

Instituto Tecnológico y de Estudios Superiores de Monterrey

EGADE Business School

Monterrey



Women as Corporate Entrepreneurs: A Systematic Examination of Contextual Factors into Female Intrapreneurship Activity

A dissertation presented by

Linda Elizabeth Ruiz Castro

Submitted to the
EGADE Business School
In partial fulfillment of the requirements for the degree of

Doctor

In

Business Administration

Major in Entrepreneurship

Monterrey, Nuevo León, México, November 12, 2019

ProQuest Number:27671651

All rights reserved

INFORMATION TO ALL USERS

The quality of this reproduction is dependent on the quality of the copy submitted.

In the unlikely event that the author did not send a complete manuscript and there are missing pages, these will be noted. Also, if material had to be removed, a note will indicate the deletion.



ProQuest 27671651

Published by ProQuest LLC (2020). Copyright of the Dissertation is held by the Author.

All Rights Reserved.

This work is protected against unauthorized copying under Title 17, United States Code
Microform Edition © ProQuest LLC.

ProQuest LLC
789 East Eisenhower Parkway
P.O. Box 1346
Ann Arbor, MI 48106 - 1346



EGADE Business School
Tecnológico de Monterrey

Hacemos constar que, en la Ciudad de Monterrey, el día 26 de noviembre de 2019, el(la) alumno(a):

LINDA ELIZABETH RUIZ CASTRO

Sustentó el examen de grado en defensa de la tesis titulada:

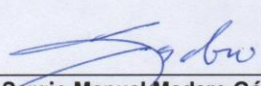
“Female as corporate entrepreneurs: An Examination of contextual influences that lead or deprive them to engage in the activity.”

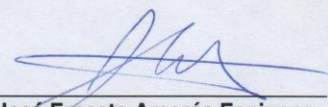
Presentada como requisito final para la obtención del grado de

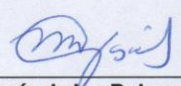
DOCTORA EN CIENCIAS ADMINISTRATIVAS

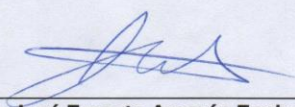
Ante la evidencia presentada en el trabajo de tesis y en este examen, el comité examinador presidido por Dr. Sergio Manuel Madero Gómez ha tomado la siguiente resolución:

Aprobada por unanimidad


Dr. Sergio Manuel Madero Gómez
Director de Tesis


Dr. José Ernesto Amorós Espinosa
Co-Director de Tesis


Dra. María de los Dolores González Saucedo
Lector


Dr. José Ernesto Amorós Espinosa
Director de Programas de Doctorado

Declaration of Authorship

I, Linda Elizabeth Ruiz Castro, declare that this dissertation titled: **Women as Corporate Entrepreneurs: A Systematic Examination of Contextual Factors into Female Intrapreneurship Activity** and the work presented in it are my own. I confirm that:

- This work was done wholly or mainly while in candidature for a research degree at this University.
- Where any part of this dissertation has previously been submitted for a degree or any other qualification at this University or any other institution, this has been clearly stated.
- Where I have consulted the published work of others, this is always clearly attributed.
- Where I have quoted from the work of others, the source is always given. With the exception of such quotations, this dissertation is entirely my own work.
- I have acknowledged all main sources of help.
- Where the dissertation is based on work done by myself jointly with others, I have made clear exactly what was done by others and what I have contributed myself.

Linda Ruiz Castro

Linda Elizabeth Ruiz Castro
11/12/2019

@2019 by Linda Elizabeth Ruiz Castro
All rights reserved
EGADE Business School
Monterrey

Dedication

To God, my husband, daughters, family, and friends for all their support and encouragement in this doctoral process.

Acknowledgements

I would like to express my deepest gratitude to all those have been side by side with me, especially Dr. Sergio Madero and Dr. Ernesto Amorós, who helped me to successfully develop my dissertation process. I really appreciate their time and valuable feedback to my work, as well as their encouragement to the presentation of this work at differences conferences. Similarly, I thank Dr. María de los Dolores González for their valuable suggestions at my thesis presentation.

I also thank my family and friends, especially my husband and my children (Mariana and Liah Natalia) for their support and patience for all those weekends that I could not stay with them and instead I was reading and writing. Thanks, mom, sister, and parents-in-law for their support. To my friends who unconditionally support me in different aspects during this process. To my classmates and also friends for their valuable suggestions, and the long and enjoyable hours we spend at school, especially when we needed extra coffee to continue working.

Finally, I would also like to thank EGADE Business School, Tecnológico de Monterrey and CONACyT for support on tuition and living for this period.

Women as Corporate Entrepreneurs: A Systematic Examination of Contextual Factors into Female Intrapreneurship Activity

By

Linda Elizabeth Ruiz Castro

Abstract

Corporate Entrepreneurship is the process of creating new ventures, products or processes within the corporate umbrella. The role of women in the corporate entrepreneurship activity is scarce. Different studies suggest that their participation may bring positive outcomes to the process. The objective of this thesis is to explore the contextual factors that encourage or limit corporate entrepreneurship activity by women. The present doctoral thesis includes three primary studies and a systematic literature review that highlight the importance of women as corporate entrepreneurs. The first study was based on a qualitative approach, and the objective was to explore the entrepreneurial behavior of women in managerial positions. Results from this study lead to two quantitative studies that used a unique set of elements that were included in a database that allows examining the behavior of women in the activity through different countries. The main variables included in these two studies were organized in three categories: individual (skills, opportunity recognition, fear of failure, and networks), organizational (job satisfaction, income satisfaction, work-life balance satisfaction, and meaningful job) and external variables (National culture and inequality levels). Results suggest that inequality levels negatively affect the activity and national culture does not seem to strongly affect the activity. In the organizational arena, results suggest that having a meaningful job and autonomy are strong determinants for the activity. This thesis has implications for theory and practice.

Index

Chapter 1: Introduction	9
1.1 Introduction and statement of the problem	10
1.2 Research objectives	11
1.3 Structure of the research	12
1.4 Findings overview	15
Chapter 2: Literature Review	18
Women and Entrepreneurship Activities in Established Organizations: A Systematic Literature Review	18
2.1 Introduction	19
2.2 Research Method	21
2.3 Descriptive Results	25
2.4 Discussion and conclusion	38
Chapter 3: Empirical Qualitative Study	41
I Rather Stay!- Women as Corporate Entrepreneurs	41
3.1 Introduction	42
3.2 Literature Review	44
3.3 Methodology	47
3.4 Findings	49
3.4 Discussion and implications	55
3.4 Limitations and Future Research	57
Chapter 4: Empirical Quantitative Study	59
Women as Corporate Entrepreneurs: Work Elements and National Culture Effect	59
4.1 Introduction	60
4.2 Literature Review	62
4.3 Methodology	69
4.3 Results	76
4.2 Discussion and Conclusion	79
4.2 Limitations and Future Research	81
4.2 Appendix	82
Chapter 5: Empirical Quantitative Study	83
Does Gender Matters On Corporate Entrepreneurship? A Cross-Country Study	83

5.1 Introduction.....	84
5.2 Literature Review.....	85
5.3 Methodology.....	92
5.2 Results.....	95
5.2 Discussion and Conclusion.....	107
Chapter 6: Conclusions.....	111
6.1 Summary of Findings.....	112
6.2 Summary of contributions.....	118
6.4 Limitations and Future Research.....	118
References.....	121

Chapter 1: Introduction

1.1 Introduction and statement of the problem

“The only way that you run a company for the duration of the company and of the CEO is to invest in transformation when... the world demands a transformation.”

Indra Nooyi

To achieve specific outcomes, organizations around the world are focused on retaining highly talented people that can contribute to corporate objectives. Among the various relevant factors, some research has emphasized the role of the female labor force (e.g., Lyngsie and Foss, 2017), suggesting that the presence of women as part of a team may bring different perspectives that can lead organizations to more entrepreneurial and innovative outcomes. However, there is a lack of systematic research and knowledge regarding the role of women in many corporate activities. For this reason, scholars have pointed out the need to focus on the behavior of individuals (Corbett, Covin, O’Connor, and Tucci, 2013) and specifically to gain a better understanding of the behavior of women in the corporate entrepreneurship arena (Jennings and Brush, 2013).

Corporate entrepreneurship (CE) is defined as the process of engaging in a new venture creation or engaging in a renewal process within a corporate umbrella (Guth and Ginsbergh, 1990). CE is considered one type of entrepreneurship, and it has been used by organizations as a strategy to obtain diverse organizational outcomes (e.g., Covin and Kuratko, 2010). To do so, organizations may rely on their employees’ capabilities to search for innovative paths that may lead corporations to obtain the profitable growth they desire to have. The creation of projects that evolve into new ventures is called corporate venturing, while the renewal process is linked to new processes, new products or new strategies that can modify or extend the core business of a company (Sharma and Chrisman, 1999).

