistics

		Mean	Standard deviation
Internal (personal) factors	Entrepreneurial Orientation (EO)	3.77	0.64
	Human Capital (HC)	3.49	0.77
	Entrepreneur Goals and Motives (EGM)	3.74	0.92
External (Environmental) Factors	Business Characteristics (BC)	3.05	1.29
	Economic Factors (EF)	3.48	.780
	Socio Cultural Factors (SCF)	3.97	.710
	Legal and Administrative Factors (LAF)	1.96	.620
Internal factors	Total of internal factors	3.64	.510
External factors	Total of external factors	3.02	.430
Mediating variable	Opportunity Recognition (OR)	3.49	1.01
Dependent	Entrepreneurs Performance (EP)	3.01	1.01

variable			

Source: Own analysis of the questionnaire

It is important to note that the women entrepreneurs perceived their performance as average, since they scored their performance a mean of 3.01 on a 1-5 scale. Also, it has been found that the women perceived their opportunity recognition as being slightly above average, but still not highly rated (mean of 3.49 on the same 1-5 scale), Furthermore, Internal factors were perceived as more important than the External factors. The respective mean values were equal to 3.64 and 3.02.

Inspecting the variables comprising the Internal factors, the results show that Entrepreneur Goals and Motives are perceived to be more influential on the women entrepreneurs when compared to Human Capital. As for the External factors, it seems that Economic and Socio-cultural factors are more important than Business Characteristics or Legal and Administrative factors.

Chathurangani, Hemathilake & Samudrika [2019] also used a structured questionnaire adapted from the study of Hasan & Almubarak [2016] to examine the perceptions of women entrepreneurs in Sri Lanka. Comparing the scores obtained in Sri Lanka and Israel, most answers in the latter country slightly exceeded the midpoint in the 1-5 scale, whilst the Sri Lankan women usually assigned a score below 3. Overall, women entrepreneurs in the study perceived their Entrepreneur Performance as below average with a mean of 2.540 (std. deviation 0.699), which is lower than the result I obtained for the female Israeli entrepreneurs. The women in Sri Lanka also perceived their opportunity recognition as being below average (mean of 2.500; std. deviation 0.655), which again was lower than the score estimated for the Israeli women entrepreneurs. The highest mean (3.525 with std. deviation 1.106) was assigned to Economic Factors, a group of variables the responders in my study scored on average of 3.48. Whereas the Israeli women Entrepreneurs perceived Legal and Administrative Factors as below average, with a mean of 1.96 (std. deviation.0.92), the Sri Lankan women perceived these factors as almost average with a mean of 2.950 (std. deviation. 0.813) [Chathurangani, Hemathilake & Samudrika, 2019].

4.2.2. Univariate Statistical Analysis

The Pearson correlation coefficient measures the strength of the linear relationship between two variables. I applied the correlation coefficient (r) to measure the sign and the strength of relationship between internal factors and the mediating variable (Opportunity Recognition), as well as between Internal factors and Entrepreneurs Performance. Table 14 shows the Pearson correlations and the results of the significance tests. The asterisks * and ** denote the estimated p-value below 0.05 and 0.01, respectively.

Table 14: Correlation of Study Variables

		Correlations with Opportunity Recognition (OR)	Correlations with Entrepreneurs Performance (EP)
Internal (personal) factors	Entrepreneurial Orientation (EO)	0.432**	0.355**
	Human Capital (HC)	0.193*	0.180*
	Entrepreneur Goals and Motives (EGM)	0.189*	0.239**
	Total of Internal factors	0.386**	0.366**
External (Environmental) Factors	Business Characteristics (BC)	0.020	-0.07
	Economic Factors (EF)	-0.056	0.216**
	Socio Cultural Factors (SCF)	0.063	0.226**
	Legal and Administrative Factors (LAF)	0.057	0.019
	Total of External factors	0.038	0.165*

*p<0.05, **p<0.01

Source: Own analysis of the questionnaire

The results confirmed that the Internal factors were significantly correlated with both the mediating variable and the dependent variable. Furthermore, significant relationships, were found between all Internal factors and Opportunity Recognition, as well as between the Entrepreneur Performance (EP). The Entrepreneurial Orientation factor showed stronger correlations with the mediating and dependent variables.

By contrast, when examining the external variables, none of the external factors displayed a significant correlation with Opportunity Recognition (OR), and only some of

them were correlated with Entrepreneur Performance (EP). While no correlation was found between the External factors and the mediating variable, the correlation between the Total External factors and the dependent variable was significant. In addition, two of the factors included in the External factors' group, Economic Factors and Socio-Cultural Factors, were shown to be significantly correlated with the dependent variable.

By comparison, the exploration of the influence of the independent variables on Entrepreneur Performance (EP) in Hasan & Almubarak's [2016] study did not find that Entrepreneurial Orientation (EO) had a significant influence on women Entrepreneur Performance (EP). It is important to note that Hasan and Almubarak [2016] did not find a significant relationship between Entrepreneurial Orientation and Entrepreneur Performance.

Nor did their results indicate that Economic Factors (EF) or Socio-Cultural Factors (SCF) influenced Entrepreneur Performance (EP). As the results for Israeli women indicated significant correlation between the said variables, it is very likely that the regression analysis results may differ as well.

4.2.3 Mediation Model Testing

The Modified Conceptual Model proposed that the Opportunity Recognition variable mediated the relationship between the Internal and External factors and Entrepreneur Performance. In order to validate the model and assess whether or not the mediation hypothesis could be supported, I decided to carry out the Sobel test, a procedure widely employed in empirical works. The Sobel test has been used in statistical analysis to test the significance of the mediating effect by determining whether there was a significant reduction in the effect of the independent variable, resulting from the mediating variable, and thus whether the mediating effect was statistically significant [Baron & Kenny, 1986]. In the mediation model, when including the mediator in the regression analysis, the effect of the independent variables should be reduced, and the effect of the mediator should be significant. Thus, the two-step testing procedure required first regressing the independent variable against the mediating one, and then to regress the dependent

variable against both the independent and mediating variables. The regression results have been used to carry out the Sobel test.

The first set of regressions focused on the hypothesis that Opportunity Recognition mediates the relationship between the Internal factor group and Entrepreneur Performance of the women. According to the Sobel testing procedure, the first regression within the set was performed with Internal factors as the independent variable and Opportunity Recognition as the dependent variable. The F-test revealed that the coefficients were jointly significant at a 1% significance level. The estimated test statistics for F(1,157) was equal to 26.39 (F(1,157)=26.39, p<0.01) and the independent variables explained nearly 16% of variance in the dependent variable (R^2 = 0.158). The second regression included Entrepreneur Performance as the dependent variable regressed against Internal factors and Opportunity Recognition (OR). The F-test revealed that the coefficients were jointly significant at a 1% significance level. The estimated test statistics for F(2,156) was equal to 12.41 (F(2, 156)=12.41, p<0.01) and Internal factors and Opportunity Recognition (OR) explained 14% of variance in the dependent variable (R^2=0.137). Table 15 summarises the regression results.

Table 15: Coefficients of Regression for Testing of the Mediating Hypothesis for the Independent Variable (Internal factors)

	Dependent variable	Independent variable	Coefficients		
			Variable	B	Std. Error
1	Opportunity Recognition (OR)	Internal factors	Internal factors	0.776	0.143
2	Entrepreneur Performance (EP)	Internal factors and Opportunity Recognition (OR)	Opportunity Recognition (OR)	0.043	0.079

Source: Own analysis of the questionnaire

The null hypothesis of the Sobel mediating test has been rejected (Z=0.54, p<0.01), showing that the Opportunity Recognition variable does not mediate the relationship between Internal factors' groups and the dependent variable of the model (Entrepreneur Performance).

Performing the second set of regressions, I aimed at testing if the relationship between External factors' groups and the dependent variable (Entrepreneur Performance) is mediated by the Opportunity Recognition. The first regression in this set was performed with External factors as the independent variable and Opportunity Recognition as the dependent variable. The joint coefficient in this model was not significant ((F (1, 157)=0.12, p<0.01), R^2=0.001). The second regression in this set included Entrepreneur Performance as the dependent variable and external factors and Opportunity Recognition as the independent variables. The joint coefficient in this model was significant at a 1% significance level ((F (2, 156)=4.98, p<0.01), R^2=0.06). Table 16 presents the regression results.

Table 16: Coefficients of regression for testing of the mediating hypothesis for the independent variable (External factors)

	Dependent variable	Independent variable	Coefficients		
			Variable	B	Std. Error
1	Opportunity Recognition (OR)	External factors	External factors	0.068	0.193
2	Entrepreneur Performance (EP)	External factors and Opportunity Recognition (OR)	Opportunity Recognition (OR)	0.175	0.076

Source: Own analysis of the questionnaire

As with the first set of regressions, the null hypothesis of the Sobel mediating test has been rejected for the second set of regressions (Z=0.34, p<0.01). The results indicate that the Opportunity Recognition variable does not mediate the relationship between External factors' groups and the dependent variable of the model.

With the Sobel mediating test not significant for both sets of regressions, the Opportunity Recognition variable was not found to mediate the relationship between Internal factors, External factors, and Entrepreneurs' Performance. Since the statistical

analysis did not find that Opportunity Recognition (OR) mediated the relationships between the independent and dependent variables, the mediation model was excluded from the study.

In the Univariate Statistical Analysis, none of the external factors displayed a significant correlation with Opportunity Recognition (OR), the mediating variable, as shown in Table 17. In addition, the null of the Sobel mediating test was rejected for the sets of regressions, as shown in Tables 15 and 16, indicating that the Opportunity Recognition variable did not mediate the relationship between Internal factors and Entrepreneurs' Performance, the dependent variable and between External factors and the dependent variable.

Hasan & Almubarak's [2016] study examined the three conditions included in the mediation test of Baron and Kenny (1986) and found that Opportunity Recognition (OR) was a mediating variable for two of the independent variables, Entrepreneurial Goals and Motivations (EGM) and IC (Industry (SMEs) Characteristics) [Baron & Kenny, 1986; in Hasan & Almubarak, 2016].

4.2.4 Unmediated Model Testing

Since the initial proposed study model of mediating was not supported, an unmediated regression model was performed, to check which of the seven factors in the Internal and External factors' groups explain the dependent variable of the study (Entrepreneur Performance). The Opportunity Recognition variable, previously included as the mediating variable, was dropped due to the multicollinearity.

All seven variables together accounted for 22% of variance in performance, which indicated that the model was distinctive and reasonably well-fitted.

Table 17 presents the coefficient values for the regression of the unmediated model.

Table 17: Unmediated model regression coefficients

	B	β	T
Entrepreneurial Orientation (EO)	0.444	0.284	3.58**
Economic Factors (EF)	0.231	0.179	2.405*
Socio Cultural Factors (SCF)	0.203	0.142	1.820
Entrepreneur Goals and Motives (EGM)	0.135	0.124	1.55

Human Capital (HC)	0.104	0.080	1.03
Business Characteristics (BC)	-0.057	-0.072	-0.949
Legal and Administrative Factors (LAF)	-0.049	-0.031	-0.401

*p<0.05, **p<0.01

Source: Own analysis of the questionnaire

Results of the unmediated model regression showed that only two factors were unique predictors of Entrepreneur Performance: Entrepreneurial Orientation and Economic Factors. The coefficient values were equal to 0.444 and 0.231, respectively. The β- coefficient indicates the strength of the effect of each independent variable on the dependent variable (Entrepreneur Performance). Analysing the estimated Beta coefficient value, it turned out that Entrepreneurial Orientation influenced the Entrepreneur Performance 1.58 times greater when compared with the Economic factors. The coefficient values of the unmediated regression model showed that the two variables factors, Entrepreneurial Orientation (EO) and Economic Factors (EF), had a significant effect on performance.

Despite only a minor difference between their mean values and volatility, the reaction to changes in Entrepreneurial Orientation is much stronger than to changes in Economic Factors. The magnitude of the response of Entrepreneurial Performance is nearly twice as large for the former as for the latter. It has been noted that Entrepreneurial Performance is more affected by factors directly dependent on the respondents, rather than available capital and financial infrastructure. This result may also impact future actions undertaken by economic authorities. The financial side of running a business, albeit significantly affecting performance, has shown to be secondary importance. Much stronger effects can be obtained by promoting proactive behavior towards planning, developing unique ways of running the business or being more risk averse and exploring the unknown.

By contrast, in the study conducted by Hasan and Almubarak [2016] in Bahrain, the four factors that influenced women Entrpreneurs' Performance were Entrepreneurial Goals and Motivations, Industrial Characteristics, Legal and Administrative Factors and Opportunity Recognition. The External factors were found to have a stronger influence on the women Entrpreneurs' Performance than the Internal factors. In order to run effective businesses, the women need direction to achieve their goals and maintain their

motivation. They also need government support to encourage their entrepreneur efforts that may be hindered by legal factors.

4.2.5 Ordered Logistic Regression

The ordered logit model was used for the logistic regression of the ordinal response variables.

An initial model was tested, in which six of the variables were first introduced into the regression equation. The goal was to estimate the cumulative probabilities of choosing a specific value on the 1-to-5 scale for Entrepreneur Performance (EP) under various values of the explanatory variables. I selected the explanatory variables by testing their significance in the Entrepreneur Performance model. Therefore, in the first stage an analysis was performed in order to find out which of the six variables has such significant contribution. The optimal model would be the model in which the variables had a significant effect on performance. To test the effect on performance, in the initial model, Entrepreneurial Orientation (EO) was not included. The p-value was used as a vital part of the regression analysis, since it determined whether to include or exclude a variable. The standard points of reference in applied statistics for significance are 1%, 5%, and 10% significance level. When the coefficient's p-value is greater than 10%, it is usually assumed that the estimated coefficient is statistically insignificant.

Table 18 shows that the factors Human Capital (HC), Entrepreneurial Goals and Motivations (EGM), Economic Factors (EF), Socio-Cultural Factors (SCF) are statistically significant. The results of the regression demonstrated that the four variables, Human Capital, Entrepreneurial Goals and Motivations, Economic Factors and Socio-Cultural Factors displayed a significant effect on performance.

Table 18: Coefficient Values and Significance of Factors

Combined		Coefficient	Significance	
		estimated coefficient	p-value	Interpretation
Q15 -	Human Capital	0.356	0.034	significant at 5% sign.

Q22				Level
Q23 - Q26	Entrepreneurial Goals and Motivations	0.36	0.023	significant at 5% sign. Level
Q27 - Q29	Economic Factors	0.4	0.016	significant at 5% sign. Level
Q30 - Q32	Socio-Cultural Factors	0.587	0.002	significant at 1% sign. Level

Source: Own analysis of the questionnaire

Whilst selecting the set of explanatory variables, I aimed at mitigating the danger of discarding any economically important yet borderline insignificant variable. Therefore, I have applied a more liberal approach to the variable selection process, setting the threshold at 20% significance level. For up to a 20% p-value, the coefficients might be at what may be considered the boarder-line insignificant level. When the estimated p-values were greater than 20%, the models were dropped.

The values for Business Characteristic factors and Legal and Administrative factors, as shown in Table 19, were not statistically significant; meaning that they needed to be excluded from the analysis and simulations.

Table 19: Coefficient Values and Non-Significant Factors

Combined		Coefficient	Significance	
		estimated coefficient	p-value	Interpretation
Q37-Q38	Business Characteristics	-0.104	0.359	statistically insignificant at 10% significance level
Q30-Q32	Legal and Administrative Factors	-0.105	0.645	statistically insignificant at 10% significance level

Source: Own analysis of the questionnaire

Since Business Characteristics and Legal and Administrative Factors were variables that were found not to have a significant effect on Entrepreneur Performance (EP), they were excluded from the model. While the initial model did not include Entrepreneurial Orientation (EO), the analysis was continued this variable into the regression model. Once Business Characteristics (BC) and Legal and Administrative Factors (LAF) had been eliminated, regression was performed using five variables in the initial model, Entrepreneurial Orientation (EO), Human Capital (HC), Entrepreneurial Goals and Motivations (EGM), Economic Factors (EF), Socio-Cultural Factors (SCF). Two variables - Human Capital (HC) and Entrepreneurial Goals and Motivations (EGM) - were found to have no significant effect on Entrepreneur Performance (EP), (as shown in Table 20) and thus excluded from further analysis. As the goal was to arrive at a model in which all independent variables had a significant effect on the dependent variable, the final model included.