CE can significantly impact the performance of a company; thus, corporations that rely on it may impact the economy of countries by providing new jobs and creating competitive advantages in certain regions. It is important also to be aware of the external and internal factors that may guide or limit individuals, especially women, engaging in

these types of activities. Some authors have emphasized the role of environmental factors like the national culture (Turró, Urbano, and Peris-Ortiz, 2014); while others (e.g., Klyver et al., 2013) suggest that inequality levels may be the cause of the gender gap in the entrepreneurial area. Internal factors include managerial support, autonomy, and use of rewards, among other factors within corporations (Kuratko, Ireland, Covin, and Hornsby, 2005).

As previously highlighted, despite the progress of research on women as entrepreneurs, only a few studies have focused on understanding the role of women in the corporate world. Most of the extant research studies describe the factors that lead women to leave the corporate world and become independent entrepreneurs (e.g., Heilman and Chen, 2003; Mattis, 2004; Xavier, Ahmad, Nor, and Yusof, 2012), and some others have dedicated their efforts to understanding differences between women and men from a managerial and entrepreneurial perspective (e.g., Adachi and Hisada, 2017; Tietz and Parker, 2012), but the literature still is not conclusive about the role that women are taking in novel projects inside corporations.

Based on the previous evidence, the present research aims to fill the gap by uncovering different elements of CE with regard to the role of women. Building on the existing literature on corporate entrepreneurship and gender and the external factors that may work as strong determinants for the activity, the focus of this is on understanding some primary elements and useful elements, including individual factors (skills, ability to detect entrepreneurial opportunities, networks), organizational characteristics (overall job satisfaction elements), and external environment (national culture and inequality levels).

1.2 Research objectives

The main objective of this thesis is to contribute to the understanding of the influences that may affect the behavior of women engaging in corporate entrepreneurship activities. From an empirical perspective, this research attempts to identify the internal and external factors, like national culture and inequality levels, that may limit or encourage the entrepreneurial

activity of women under a corporation, as well as the personal characteristics that an individual may be perceived to have. Formally stated, the research questions to be addressed are:

- What are the factors from a managerial perspective that limit or encourage women's pursuit of corporate entrepreneurship activity?
- What is the effect of individual factors on women's pursuit of such activity?
- What is the effect of diverse work elements on women's pursuit of such activity?
- What is the effect of national culture on women's pursuit of such activity?
- What is the effect of inequality levels on women's pursuit of such activity?

The present research attempts to contribute to the field of gender and corporate entrepreneurship in multiple ways. The first study is an explorative study using a qualitative and interpretative approach, in which the main intention is to ascertain whether women as middle managers (a key position to detect entrepreneurial opportunities) are pursuing entrepreneurial activities in their workplace and what limitations or motivations they are facing during the process.

Taking this work as a reference, a second study is developed to determine, from an external perspective, whether specific work factors such as job satisfaction or satisfaction with work and personal responsibilities and national cultural elements have an effect on women when engaging in corporate entrepreneurship activities. The third empirical study evaluates whether the efforts of achieving national equality levels have an influence on the activity. This research was inspired by a personal perspective, as well as a call from the experts in the area due to the lack of studies analyzing the behavior of women in the corporate entrepreneurship arena (e.g., Jennings and Brush, 2013).

1.3 Structure of the research

The present doctoral thesis includes three primary studies that highlight the importance of women as corporate entrepreneurs. They also show internal and external factors and

personal perspectives that may affect women's engagement in corporate entrepreneurship activity. Two of the studies used a unique set of elements that were included in a database, making it possible to examine the behavior of women in the activity in different countries. The thesis is structured into six main chapters, each of which has a clear objective to contribute to the literature on gender and entrepreneurship.

The first chapter presents an overall introduction to the subject of corporate entrepreneurship and the role of women and highlights the importance of this subject to the economic development of nations. It also includes the problem statement and the main research questions that have led to the development of this project.

The second chapter includes a systematic literature review focusing on two main elements, the role of women in corporate entrepreneurship activities and the role of women in innovation (within corporations). This chapter concludes by highlighting the main elements that contribute to the development of women as entrepreneurs inside organizations, which serve as a guide to the empirical studies described in the following chapters.

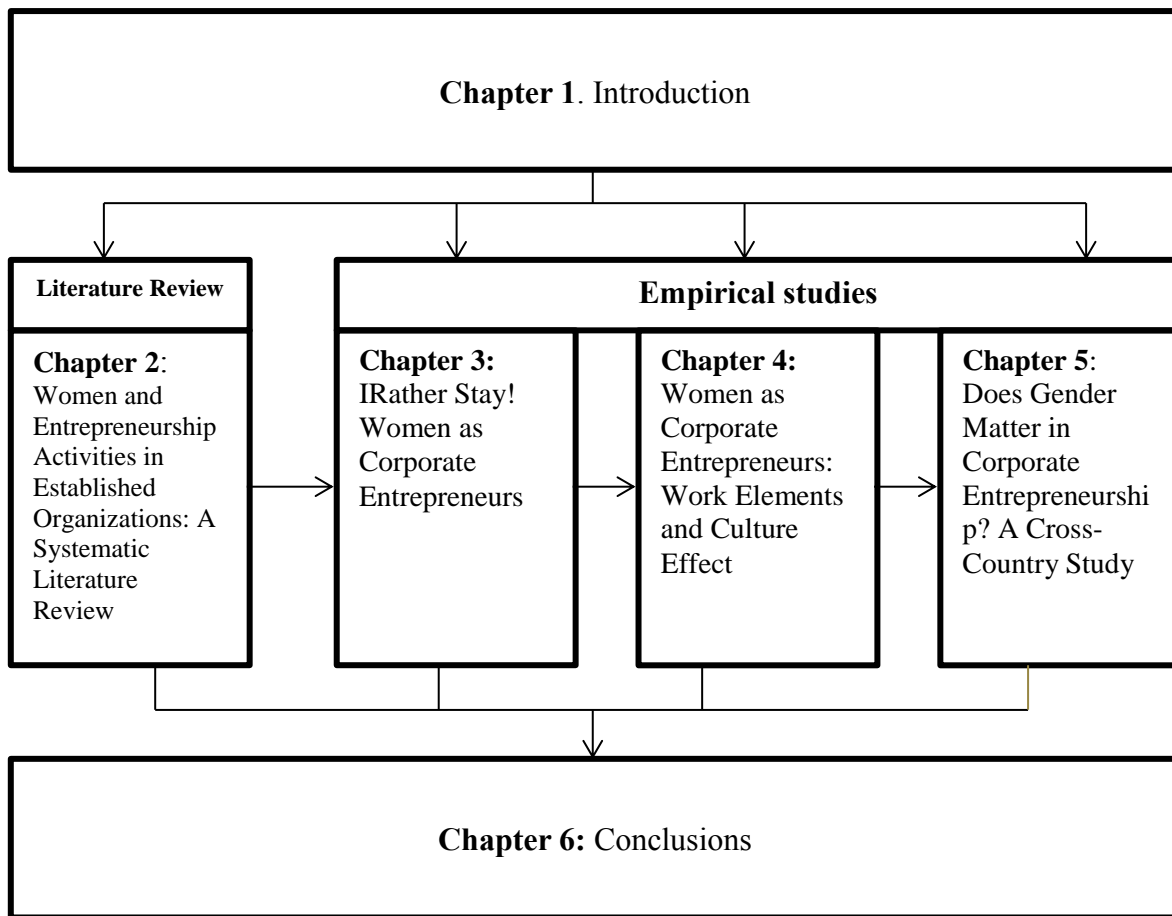
The third chapter presents a qualitative study that follows an interpretative methodology inspired by authors like Kathy Charmaz. In this study, the main objective is to explore the process and the limitations experienced by women in middle management positions when trying to engage in entrepreneurial activities in their workplace. This was the first part of the research project; it serves as the beginning of the investigation, and the inspiration for the other two studies was taken from the results of this study.

The fourth chapter presents a quantitative study using the Global Entrepreneurship Database (GEM) from the year 2013. The 2013 GEM includes a series of questions that evaluate well-being in the workplace, as well as a series of questions linked to the entrepreneurial behavior of employees. The main idea was to test whether the presence of job satisfaction elements will allow women to remain in the organization and develop their entrepreneurial skills within it. For the construction of the database, in addition to the GEM, information from all of Hofstede's national culture dimensions was included. To analyze the information, a hierarchical logit regression was used.

The fifth chapter presents a quantitative study using the Global Entrepreneurship Database (GEM) from the year 2015. The study also includes inequality levels of each country to analyze the influence on CE. The information was extracted from the United Nations database. Finally, for the construction of a unique database, information from Hofstede's studies and NES was included. The aim of this paper was to analyze the effect of inequality levels across regions and national culture on the activity of women as corporate entrepreneurs and to compare the effect between women and men. To analyze the information, a logit hierarchical regression analysis strategy was followed.

Finally, chapter six includes the overall conclusions of this research, as well as implications and limitations of the study and directions of future studies.

Figure 1. Structure of the thesis



1.4 Findings overview

Table 1- Resume of the research studies included in each chapter.

Research paper	Objective	Design/methodology	Findings	Originality/value
Women and Entrepreneurship Activities in Established Organizations: A Systematic Literature Review	Review the current literature in the areas of women and corporate entrepreneurship to identify trends and areas that need to be developed in the research area.	A systematic literature review was followed. Information was gathered from <i>Scopus</i> , <i>Web of Science</i> and <i>Google Scholar</i> primarily. Data was then analyzed and reported with the emphasis in highlighting possible new paths for research.	The role of women has been found to contribute significantly to the entrepreneurial outcomes of organizations. However, the vast majority of the research has emphasized the gender diversity of employees and teams. Moreover, research on women has only focused in their contributions to the results to corporations. Besides, the majorities of authors who have published on these topics used developed countries as a context for their studies and have used quantitative approach for their analysis.	This paper documents and analyzes the current published research studies with the focus on the entrepreneurial behavior of women employees. Specifically, it documents the various methods used to analyze their association, and to emphasize the role of women in organizations when developing entrepreneurial activities. Moreover, it introduces paths for further research.
I Rather Stay!- Women as Corporate Entrepreneurs.	Identify factors that facilitate and limit the development of women as corporate entrepreneurs.	This paper follows a qualitative approach, where 15 semi-structured interviews with female middle managers that are leading or participating in a novel project were analyzed. After the transcription of each interview, codes capturing actions were	The participants highlight the need and importance of leaving a legacy to inspire others (not just women) to engage in these types of activities. For them, it is also important to have autonomy and a passion for challenges. Their limitations are mainly related to	This study reveals important internal organizational factors that contribute to the development of women as corporate entrepreneurs and middle managers. The study gives direction to practitioners and to those interested in retaining highly talented people within

identified. Then using an interactive process between data and literature, patterns were identified.

organizational conditions such as operational duties, excessive processes for approval or rigid guidelines, and resistance to change. Women expect that they can develop professionally by engaging in corporate entrepreneurship activities.

corporations in order to sustain their business. It also contributes to the literature about the problems faced by women in the workplace that lead them leaving the organizations

Women as Corporate Entrepreneurs: Work Elements and Culture Effect

Examine the influences of work characteristics (Autonomy, Job satisfaction, a meaningful job, work-balance satisfaction, and income satisfaction), national culture and the individual propensity of women (skills, fear of failure) toward corporate entrepreneurship activities. The aim is to contribute to the literature of gender and corporate entrepreneurship. Despite the significant roles that women are taken into the corporate ladder, the subject is under researched.

Data was gathered from Global Entrepreneurship Monitor (2013) since offers a unique way to conduct hierarchical logistic analysis to evaluate information from 19 countries among a sample of women under a paid job. This paper also uses information from Hofstede's six dimensions of national culture, to evaluate the context, which can also explain variation on the corporate entrepreneurial activities of women

Results reaffirm the importance of having right conditions at work by pursuing women job satisfaction and providing autonomy. Women's perception of having a meaningful job and having the necessary skills result a strong determinant for the activity. Culture is also an important element to consider since it has a significant effect on the activity.

This paper contributes to the corporate entrepreneurship and gender literature by showing the value of the influence of some work characteristics and personal propensity. National culture may have an effect but not as strong as the elements that surround daily job activities.

Does Gender Matters on Corporate Entrepreneurship? A Cross-Country Study

Analyze the effect of gender in corporate entrepreneurship in several countries, as well as how employees' entrepreneurial skills and networks affect their professional opportunities. The paper

This research used information from the Global Entrepreneurship Monitor (GEM) from the year of 2015, due this database has diverse variables that allow evaluating the entrepreneurial behavior of

The multilevel analysis confirms the significant effect of country's equality levels on corporate entrepreneurship, as well as the important effect of employees' entrepreneurial skills, networks, and

This study articulates how national inequality levels and national cultures may cause men and women to operate differently when engaging in corporate entrepreneurship activities. Thus, it contributes to

also aims to analyze the influence of external factors as inequality levels and culture across countries.

employees. The paper also includes data from the United Nations, National Expert Survey (NES) and Hofstede's studies. The final database includes evidence from 50 countries and it was analyzed using a logistic hierarchical analysis, diverse robustness checks were also included.

opportunity recognition. These characteristics affect in a similar manner to both women and men, but significantly differ among countries; therefore the context is a strong determinant when pursuing entrepreneurial activities inside organizations.

research about gender and entrepreneurship, using contextual factors as determinants. The study also demonstrates the significant value of hiring, retaining and developing employees with entrepreneurial skills (regardless their gender).

Chapter 2: Literature Review

Women and Entrepreneurship Activities in Established Organizations: A Systematic Literature Review

2.1 Introduction

Today's dynamic environment demands that organizations continuously look for ways to increase their organizational performance. They do so by improving their current processes and by looking to explore innovative paths for their business. Examples of such activities include creating new products and practices, engaging in new markets, and/or developing a new business. When organizations engage in activities that are consider novel and are developed into an existing business, this is called corporate entrepreneurship. (Guth and Ginsberg, 1990). Corporate entrepreneurship has been a topic of interest for a number of years, as diverse authors (e.g., Miller, 1983) have argued that engaging in these types of activities can help companies to sustain their corporations, grow their business and create competitive advantages.

Corporate entrepreneurship activity has national relevance for two main reasons. First, companies that rely on such activity may create new jobs, which is beneficial to the company's home country. Second, such activity can help companies and, by consequence, countries to develop competitive advantages by enabling new markets and entire new industries. Corporate entrepreneurship is thus a good and beneficial strategy for emerging economies that desired to compete internationally (Yiu, Lau, and Bruton, 2007). To do so, organizations may foster these activities internally by hiring, retaining and developing highly skilled employees. For such companies, it may be highly important to retain talented workers, regardless of their gender (Briganti and Samson, 2019)

In the corporate world, women are advancing through hierarchical levels and are taking new positions. The roles they take in organizations may be highly appreciated by the entire organization, since various authors have demonstrated that their presence may bring different viewpoints and, by consequence, more entrepreneurial outcomes (Lyngsie and Foss, 2017; Ruiz-Jiménez, Del Mar Fuentes-Fuentes, and Ruiz-Arroyo, 2016). Similarly, other research studies have focused on analyzing diverse teams or organizations. Their outcomes demonstrate that this approach may be highly beneficial to companies, particularly those that desire to have more innovative results (Miller and Trianna, 2009).

However, following a strategy of team diversity may not be the only element to achieve innovative results. The board strategy of the business and a critical mass involvement of women (Torchia, Calabro, and Huse, 2011) may also be relevant to corporations. Authors suggest that businesses need to have a clear strategy oriented to achieving innovation (Chen, Leung, and Evans, 2018; Dezsö and Ross, 2012). Moreover practitioners need to considered the context and cultural believes because the implication to the activity (Kushnirovich and Heilbrunn, 2013; Ritter-Hayashi, Vermeulen, and Knoblen, 2016).

Some other elements to take into consideration are linked to the skill development of the women in organizations, as the years they spend preparing themselves and achieving various degrees may play a key role in women's engagement with corporate entrepreneurship activities in the workplace (Garba and Kraemer-Mbula, 2018). Hatak, Harms, and Fink (2015) suggest that age may be linked to the propensity to engage in these types of activities. It is assumed that older women are more experienced and thus more prepared for such activities.

Besides gender diversity and contextual factors, another stream of scholarship is dedicated to comparing the behavior and performance of women and men. With regard to entrepreneurial orientation inside organizations, women tend to score lower than men, but their score will depend on the women perception of the entrepreneurial orientation of the firm (Fellnhöfer, Puumalainen, and Sjögrén, 2016). Luksyte *et al.* (2018) suggest that differences between women and men are due to the fact that stereotypically innovative behavior is usually associated with men and not women. Thus, women are less likely to participate in positions associated with offering innovative outcomes, that belief may influence men to include more men in their teams and not women, in the opposite side women may include more women to theirs instead of men (Whittington, 2018).