Further analysis indicated a strong pattern in the data and showed that the probabilities were similar no matter which variable served as the explanatory one. Table 20 presents the cumulative probabilities of choosing specific values assessing the Entrepreneur Performance under various values of the explanatory variables. The probabilities were estimated at median values of the right-hand variables. For instance, the cumulative probabilities for Entrepreneurial Orientation were as follows:

When the respondents assessed the EO at its median value, the probability that they also chose Answer 1 for EP was equal 0.063. Notice that the probabilities sum up to 1 (as the estimated probabilities are actually cumulative ones) and I additionally calculated the probabilities of (1) choosing answers below and above the midpoint (second row of Table 20. containing the probability of choosing Answer 1 and Answer 2, as well as Answer 4 and Answer 5) (2) choosing answers not smaller than the midpoint value 3 (third row of Table 20.).

The reasoning behind the use of the median was the need to approximate a central tendency in the data, and although an average might be used as well, the median offered a more accurate proxy that was robust to extreme values chosen by the respondents less frequently, pointing directly to the midpoint of the variable's range.

Business development services are one of the activities that may influence Business Characteristics and these services can be obtained through professional advisors. Such

development services from outside firms were found to be associated with revenue performance for Israeli female entrepreneurs [Lerner, Brush & Hisrich, 1997]. Training for entrepreneurs is important because the updating of knowledge and skills of entrepreneurs can increase firm performance. Training for entrepreneurs can increase the competence of entrepreneurs [Inmyxai & Takahashi, 2009].

In this research, Business Characteristics was statistically insignificant because 80% of the women entrepreneurs who responded to the survey had completed different levels of academic training, including 34% of them who had earned a BA degree, 43% who had earned a MA degree, and 3% who had graduated with a Ph.D. degree. Due to their abilities and prior knowledge, the women are less dependent on knowledge from counsellors and training than a less educated population.

Legal and Administrative Factors (LAF) refer to the various issues related to administrative bodies and government regulations affecting the performance of women entrepreneurs [Hasan & Almubarak, 2016]. According to Cabrera & Mauricio [2017] the external environment includes among others: government politics for entrepreneurship support, legal frame and government politics, national systems of investigation and innovation. In this research, LAF refers to the satisfaction with government assistance, legal, institutional and policy constraints, and tax laws. Legal and Administrative Factors were found to be statistically insignificant. Most government incentives in Israel are directed to a social periphery, such as the ultra-Orthodox population, Arabs, and residents living in geographical locations in the periphery. The Israel women entrepreneur population that participated in the study did not represent a social periphery, were not targeted by government programmes, and hence the LAF variable became insignificant.

Table 20: Probabilities at Median for the Factors

<table>
<tr><th colspan="2" rowspan="2">Combined</th><th colspan="5">Probability at median</th></tr>
<tr><th>Answer 1</th><th>Answer 2</th><th>Answer 3</th><th>Answer 4</th><th>Answer 5</th></tr>
<tr><td rowspan="3">Q1-Q6</td><td rowspan="3">Entrepreneurial Orientation</td><td>0.063</td><td>0.163</td><td>0.416</td><td>0.269</td><td>0.089</td></tr>
<tr><td colspan="2">0.226</td><td></td><td colspan="2">0.358</td></tr>
<tr><td colspan="3"></td><td colspan="2">0.774</td></tr>
<tr><td>Q15-</td><td>Human Capital</td><td>0.073</td><td>0.169</td><td>0.393</td><td>0.267</td><td>0.098</td></tr>
</table>

Q22		0.242			0.365	
				0.758		
Q23-Q26	Entrepreneurial goals and motivations	0.078	0.177	0.392	0.261	0.093
		0.255			0.354	
				0.746		
Q27-Q29	Economic factors	0.099	0.207	0.401	0.222	0.071
		0.306			0.293	
				0.694		
Q30-Q32	Socio-cultural factors	0.082	0.186	0.404	0.247	0.082
		0.268			0.329	
				0.733		

Source: Own analysis of the questionnaire

A strong pattern emerged in the data that showed that the probabilities were similar no matter which variable served as the explanatory one. Regardless of which factor is examined, the midpoint 3 appears to be the most probable one. It suggests that whatever the female entrepreneurs do, they always feel like their business is just acceptable, neither outstanding nor bad, but definitely acceptable.

In addition, the probability of Answer 4 was always greater than the probability of Answer 2 Furthermore, when calculating probability sums, the sum of Answer 4 and Answer 5 are about 10 percentage point more probable than the sums of Answer 1 and Answer 2. When adding up Answers 3, 4 and 5, the probability is close to or greater than 0.7. The result shows that there is a 'skewness' in perception. Not-great-not-bad dominates, but in general female entrepreneurs are more optimistic than pessimistic, since they have chosen A4&A5 with a higher probability than A1&A2.

Regarding Entrepreneur Performance (EP), the dependent variable, the most frequent response for Entrepreneurial Performance on the survey was 3, with more than 60 answers being equal to 3. Figure 16 shows the histogram of the Entrepreneur Performance (EP) responses frequency.

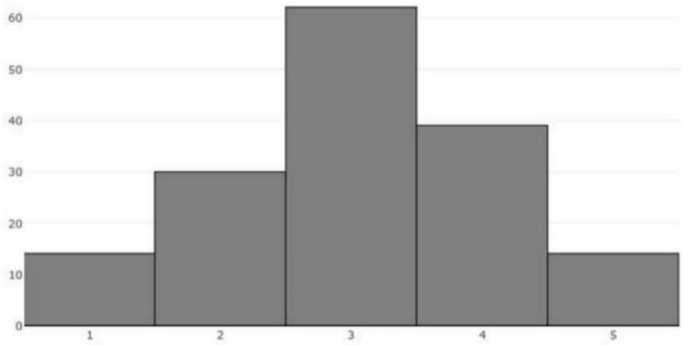

Figure 16: Frequency of EP responses

Source: Own analysis of the questionnaire

In the final model, the three variables: Entrepreneurial Orientation (EO), Economic Factors (EF) and Socio-Cultural Factors (SCF), were each shown to significantly affect Entrepreneur Performance (EP), the dependent variable, as shown in Table 21. The analysis further showed that Human Capital (HC) and Entrepreneurial Goals and Motivations (EGM) turned out to be insignificant at the 10% significance level as shown in Table 21.

Table 21: Coefficient Values and Significance of Factors for Combo Model

Combined model I	Coefficient	Significance	
	estimated coefficient	p-value	interpretation
EO	0.602	0.010	significant at 1% sign. level
HC	0.216	0.221	statistically insignificant at 10% sign. level
EGM	0.162	0.326	statistically insignificant at 10% sign. level
EF	0.346	0.045	significant at 5% sign. level
SCF	0.498	0.010	significant at 1% sign. level

Source: Own analysis of the questionnaire

4.2.6 Re-Estimated Model Testing

Following the elimination of Human Capital (HC) and Entrepreneurial Goals and Motivations (EGM), a re-estimated model was employed in order to perform simulations. Results for the re-estimated model are displayed in Table 22.

Table 22: Coefficient Values and Significance of Factors for Re-estimated Model

Combined model II	Coefficient	Significance	
	estimated coefficient	p-value	interpretation
EO	0.697	0.002	significant at 1% sign. level
EF	0.379	0.026	significant at 5% sign. level
SCF	0.54	0.005	significant at 1% sign. level

Source: Own analysis of the questionnaire

Table 23: Probabilities at Median for the Factors for Re-estimated Model

Combined model II	Probability at median				
	Answer 1	Answer 2	Answer 3	Answer 4	Answer 5
EO, EF, SCF	0.071	0.179	0.431	0.247	0.072
	0.25			0.319	
			0.75		

Source: Own analysis of the questionnaire

Thereafter, the probability of choosing various values of Entrepreneur Performance (EP) under various values of Entrepreneurial Orientation (EO) were calculated. This calculation is important in order to show how the probabilities of choosing a specific answer for the dependent variable, Entrepreneur Performance (EP), vary across the entire range of the explanatory variables. These calculations were performed for each explanatory variable, separately. The results of the analysis with Entrepreneurial Orientation (EO) as the explanatory variable are shown in Table 24.

Table 24: The Probability of Choosing Values of EP under Various Values of EO

Explanatory Variable:	EP = 1	EP = 2	EP = 3	EP = 4	EP = 5

EO = 1	0.384	0.346	0.215	0.045	0.010
EO = 2	0.237	0.337	0.322	0.085	0.019
EO = 3	0.134	0.268	0.409	0.152	0.037
EO = 4	0.071	0.179	0.431	0.247	0.072
EO = 5	0.037	0.106	0.373	0.349	0.135

Source: Own analysis of the questionnaire

The results of the analysis of the probability of choosing various values of Entrepreneur Performance (EP) under various values of Entrepreneurial Orientation (EO) are depicted in Figure 17.

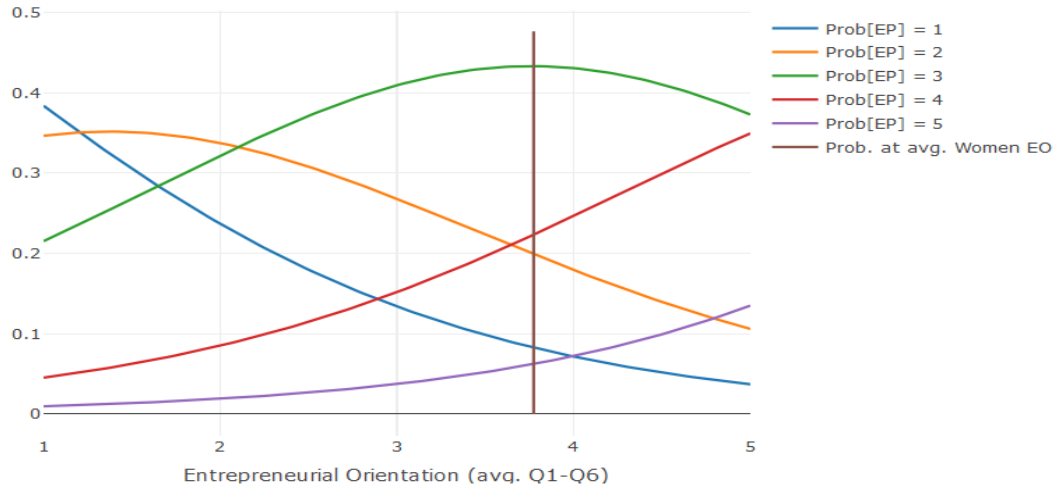

Figure 17: The Probability of Choosing Various Values of EP under Various Values of EO

Source: Own analysis of the questionnaire

For the entire range of EO, the probability that the respondents have chosen EP = 5 was by far the smallest. Not surprisingly, the lowest value of EO were associated with high probability of choosing EP = 1 or 2. After reaching the midpoint, EP = 3 prevailed, though the probability of choosing this answer was only marginally larger than EP = 4 for the highest value of EO.

Entrepreneurial Orientation (EO) has been described in Shane's [2003] theory of entrepreneurship as the capability of entrepreneurs to find out and utilize opportunity related to entrepreneurial performance, which varies among people and is based on individual situations regarding risk acceptance. Miller [1983] first defined the concept of Entrepreneurial Orientation and characterized Entrepreneurial Orientation by using three

dimensions: innovation, pro-activeness, and risk-taking. Many studies thereafter adopted these three dimensions to define the characteristics of entrepreneurial organization [Lim, S. & Envick, B., 2013]. In this research, based on the same three dimensions, Entrepreneurial Orientation is measured in terms of risk taking, pro-activeness and innovativeness. Entrepreneurial Orientation as a measure has been widely used in a variety of research settings because of its documented high levels of reliability and validity in numerous studies [Covin & Slevin, 1989].

Figure 17 shows the specific way in which Entrepreneurial Orientation influences Entrepreneur Performance. If Entrepreneur Performance is low, the probability that the performance is evaluated at 1 & 2 is the highest. This complies with my expectations. Covin and Slevin [1989], as well as many researchers thereafter, noticed that firms are entrepreneurial if they are innovative, risk taking, and proactive, and suggested that Entrepreneurial Orientation is an essential attribute of high-performing firms. A large increase in the probability of evaluating the Entrepreneur Performance at 4 is observed as it increases nearly 6 times. This indicates that growing Entrepreneurial Orientation has a significant impact on women's satisfaction with their business performance.

Three models were estimated for Entrepreneurial Orientation (EO). In the first model Entrepreneurial Orientation (EO) was estimated separately for 3 group of questions. The second model combined the groups and the third model was a model for significant groups only. The results of the analyses are shown in Table 25 and Table 26.

Table 25: Coefficient Values and Significance of Entrepreneurial Orientation

	Separate Variables	Coefficient	Significance	
		estimated coefficient	p-value	interpretation
Q1: Q2	innovativeness	0.546	0.001	significant at 1% sign. level
Q3: Q4	risk-taking	0.371	0.019	significant at 5% sign. level
Q5: Q6	proactiveness	0.611	0.000	significant at 1% sign. level
	Combined			

	Separate Variables	Coefficient	Significance	
		estimated coefficient	p-value	interpretation
Q1: Q2	innovativeness	0.34	0.072	significant at 10% sign. level
Q3: Q4	risk-taking	0.174	0.316	statistically insignificant
Q5: Q6	proactiveness	0.476	0.008	significant at 1% sign. level
	Re-Estimated			
Q1: Q2	innovativeness	0.410	0.020	significant at 5% sign. level
Q5: Q6	proactiveness	0.487	0.007	significant at 1% sign. level

Source: Own analysis of the questionnaire

The three dimensions for Entrepreneurial Orientation considered were innovation, pro-activeness, and risk-taking. Innovativeness related to the willingness for creativity and experimentation by introducing new products, services and processes. Pro-activeness involves invoking a forward-looking perspective and anticipation of competition and demand. Risk-taking may describe the actions taken to enter into and commit to uncertain environments. We found out that risk-taking was statistically insignificant in the second model that combined the groups.

A comparison of entrepreneurs by gender showed that the only difference identified within the evaluation of Entrepreneurial Orientation was that males take more risks in business than females [Belas & Sopkova, 2016]. The higher risk aversion among women explains a large proportion of the entrepreneurial gender gap [Caliendo, Fossen, Kritikos & Wetter, 2015]. Several studies demonstrated lower risk-taking by women. Nascent women entrepreneurs perceive more risk than nascent male entrepreneurs [Dalborg, von Friedrichs & Wincent, 2015]. Women tend to demonstrate more risk aversion than do men [Powell & Ansic, 1997; Harris, Jenkins & Glaser, 2006; Dawson & Henley, 2015].

Table 26: Probabilities at Median for Entrepreneurial Orientation

	Separate Variables	Probability at median				
		Answer 1	**Answer 2**	**Answer 3**	**Answer 4**	**Answer 5**
Q1: Q2	innovativeness	0.071	0.168	0.403	0.266	0.092
Q3: Q4	risk-taking	0.071	0.165	0.391	0.273	0.099
Q5: Q6	proactiveness	0.078	0.187	0.413	0.242	0.081
	Combined	0.063	0.163	0.416	0.269	0.089
Q1: Q2	innovativeness					
Q3: Q4	risk-taking					
Q5: Q6	proactiveness					
	Re-Estimated	0.067	0.171	0.418	0.258	0.085
Q1: Q2	innovativeness					
Q5: Q6	proactiveness					

Source: Own analysis of the questionnaire

An additional analysis of the survey data tested the innovativeness and proactiveness for EP=1.

Figure 18 depicts the probability of choosing EP = 1 under various values of innovativeness and proactiveness.