However, women may have some attributes that are associated with the development of entrepreneurial activities, such as providing more autonomy and support to their followers (García Solarte, García Perez de Lema, and Madrid Guijarro, 2015). In another direction, Dohse, Goel, and Nelson (2019) compared the innovative behavior of female owners and managers. Scholars suggest that owners are more likely to introduce

innovation than managers. Those results may depend on several different factors, like the support from managers, rewards, and feedback employees receive in the workplace, along with other elements (Kuratko, Hornsby, and Covin, 2014).

Therefore, in order to achieve a greater understanding of the role of women in corporate entrepreneurship activities, the aim of this review is to provide a report of the current evidence linked to these subjects. More specifically, the following questions are addressed:

- 1- What are the main research directions on the topic of women and entrepreneurial activities inside organizations?
- 2- What are the types of methods used for evaluating this relationship?
- 3- What are the main findings of the current literature?
- 4- What is the context that has been studied in the subject of women and corporate entrepreneurship activities?

This paper is organized as follows. Section 2 included the methods followed to perform the quantitative systematic literature review. Section 3 includes the results of the general data analysis of the papers included. Section four includes a discussion and future paths for research in the area of women and corporate entrepreneurship. Finally, section five presents the conclusion.

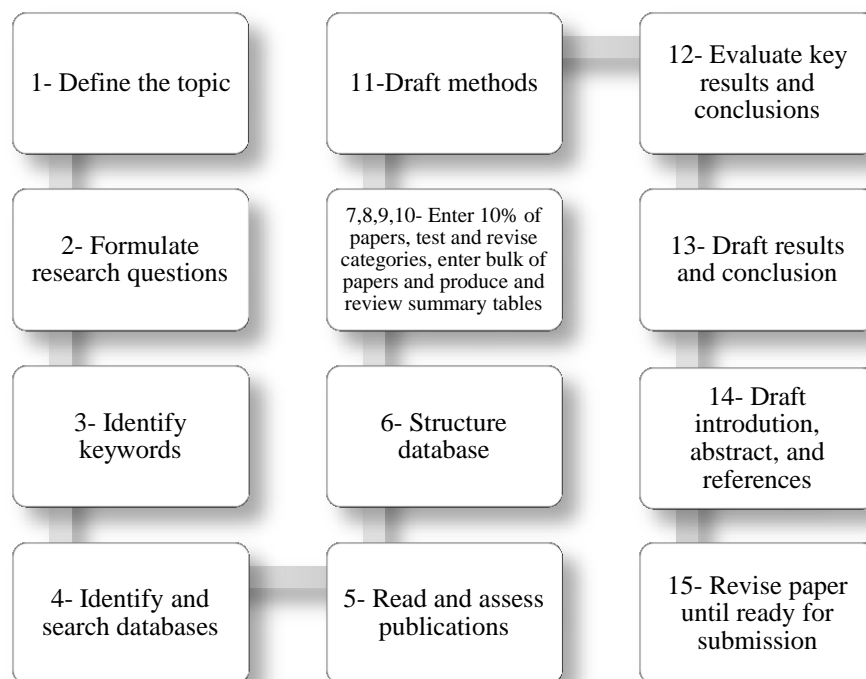
2.2 Research Method

To accomplish the goal of this literature review, a systematic review technique was followed, as this is considered a methodology with a transparent and rigorous approach (Greenhalgh et al., 2004). The research was guided by a quantitative methodology, inspired by the work of Pickering and Byrne (2014). This technique is helpful in identifying and

evaluating the main elements of the association between women and entrepreneurship activities inside organizations and the gap in the literature. By applying this method, the present research attempts to minimize the potential bias that can occur in narrative reviews (Collins and Fauser, 2005).

To conduct this literature review, the fifteen steps suggested by Pickering and Byrne (2014) were followed, as shown in Figure 1 below.

Figure 1. Steps followed to conduct the literature review, adapted from Pickering and Byrne (2014).



2.2.1 Identification of the literature

To identify the relevant information from the research areas of women and corporate entrepreneurship, *Web of Science*, *Scopus* and *Google Scholar* were used as primary search engines. To manage the scope, the year 1990 was taken as a reference for examining studies in this area. This year is relevant because this study takes into consideration the definition of corporate entrepreneurship adapted by Guth and Ginsberg (1990). Due to the scope of the area, this study takes into account studies of women and corporate

entrepreneurship in the area of business, management and women's studies from that year up to now.

Within each database explored, the following key words were used: intrapreneurship and women innovation and women and corporations, innovation and women and entrepreneurship, corporate entrepreneurship, women initiatives at work, women at work and entrepreneurship, women and R&D, entrepreneurial employees, and gender, and women and innovative work. In the search process, Spanish words were also used to expand the scope of the analysis, so the following words were used: *mujer intraemprendedora, mujer innovadora, emprendimiento corporativo y mujer, mujeres como emprendedoras corporativas, empleadas emprendedoras, mujer en el trabajo, intraemprendimiento y género.*

The search included all peer-reviewed and open-access journals. In the collection of studies, publications from proceedings and book chapters were also considered. To select the papers, the titles, key words and abstracts were first reviewed. Based on this initial review, papers were either discarded or retained in the database for the following analysis. To obtain complete information about the retained papers, the introduction, method, results and discussion were subsequently read. To perform the analysis and accomplish the goal of the paper, information regarding the context of the studies, objective or research questions, variables, method of analysis, and results were extracted. Reading this information was necessary to ensure that relevant papers were included.

Reviews or critiques from other studies, incomplete studies, and studies that did not assess any relationship between gender and corporate entrepreneurship were excluded. Those research studies that were duplicated were also excluded (e.g., a paper that had different versions, like a presentation in a conference prior to publication in a journal)

2.2.2 Data analysis

Only three research studies were found when using the key words of women and corporate entrepreneurship or women and intrapreneurship. Therefore, it was necessary to include

words that relate to corporate entrepreneurship, so innovation was used, since this word is considered to have a strong tie to corporate entrepreneurship activities. However, when using the key words women and innovation, Web of Science displayed more than 2812 research studies. Upon review, we realized that several studies included the word innovation as part of their abstract but did not necessarily include innovation as a variable or construct of study. Thus, it was necessary to refine the search by including the areas of business, management and women's studies, social science and engineering. After doing so, 360 articles resulted from this search. We then read the titles of the papers and abstracts and included those that were considered valuable for the research subject.

We followed the same approach with the Scopus database. We finalized the search with 109 possible research articles and then continued by analyzing method, results, and discussion and conclusion. Based on this analysis, we selected 38 articles, as the rest of the papers included areas or analyses that were not in the scope of this literature review; for example, we excluded those within the medical sciences that did not relate to the behavior of women and corporate entrepreneurship activities but rather focused on applying innovative methods to women patients.

We used a different approach with *Google Scholar* than the other databases. Similar words as in the *Web of Science* and *Scopus* searches were used, but for those articles that were considered key for the research we decided to look for the papers were associated with them. Another strategy that was taken into consideration was to read the cited literature of key papers. We did so with the aim of identifying possible research studies that we could possibly omitted.

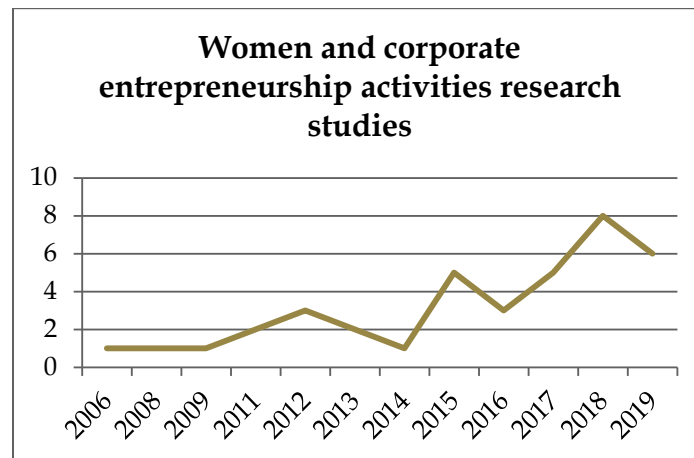
The metadata of the papers examined were organized so that they could then be analyzed; to do so, different approaches were taken. Specifically, the following variables were analyzed: the year of publication of the paper; level of analysis; type of paper; dependent, independent, control and moderator/mediator variables; source of information; method of analysis; region of analysis; and key results. Information was split according to the recommendations from Pickering and Byrne (2014) so that it could be analyzed in the most efficient manner.

2.3 Descriptive Results

2.3.1 Trends and locations

In order to understand and analyze the trend in women and entrepreneurship activities in established organizations, the date of the papers examined was analyzed. Figure 2 illustrates the articles found by year of publication. The full list of papers can be found in table 1. As other authors have suggested (Agnete Alsos et al., 2013), the research relating to gender and innovation or entrepreneurial activities within organizations has only recently begun to increase. Thus, even though the examination covered papers dating back to 1990, it seems that research associated with the focal themes started only 13 years ago.

Figure 2. Number of publications linking women and entrepreneurial practices inside corporations.



Also, it is interesting to note the geographical distribution of the research, as shown in Figure 3. The majority of the studies (51%) were developed in Europe, with Spain leading the list of countries with six papers. Next, 22% of the research studies use data from multiple locations and make comparisons between countries. The research studies from North America, specifically from the USA, represent 16% of the papers included in the analysis. Asia and Africa represent a minority. South America lacks any studies linking women and corporate entrepreneurship activities.

The considerable number of papers linking women and entrepreneurship activities in organizations or innovation is possible due to the different policies that the governments in different regions have made. For example, the most recent report about women, business and the law by World Bank (2019) describes 9 of 10 countries from Europe in the top list of countries with beneficial policies for women. One of the aims of these policies is to protect women in the workplace and provide benefits so they can keep their jobs and contribute to the wellbeing of the family. Therefore, for those economies that do not support women in the workplace, it is hard to find them in roles as innovators or developers of entrepreneurial activities inside organizations.

Figure 3. Geographical distribution of research studies



Table 1. List of papers included in the review

No.	Year of publication	Authors	Title	Journal of publication	Principal findings	No. Citations
1.	2006	Huse, M., & Grethe Solberg, A.	Gender-related Boardroom Dynamics: How Women Make and Can Make Contributions on Corporate Boards	Women in Management Review Now Gender in Management	The role of power needs to be understood with care by women and men. Women and men need to prepare themselves and participate in decision-making processes.	441
2.	2008	Chen, C., & Li, B.	The Work and Non-work Pressure of Female Managers	2008 International Seminar on Business and Information Management.	Work and non-work work variables are related to the innovative work of women.	-
3.	2009	Miller, T., & del Carmen Triana	Demographic Diversity in the Boardroom: Mediators of the Board Diversity–Firm Performance Relationship	Journal of Management Studies	Board gender and racial diversity are positively linked to innovation. Innovation may serve as a mediator of racial diversity and innovation.	666
4.	2011	Østergaard, C. R., Timmermans, B., & Kristinsson	Does a Different View Create Something New? The Effect of Employee Diversity on Innovation	Research Policy	Gender diversity and education are strong predictors of innovation.	507
5.	2011	Torchia, M., Calabrò, A., & Huse, M.	Women Directors on Corporate Boards: From Tokenism to Critical Mass	Journal of Business Ethics	Gender-balance in teams is a strong predictor of innovation.	588

6.	2012	Dezsö, C. L., & Ross, D. G.	Does Female Representation in Top Management Improve Firm Performance? A Panel Data Investigation	Strategic Management Journal	The innovation context is important for women to develop innovative ideas.	742
7.	2012	Galia, F., & Zenou, E.	Board Composition and Forms of Innovation: Does diversity Make a Difference?	European Journal of International Management	Board gender diversity has a positive influence over marketing innovation, but negative on product innovation.	37
8.	2013	Díaz-García, C., González-Moreno, A., & Jose Sáez-Martínez, F.	Gender Diversity Within R&D Teams: Its Impact on Radicalness of Innovation	Journal of Business Ethics	Gender diversity moderates the relation between capability and innovation performance. Gender diversity in TMT has benefits to innovation performance.	34
9.	2013	Foss, L., Woll, K., & Moilanen, M.	Creativity and Implementations of New Ideas: Do Organizational Structure, Work Environment and Gender Matter?	International Journal of Gender and Entrepreneurship	Women's innovative ideas are not implemented to the same degree as men's. Creativity and implementation may be moderated by gender.	69
10.	2013	Kushnirovich, N., & Heilbrunn, S.	Innovation and Conformity: Intersection of Gender and Ethnicity in Hi-Tech Organizations	Journal of Management Development	Gender is not a strong predictor of innovation, but culture is.	14
11.	2015	García Solarte, Monica; Garcia Perez de Lema,	Intrapreneur Organizational Culture and Gender Manager: An Empirical Study on SMES	FAEDPYME International Review	Gender in management has an influence on intrapreneurship	1

		D., & Madrid Guijarro, A.			culture. Women provide more autonomy than men within employees to develop their novel ideas.	
12.	2015	Hatak, I., Harms, R., & Fink, M.	Age, Job Identification, and Entrepreneurial Intention	Journal of Managerial Psychology	Gender has an effect on entrepreneurial intention, even in population over 50 years of age.	72
13.	2015	Akulava, M.	Gender and Innovativeness of the Enterprise: the Case of CIS countries	Working Paper in Belarusian Economic Research and Outreach Center (BEROC)	Having a woman owner or diversified team will have a positive influence on innovation.	1
14.	2015	Galia, F., Zenou, E., & Ingham, M.	Board Composition and Environmental Innovation: Does Gender Diversity Matter?	International Journal of Entrepreneurship and Small Business	Women can contribute to the benefits of pursuing innovation but not the intensity.	14
15.	2015	Fernández, J.	The Impact of Gender Diversity in Foreign Subsidiaries' Innovation Outputs	International Journal of Gender and Entrepreneurship	Gender diversity has a strong effect on product innovation but not on process innovation.	8
16.	2016	Fellnhöfer, K., Puumalainen, K., & Sjögrén, H	Entrepreneurial Orientation and Performance—are Sexes Equal?	International Journal of Entrepreneurial Behavior & Research	Females score themselves lower than men in the entrepreneurial orientation.	37
17.	2016	Ritter-Hayashi, D., Vermeulen, P., & Knoblen, J.	Gender Diversity and Innovation: The Role of Women's Economic Opportunity in Developing	Tilburg University.	Gender diversity is a strong predictor of innovation, but the	10

			Countries		environment plays a significant role	
18.	2016	Ruiz-Jiménez, J. M., & del Mar Fuentes-Fuentes, M	Management Capabilities, Innovation, and Gender Diversity in the Top Management Team: An Empirical Analysis in Technology-Based SMEs	BRQ Business Research Quarterly	Gender diversity moderates the relation between management capabilities and innovation performance.	51
19.	2016	Ruiz-Jiménez, J. M., del Mar Fuentes-Fuentes, M., & Ruiz-Arroyo, M.	Knowledge Combination Capability and Innovation: The Effects of Gender Diversity on Top Management Teams in Technology-Based Firms.	Journal of Business Ethics	Gender diversity moderates the relationship between knowledge combination and innovative capability.	34
20.	2017	Adachi, T., & Hisada, T.	Gender Differences in Entrepreneurship and Intrapreneurship: an Empirical Analysis	Small Business Economics	Significant gender differences when evaluating intrapreneurship and entrepreneurship activities. The gap is significant related to work more than family variables.	17
21.	2017	Lyngsie, J., & Foss, N. J	The More, The Merrier? Women in top-Management Teams and Entrepreneurship in Established Firms	Strategic Management Journal	Gender diversity has an impact on entrepreneurial outcomes. The presence of more women is a strong determinant for the activity.	38
22.	2017	Garcia	Diversity is Strategy: the Effect of	R&D Management	High diversity in	15

		Martinez, M., Zouaghi, F., & Garcia Marco, T.	R&D Team Diversity on Innovative Performance		gender and skills may have negative effects on creativity. The optimal mix of capabilities is necessary.	
23.	2017	Watanabe, C., Naveed, K., & Neittaanmäki, P.	ICT-driven Disruptive Innovation Nurtures Un-captured GDP: Harnessing Women's Potential as Untapped Resources	Technology in Society	Recognizing the skills of women is important for innovation.	9
24.	2018	Luksyte, A., Unsworth, K. L., & Avery, D. R	Innovative Work Behavior and Sex-based Stereotypes: Examining Sex Differences in Perceptions and Evaluations of Innovative Work behavior	Journal of Organizational Behavior	Men receive better evaluations when participating in innovative activities in comparison to women.	10
25.	2018	Na, D. M., Park, S. H., & Kwak, W. J.	The Demographic Faultline Is a New Situational Factor for Team Management: The Effect of Leader Teamwork Behaviors on Support for Innovation	The Journal of Asian Finance, Economics and Business (JAFEB)	Leadership influences innovation, but gender serves as a moderator.	-
26.	2018	Borowiec, K. D. M. A.	Gender and divergent thinking - implications for management executives	Innovation Management, Entrepreneurship and Sustainability 2018	There are differences between the levels of creativity between women and men.	-
27.	2018	Horbach, J., & Jacob, J.	The Relevance of Personal Characteristics and Gender Diversity for (Eco-) Innovation Activities at the Firm-Level: Results From a Linked Employer–Employee Database in Germany	Business Strategy and the Environment	Mixed gender management is positively related to innovation. This relationship depends on the type of company; those that are export-oriented have a greater	12