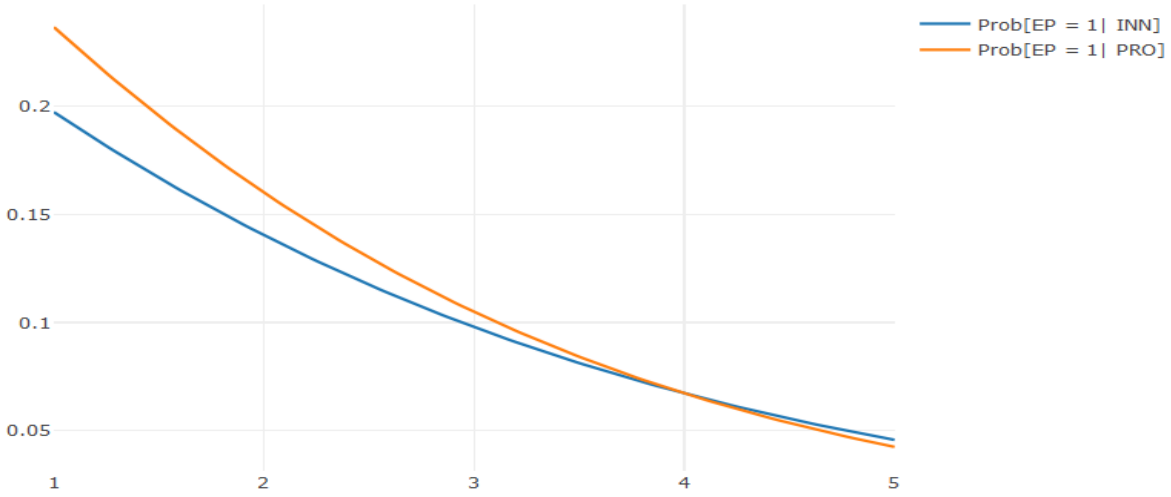

Figure 18: The Probability of Choosing EP = 1 under Various Values of Innovativeness and Proactiveness

Source: Own analysis of the questionnaire

An analysis of the results demonstrated no particular changes for the explanatory variables = 5. For both the explanatory variables, the decrease was large. The probability at explanatory variables = 1 was higher for proactiveness, than for innovativeness.

The next analysis of the data examined innovativeness and proactiveness for EP = 5. Figure 19 depicts the probability of choosing EP = 5 under various values of innovativeness and proactiveness.

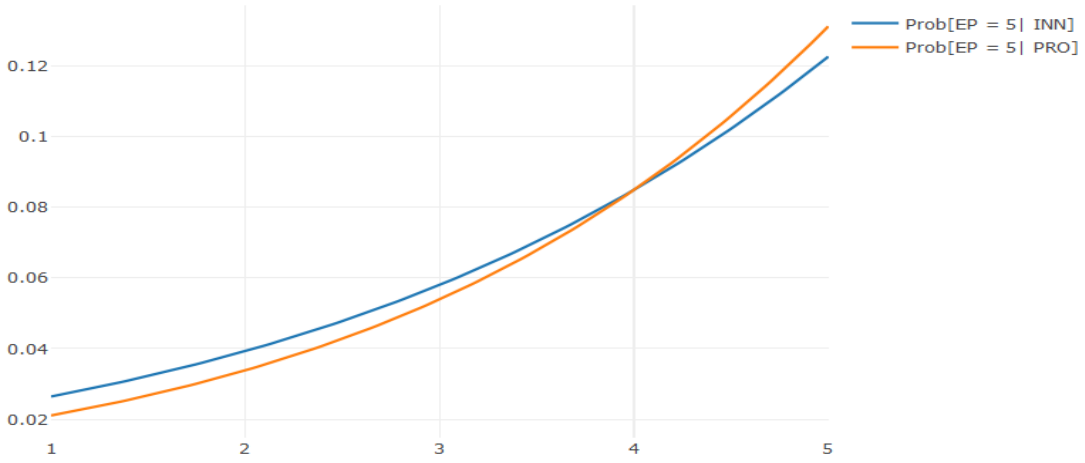

Figure 19: The Probability of Choosing EP = 5 under Various Values of Innovativeness and Proactiveness

Source: Own analysis of the questionnaire

An analysis of the results demonstrated no particular changes for all the explanatory variables. For both the explanatory variables, the increase was large, but it did not go beyond 0.15 which combined with the previous results for EP = 1 is still much smaller. The probability at explanatory variables = 5 was higher for proactiveness, than for innovativeness. The probability increased from 0.02 to 0.12

As mentioned, for every factor studied, the midpoint 3 has remained the most probable one. It suggests that whatever the female entrepreneurs do, they always feel like their business is just acceptable, neither outstanding nor bad, but definitely acceptable.

The probability of choosing various values of Entrepreneur Performance (EP) under various values of Economic Factors (EF) were calculated. The results of the analysis are shown in Table 27.

Table 27: The Probability of Choosing Values of EP under Various Values of EF

Explanatory Variable:	**EP = 1**	**EP = 2**	**EP = 3**	**EP = 4**	**EP = 5**
EF = 1	0.141	0.275	0.404	0.145	0.035
EF = 2	0.101	0.227	0.429	0.192	0.051
EF = 3	0.071	0.179	0.431	0.247	0.072
EF = 4	0.050	0.136	0.408	0.304	0.102
EF = 5	0.035	0.101	0.365	0.357	0.142

Source: Own analysis of the questionnaire

The results of the analysis of the probability of choosing various values of Entrepreneur Performance (EP) under various values of Economic Factors (EF) are depicted in Figure 20.

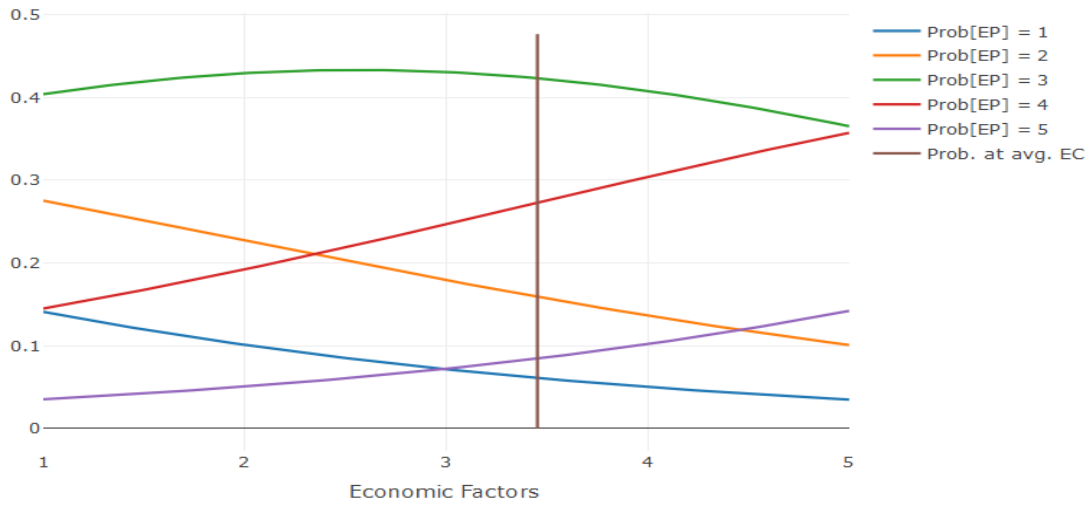

Figure 20: The Probability of Choosing Various Values of EP under Various Values of EF

Source: Own analysis of the questionnaire

The analysis of the probability of choosing various values of Entrepreneur Performance (EP) under various values of EF found a lower probability for EP=5 than EP=4 for all the values of EF, even when EF=5. Also, there was a lower probability for EP=4 than EP=3 for all the values of EF, even when EF=5. For all the values of EF, the highest probability is estimated for EP=3. When EF=1 the probability for EP=1 was almost equal to the probability for EP=4. When EF=1 the probability for EP=2 or 3 was higher than the probability for EP=1. When EF=1 the probability for EP=3 was 40% The greatest probability for when EF=3, 43.1% for EP=3. The greatest probability for EP=5 was 14.2%.

There is also an increase in probability when evaluating EP at 4, with an increase of nearly 2.3 times. This indicates that Economic Factors have a significant impact on our satisfaction with our business performance.

Next, I estimated the probability of choosing specific values of Entrepreneur Performance (EP) under various values of SCF. The results of the analysis are shown in Table 28 and depicted in Figure 21.

Table 28: The Probability of Choosing Values of EP under Various Values of SCF

Explanatory Variable:	EP = 1	EP = 2	EP = 3	EP = 4	EP = 5
SCF = 1	0.280	0.348	0.287	0.070	0.015
SCF = 2	0.185	0.311	0.367	0.111	0.026
SCF = 3	0.117	0.248	0.421	0.171	0.043
SCF = 4	0.071	0.179	0.431	0.247	0.072
SCF = 5	0.043	0.120	0.392	0.328	0.118

Source: Own analysis of the questionnaire

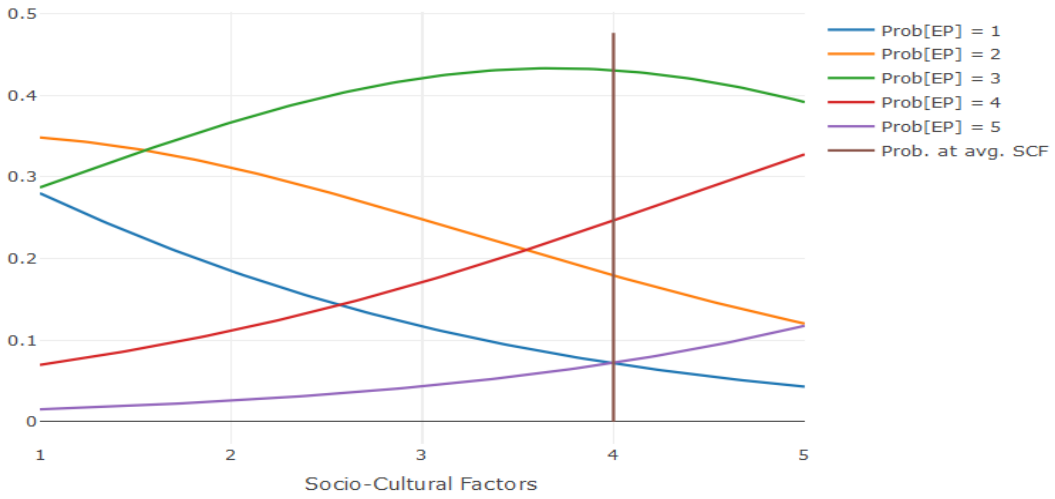

Figure 21: The Probability of Choosing Various Values of EP under Various Values of SCF

Source: Own analysis of the questionnaire

The analysis of the probability of choosing various values of Entrepreneur Performance (EP) under various values of Socio-Cultural Factors (SCF) demonstrated the highest probability for EP = 3, meaning neither outstanding nor bad. It has also demonstrated a lower a lower probability for EP=5 than EP=4 for all the values of SCF, even when SCF=5. Also, the results showed a low probability for EP=4 than EP=3 for all the values of SCF, even when SCF=5. Except for SCF=1, for all the values of SCF the higher probability was for EP=3 When SCF =1 the probability for EP=1 was almost equal to the probability for EP=3. The greatest probability for when EF=3, was 43.1% for SCF=4. The greatest probability for EP=5 was 11.8%.

The findings show an increase in probability when evaluating Entrepreneur Performance at 4, with an increase of nearly 4.3 times. Thus, it can be suggested that growing Socio-Cultural Factors would have a significant impact on the women's satisfaction with their business performance.

Using a combined model for EP=1, the probability of choosing EP = 1 under various values of Entrepreneurial Orientation (EO), Economic Factors (EF) and Socio-Cultural Factors (SCF) was examined. Figure 22 depicts the probability of choosing EP = 1 under various values of Entrepreneurial Orientation (EO), Economic Factors (EF) and Socio-Cultural Factors (SCF).

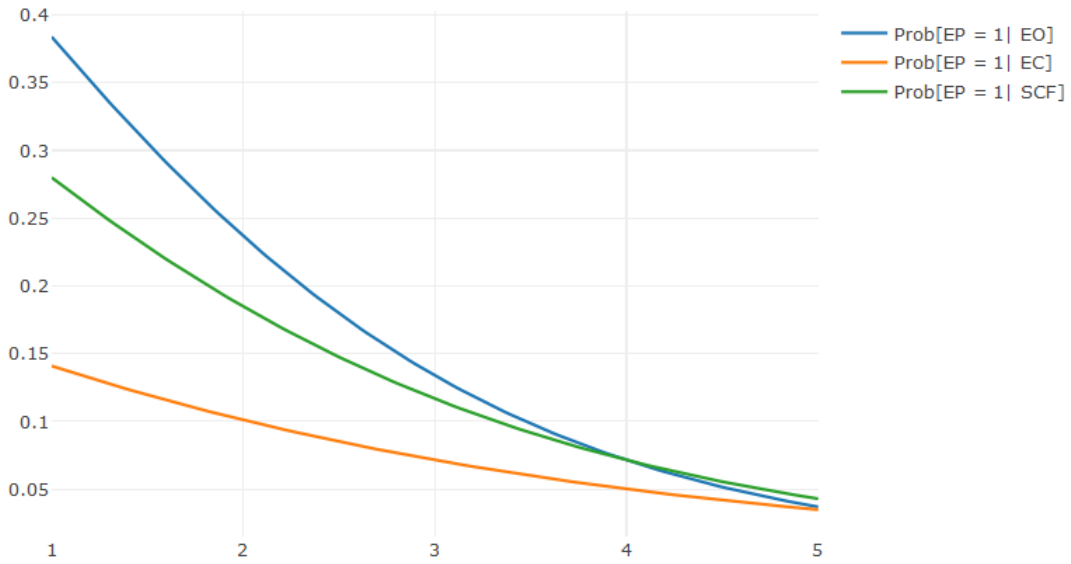

Figure 22: The Probability of Choosing EP = 1 under Various Values of EO, EF, and SCF

Source: Own analysis of the questionnaire

Analysis of the results using the combined model demonstrated no particular changes for the explanatory variables = 5. For all the explanatory variables, the decrease was huge. The probability at explanatory variables = 1 showed considerable differences: EO=38.4%, SCF=28% and EF=14.4%.

Using a combined model for EP=5, the probability of choosing EP = 5 under various values of Entrepreneurial Orientation (EO), Economic Factors (EF) and Socio-Cultural Factors (SCF) was examined. Figure 23 depicts the probability of choosing EP = 5 under various values of Entrepreneurial Orientation (EO), Economic Factors (EF) and Socio-

(SCF).

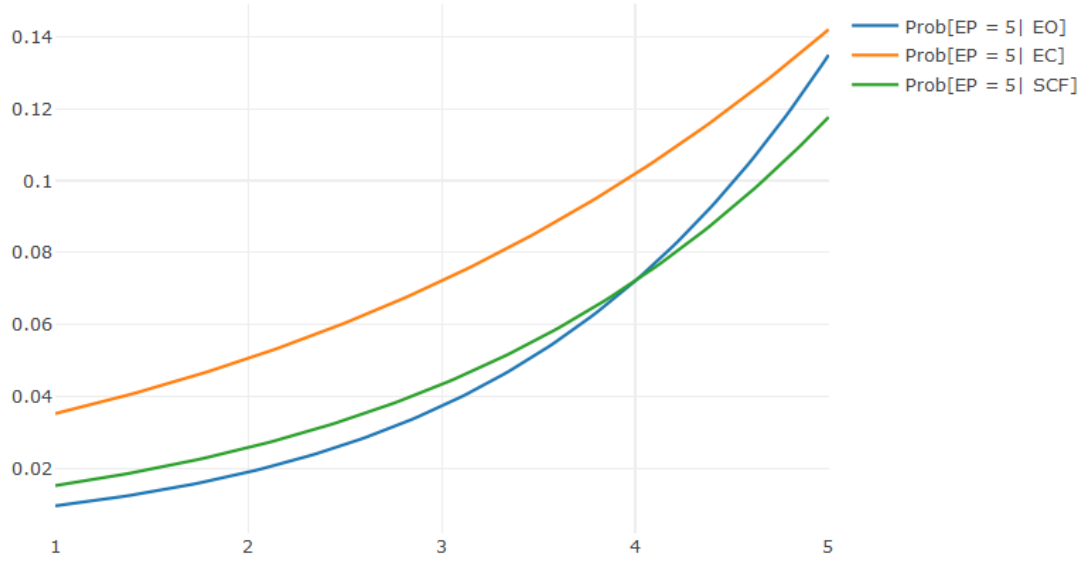

Figure 23: The Probability of Choosing EP = 5 under Various Values of EO, EF, and SCF

Source: Own analysis of the questionnaire

Analysis of the results using the combined model showed that there was almost no difference between the explanatory variables. The increase in the estimated probabilities was considerable. The probability for Entrepreneurial Orientation (EO) increased by more than 0.125.

4.2.7 Testing Research Hypotheses

In the Univariate Statistical Analysis, none of the external factors displayed a significant correlation with Opportunity Recognition (OR), the mediating variable, as shown in Table 17. In addition, the null of the Sobel mediating test was rejected for the sets of regressions, as shown in Tables 15 and 16, indicating that the Opportunity Recognition variable did not mediate the relationship between Internal factors and Entrepreneurs' Performance, the dependent variable and between External factors and the dependent variable. Therefore, the research hypotheses **H1**: ***Opportunity Recognition mediates the relationship between internal factors and women Entrepreneurs' Performance*** and **H2**: ***Opportunity Recognition mediates the relationship between external factors and women Entrepreneurs' Performance*** were rejected.

The Unmediated Model Testing and Ordered Logic Regression examined the relationship between the independent variables, the Internal and External factors and the dependent variable, women Entrepreneurs' Performance. Based on the estimation results, hypothesis **H3a**: ***Entrepreneurial Orientation influences women Entrepreneurs' Performance*** was supported. Results of the unmediated model regression in Table 17 and the combo model, (p-value = 0.010, β=0.602) in Table 21 show the positive and statistically significant (at 1% significance level) relationship between Entrepreneurial Orientation, an Internal factor and Entrepreneurs' Performance, the dependent variable.

Testing results for the other Internal factors, Human Capital and Entrepreneurial Goals and Motivations could not confirm the hypotheses, **H3b**: ***Human Capital influences women Entrepreneurs' Performance*** and ***H3c: Entrepreneurial Goals and Motivations influences women Entrepreneurs' Performance.*** Nevertheless, the hypothesis may be partially confirmed by the results of the Ordered Logistic Regression in Table 18, for Human Capital with p-value = 0.034 and β=0.356 and Entrepreneurial Goals and Motivations with p-value = 0.034, and β=0.356. Notice that the coefficients estimated for the ordered logistic regression do not have a straightforward interpretation. Their signs, however, can be interpreted in a standard fashion.

The hypotheses **H4**: ***External factors influence women Entrepreneurs' Performance*** were tested regarding the relationship of the External factors with the dependent variable, women Entrepreneurs' Performance.

Hypothesis **H4a**: ***Business Characteristics influence women Entrepreneurs' Performance*** was not confirmed since the results of the Ordered Logistic Regression shown in Table 19 (p-value=0.359; β= -0.104) demonstrated statistical insignificance at the 10% significance level.

Based on the testing, hypothesis **H4b**: ***Economic Factors influence women Entrepreneurs' Performance*** was supported. Results of the unmediated model regression in Table 17 and the combo model, (p-value = 0.045, significant at the 5% significance level & β=0.346) in Table 21 show the positive relationship between Economic Factors, an External factor and Entrepreneurs' Performance, the dependent variable.

Similarly, hypothesis **H4c**: ***Socio-Cultural Factors influence women Entrepreneurs' Performance*** was supported. Results of the combo model, (p-value = 0.010, significant at the 1% significance level & β=0.498) in Table 21 show the positive relationship between

Socio-Cultural Factors, an External factor and Entrepreneurs' Performance, the dependent variable.

Hypothesis **H4d**: ***Legal and Administrative Factors influence women Entrepreneurs' Performance*** was not confirmed since the results of the Ordered Logistic Regression shown in Table 19 (p-value=0.645; β= -0.105) demonstrated statistical insignificance at the 10% significance level.

In this chapter, the results of the analysis of the data collected from the women entrepreneurs that participated in the survey of this study were presented. Using the final model for the study, three of the variables, Entrepreneurial Orientation (EO), Economic Factors (EF) and Socio-Cultural Factors (SCF), were each shown to significantly affect the dependent variable, Entrepreneur Performance (EP). The hypotheses posited for the research were tested. Based on the results, research hypotheses **H3a** ***Entrepreneurial Orientation influences women Entrepreneurs' Performance***, **H4b** ***Economic Factors influence women Entrepreneurs' Performance*** and **H4c** ***Socio-Cultural Factors influence women Entrepreneurs' Performance*** were supported. The next chapter, Chapter 5, will further discuss the findings and the contribution of the research to current knowledge. The implications of the study will be examined, and the limitations of the study outlined. The chapter will also include recommendations for future research regarding women's entrepreneurship.

Chapter 5: General Discussion

This chapter will further discuss the findings and the contribution of the research. It will discuss the research limitations and recommendations for future research. Finally, it will examine the implications for practice.

Since most of the earlier studies on entrepreneurship focused on men and failed to represent a holistic picture of women entrepreneurship [Hughes, Jennings, Brush, Carter & Welter, 2012], I have chosen to examine holistically the factors effecting women's entrepreneurship performance. During my professional consultancy career in Israel, I have accompanied hundreds of women entrepreneurs in small and medium-sized enterprises. My observations of the challenges that they have faced, drove my interest to delve into the subject of women entrepreneurship, in general, and specifically to investigate the factors influencing women entrepreneurs in Israel.

In the study, I chose to examine those factors that were found to be key factors influencing entrepreneurs' performance. The reference to most of the variables had a gender perspective bias, because of the existing gaps between women and men entrepreneurs that have been reported in the literature. The marked differences between men and women in the factors that influence entrepreneurship as noted in previous studies have been found across most of the influencing factors: the entrepreneur's performance, entrepreneurial orientation, goals, and motivations as well as human capital, economic and socio-cultural factors.

Raising the former, male entrepreneurs have been shown to display a significantly higher level of entrepreneurial self-efficacy in comparison to women [Chowdhury & Endres, 2005]. Self-efficacy had an influencing impact on the level of performances [Bandura, 1991]. When perceiving their performance, women were more conservative than men in their expectations for growth and have chosen to establish small businesses.

Regarding the Entrepreneurial Orientation, women entrepreneurs tend to demonstrate more risk aversion than men do. The higher risk aversion among women significantly contributed to the entrepreneurial gender gap [Caliendo, Fossen, Kritikos & Wetter, 2015]. Differences have also been observed for Entrepreneurial Goals and Motivations, as men and women have been motivated by different motives, women often wanting to start a business in order to achieve personal freedom, security, and

satisfaction [Shabbir & Di Gregorio, 1996] and have been less motivated by the desire to earn money.

Women and men bring different human capital to the business regarding aspects of education and previous management experience. Women generally have acquired less business human capital from previous work experience in a similar business context [Fairlie & Robb, 2009].

For Economic Factors, Chowdhury & Endres [2005] noted that perceived financial knowledge, both in men and in women, had a significant positive influence on entrepreneurial self-efficacy. Women perceived a greater need for financial and accounting assistance than men did. It was also found that women were less likely to seek external finance for their business, and when seeking financial support, female entrepreneurs faced tighter access to credit.

Finally, one of the three main types of entrepreneurial gaps found between women and men was the gap in social capital [Efroni, 2017a]. The differences in social capital between women and men have been attributed to women's being more involved with kin, while men have been more involved with co-workers. In addition, women were less likely to utilize bridging and linking social capital for their businesses. Furthermore, women entrepreneurs encountered barriers in accessing traditionally male-dominated established networks, with women under-represented in entrepreneurial networks.

5.1. Conducting the Research

In order to examine the Modified Conceptual Model and the research hypotheses posited for the research, two models were constructed to enable the statistical analysis and testing of the hypotheses. In the first model, the effect of all the variables, Entrepreneurial Orientation (EO), Human Capital (HC), Entrepreneurial Goals and Motivations (EGM), Business Characteristics (BC), Economic Factors (EF), Socio-Cultural Factors (SCF) and Legal and Administrative Factors (LAF), on Entrepreneur Performance (EP) was examined, while relating to their division into internal and external factors. The second model used was a mediation model, in which all of the variables, Entrepreneurial Orientation (EO), Human Capital (HC), Entrepreneurial Goals and Motivations (EGM),

Business Characteristics (BC), Economic Factors (EF), Socio-Cultural Factors (SCF) and Legal and Administrative Factors (LAF) were examined for their effect on Entrepreneur Performance (EP) through the mediatory variable, Opportunity Recognition (OR).

The models used for the analysis were selected for several reasons. Firstly, to examine the effect of each independent variable on the dependent variable individually, and in addition, to examine the effect when the variables were divided into groups of factors: the internal factors and the external factors. Secondly, the models were used to enable the examination of whether Opportunity Recognition was a mediating variable, between the independent variables and the dependent variable.

The initial proposed mediated model was not supported in Israel since the mediator variable (Opportunity Recognition) was not found to mediate the relationship between the dependent variable of the model (Entrepreneur Performance) and the independent variables. This finding differs from the results of Hasan & Almubarak's [2016] research in Bahrain, which found that Opportunity Recognition mediates two of the independent variables, Entrepreneurial Goals and Motivations (EGM) and Business Characteristics (BC). However, analysis based on an unmediated model identified factors influencing the dependent variable, women Entrepreneurs' Performance (EP). Significant correlations were found between the Internal and External factor groups and the dependent variable, women Entrepreneurs' Performance (EP). In addition, one of the Internal factors (Entrepreneurial Orientation) and two of the External factors (Economic Factors and Socio-Cultural Factors) were significantly correlated with the dependent variable, women Entrepreneurs' Performance (EP). When estimating the unmediated model, the only two factors for which the relationship was shown to be statistically significant for predicting Entrepreneur Performance, were Entrepreneurial Orientation and Economic Factors. The effects of Entrepreneurial Orientation and Economic Factors on Entrepreneurs' Performance would be expected to involve the increased tendency of women for risk aversion and the reluctance of the women to seek external finance for their businesses.

In the final phase of my research, I applied the logistic regression of the ordinal response variables. The use of the ordered logit model was to discover how well a response to an item can be predicted based on the responses to other items. Using the Ordered Logistic Regression Model and following exclusion of the Business Characteristic Factors and Legal and Administrative Factors, which were shown to be not statistically

significant, the factors Human Capital (HC), Entrepreneurial Goals and Motivations (EGM), Economic Factors (EF), Socio-Cultural Factors (SCF) entered the set of explanatory variables. My research found Human Capital (HC) and Entrepreneurial Goals and Motivations (EGM) to be insignificant and following their elimination, a re-estimated model was used in the analyses.

The results from this study have been supported by previous studies as reported in the literature review. Earlier studies have found that Entrepreneurial Orientation (EO) had a significant influence on women Entrepreneur Performance (EP). Wiklund and Shepherd [2005] suggested that the outcome of Entrepreneurial Orientation (EO) is high performance and several other studies have recognized these entrepreneurial activities as an important factor in the performance of the organization. Economic Factors (EF) has also been indicated as a significant factor influencing the willingness of the entrepreneurs to build and expand their businesses [Rosa et al., 1996]. Javadian and Singh [2012] reported on the positive effect that social factors had on Entrepreneur Performance (EP). Therefore, based on the results of previous studies and the results from this study in Israel, women entrepreneurs in Israel could be advised to focus on these three factors: Entrepreneurial Orientation (EO), Economic Factors (EF) and Socio-Cultural Factors (SCF), in order to enhance their performance.

The research hypotheses, **H1**: ***Opportunity Recognition mediates the relationship between internal factors and women Entrepreneurs' Performance*** and **H2**: ***Opportunity Recognition mediates the relationship between external factors and women Entrepreneurs' Performance*** stated that Opportunity Recognition (OR) mediated the relationship between internal (personal) factors and women Entrepreneur Performance (EP) and between external (environmental) factors and women Entrepreneur Performance (EP). The mediation model was tested, but results did not indicate that Opportunity Recognition (OR) served as a mediating variable, and **H1** and **H2** were rejected. The hypotheses, **H3** ***Internal factors influence women Entrepreneurs' Performance*** and **H4** ***Internal factors influence women Entrepreneurs' Performance*** predicted that, the internal (personal) factors and the external (environmental) factors, the independent variables, would influence women Entrepreneur Performance, the dependent variable. Only hypotheses **H3a** ***Entrepreneurial Orientation influences women Entrepreneurs' Performance*****, H4b** ***Economic Factors influence women Entrepreneurs'***

Performance and **H4c *Socio-Cultural Factors influence women Entrepreneurs' Performance*** were supported by the estimation results.

5.2. Contributions of the Research

The study contributed to existing knowledge by examining a comprehensive framework of factors influencing Israeli women's business success, including both internal factors and external factors and by testing opportunity recognition as a mediator variable. Conducting the research in Israel enabled an investigation of Hasan & Almubarak's [2016] model that was conducted in Bahrain, in additional Middle East country. In the study, the proposed Modified Conceptual Model was introduced and in addition to focusing the study on opportunity recognition as a mediator variable, it was also used to analyze the effect of all variables on entrepreneurial performance. In addition, the use of the ordered logit model tested how well a response to an item can be predicted based on the responses to other items.

The results of the study found significant relationships between the three variables, Entrepreneurial Orientation (EO), Economic Factors (EF) and Socio-Cultural Factors (SCF), and women Entrepreneur Performance (EP). Further studies may expand on the significant relationships of these factors on Entrepreneur Performance (EP), while investigating the reasons behind the weak relationships with the other factors. Furthermore, extensive information, which is extremely difficult to collect, was gathered. This sample of Israeli women entrepreneurs contributing to the knowledge about factors influencing women entrepreneurs.

5.3. Research Limitations and Recommendations for Future Research

To gather data for this study in Israel, relevant interviewees were approached via several channels, including WhatsApp, e-mails, web sites and paid campaigns on Facebook, the page of the Small and Medium Business Agency of the Ministry of Economics and Industry and non-profit organizations that promote women. Thus, the 159 Israel women interviewees participating in the study only represent a limited sample of

the Israeli female entrepreneur population. Other disadvantages of the use of the Snowball sampling method is that the sample selection is biased towards the characteristics of online population, limited by age, education level and socioeconomic level to a target population with access to the Internet.

Responses to the online survey were anonymous, and thus the actual response rate is not known. Furthermore, since the study used only an online questionnaire to gather data from the Israeli women entrepreneurs, it would be recommended to include interviews as an additional tool to gather further details from the women and to gain a deeper understanding of their responses.

Once Opportunity Recognition (OR) had been shown not to be a mediating variable, it was eliminated from the models due to the possibility of multicolinarity that could interfere with the models. The relationships that existed between Opportunity Recognition (OR) aORand the other independent variables probably caused the issue when it was included into the model as an independent variable. Multicolinarity is a severe correlation of independent variables. It leads to unreliable and unstable estimates of regression coefficients. In this case a multicolinarity probably was created between the variable Opportunity Recognition (OR) and Entrepreneurial Orientation (EO). In this research Opportunity Recognition (OR) refers to the alertness to opportunity – to the ability to notice without search opportunities. Two factors influence the ability to recognize opportunities given the same amount of information: absorptive capacity and cognitive processes related to alertness to opportunity. Research suggests that the most important cognitive processes are intelligence, perceptive ability, creativity and seeing opportunity where other see risk [Shane, 2003]. In this research, Entrepreneurial Orientation is measured in terms of risk taking, pro-activeness and innovativeness. It is possible that creativity, that is part of the cognitive processes related to alertness, similar to innovativeness that is one dimension of entrepreneurial orientation and possibly 'seeing opportunity where other see risk', that is part of the cognitive processes related to alertness, similar to risk taking that is another dimension of entrepreneurial orientation. This similarity probably created multicolinarity between the variable Opportunity Recognition (OR) and Entrepreneurial Orientation (EO).

The research focused on the factors that influenced Israeli Women Entrepreneurs' Performance in SMEs. Analysis of the results of the study showed the effect that certain

internal (individual) and external (environmental) factors had on women Entrepreneurs' Performance. It is recommended that further studies be conducted in the Israeli business environment focusing on the three variables: Entrepreneurial Orientation (EO), Economic Factors (EF) and Socio-Cultural Factors (SCF), which were shown to significantly affect performance. In light of the results, in order to gain a deeper understanding of the challenges that women entrepreneurs face when conducting their business, it is advisable to focus on the factor Entrepreneurial Orientation (EO).

The three dimensions for Entrepreneurial Orientation considered were innovation, pro-activeness, and risk-taking. It was found that risk-taking was statistically insignificant in the second model that combined the groups. This result teaches us that it is important in researches to present data to Entrepreneurial Orientation (EO) and to all its components: innovation, proactiveness, and risk-taking.