					propensity to innovate.	
28.	2018	Torchia, M., Calabrò, A., Gabaldon, P., & Kanadli, S. B	Women Directors Contribution to Organizational Innovation: A Behavioral Approach.	Scandinavian Journal of Management	Women contribute positively to organizational innovation, but the decision-making culture is important.	3
29.	2018	Whittington, K. B.	A Tie is a Tie? Gender and Network Positioning in Life Science Inventor Collaboration	Research Policy	Women and men differ in terms of connecting and collaborating.	5
30.	2018	Chen, J., Leung, W. S., & Evans, K. P.	Female Board Representation, Corporate Innovation and Firm Performance	Journal of Empirical Finance	Women board representation is associated with greater innovative performance, but only if the company pursues innovation and creativity.	7
31.	2018	Garba, T., & Kraemer-Mbula, E.	Gender Diversity and Enterprise Innovative Capability The Mediating Effect of Women's Years of Education in Nigeria.	International Journal of Gender and Entrepreneurship	Gender diversity is linked to innovative capability of enterprises, but this relationship is mediated by the years of education of women.	1
32.	2018	Saggese, S., & Sarto, F.	The Role of Women on Board for Innovation: Lessons From the High-Tech Companies	Book Chapter In IPAZIA Workshop on Gender Issues	Female directors have a positive effect on companies' commitment to innovation, but only to	1

					the extent of women's critical mass presence.	
33.	2019	Dai, Y., Byun, G., & Ding, F.	The Direct and Indirect Impact of Gender Diversity in New Venture Teams on Innovation Performance	Entrepreneurship Theory and Practice	Gender diversity is positively linked with innovation performance.	1
34.	2019	Dohse, D., Goel, R. K., & Nelson, M. A	Female Owners Versus Female Managers: Who is Better at Introducing Innovations?	The Journal of Technology Transfer	Women owners have more influence on innovation than women managers.	1
35.	2019	Briganti, S. E., & Samson, A.	Innovation Talent as a Predictor of Business Growth	International Journal of Innovation Science	There are no significant gender differences in scores of innovation.	-
36.	2019	Steyn, R., & De Bruin, G. P	The Structural Validity and Measurement In variance Across Gender of the Brief Corporate Entrepreneurship Assessment Instrument	South African Journal of Economic and Management Sciences	This study develops an instrument to differentiate innovative behavior of women and men.	1
37.	2019	Na, K., & Shin, K.	The Gender Effect on a Firm's Innovative Activities in the Emerging Economies	Sustainability	Female top management is associated with marketing innovation.	-
38.	2019	Singh, M., & Sarkar, A	Role of Psychological Empowerment in the Relationship Between Structural Empowerment and Innovative Behavior	Management Research Review	Women empowerment variables lead to innovative behavior.	-

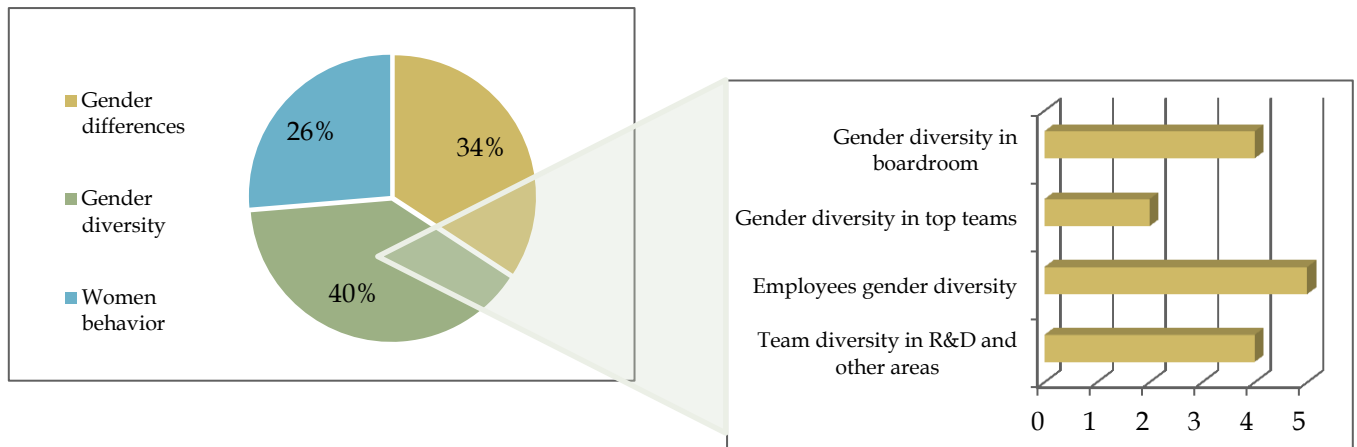
2.3.2 *Principal themes*

Guided by our research questions, all the information was grouped according to the main topics of the examined papers. The majority of the papers focused on analyzing gender diversity in the workplace or in teams. Most of the authors analyzed the implications of having diversified teams in top management (Lyngsie and Foss, 2017; Ruiz-Jiménez and del Mar Fuentes-Fuentes, 2016), the board of directors (Galia et al., 2015; Horbach and Jacob, 2018; Miller and Trianna, 2009) or the population of employees in corporations and some other specific teams (Fernández, 2015; Garba and Kraemer-Mbula, 2018; Østergaard et al., 2011; Ritter-Hayashi et al., 2016). The approach of these papers is to analyze the relationship of diversity or the role of women in teams with specific outcomes like innovation.

The second theme detected is linked to the gender differences in the corporate entrepreneurship activity. In this area, different authors analyzed the role of culture and gender stereotypes linked to innovation (Kushnirovich and Heilbrunn, 2013; Luksyte et al., 2018), the perception of their entrepreneurial orientation (Fellnhöfer et al., 2016), and even special individual characteristics (García Solarte et al., 2015). Adachi and Hisada (2017) paid special attention to family-related variables and their implications for on independent and corporate entrepreneurial activities. In a more specific way, Borowiec (2018) analyzed the creative behavior of women and men and suggested that there are significant differences in the level of creativity between women and men.

The third theme emphasized the role of women or the implication of their presence in the organization and in innovation outcomes. For example, Deszö and Ross (2012) developed a theoretical model to explain how and under what conditions women engage in innovation activities, see figures 4 and 5. Other studies focused on the organizational outcomes due to the presence of women (Torchia et al., 2018) or contextual factors (Chen and Lin, 2008).

Figures 4 and 5. Distribution of the main subjects and the division in the gender studies.



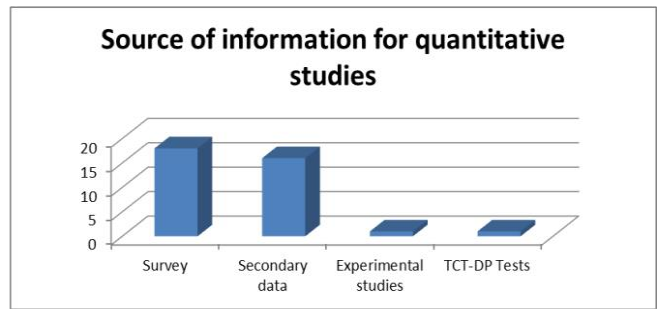
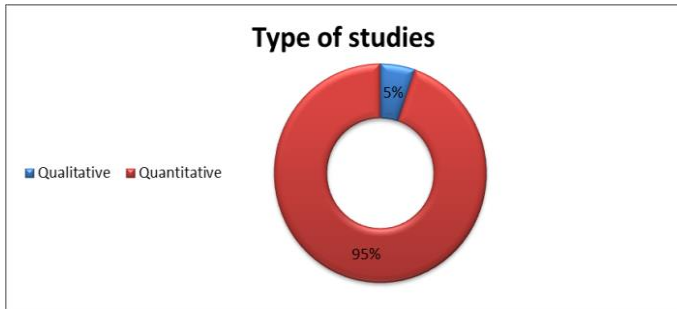
2.3.3 Source and analysis of information

Relevant information was categorized by the approach taken to perform the research, the results of which are detailed in Figures 6 and 7. Only one paper was found to take a qualitative approach, using interviews to gathered information and a narrative analysis to make conclusions.

For the quantitative studies, 50% of the studies gathered information from questionnaires, 44% analyzed information from secondary data, and almost 3% each were related to information obtained from test and experiments. Information from secondary data was mainly obtained from national databases from governmental and nongovernmental organizations. Moreover, the remaining 35% gathered information from international organizations like the World Bank.