Given the great importance to the economy and society of encouraging entrepreneurship among women, it is advisable to continue researching how government policy can develop Entrepreneurial Orientation (EO) among women entrepreneurs in Israel. Lim, S. & Envick, B. [2013] found significant differences in most EO dimensions between genders and among nations. Thus, it is important that customized approaches for developing EO will be based on gender and cultural.

The current research focused specifically on Israeli women entrepreneurs. Future research could focus on expanding the study to include comparisons between women entrepreneurs from different countries and cultures.

5.4. Implications for Practice

Understanding the key factors that influence women entrepreneurship may assist aspiring women entrepreneurs, as well as inform planners and practitioners interested in promoting women entrepreneurs. Furthermore, policies and programs to support women entrepreneurs in small and medium enterprises may be developed to align with the information available about the factors that influence women entrepreneurs in small and medium enterprises. Policies aimed at developing entrepreneurs should be gender sensitive.

The results of the study found significant relationships between the three variables, Entrepreneurial Orientation (EO), Economic Factors (EF) and Socio-Cultural Factors (SCF), and women Entrepreneur Performance (EP). The results indicate that Entrepreneurial Orientation (EO), Economic Factors (EF) and Socio-Cultural Factors (SCF) have a significant impact on women entrepreneur satisfaction with their business performance (EP). The results showed that growing Entrepreneurial Orientation (EO), Economic Factors (EF) and Socio-Cultural Factors (SCF) would have a significant impact on the women's satisfaction with their business performance.

The reaction to changes in Entrepreneurial Orientation is much stronger than to changes in Economic Factors. The magnitude of the response of Entrepreneurial Performance is nearly twice as large for the former as for the latter. Also the probability at explanatory variables = 1 showed considerable differences: EO=38.4%, SCF=28% and EF=14.4% and a large increase in the probability of evaluating the Entrepreneur Performance at 4 is observed as it increases nearly 6 times. This indicates that growing Entrepreneurial Orientation has a significant impact on women's satisfaction with their business performance.

It has been noted that Entrepreneurial Performance is more affected by factors directly dependent on the respondents, rather than available capital and financial infrastructure. This result may impact future actions undertaken by economic authorities. The financial side of running a business, albeit significantly affecting performance, has shown to be secondary importance. Much stronger effects can be obtained by promoting proactive behavior towards planning, developing unique ways of running the business or being more risk averse and exploring the unknown.

Miller [1983] first defined the concept of Entrepreneurial Orientation and characterized Entrepreneurial Orientation by using three dimensions: innovation, pro-activeness, and risk-taking. In this research, based on the same three dimensions, Entrepreneurial Orientation is measured in terms of risk taking, proactiveness and innovativeness. Entrepreneurial Orientation as a measure has been widely used in a variety of research settings because of its documented high levels of reliability and validity in numerous studies [Covin & Slevin, 1989]. Covin and Slevin [1989], as well as many researchers thereafter, noticed that firms are entrepreneurial if they are innovative, risk taking, and proactive, and suggested that Entrepreneurial Orientation is

an essential attribute of high-performing firms. Innovativeness related to the willingness for creativity and experimentation by introducing new products, services and processes. Proactiveness involves invoking a forward-looking perspective and anticipation of competition and demand. Risk taking may describe the actions taken to enter into and commit to uncertain environments. We found out that risk taking was statistically insignificant in the second model that combined the groups and probability at explanatory variables = 5 was higher for proactiveness than for innovativeness.

As a business consultant working with the Small and Medium Business Agency of the Ministry of Economics and Industry in Israel, I see how the state is currently investing a lot of effort in making courses accessible to business owners and entrepreneurs. It is recommended that more emphasis be placed on education and training related to entrepreneurship, focus on training in topics relevant to: Entrepreneurial Orientation (EO), Economic Factors (EF) and Socio-Cultural Factors (SCF). It is recommended that these courses will be gender sensitive because men are found to be more entrepreneurial oriented than women [Quaye et al., 2015]. It is also recommended to expand the training not only for entrepreneurs and business owners but also for university students and in schools. Entrepreneurship education and training should be promoted from basic education onwards in order to develop entrepreneurial skills from an early age. Schools should develop curricula for encouraging proactiveness and innovativeness especially among girls.

Prior business experience also has a significant positive relationship with Entrepreneurial Orientation (EO). Therefore, it is advisable to encourage entrepreneurs to meet with experienced business owners through networking meetings for businesses, promote collaborations and partnerships. In this way, the entrepreneurs will benefit from the experience gained by the experienced business owners.

This chapter deepened the discussion of the findings and the contribution of the research. The chapter examined the limitations of the study and recommendations for future research. Finally, it focused on implications for practice.

Summary of the Dissertation

Female entrepreneurship affects the economic growth of many countries, thus creating an interest in understanding the factors that influence women's business success and their economic and social impact. This study was conducted in the Israeli business environment and focused on women entrepreneurs' in Israel. Little information is known about the factors that influence women Entrepreneur Performance in Small and Medium Enterprises (SMEs) in the Israeli business environment and therefore, the dissertation focused on a study of the factors influencing Israeli Women Entrepreneur Performance in SMEs.

An online survey based on an adaptation of Hasan & Almubarak's [2016] questionnaire was constructed. The questionnaire was adapted for use with Israeli women entrepreneurs to enable data collection from the sample of women entrepreneurs. Initially, a pilot study was conducted with the aim of improving the alignment of the questionnaire to Israeli women. Once the questionnaire had been adapted and tested, one hundred and fifty-nine Israeli women SME entrepreneurs responded to the online survey. The factors that influence the women to establish, grow and expand their SMEs were examined by using the online survey which was distributed to Israeli women entrepreneurs.

Hasan & Almubarak's [2016] Conceptual Model forms the basis for the Modified Conceptual Model proposed in this study. In accordance with this model, the study focuses on examining Opportunity Recognition as a mediator variable, as well as analyzing the effect of all the influencing factors on Entrepreneurial Performance. In the proposed Modified Conceptual Model, similarly to Hasan & Almubarak's [2016] Conceptual Model, the influencing factors are divided into internal (personal) factors and external (environmental) factors. The internal (personal) factors include Entrepreneurial Orientation (EO), Human Capital (HC) and Entrepreneur Goals and Motives (EGM). The external (environmental) factors include Business Characteristics (BC), Economic factors (EF), Socio Cultural Factors (SCF) and Legal and Administrative Factors (LAF).

Based on the proposed Modified Conceptual Model, two statistical models were used for analysis and testing. In the first model, the effect of all the seven independent

variables, Entrepreneurial Orientation (EO), Human Capital (HC), Entrepreneurial Goals and Motivations (EGM), Business Characteristics (BC), Economic Factors (EF), Socio-Cultural Factors (SCF) and Legal and Administrative Factors (LAF) on Entrepreneurs' Performance (EP), were examined while considering their division into Internal and External factors. A second model used was a mediation model, in which all of the seven independent variables, Entrepreneurial Orientation (EO), Human Capital (HC), Entrepreneurial Goals and Motivations (EGM), Business Characteristics (BC), Economic Factors (EF), Socio-Cultural Factors (SCF) and Legal and Administrative Factors (LAF) were examined for their effect on Entrepreneurs' Performance (EP) through mediation with Opportunity Recognition (OR), the mediatory variable.

Analysis of responses collected from the women showed that the initial proposed mediated model of the study was not supported in Israel, since the mediator variable, Opportunity Recognition (OR), was not found to mediate the relationship between Entrepreneur Performance (EP), the dependent variable of the model and the independent variables. Nevertheless, the statistical analysis showed significant correlations between the groups of Internal and External factors and Entrepreneur Performance (EP), the dependent variable. Furthermore, Entrepreneurial Orientation (EO), one of the Internal factors, and Economic Factors (EF) and Socio Cultural Factors (SCF), which are two of the External factors were significantly correlated with Entrepreneur Performance (EF), the dependent variable and were shown to significantly affect Entrepreneur Performance (EP). Nevertheless, using an unmediated model, Entrepreneurial Orientation (EO) and Economic Factors (EF) were found to be the only two factors that predict Entrepreneur Performance (EP). Further studies will be needed that focus on the effect that these independent variables have on performance, and to gain a deeper understanding of the influences that affect women entrepreneurs when conducting their business.

References

Aarstad, J., Haugland, S. A. & Greve, A. (2010). Performance spillover effects in entrepreneurial networks: Assessing a dyadic theory of social capital. *Entrepreneurship: Theory and Practice*, *34*(5), 1003–1019. https://doi.org/10.1111/j.1540-6520.2009.00346.x

Abrar, P. (2013). What Makes Israel with Just Eight Million People, An Innovation Hub? ETRise-Entrepreneurship. http://www.economictimes.indiatimes.com

Agarwal, S. & Lenka, U. (2016). An exploratory study on the development of women entrepreneurs: Indian cases. *Journal of Research in Marketing and Entrepreneurship*, *18*(2), 232–247. https://doi.org/10.1108/JRME-04-2015-0024

Ahl, H. (2006). Why Research on Women Entrepreneurs Needs New Directions. *Et&P*, *30*(5), 595–621. https://doi.org/10.1111/j.1540-6520.2006.00138.x

Ahl, H. (2012). Exploring the Dynamics of Gender , Feminism and Entrepreneurship : Advancing Debate to Escape a Dead End ?, *19*(June 2016), 543–562. https://doi.org/10.1177/1350508412448695

Almor, T. & Heilbrunn, S. (2013). Entrepreneurship in Israel: Theory and Practice. *The American Journal of Entrepreneurship*, 6(2): 16 – 36.

Amutha, D. (2015). Entrepreneurship: a new alfemale frontier, 8. Retrieved from http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2684511

Anderson, A. & Park, J. (2007). Entrepreneurial Social Capital Conceptualizing Social Capital in New High-tech Firms. *International Small Business Journal*, *25*(3), 245–272. https://doi.org/10.1177/0266242607076526

Aramand, M. & Valliere, D. (2012). Dynamic capabilities in entrepreneurial firms: A case study approach. *Journal of International Entrepreneurship*, *10*(2), 142–157. https://doi.org/10.1007/s10843-012-0088-3

Aspromourgos, T. (2012). Entrepreneurship, risk and income distribution in Adam Smith. *The European Journal of the History of Economic Thought*, *21*(1), 21–40. https://doi.org/10.1080/09672567.2012.683025

Baltar, F. & Brunet, I. (2012). Social research 2.0: Virtual snowball sampling method using Facebook. *Internet Research*, *22*(1), 57–74.

https://doi.org/10.1108/10662241211199960

Bandura, A. (1991). Social cognitive theory of self-regulation. *Organizational Behavior and Human Decision Processes*, *50*(2), 248–287. https://doi.org/10.1016/0749-5978(91)90022-L

Bao, J., Zhou, X. & Chen, Y. (2017). Entrepreneurial passion and behaviors: Opportunity recognition as a mediator, *45*(200), 1211–1220.

Barbaroux, P. (2014). From market failures to market opportunities: managing innovation under asymmetric information. *J. Innov. Entrep*., 3(5).

Bardasi, E., Sabarwal, S. & Terrell, K. (2011). How do female entrepreneurs perform? Evidence from three developing regions. *Small Business Economics*, *37*(4), 417–441. https://doi.org/10.1007/s11187-011-9374-z

Baron, R. M. & Kenny, D. a. (1986). The Moderator-Mediator Variable Distinction in Social The Moderator-Mediator Variable Distinction in Social Psychological Research: Conceptual, Strategic, and Statistical Considerations. *Journal of Personality*, *51*(6), 1173–1182. https://doi.org/10.1037/0022-3514.51.6.1173

Belas, J. & Sopkova, G. (2016). A Model of Entrepreneurial Orientation. *Transformations in Business & Economics, 15*(2B), 630.

Bellucci, A., Borisov, A. & Zazzaro, A. (2010). Does gender matter in bank-firm relationships? Evidence from small business lending. *Journal of Banking and Finance*, *34*(12), 2968–2984. https://doi.org/10.1016/j.jbankfin.2010.07.008

Birley, S. (1987). Female entrepreneurs : are they really any different? *Journal of Small Business Management*, (October), 30–36. Retrieved from http://hdl.handle.net/1826/439

Blisson, D. & Rana, B. K. (2001). The Role of Entrepreneurial Networks: The Influence of Gender and Ethnicity in British SME's. *46th International Council for Small Business Conference, Taipei, Taiwan*.

Boden, R. J. & Nucci, A. R. (2000). On the survival prospects of men's and women's new business ventures. *Journal of Business Venturing*, *15*(4), 347–362. https://doi.org/10.1016/S0883-9026(98)00004-4.

Bolton, D.L. & Lane, M.D. (2012). Individual entrepreneurial orientation: development of a measurement instrument. *Education + Training*, 54(2/3), p. 219-233.

Brüderl, J. & Preisendörfer, P. (1998). Network Support and the Success of Newly Founded

Business. *Small Business Economics*, *10*(3), 213–225. https://doi.org/10.1023/A:1007997102930

Bruin, A. De & Brush, C. G. (2007). E T & P for Coherent Research, (781), 323–339.

Brush, C. G. (1992). Research on Women Business Owners; Past Trends, a New Perspective and Future Directions. *Entrepreneurship Theory and Practice*, *16*, 5–30.

Brush, C. G., Bruin, A. & Welter, F. (2009). A gender-aware dd. *International Journal of Gender and Entrepreneurship*, *1*(March). https://doi.org/10.1108/17566260910942318

Brush, C. G., Carter, N., Gatewood, E., Greene, P. & Hart, M. (2001). The Diana Project. Women Business Owners and Equity Capital: The Myths Dispelled. *The Kauffman Centre for Entrepreneurial Leadership at the Ewing Marion Kauffman Foundation.*

Brush, C. G. & Cooper, S. Y. (2012). Female entrepreneurship and economic development: An international perspective. *Entrepreneurship & Regional Development*, *24*(1–2), 1–6. https://doi.org/10.1080/08985626.2012.637340

Brush, C. G., de Bruin, A. & Welter, F. (2009). A gender aware framework for women's entrepreneurship. *International Journal of Gender and Entrepreneurship*, *1*(1), 8–24. https://doi.org/10.1108/17566260910942318

Brush, C. G., Wong-MingJi, D. J. & Sullivan, S. E. (1999). Women Entrepreneurs: Moving Beyond the Glass Ceiling. *Academy of Management. The Academy of Management Review*, *24*(3), 585–586. https://doi.org/10.5465/AMR.1999.2202143

Brush, C., Welter, F. & Welter, F. (2006). E T & P Introduction to the Special Issue : Towards, (November 2016), 585–593. https://doi.org/10.1111/j.1540-6520.2006.00137.x

Bryman, A. (2004). *Social Research Methods* (Second Edi). Oxford University Press.

Bugawa, A. & Aljuwaisri, S.M. (2021). Internal and External Factors on Women's Entrepreneurship Performance in The State of Kuwait. AGJSR, 37(3), p. 33-53.

Burt, R. S. (1998). The gender of social capital. *Rationality and Society*, *10*(1), 5–46. https://doi.org/10.1177/104346398010001001

Buttner, Buttner, Holly, E., Holly, E., Rosen, Rosen, … Benson. (1992). Rejection in the Loan Application Process: Male and Female Entrepreneurs' Perceptions and Subsequent Intentions. *Journal of Small Business Management*, *30*, 58. Retrieved from http://proquest.umi.com/pqdweb?did=591025&Fmt=7&clientId=65345&RQT=309&VName=PQD

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

Caliendo, M., Fossen, F. M., Kritikos, A. & Wetter, M. (2015). The gender gap in entrepreneurship: Not just a matter of personality. *CESifo Economic Studies*, *61*(1), 202–238. https://doi.org/10.1093/cesifo/ifu023

Carland, J. W., Hoy, F., Boulton, W. R., Carland, J. A. C. & Carland, J. O. a N. N. C. (1984). Differentiating Entrepreneurs from Small Business Owners. *The Academy of Management Review*, *9*(2), 354–359. https://doi.org/10.2307/258448

Carranza, E., Dhakal, C. & Love, I. (2018). Female Entrepreneurs: How and Why Are They Different? World Bank Group. World Bank, Washington, DC. License: Creative Commons Attribution CC BY 3.0 IGO.

Carroll, G. & Hannan, M. (2000). *he Demography of Corporations and Industries*. Princeton, NJ, US:Princeton University Press.