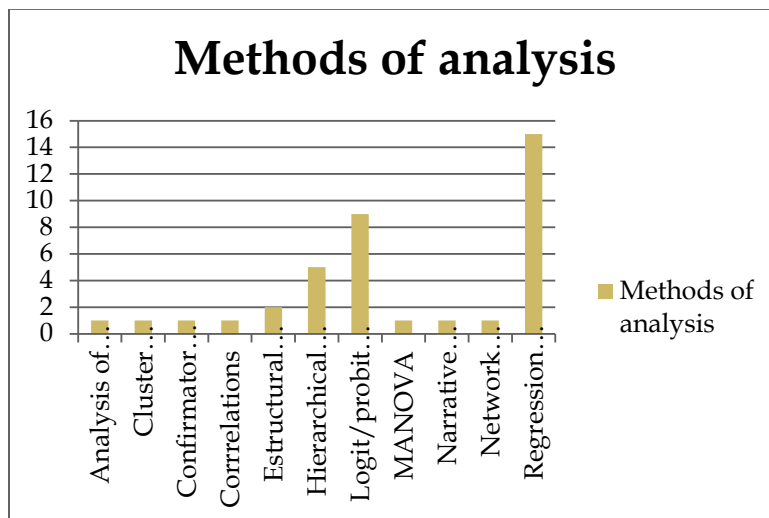
Another important topic to describe is the use of theory in the studies. Only 16% of the studies based their research on specific theories; the rest of the research papers based their studies on the gap from previous studies.

Figures 6 and 7. Distribution of the approach of studies and the sources of information of quantitative studies.



To analyze the information, different methods were used. The majority of the studies used various regressions as a way to analyze information. Authors also used different variables to analyze innovation as an outcome; for example, some of them used innovation or corporate entrepreneurship activity as a binary variable, asking respondents to indicate whether the company introduced new products or processes (e.g., Horbach and Jacob, 2018). Others quantified the expenditures by R&D as a proxy for innovation (e.g., Fernández, 2015) or number of patents (Whittington, 2018). Others used existing scales to measure innovation, where different questions were evaluated by the individuals based on the degree of agreement and disagreement in different sentences (e.g., Luksyte et al., 2018). Figure 8 shows the methods of analysis used in the examined papers.

Figure 8. Methods of analysis



2.4 Discussion and conclusion

Corporate entrepreneurship is an activity that, when adopted as a strategy, can allow organizations to open up possibilities for growing and sustaining their businesses (Kreiser et al., 2019), especially in today's highly dynamic environment. To do so, corporations need to rely on their employees' capabilities and pursue their development regardless of their gender. In recent years, corporations have faced pressure to develop practices for gender inclusion, while at the same time; the academic community has been contributing evidence on the benefits of diversified teams and the role of women for sustaining businesses and achieving complex goals.

Nevertheless, the empirical contributions of previous research still leave opportunities for further exploration. From this standpoint, this paper has focused on exploring through a literature review the role of women in developing entrepreneurial activities inside organizations. Most of the recent studies have focused on understanding women's role as independent entrepreneurs, but their contributions under the corporate umbrella remain unclear. From this perspective, this review is intended to provide opportunities to support theoretical frameworks and paths for empirical studies regarding women and entrepreneurship.

Results from the 38 articles reviewed indicate that in recent years the number of research studies focusing on gender and entrepreneurial activities inside organizations has increased, and most of these are focused on innovation (a concept that is closely linked to entrepreneurship). The majority of empirical studies place emphasis on having gender-diversified teams (e.g., Chen, Leung, and Evans, 2018; Galia and Zenou, 2012) and their implications for having more entrepreneurial outcomes. However, different authors suggest that this factor is not necessarily the only determinant for corporate entrepreneurship activity; rather, context is crucial, along with some other elements like education (Garba and Kraemer-Mbula, 2018).

Most of the publications took place in different countries in Europe, followed by United States. Noticeably absent are studies from Latin America; a possible explanation for this is that this region has high degrees on independent entrepreneurship, so academic

research is focused on studying independent entrepreneurs. Another aspect to consider is that most corporate entrepreneurship activities occur in developed countries, while only a small portion occurs in developing countries. However, the empirical evidence in this review suggests emphasizing the benefits that the inclusion of women brings to organizations and, by consequence, the benefits to countries through the creation of competitive advantages and the creation of jobs.

The source of information and method of analysis are emphasized in the generalization of results; however, we think that more studies from a qualitative perspective are important, since such studies deep into different cases and may bring important insights. Huse and Grethe Solberg (2006) suggest in their narrative analysis that having diversified directors may bring important outcomes to organizations, but the authors highlight that both women and men who take leadership roles have more planning and networking skills and contribute to the decision-making process in the corporations.

Although we found studies that emphasize the role of women, most of them were focused on top teams and boards of directors (e.g., Dezsö and Ross, 2012; Torchia et al., 2011; Torchia et al., 2018); thus, we think that more studies need to focus on the role of women employees and their contributions to the entire organizations, since corporate entrepreneurship is not solely related to top management teams (Kuratko et al., 2005). Another important aspect to highlight is linked to those studies that emphasize tokenism theories and critical mass perspectives (Saggese and Sarto, 2018; Torchia et al., 2011); that is, in some scenarios, it is insufficient to have a single woman on a team, as women may need to have the support of other women in order to contribute to the critical outcomes of organizations.

Women significantly contribute to the development and achievement of critical aspects of organizations, like entrepreneurial activities, but in some ways their contributions at middle and low levels seem to be invisible, at least in academic studies. Undoubtedly, organizations need to continue seeking to have gender-diversified teams, but they should go further in their strategy to pursue a holistic approach, in which different elements need to be considered, such as education, training plans and the innovative culture

and strategy of the corporation. More studies are needed regarding the behavior of women in other levels or organizations, and more qualitative studies are also needed.

Chapter 3: Empirical Qualitative Study

I Rather Stay!- Women as Corporate Entrepreneurs

3.1 Introduction

“I have the hunger to scale up and to set goals and achieve them. If I have my own business, I am at the top; then what? (I mean, I do not want that), I have the hunger to contribute so I can move up.” (Participant 15)

During the last decade, companies around the world faced a turbulent environment characterized by uncertainty and the need to continue growing (World Economic Forum, 2018). To mitigate this situation, corporations offer novelty products and services and implement innovative and highly productive processes that can meet the needs of domestic and international customers. As a result, companies are making efforts to retain the most talented and creative people to sustain their business; thus, there has been progress in women’s participation (International Labor Organization, 2018). However, according to Bosma *et al.* (2015), only 2% of women that work in corporate environments are considered to be working in innovative projects (corporate entrepreneurs). Interestingly, the participation of women as new venture creators has been increasing during the last few years, and their participation has almost achieved gender parity in specific regions, such as Latin America (Global Entrepreneurship Monitor, 2018).

Within the corporate context, women show signs of corporate progression by taking different hierarchical positions and expanding their workplace occupations. For example, there are some regions such as the USA where women hold approximately 50% of the middle-management positions (International Labor Organization, 2015). However, only a few achieve top management positions. Middle managers are placed in privileged positions because they know the needs of the lower levels owing to their awareness of daily operations (Huy, 2001). They are also able to identify and manage resources needed, and serve as motivators to followers to identify entrepreneurial activities (Kuratko *et al.*, 2005). Having more women in these positions would highlight whether they are able to develop their entrepreneurial skills within the corporate umbrella as they do as venture creators.

Even though scholars’ interest in corporate entrepreneurship has been covered different subjects, some areas are still underdeveloped, such as the emphasis on individuals and how they engage in these activities (Corbett *et al.*, 2013). Despite some existing

conventional ideas (in some regions) that women are not expected to take risks (Maxfield et al., 2010), others have called for specific attention to studies about women's behavior as corporate entrepreneurs (Jennings and Brush, 2013), and some suggest that they can bring different perspectives to organizational teams and, therefore, contribute to more entrepreneurial outcomes (Lyngsie and Foss, 2017).

This study aims to explore the way in which women engage in corporate entrepreneurship activities by studying the determinants and limitations faced by those that hold middle-management positions. A qualitative methodology is undertaken because it allows deep understanding of the participants' perceptions and experiences. According to Maxwell (2009), this type of methodology allows researchers to understand meanings, processes, contextual factors, and the development of causal explanations, which are useful for this investigation.

This study contributes to the literature by identifying the factors that facilitate and limit the development of women as corporate entrepreneurs. Recommendations to practitioners and policymakers are provided to create an organizational environment that can help corporations motivate women to continue developing innovative projects and, as a consequence, contribute to the sustainability of the organizations that they represent.