Carter, S. & Rosa, P. (1998). The financing of male- and female- owned businesses. *Entrepreneurship & Regional Development*, *10*, 225–241. https://doi.org/10.1080/08985629800000013

CBS. (2021). Collection of data on the occasion of International Women's Day 2021. The Central Bureau of Statistics, Jerusalem.

Chathurangani, H.B.P., Hemathilake, D.H.U. & Samudrika K.P.N. (2019). Factors Affecting on the Performance of Women Entrepreneurs' in Small and Medium Entities Proceedings of the 8th International Conference on Management and Economics.

Chlosta, S., Patzelt, H., Klein, S. B. & Dormann, C. (2012). Parental role models and the decision to become self-employed: The moderating effect of personality. *Small Business Economics*, *38*(1), 121–138. https://doi.org/10.1007/s11187-010-9270-y

Cho, Y. & Honorati, M. (2014). Entrepreneurship programs in developing countries.A meta regression analysis. *Labour Economics*, *28*, 110–130. https://doi.org/10.1016/j.labeco.2014.03.011

Choudhary, J., Hashim, H., Ann, H. J. & Sambasivan, M. (2020). The Mediating Role of Opportunity Recognition Between Education, Experience and Venture Creation by Women Entrepreneurs in India. International Journal of Academic Research in Business and Social Sciences, 10(3), 131–143.

Chowdhury, S. & Endres, M. L. (2005). Gender Difference and the Formation of

Entrepreneurial Self-Efficacy. In *Paper Presented at Annual USASBE Conference, January 13–15*.

Cliff, J. E. (1998). Does one size fit all? exploring the relationship between attitudes towards growth, gender, and business size. *Journal of Business Venturing*, *13*(6), 523–542. https://doi.org/10.1016/S0883-9026(97)00071-2

Clough, D. R., Fang, T.P. Vissa, B. & Wu, A. (2019). Turning Lead into Gold: How Do Entrepreneurs Mobilize Resources to Exploit Opportunities? Academy of Management Annals. 13(1).

Coleman, J. S. (1990). Foundations of Social Theory. In *Foundations of Social Theory* (Vol. 69, p. 993). https://doi.org/10.2307/2579680

Coleman, S. (2000). Access to Capital and Terms of Credit: A Comparison of Men- and Women-Owned Small Businesses. *Journal of Small Business Management*, *38*(3), 37–52. Retrieved from http://ezp.waldenulibrary.org/login?url=http://search.ebscohost.com/login.aspx?direct=true&db=bth&AN=3308607&scope=site

Coleman, S. (2007). The role of human and financial capital in the profitability and growth of women-owned small firms. *Journal of Small Business Management*, *45*(3), 303–319. https://doi.org/10.1111/j.1540-627X.2007.00214.x

Constantinidis, C., Cornet, A. & Asandei, S. (2006). Financing of women-owned ventures: The impact of gender and other owner -and firm-related variables. *Venture Capital*, *8*(2), 133–157. https://doi.org/10.1080/13691060600572557

Cooper, A. C., Gimeno-Gascon, F. J. & Woo, C. Y. (1994). Initial human and financial capital as predictors of new venture performance. *Journal of Business Venturing*, *9*(5), 371–395. https://doi.org/10.1016/0883-9026(94)90013-2

Courvisanos, J. & Mackenzie, S. (2014). Innovation economics and the role of the innovative entrepreneur in economic theory. *Journal of Innovation Economics & Management*, *n°14*(2), 41–61. https://doi.org/10.3917/jie.014.0041

Covin, J. G. & Slevin, D. P. (1989). Strategic management of small firms in hostile and benign environments. *Strategic Management Journal*, *10*(1), 75–87. https://doi.org/10.1002/smj.4250100107

Cox, K.C. (2014). Fundamental entrepreneurial planning processes: resource assessment and opportunity evaluation. *Entrepreneurship and Innovation*, 15(2). p. 79-88.

Cromie, S. (1987). Motivations of aspiring male and female entrepreneurs. *Journal of Organizational Behavior*, *8*(3), 251–261. https://doi.org/10.1002/job.4030080306

CWBR – Center for Women's Business Research. (2004) Women Owned Businesses in 2004: Trends in the U.S. and 50 States. Washington D.C: Center for Women's Business Research.f

Dalborg, C., von Friedrichs, Y. & Wincent, J. (2015). Risk perception matters: why women's passion may not lead to a business start-up. *International Journal of Gender and Entrepreneurship*, *7*(1), 87–104. https://doi.org/10.1108/IJGE-01-2013-0001

Dun & Bradstreet (2020). Israel Economic Snapshot – Summary of 2020 and forecast for 2021. https://www.dbisrael.co.il/en/db-experts/db-report/2020sum_2021/

Davidsson, P. & Honig, B. (2003). The role of social and human capital among nascent entrepreneurs. *Journal of Business Venturing*. https://doi.org/10.1016/S0883-9026(02)00097-6

Dawson, C. & Henley, A. (2012). Push versus pull entrepreneurship: An ambiguous distinction? *International Journal of Entrepreneurial Behaviour & Research*, *18*(6), 697–719. https://doi.org/10.1108/13552551211268139

Dawson, C. & Henley, A. (2015). Gender, Risk, and Venture Creation Intentions. *Journal of Small Business Management*, *53*(2), 501–515. https://doi.org/10.1111/jsbm.12080

de Jong, J.P.J. & Zoetermeer, O.M. (2010). Schumpeter versus Kirzner: An empirical investigation of opportunity types. Scientific Analysis of Entrepreneurship and SMEs. EIM bv, Netherlands.

Dell 2019 Women Entrepreneur Cities (WE Cities) Index. (2019). Dell Women's Entrepreneur Network. Dell Technologies. Retrieved from https://www.dell.com/learn/us/en/uscorp1/corpcomm_docs/dell-we-cities-2019-executive-summary.pdf

Delmar, F. & Shane, S. (2003). Does business planning facilitate the development of new ventures? *Strategic Management Journal*, 24, p. 1165–1185.

Dess, G. D. & Robinson Jr. R.B. (1984). Measuring Organizational Performance in the Absence of Objective Measures: The Case of the Privately Held Firm and Conglomerate Business Unit. *Strategic Management Journal*, 5(3), p. 265-273. http://dx.doi.org/10.1002/smj.4250050306

Dodd, S. D. & Patra, E. (2002). National Differences in Entrepreneurial Networking.

Entrepreneurship & Regional Development, *14*(2), 117–134. https://doi.org/10.1080/08985620110111304

Doing Business – Measuring Business Regulations. (n.d.). Retrieved from http://www.doingbusiness.org/

Dwyer, P. D., Gilkeson, J. H. & List, J. A. (2002). Gender differences in revealed risk taking: Evidence from mutual fund investors. *Economics Letters*, *76*(2), 151–158. https://doi.org/10.1016/S0165-1765(02)00045-9

Eckhardt, J.T. & Shane, S. (2010). An Update to the Individual-Opportunity Nexus. Z.J. Acs, D.B. Audretsch (eds.), Handbook of Entrepreneurship Research, 47 International Handbook Series on Entrepreneurship 5

Efroni, B. (2017a). The capital gaps between female and male entrepreneurs. In A. P. Balcerzak & I. Pietryka (Eds.), *Contemporary Issues in Economy. Proceedings of the International Conference on Applied Economics: Economics* (pp. 140–148). https://doi.org/10.24136/eep.proc.2017.3.

Efroni, B. (2017b). *Gaps between Women and Men Entrepreneurs* (Working Paper UEP, WP 01/2017).

Ekype, I., Mat, N. & Razak, R. (2010). The effect of microfinance factors on women entrepreneurs' performance in Nigeria: a conceptual framework. International Journal of Business and Social Science, 1(2), p. 255-263.

Elam, A. & Terjesen, S. (2010). Gendered Institutions and Cross-National Patterns of Business Creation for Men and Women. *European Journal of Development Research*, *22*(3), 331–348. https://doi.org/10.1057/ejdr.2010.19

Ellison, N. B. (2008). Social Network Sites : Definition , History , and Scholarship, *13*, 210–230. https://doi.org/10.1111/j.1083-6101.2007.00393.x

Elenurm T. and Vaino E. (2011), *Interpretations of Entrepreneurial Success Factors by FemaleEntrepreneurs and Executives in a Catch-up Economy*, ICSB World Conference Proceedings, Washington: International Council for Small business (ICSB), pp. 1-20.

Estrin, S. & Mickiewicz, T. (2011). Institutions and female entrepreneurship. *Small Business Economics*, *37*(4), 397–415. https://doi.org/10.1007/s11187-011-9373-0

Ezzedeen, S. R. & Zikic, J. (2012). Entrepreneurial experiences of women in Canadian high technology. *International Journal of Gender and Entrepreneurship*, *4*(1), 44–64. https://doi.org/10.1108/17566261211202972

Fabowale, L., Orser, B. & Riding, A. (1995). Gender, Structural Factors, and Credit Terms Between Canadian Small Businesses and Financial Institutions. *Entrepreneurship: Theory & Practice*, *19*(4), 41–65. Retrieved from http://search.ebscohost.com/login.aspx?direct=true&db=buh&AN=9606274685&site=ehost-live

Fairlie, R. W. & Robb, A. M. (2009). Gender differences in business performance: Evidence from the characteristics of business owners survey. *Small Business Economics*, *33*(4), 375–395. https://doi.org/10.1007/s11187-009-9207-5

Fatoki, O. (2011). The impact of human, social and financial capital on the performance of small and medium-sized enterprises (SMEs) in South Africa. *Journal of Social Sciences*, *29*(3), 193–204. Retrieved from http://www.krepublishers.com/02-Journals/JSS/JSS-29-0-000-11-Web/JSS-29-3-000-11-Abst-Pdf/JSS-29-3-193-11-1234-Fatoki-O-O/JSS-29-3-193-11-1234-Fatoki-O-O-Tt.pdf

Fielden, S., Dawe, A. & Woolnough, H. (2006). UK government small business finance initiatives: Social inclusion or gender discrimination? *Equal Opportunities International*, *25*(1), 25–37. https://doi.org/10.1108/02610150610645940

Fielden, S. L., Davidson, M. J., Dawe, A. J. & Makin, P. J. (2003). Factors inhibiting the economic growth of female owned small businesses in North West England. *Journal of Small Business and Enterprise Development*, *10*(2), 152–166. https://doi.org/10.1108/14626000310473184

Fischer, C. S. & Oliker, S. J. (1983). A research note on friendship, gender, and the life cycle. *Social Forces*, *62*(1), 124–133. https://doi.org/10.2307/2578351

Fischer, E. M., Reuber, A. R. & Dyke, L. S. (1993). A theoretical overview and extension of research on sex, gender, and entrepreneurship. *Journal of Business Venturing*, *8*(2), 151–168. https://doi.org/10.1016/0883-9026(93)90017-Y

G. H. Haines Jr., Orser, B. J., Riding, A. L., G. H. Haines, J., Orser, B. J. & Riding, A. L. (1999). Myths and realities: An empirical study of banks and the gender of small business clients. *Revue Canadienne Des Sciences de l'Administration*, *16*(4), 291. https://doi.org/10.1111/j.1936-4490.1999.tb00690.x

Gamba, M. & Kleiner, B. H. (2001). The old boys' network today. *International Journal of Sociology and Social Policy*, *21*(8/9/10), 101–107. https://doi.org/10.1108/01443330110789853

Gartner, W. B. (1989). “Who is an Entrepreneur?” is the wrong question. *American Journal of Small Business*, *13*, 47–68. https://doi.org/10.1210/jc.2003-031037

Gawel, A. (2013). Female Entrepreneurship in Poland. *Poznan University of Economics Review*, *13*(1), 115–130.

GEM. (2019). Global Entrepreneurship Monitor. 2018/2019 Women's Entrpreneurship Report. Global Entrepreneurship Research Association, London Business School, Regents Park, London.https://www.gemconsortium.org/report/gem-20182019-womens-entrepreneurship-report

GEM. (2020). Global Entrepreneurship Monitor. Overcoming national and personal crises through entrepreneuship and innovation. Entrpreneurship and innovation in Israel - GEN 2019/2020. Global Entrepreneurship Research Association, London Business School, Regents Park, London. https://www.gemconsortium.org/report/leveraging-entrepreneurship-and-innovation-to-deal-with-national-and-individual-crisis-israel-gem-20192020-report-2

Geroski, P. A. (2001). Exploring the Niche Overlaps Between Organizational Ecology and Industrial Economics. *Industrial and Corporate Change*, *10*(2), 507–540. https://doi.org/10.1093/icc/10.2.507

Gicheva, D. & Link, A. N. (2015). The gender gap in federal and private support for entrepreneurship. *Small Business Economics*, *45*(4), 729–733. https://doi.org/10.1007/s11187-015-9664-y

Gilad, B. & Levine, P. (1986). A behavioral model of entrepreneurial supply. Journal of Small Business Management, 4, 45–53.

Godwin, L. N., Stevens, C. E. & Brenner, N. L. (2006). Forced to play by the rules? Theorizing how mixed-sex founding teams benefit women entrepreneurs in male-dominated contexts. *Entrepreneurship: Theory and Practice*, *30*(5), 623–642. https://doi.org/10.1111/j.1540-6520.2006.00139.x

Gomes, A. F., Santana, W. G. P., Araújo, U. P. & Martins, C. M. F. (2014). Empreendedorismo feminino como sujeito de pesquisa. *Revista Brasileira de Gestao de Negocios*, *16*(51), 319–342. https://doi.org/10.7819/rbgn.v16i51.1508

Greene, P. G., Hart, M. M., Gatewood, E. J., Brush, C. G. & Carter, N. M. (2003). Women entrepreneurs: moving front and center: An overview of research and theory. *Coleman White Paper Series*, *3*(May 2017), 1–47. Retrieved from www.usasbe.org

Grotsky, D. (2010). Globalized Clustering, *MIT Entrepreneurship Review*.

Gutterman, A.S. (2017). Sustainable entrepreneurship: Regional and country studies. Latin Europe.*The Sustainable Entrepreneurship Project*

Harris, C. R., Jenkins, M. & Glaser, D. (2006). Gender Differences in Risk Assessment : Why do Women Take Fewer Risks than Men ? *Judgment and Decision Making*, *1*(1), 48–63.

Hassan F. Ramli A. and Desa N. (2014), Rural women entrepreneurs in Malaysia: what drives their success? International Journal of Business and Management, 9, 4, 2014.

Hassannezhad, Z. & Valliere, D. (2021). A Cognitive Measure of Entrepreneurial Alertness. *Journal of Enterprising Culture*. 29. p. 273-294.

Hasan, F. S. M. . & Almubarak, M. M. S. (2016). Factors influencing women entrepreneurs' performance in SMEs. *World Journal of Entrepreneurship, Management and Sustainable Development*, *12*(2), 82–101. https://doi.org/10.1108/WJEMSD-09-2015-0037

Hayek, F. (1937). Economics and knowledge. *Economica*, *4*(13), 33–54. https://doi.org/10.2307/2548786

Heilbrunn, S. & Davidovitch, L. (2011). Juggling family and business: Work-family conflict of women entrepreneurs in Israel. *Journal of Entrepreneurship*, *20*(1), 127–141.

Heilbrunn, S., Abu-Asbeh, K. & Abu Nasra, M. (2014). Difficulties facing women entrepreneurs in Israel: a social stratification approach. *International Journal of Gender and Entrepreneurship*, 6(2), 142–162.

Heilbrunn S., Palgi M. (2015) Women Entrepreneurs in the Rural Periphery of Israel: Comparing Israeli Palestinians and Israeli Jews. In: Syna H.D., Costea CE. (eds) Women's Voices in Management. Palgrave Macmillan, London

Henry, C., Foss, L. & Ahl, H. (2016). Gender and Entrepreneurship Research: A review of methodological approaches. *International Small Business Journal*, *34*(3), 217–241. https://doi.org/10.1177/0266242614549779

Hisrich, R. D. & Brush, C. (1984). The woman entrepreneur: Management skills and business problems. *Journal of Small Business Management*, *22*(May), 30–37. Retrieved from http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1505240

Hisrich, R., Langan-Fox, J. & Grant, S. (2007). Entrepreneurship research and practice: a call to action for psychology. *American Psychologist*, *62*(6), 575–589. https://doi.org/10.1037/0003-066X.62.6.575

Hodges, N., Watchravesringkan, K., Yurchisin, J., Karpova, E., Marcketti, S., Hegland, J., …

Childs, M. (2015). Women and apparel entrepreneurship. *International Journal of Gender and Entrepreneurship*, *7*(2), 191–213. https://doi.org/10.1108/IJGE-07-2014-0021

Hughes, K. D., Jennings, J. E., Brush, C., Carter, S. & Welter, F. (2012). Extending Women's Entrepreneurship Research in New Directions. *Entrepreneurship: Theory and Practice*, *36*(3), 429–442. https://doi.org/10.1111/j.1540-6520.2012.00504.x

Iakovleva, T., Solesvik, M. & Trifilova, A. (2013). Financial availability and government support for women entrepreneurs in transitional economies: Cases of Russia and Ukraine. *Journal of Small Business and Enterprise Development*, *20*(2), 314–340. https://doi.org/10.1108/14626001311326752

Inmyxai, S. & Takahashi, Y. (2009). Further Evidence of the Performance Contrast between Male and Female Firms in MSMEs in the Lao PDR. *Journal of Asia Entrepreneurship and Sustainability*, *64*(3), 64–85.

Jennings, J. E. & Brush, C. G. (2013). Research on Women Entrepreneurs : Challenges to (and from) the Broader Entrepreneurship Literature? *Academy of Management Annals*, *7*(1), 663–715. https://doi.org/10.1080/19416520.2013.782190

Jones, K. & Tullous, R. (2002). Behaviors of Pre-Venture Entrepreneurs and Perceptions of Their Financial Needs. *Journal of Small Business Management*, *40*(3), 233–249. https://doi.org/10.1111/1540-627x.00053

Kariv, D. (2012). "Off stage-on stage"; men and women entrepreneurs leading change and business growth. *Journal of Enterprising Communities: People and Places in the Global Economy*, *6*(2), 169–184.

Kariv, D. & Coleman, S. (2015). Toward a theory of financial bricolage: the impact of small loans on new businesses. *Journal of Small Business and Enterprise Development*, *22*(2), 196–224. https://doi.org/10.1108/JSBED-02-2013-0020

Kelley, D. J., Brush, C. G., Greene, P. G. & Litovsky, Y. (2012). Global Entrepreneurship Monitor 2012 Women' s Report. *Global Entreprneurship Research Association*, 1–57.

Kickul, J., Wilson, F., Marlino, D. & Barbosa, S. D. (2008). Are misalignments of perceptions and self-efficacy causing gender gaps in entrepreneurial intentions among our nation's teens? *Journal of Small Business and Enterprise Development*, *15*(2), 321–335. https://doi.org/http://dx.doi.org/10.1108/14626000810871709

Kim, S. M. (2014). The Impacts of Gender Differences in Social Capital on Microenterprise

Business Start-Up. *Affilia*, *29*(4), 404–417. https://doi.org/10.1177/0886109913519789

Kim, S.M. & Sherraden, M. (2014). The impact of gender and social networks on microenterprise business performance. *Journal of Sociology and Social Welfare*, 41(3), 49–69.

Kirkwood, J. (2009). Motivational factors in a push-pull theory of entrepreneurship. *Gender in Management: An International Journal*, *24*(5), 346–364. https://doi.org/10.1108/17542410910968805

Kirzner, I. M. (1973). *Competition and Entrepreneurship*. *Journal of Chemical Information and Modeling* (Vol. 53). https://doi.org/10.1017/CBO9781107415324.004

Kirzner, I. M. (1997). Entrepreneurial Discovery and the Competitive Market Process : An Austrian Approach. *Journal of Economic Literature*, *XXXV*(March), 60–85. https://doi.org/10.2307/2729693

Klyver, K., Nielsen, S. L. & Evald, M. R. (2013). Women's self-employment: An act of institutional (dis)integration? A multilevel, cross-country study. *Journal of Business Venturing*, *28*(4), 474–488. https://doi.org/10.1016/j.jbusvent.2012.07.002

Kourilsky, M. L. & Walstad, W. B. (1998). Entrepreneurship and female youth: knowledge, attitudes, gender differences, and educational practices. *Journal of Business Venturing*, *13*(1), 77–88. https://doi.org/10.1016/S0883-9026(97)00032-3

Kuratko, D. F., Hornshy, J. S. & Naffziger, D. W. (1997). An examination of owner's goals in sustaining entrepreneurship. *Journal of Small Business Management*, *35*(1), 24–33.

Kuratko, D. F., Morris, M. H. & Schindehutte, M. (2015). Understanding the dynamics of entrepreneurship through framework approaches. *Small Business Economics*, *45*(1), 1–13. https://doi.org/10.1007/s11187-015-9627-3

Landstrom, H. (1999). The Roots of Entrepreneurship Research. *New England Journal of Entrepreneurship*.

Langkamp Bolton, D. and Lane, M. (2012), "Individual entrepreneurial orientation: development of a measurement instrument", Education + Training, Vol. 54 No. 2/3, pp. 219-233. https://doi.org/10.1108/00400911211210314

Lerner, M., Brush, C. & Hisrich, R. (1997). Israeli women entrepreneurs: An examination of factors affecting performance. *Journal of Business Venturing*, *12*(4), 315–339. https://doi.org/10.1016/S0883-9026(96)00061-4

Lewis, K. V., Henry, C., G., E. J. & W. & J., (Eds.). (2014). *Women's Entrepreneurship in the*

21st Century: An International Multi-Level Research Analysis. Edward Elgar Publishing. https://doi.org/10.4337/9781782544616

Lim, S. & Envick, B. (2013). Gender and entrepreneurial orientation: A multi-country study. *International Entrepreneurship and Management Journal, 9*(3), 465-482.

Lindberg, M., Lindgren, M. & Packendorff, J. (2014). Quadruple Helix as a Way to Bridge the Gender Gap in Entrepreneurship: The Case of an Innovation System Project in the Baltic Sea Region. *Journal of the Knowledge Economy*, *5*(1), 94–113. https://doi.org/10.1007/s13132-012-0098-3

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

Loscocco, K. A., Robinson, J., Hall, R. H. & Allen, J. K. (1991). Gender and Small Business Success: An Inqury into Women´s Relative Disadvantage. *Social Forces*. https://doi.org/10.2307/2580062

Loscocco, K. & Bird, S. R. (2012). Gendered Paths : https://doi.org/10.1177/0730888412444282

Lumpkin, G.T. & Dess, G.G. (1996). Clarifying the Entrepreneurial Orientation Construct and Linking It to Performance. *Academy of Management Review*. 21, p.135-172.

Malach-Pines, A. & Schwartz, D. (2008). Now you see them, now you don't: gender differences in entrepreneurship. *Journal of Managerial Psychology*, *23*(7), 811–832. https://doi.org/10.1108/02683940810896358

Manolova, T. S., Manev, I. M., Carter, N. M. & Gyoshev, B. S. (2006). Breaking the family and friends' circle: Predictors of external financing usage among men and women entrepreneurs in a transitional economy. *Venture Capital*, *8*(2), 109–132. https://doi.org/10.1080/13691060500434072

Marcén, M. (2014). The role of culture on self-employment. *Economic Modelling*, *44*(S1), S20–S32. https://doi.org/10.1016/j.econmod.2013.12.008

Marsden, P. V. (1987). Core Discussion Networks of Americans. *American Sociological Review*, *52*(1), 122–131. https://doi.org/10.2307/2095397

Marvel, M. R., Davis, J. L. & Sproul, C. R. (2016). Human Capital and Entrepreneurship Research: A Critical Review and Future Directions. *Entrepreneurship: Theory and Practice*, *40*(3), 599–626. https://doi.org/10.1111/etap.12136

Maurer, I. & Ebers, M. (2006). Dynamics of Social Capital and Their Performance Implications: Lessons from Biotechnology Start-Ups. *Administrative Science Quarterly*, *51*(2), 262–292. https://doi.org/10.2189/asqu.51.2.262

Mazzei, M.J. (2018). Strategic entrepreneurship: Content, process, context, and outcomes. *Int Entrep Manag J* 14, p**.** 657–670.

McAdam M. (2013). *Female Entrepreneurship*. Routledge.

Menipaz, E., Avrahami, Y. & Lerner, M. (2007). Global Entrepreneurship Monitor (GEM): Israel National Entrepreneurship Report. Ben-Gurion University of the Negev , Beersheba, Israel, 68.

Miller, D. (1983). The correlates of entrepreneurship in three types of firms. Management Science, 29(7), 770–791.

Ming Yen Teoh, W. & Choy Chong, S. (2014). Towards strengthening the development of women entrepreneurship in Malaysia. *Gender in Management: An International Journal*, *29*(7), 432–453. https://doi.org/10.1108/GM-10-2013-0122

Minniti, M. & Naude, W. (2010). What Do We Know About The Patterns and Determinants of Female Entrepreneurship Across Countries[quest]. *EUR J DEV RES*, *22*(3), 277–293. https://doi.org/10.1057/ejdr.2010.17

Mitchelmore, S. & Rowley, J. (2013). Entrepreneurial competencies of women entrepreneurs pursuing business growth. *Journal of Small Business and Enterprise Development*, *20*(1), 125–142. https://doi.org/10.1108/14626001311298448

Monnickendam-Givon, Y., Schwartz, D. & Gidron, B. (2016). Network not utilized: The case of ultra-orthodox female micro-entrepreneurs in Israel. Journal of Developmental Entrepreneurship, 21(1). 1650006-1-19.

Moore, G. (1990). Structural Determinants of Men's and Women's Personal Networks. *American Sociological Review*, *55*(5), 726–735. https://doi.org/10.2307/2095868

Moroz, P. W. & Hindle, K. (2012). Entrepreneurship as a Process: Toward Harmonizing Multiple Perspectives. *Entrepreneurship: Theory and Practice*, *36*(4), 781–818. https://doi.org/10.1111/j.1540-6520.2011.00452.x

Muntean, S. C. (2013). Wind beneath my wings: policies promoting high-growth oriented women entrepreneurs. *International Journal of Gender and Entrepreneurship*, *5*(1), 36–59. https://doi.org/10.1108/17566261311305201

Nneka, A. A. (2015). Factors that affect the performance of women entrepreneurs in the

micro scale enterprises in Southwestern Nigeria, *6*(2), 30–31.

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

OECD (2016), "Product market regulations across OECD countries, 2003 and 2013: From 0 ff(least restrictive) to 6 (most restrictive)", in SME and Entrepreneurship Policy in Israel 2016, OECD Studies on SMEs and Entrepreneurship, OECD Publishing, Paris, https://doi.org/10.1787/9789264262324-graph8-en.

OECD (2021), Entrepreneurship Policies through a Gender Lens, OECD Studies on SMEs and Entrepreneurship, OECD Publishing, Paris, https://doi.org/10.1787/71c8f9c9-en.

OECD (2022), "Inventors" (indicator), https://doi.org/10.1787/8e43c08c-en

Okeyo, W. O., Gathungu, J. M. & K'Obonyo, P. (2016). Entrepreneurial Orientation, Business Development Services, Business Environment, and Performance: A Critical Literature Review. *European Scientific Journal, ESJ*, *12*(28), 188.

Olsen, R. a. & Cox, C. M. (2001). The Influence of Gender on the Perception and Response to Investment Risk: The Case of Professional Investors. *Journal of Psychology and Financial Markets*, *2*(1), 29–36. https://doi.org/10.1207/S15327760JPFM0201_3

Orser, B. J., Riding, A. L. & Manley, K. (2006). Women Entrepreneurs and Financial Capital. *Entrepreneurship: Theory & Practice*, *30*(5), 643–665. https://doi.org/10.1111/j.1540-6520.2006.00140.x

Overbeke, K. K., Bilimoria, D. & Perelli, S. (2013). The dearth of daughter successors in family businesses: Gendered norms, blindness to possibility, and invisibility. *Journal of Family Business Strategy*, *4*(3), 201–212. https://doi.org/10.1016/j.jfbs.2013.07.002

Pellegrino, E. T. & Reece, B. L. (1982). Perceived Formative and Operational Problems Encountered by Female Entrepreneurs in Retail and Service Firms. *Journal of Small Business Management*, *20*(2), 15. Retrieved from http://search.proquest.com/abicomplete/docview/220995389/13E37C347539991028/20?accountid=14570%5Cnhttp://media.proquest.com/media/pq/classic/doc/66095243/fmt/pi/rep/NONE?hl=&cit%3Aauth=Pellegrino%2C+Eric+T%3BReece%2C+Barry+L&cit%3Atitle=Perceived+formativ

Pettersson, K. & Heldt Cassel, S. (2014). Women tourism entrepreneurs: doing gender on farms in Sweden. *Gender in Management: An International Journal*, *29*(8), 487–504.

https://doi.org/10.1108/GM-02-2014-0016

Pines, A., Lerner, M. & Schwartz, D. (2010), Gender differences in entrepreneurship: equality, diversity and inclusion in times of crisis. *Equality, Diversity and Inclusion: An International Journal*, 29(2), 186-198.

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

Powell, M. & Ansic, D. (1997). Gender Differences in Risk Behaviour in Financial Decision-Making: An Experimental Analysis. *Journal of Economic Psychology*, *18*(November 1997), 605–628. https://doi.org/10.1016/S0167-4870(97)00026-3

Publication dedicated to "female entrepreneurship" in 2001-20021 period retrieved from Web of Science Core Collection, access: 31 March 2022

Putnam, R. D. (1993). The Prosperous Community: Social Capital and Public Life. *The American Prospect*, *13*(13), 35–42. https://doi.org/http://www.prospect.org/cs/articles?article=the_prosperous_community

Quaye, D. Acheampong, G. and Asiedu, M. 2015. Gender Differences in Entrepreneurial Orientation: Evidence from Ghana. European Journal of Business and Management, 7(12): 128-139.

Radipere, S. & Dhliwayo, S. (2014). The role of age and business size on small business performance in the South African small enterprise sector. *Problems and Perspectives in Management*, 12(4)

Renzulli, L. A., Aldrich, H. & Moody, J. (2000). Family Matters: Gender, Networks, and Entrepreneurial Outcomes. *Social Forces*, *79*(2), 523–546. https://doi.org/10.1093/sf/79.2.523

Ronen, S. & Shenkar, O. (1985). Clustering countries on attitudinal dimensions: A review and synthesis. *Academy of Management Review*, 10, 435-454.

Roomi, M. A., Harrison, P. & Beaumont-Kerridge, J. (2009). Women-owned small and medium enterprises in England: Analysis of factors influencing the growth process. *Journal of Small Business and Enterprise Development*, *16*, 270–288. https://doi.org/10.1108/14626000910956056

Roper, S. & Scott, J. M. (2009). Perceived Financial Barriers and the Start-up Decision: An

Econometric Analysis of Gender Differences Using GEM Data . *International Small Business Journal* , *27*(2), 149–171. https://doi.org/10.1177/0266242608100488

Rostam-Afschar, D. (2014). Entry regulation and entrepreneurship: a natural experiment in German craftsmanship. *Empirical Economics*, *47*(3), 1067–1101. https://doi.org/10.1007/s00181-013-0773-7

Roth, P. L., Purvis, K. L. & Bobko, P. (2012). A Meta-Analysis of Gender Group Differences for Measures of Job Performance in Field Studies. *Journal of Management*, *38*(2), 719–739. https://doi.org/10.1177/0149206310374774

Sa'ar, A., Sachs, D. & Aharoni, S. (2011). Between a gender and a feminist analysis -The case of security studies in Israel. International Sociology, 26(1), 50–73. https://doi.org/10.1177/0268580910380979

Salfiya, U.M.A.C. & Gunapalan, S. (2013). Push and Pull motivation factors for Women Entrepreneurship. *The International Journal for Economics and Business Management*, EAST Publication, 3(1), p. 83-90.

Sambasivan, M., Abdul, M. & Yusop, Y. (2009). Impact of personal qualities and management skills of entrepreneurs on venture performance in Malaysia: Opportunity recognition skills as a mediating factor. *Technovation*, *29*(11), 798–805. https://doi.org/10.1016/j.technovation.2009.04.002

Saridakis, G., Marlow, S. & Storey, D. J. (2014). Do different factors explain male and female self-employment rates? *Journal of Business Venturing*, *29*(3), 345–362. https://doi.org/10.1016/j.jbusvent.2013.04.004

Schultz, T. (1971). Investment in Human Capital. *Investment in Human Capital*, *51*(1), 24–47. https://doi.org/10.1007/sl0649-007-9105-l

Sena, V., Scott, J. & Roper, S. (2012). Gender, borrowing patterns and self-employment: Some evidence for England. *Small Business Economics*, *38*(4), 467–480. https://doi.org/10.1007/s11187-010-9272-9

Shabbir, A. & Di Gregorio, S. (1996). An examination of the relationship between women's personal goals and structural factors influencing their decision to start a business: The case of Pakistan. *Journal of Business Venturing*, *11*(6), 507–529. https://doi.org/10.1016/S0883-9026(96)00034-1

Shamudeen, K., Keat, O. Y. & Hassan, H. (2017). Entrepreneurial Success within the Process of Opportunity Recognition and Exploitation : An Expansion of Entrepreneurial

Opportunity Recognition Model. *International Review of Management and Marketing*, *7*(1), 107–111.

Shane, S. (2003). *A General Theory of Entrepreneurship: The Individual-Opportunity Nexus*. Edward Elgar. Cheltenham.

Shane, S. & Stuart, T. (2002). Organizational endowments and the performance of University start-ups. *Management Science*, *48*(1), 154–170. https://doi.org/10.1287/mnsc.48.1.154.14280

Shaver, K. G. & Scott, L. R. (1991). Person, process, choice: The psychology of new venture creation. *Entrepreneurship Theory and Practice*, *16*(2), 23–45. https://doi.org/Article

Shaw, E., Marlow, S., Lam, W. & Carter, S. L. (2009). Gender and entrepreneurial capital: implications for firm performance. *International Journal of Gender and Entrepreneurship*, *1*(1), 25–41. https://doi.org/10.1108/17566260910942327

Shinnar, R. S., Giacomin, O. & Janssen, F. (2012). Entrepreneurial Perceptions and Intentions: The Role of Gender and Culture. *Entrepreneurship: Theory and Practice*, *36*(3), 465–493. https://doi.org/10.1111/j.1540-6520.2012.00509.x

Shkedi, A. (2003). *Words of meaning*. Ramot publishing and University of Tel-Aviv.

Senor, D. & Singer, S. (2009). Start-Up Nation: The Story of Israel's Economic Miracle and (2010) Israel Venture Capital Research Center, as reported in Grotsky, D. (2010) "Globalized Clustering", MIT Entrepreneurship Review.

Sullivan, D. M. & Meek, W. R. (2012). *Gender and entrepreneurship: a review and process model*. *Journal of Managerial Psychology* (Vol. 27). https://doi.org/10.1108/02683941211235373

Taber, K. S. (2018). The Use of Cronbach's Alpha When Developing and Reporting Research Instruments in Science Education, 1273–1296. https://doi.org/10.1007/s11165-016-9602-2

Teoh, W. M. & Chong, S.C. (2007). Theorizing a framework of factors influencing performance of women entrepreneurs in Malaysia. *Journal of Asia Entrepreneurship and Sustainability*, 3(2), p. 1-18.

Terjesen, S. & Lloyd, A. (2015). Female Entrepreneurship Index (2015). Global Entrepreneurship & Development Index.

Terjesen, S., Elam, A. & Brush., C. G. (2011). *Gender and new venture creation. Handbook of Research on New Venture Creation*. Cheltenham: Edward Elgar Publishing.

The 2017 Global Startup Ecosystem Ranking. (2017). Startup Genome. Retrieved from https://startupgenome.com/

The 2021 Global Startup Ecosystem Ranking. (2021). Startup Genome. Retrieved from https://startupgenome.com/reports/gser2021

The 2015 United States GEM Report. (n.d.). Retrieved from http://www.babson.edu/Academics/centers/blank-center/global-research/gem/Documents/GEM USA 2015.pdf

Thebaud, S. (2010). Gender and Entrepreneurship as a Career Choice: Do Self-assessments of Ability Matter? *Social Psychology Quarterly*, *73*(3), 288–304. https://doi.org/10.1177/0190272510377882

Treichel, M. Z. & Scott, J. A. (2006). Women-Owned businesses and access to bank credit: Evidence from three surveys since 1987. *Venture Capital*, *8*(1), 51–67. https://doi.org/10.1080/13691060500453726

Unger, J. M., Rauch, A., Frese, M. & Rosenbusch, N. (2011). Human capital and entrepreneurial success: A meta-analytical review. *Journal of Business Venturing*, *26*(3), 341–358. https://doi.org/10.1016/j.jbusvent.2009.09.004

Urbano, D. & Turró, A. (2013). Conditioning factors for corporate entrepreneurship: An in(ex)ternal approach. *International Entrepreneurship and Management Journal*, *9*(3), 379–396. https://doi.org/10.1007/s11365-013-0261-8

van der Zwan, P., Thurik, R., Verheul, I. *et al.* (2016). Factors influencing the entrepreneurial engagement of opportunity and necessity entrepreneurs. *Eurasian Bus Rev* 6, p. 273–295

Verheul, I. &Thurik, R. (2001). Start-Up Capital: "Does Gender Matter?" *Small Business Economics*, *16*(4), 329–345. https://doi.org/10.1023/A:1011178629240

Verheul, I., Thurik, R., Grilo, I. & Van der Zwan, P. (2012). Explaining preferences and actual involvement in self-employment: Gender and the entrepreneurial personality. *Journal of Economic Psychology*, *33*(2), 325–341. https://doi.org/10.1016/j.joep.2011.02.009

Vij, S. & Bedi, H. (2016). Are subjective business performance measures justified?. International Journal of Productivity and Performance Management. 65. 603-621. 10.1108/IJPPM-12-2014-0196.

Wang, Y.-L., Ellinger, A. D. & Wu, Y.-C. J. (2013). Entrepreneurial opportunity recognition: an empirical study of R&D personnel. *Management Decision*, *51*(2), 248–266.

https://doi.org/10.1108/00251741311301803

Wang, X., Cai, L., Zhu, X. & Deng, C. (2020). Female entrepreneurs' gender roles, social capital and willingness to choose external financing. *Asian Bus Management.*

Watson, J. (2002). Comparing the Performance of Male- i and Female-Controlled Businesses: Relating Outputs to Inputs. *Entrepreneurship Theory and Practice*, *26*(3), 91–100. Retrieved from http://search.ebscohost.com/login.aspx?direct=true&db=buh&AN=6749039&site=ehost-live

Welter, F. & Smallbone, D. (2010). The embeddedness of women´s entrepreneurship in a transition context. *Women Entrepreneurs and the Global Environment for Growth. A Research Perspective*, (March), 96–117.

Wiklund, J. and Shepherd, D. (2005). Entrepreneurial orientation and small business performance: A configurational approach, Journal of Business Venturing, 20, pp. 71-91.

Wilson, F., Kickul, J. & Marlino, D. (2007). Gender, entrepreneurial self-efficacy, and entrepreneurial career intentions: Implications for entrepreneurship education. *Entrepreneurship: Theory and Practice*, *31*(3), 387–406. https://doi.org/10.1111/j.1540-6520.2007.00179.x

Wilson, F., Marlino, D. & Kickul, J. (2004). Our entrepreneurial future: Examining the diverse attitudes and motivations of teens across gender and ethnic identity. *Journal of Developmental Entrepreneurship*, *9*(3), 177–197. https://doi.org/10.1016/S0072-9752(10)97001-2

Wu, Z. & Chua, J. H. (2012). Second-Order Gender Effects: The Case of U.S. Small Business Borrowing Cost. *Entrepreneurship: Theory and Practice*, *36*(3), 443–463. https://doi.org/10.1111/j.1540-6520.2012.00503.x

Zacharakis, A. L. & Meyer, G. D. (2000). The potential of actuarial decision models: canthey improve the venture capital investment decision? *Journal of Business Venturing*, *15*(4), 323–346. https://doi.org/10.1016/S0883-9026(98)00016-0

Zhao, H., Seibert, S. E. & Hills, G. E. (2005). The Mediating Role of Self-Efficacy in the Development of Entrepreneurial Intentions. *Journal of Applied Psychology*, *90*(6), 1265–1272. https://doi.org/10.1037/0021-9010.90.6.1265

Zhang, Q. F. & Pan, Z. (2012). Women's Entry into Self-employment in Urban China: The Role of Family in Creating Gendered Mobility Patterns. *World Development*, *40*(6), 1201–

1212. https://doi.org/10.1016/j.worlddev.2011.11.004

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Appendix 1 - Survey of Women Business Ownership

סקר בעלות עסקים

שלום, שמי ברכה עפרוני. במסגרת לימודי הדוקטורט שלי אני עורכת מחקר בנושא בעלות עסקים בישראל. אודה לך אם תשיבי לשאלות הבאות ובכך תתרמי להצלחה בעסקים של נשים נוספות. אין תשובות נכונות או לא נכונות ולכן אבקש שתשיבי בכנות המרבית. אני מודה לך מראש על השתתפותך ותרומתך למחקר.

Hello, my name is Bracha Efroni. As part of my PhD studies, I am conducting research on women business ownership in Israel. I would be grateful if you would answer the following questions and thereby contribute to the success of other women's businesses. There are no correct or incorrect answers, so I ask you to respond with the utmost sincerity. I thank you in advance for your participation and your contribution to the research

באיזו מידה את מסכימה למשפטים הבאים

To what extent do you agree with the following statements

אנא בחרי את התשובה המתאימה לך החל מ"כלל לא מסכימה" ועד "מסכימה מאוד". בטלפון יש לגלול את המסך לצדדים

Please choose the answer that applies to you from "not agree" to "very agree". On the phone scroll the screen sideways

באופן כללי אני נוטה לפעול בדרכים ייחודיות, יוצאות דופן In general, I prefer a strong emphasis in projects on unique, one-of-a-kind approaches rather than revisiting tried and true approaches used before	EO	1
כאשר אני לומדת דברים חדשים אני מעדיפה לנסות את הדרך הייחודית שלי ולא לנהוג כמו כולם I prefer to try my own unique way when learning new things rather than doing it like everyone else does	EO	2
אני נהנית להיות נועזת ולצאת להרפתקאות אל הלא נודע I like to take bold action by venturing into the unknown	EO	3
אני מוכנה להשקיע הרבה זמן ו / או כסף במשהו שיכול להניב תשואה גבוהה I am willing to invest a lot of time and/or money on something that might yield a high return	EO	4
אני משקיעה הרבה בתכנון I tend to plan ahead on projects	EO	5
אני מעדיפה לנקוט פעולה ולגרום לדברים לקרות ולא לשבת ולחכות	EO	6

I prefer to “step-up” and get things going on projects rather than sit and wait for someone else to do it		
בשגרה היומיומית אני מרבה לזהות סביבי רעיונות למיזמים פוטנציאליים	OR	7
While going about routine day-to-day activities, I see potential new venture ideas all around me		
יש לי "ערנות" מיוחדת, רגישות כלפי הזדמנויות יזמיות	OR	8
I have a special “alertness” or sensitivity toward new venture opportunities		
אני יכולה לזהות הזדמנויות יזמיות חדשות גם בתחומים בהם אין לי ניסיון אישי	OR	9
I can recognize new venture opportunities in industries where I have no personal experience		
אני מרוצה מהגידול במכירות	EP	10
I am satisfied with the increase in sales		
אני מרוצה מהגידול ברווחים	EP	11
I am satisfied with the profitability growth		
אני מרוצה מהגידול במספר העובדים	EP	12
I am satisfied with the increase in the number of employees		
אני מרוצה מהביצועים של העסק ביחס למתחרים	EP	13
I am satisfied with the performance relative to competitors		
באופן כללי אני מרוצה מהביצועים של העסק	EP	14
I am satisfied with the overall business performance		
ההשכלה שלי מאפשרת לי להתמודד עם הפעילויות בעסק	HC	15
My education background enables me to handle the business activities		
יש לי ניסיון בשוק העבודה לפני הקמת העסק	HC	16
I have work experience prior to starting the business		
אין לי ניסיון קודם בעבודה הקשורה לעסק שלי	HC	17
I don’t have previous work experience related to this business before I start it		
רכשתי ניסיון ניהולי לפני הקמת העסק	HC	18
I acquired managerial experience prior to starting the business		
אני בעלת השכלה עסקית	HC	19
I acquired business education		
אני בעלת יכולת ניהול פיננסי	HC	20

I am competence in financial management		
יש לי את היכולת לנהל את השיווק	HC	21
I am competence in marketing management		
אין לי את היכולת לנהל עובדים	HC	22
I am not competence in personnel management		
החלטתי להקים עסק משלי על מנת להגדיל את ההכנסות שלי	EGM	23
I decided to make my own business to increase my personal income		
החלטתי להקים עסק משלי לצורך צמיחה והתפתחות אישית	EGM	24
I decided to make my own business to personal growth		
החלטתי להקים עסק משלי כדי להיות הבוסית של עצמי	EGM	25
I decided to make my own business to be my own boss		
החלטתי להקים עסק משלי על מנת להבטיח את עתיד בני משפחתי	EGM	26
I decided to make my own business to secure future for family members		
אין לי מספיק הון לשמר ולהרחיב את העסק	EF	27
I do not have enough capital to preserve and expand my business		
אני נאבקת לקבל אשראי מהבנקים	EF	28
I'm struggling to get credit from the banks		
אני מרוצה מהאמצעים הפיננסיים הניתנים לי ממוסדות אשראי	EF	29
I am satisfied with the financial facilities given by lending institutions		
לתמיכה שאני מקבלת מקרובי משפחה וחברים קרובים יש השפעה חיובית חזקה על העסק שלי	SCF	30
The support from strong ties (spouse, parents, friends and relatives) have a positive effect on my business growth		
לתמיכה שאני מקבלת משותפים עסקיים, עמיתים או אחרים שאינם קרובי משפחה או חברים קרובים יש השפעה חיובית חזקה על העסק שלי	SCF	31
The support from business associates, colleagues, or others, who are not spouses/partners/relatives/family members/friends have a positive effect on my business growth		
אני סובלת מאוד מאפליה מגדרית	SCF	32
I suffer greatly from gender discrimination		
יש לי סיוע עסקי ותמיכה מגופים ממשלתיים	LAF	33
I have business assistance and supporters from government bodies		

אני נהנית מתמריצים ממשלתיים I am beneficiary of government incentives	LAF	34
אין לי אילוצים הנובעים ממגבלות חוקיות, מוסדיות או מדיניות I have no legal, institutional and policy constraints	LAF	35
המס המוטל על העסק שלי סביר The tax levied on my business is reasonable	LAF	36
אני נעזרת ביעוץ עסקי מגורם מקצועי I use business advice from a professional	BC	37
אני נוהגת ללכת להדרכות והשתלמויות בנושאים הקשורים לניהול העסק I tend to go to workshops and seminars on issues related to running the business	BC	38

וכעת כמה שאלות עלייך ועל העסק שלך
And now some questions about you and your business

מהו גילך?39

39 Age

מהי השכלתך? 40

40 Education Level

- יסודי
- תיכון/על תיכונית
- אקדמית תואר ראשון
- אקדמאית תואר שני
- אקדמאית תואר שלישית

מה מצבך המשפחתי? 41

41 Marital status

- נשואה
- רווקה
- גרושה
- אלמנה

42 מה אחוז הבעלות שלך בעסק?

42 Ownership percentage in business

- בעלות מלאה
- שותפה - יותר מ-50% בעלות
- שותפה ב- 50% בעלות
- שותפה בפחות מ-50% בעלות

BC 43 - מהו הוותק של העסק בשנים?

43 What is the number of years since you established your businesses?

44 מהו הסקטור אליו העסק שלך שייך?

44 Sector

- ייצור
- קמעונאות
- שירותים
- שירותי מומחים
- הייטק
- אחר

45 איך הקמת את העסק?

45 How the Business Was Established

- העסק הוקם על ידי
- העסק נקנה
- העסק הועבר אלי בירושה
- אחר

BC- 46 כמה סה"כ **משרות** את מעסיקה בעסק-יש לסמן אפס אם אין עובדים?

46 What is the number of full-time employees in your business?

אם את מעוניינת לקבל את תוצאות הסקר את מוזמנת להשאיר שם וכתובת מייל
If you are interested in receiving the survey results you are welcome to leave a name and email address

שם - _____

כתובת מייל – _____

תודה מקרב לב על שיתוף הפעולה

Thank you very much for your cooperation