3.2 Literature Review

The literature on corporate entrepreneurship highlights two important aspects. For Guth and Ginsberg (1990), these relate to the creation of new businesses inside existing corporations and to the goal of transforming current organizations. More recently, Covin and Kuratko (2010) emphasized that organizational transformation is associated with renewal, during which an organization can implement new processes, introduce new products or services, and find innovative ideas that improve organizational outcomes.

Previous research studies in this field have suggested that social environment is relevant when conducting entrepreneurship activities (e.g., Kuratko *et al.*, 2014; Parker, 2011; Sehora and Theerapatvong, 2010). Parker (2011) showed that a male-dominated environment prevails most often in corporate entrepreneurship activities. However recent evidence suggests that the presence of women in organizational teams is related to more entrepreneurial outcomes (Lyngsie and Foss, 2017).

Adachi and Hisada (2017), who assume that men and women have the same skills, suggested that women participate in corporate entrepreneurship activities less often than men do. They also suggest that work conditions, such as part-time jobs, can positively contribute to the development of these actions by women. Other authors, who compared women corporate entrepreneurs with women with own businesses (e.g., Brodsky, 1993; Tietz and Parker, 2012), suggested that women feel more confident developing entrepreneurship in an organizational context and may be motivated by economic rewards and recognition for their talented work.

Different from this result, various scholars have conducted ample research about why women leave corporate environments and engage in entrepreneurial activities. They suggest that women desire to leave such environments owing to frustration for not achieving what they want (Weiler and Bernasek, 2001) and difficulties in balancing work and family responsibilities (Marlow and Carter, 2004; Mattis, 2004; Walker and Webster, 2007). However, when they engage in traditional entrepreneurial activities, they face other difficulties, such as working long hours in order to sustain the business, thus causing work and family conflicts (Heilbrunn and Davidovitch, 2011; Rehman and Azam Roomi, 2012).

Performing a gender-blind research, Hornsby *et al.*, (2002) suggested that factors other than appropriate rewards trigger entrepreneurial activity. These relate to the perception of support from superiors for new ideas and having access to all the resources needed to implement opportunities discovered. These authors also suggested that personal characteristics, such as the desire to take risks and tolerance of failure, are also relevant to the entrepreneurial activity. Usually, women have been stereotyped as lacking these characteristics (e.g., Maxfield *et al.*, 2010).

Career development scholars have emphasized that one of the reasons why women contribute to advancement through hierarchical positions in organizations is entirely related to the ability to demonstrate entrepreneurial initiatives (Mainiero, 1994). Some other factors that contribute to the development of women in corporations are associated with the training and education they received as well as challenging assignments (Tharenou, 2001); however, only few women achieve senior positions (Catalyst Organization, 2018).

Martiarena (2013), who was concerned about differences between employees who propose and implement innovative ideas, including regular employees and independent entrepreneurs, performed an analysis using data from the Global Entrepreneurship Monitor. The author suggested that corporate entrepreneurs are more risk-averse than regular entrepreneurs and possess fewer entrepreneurial skills because they are less adept at detecting an opportunity when compared to regular entrepreneurs. However, Douglas and Fitzsimmons (2013) argued that some corporate entrepreneurs remain within an organization not because lack of skills but because they have not found adequate business opportunities to develop or because they have not gathered enough capital or experience to run a separate enterprise.

A hierarchical position also may be critical in identifying entrepreneurial opportunities; for example, middle managers who know the needs of lower levels by being aware of demands from the whole operation are more sensitive to detect innovative ideas (Huy, 2001). Middle managers can also motivate lower-level workers to look for innovative ideas and further implementations by allocating resources (Kuratko *et al.*, 2005; Rouleau, 2005). However, being stuck in middle-management positions for a long period may

demotivate women about their perception of their job. They may perceive a lack of support from superiors in their professional development (Wentling, 2003).

Patterson and Mavin (2009), though, argued that women still face masculine environments, which can limit their performance. Because women need to adapt to this type of environment, they likely face additional barriers. One reason behind these barriers is the historical role prescribed by gender. In short, women are expected to take care of children and perform “easy” jobs, whereas men are responsible for more difficult, strategic employment.

Vázquez-Carrasco, Lopez-Perez, and Centeno (2012), who evaluated women and men in high- and middle-management positions, concluded that no clear evidence of prejudice against working women existed, at least in these types of positions. They suggested ignoring gender differences and focusing on the capabilities of men and women in certain positions. More recently, Khan (2016) suggested that females are more visible and take on more challenges at work, which could be related to women leading more innovative projects and taking positions that earlier were dominated by men, such as in operations or engineering.

While some authors suggest that corporate environments are supportive for women and others describe that a male-dominated environment is challenging for them, there are not enough studies focusing on the process of women engaging in corporate entrepreneurial activities. Understanding the factors that contribute to motivate and limit women to engage in corporate entrepreneurship activities is critical for organizations. Taking this into consideration, we would like to address the following questions: 1) How are women engaging in corporate entrepreneurship activities in middle-management positions?, 2) What are their main drivers to continually seek new opportunities?, and 3) What are the limitations that women face in an ever-changing workplace?.

3.3 Methodology

Quantitative studies are one of the best-known methodologies to address corporate entrepreneurship and women at work (e.g., Adachi and Hisada, 2017; Parker, 2011). Many researchers used Global Entrepreneurship Monitor data (e.g., Roper and Scott, 2009; Urbano and Turró, 2013) to develop their research. However, there is a need to deeply understand the limitations, meanings, actions, and processes of female middle managers as corporate entrepreneurs. We use a qualitative approach because it clarifies and describes implications that may be impossible to recognize with a quantitative approach.

Sample

We purposely selected women in middle-management positions who work in medium- and large-sized companies with different seniorities. We performed semi-structured interviews with 15 females whose mean age was 35 years. Each interview lasted one hour, on average, and was recorded. To protect their identities, prior to the interview, participants signed an agreement with detailed guidelines.

Data analysis

To identify the main issues and drivers in corporate entrepreneurship processes and activities, we asked the participants questions such as: How do you detect an opportunity to develop a project? How do you select projects to work on? How do you make sure your ideas are implemented? How do you involve people working on specific projects? How do you manage the resources you need?

In Table 1, we show the type of company where participants work and the kind of projects they are working on.

Table 1. Projects Developed by Participants

Participant	Type of industry	Working Area	Projects
1	Food Industry	Business Intelligence Manager	New Market
2	Technology development	Innovating Entrepreneurship Managers	New Venture
3	Manufacturing	Engineering Manager	New Process
4	Manufacturing	Human Resource Manager	New Strategy
5	Die Casting	Sustainability Manager	New Process
6	Manufacturing	Supply Chain Manager	Innovating Area and Internal Female Associations
7	Food Industry	Lactic Supplier Manager	New Product
8	Food Industry	R&D Manager	New Product
9	Manufacturing	Operations Manager	New Process
10	Retail	Brand Manager	New Market
11	Manufacturing	Outsource Coordinator**	New Venture
12	Manufacturing	Sales Manager	New Strategy
13	Die Casting	Human Resource Manager	New Facility
14	Food Industry	Human Resource Manager	New Employee Strategy
15	Financial Services	Compliance Manager	New process

** Workers in all positions are called coordinators. As a policy, the company is against hierarchies.

To start the analysis, we first transcribed each interview and then began the process of coding. During the first round of coding, we captured words that expressed actions, as suggested by Charmaz (2014) and Saldaña (2016), to interpret action codes for initial analysis. In the second step, we developed a memo for each coded interview. Using an interactive process, we continuously reverted to research questions, codes, and memos to stay focused on the analysis and the interpretation of information and to provide a high-quality understanding of the phenomena. In the next step, we performed a second round of coding to look for patterns and to establish categories of information.

After establishing categories, we sorted them and began the process of connecting, comparing, and mapping them using Atlas Ti. To validate our interpretations, we set up different discussions with a second scholar. The goal was to perform a more robust interpretation of information by reviewing codes, categories, and their links. As described by Brinkmann and Kvale (2015), this dialogical intersubjective method allows reciprocal critics of the scholars by interpreting data.

3.4 Findings

Triggers

A recurring subject in the interviews was the factors that lead to the identification of innovative ideas, the process participants followed to implement them, as well as the implications that emerged during the process. Our interviewees were focused in their respective areas, they attempted to help the people they led and attempted to make the organization notice their different approaches. Women in these positions also hope that their behavior can filter down to other generations of coworkers, or even family. They also expect that these initiatives can promote them to higher positions. In the next paragraphs, we describe these concepts and integrate them into the triggers that stimulate corporate entrepreneurship activities.

Legacy

Legacy refers to a consistent desire to transmit experience or achievements in different ways, such as by getting involved in peoples' needs, helping them solve problems, or achieving better work conditions and outcomes. We interpreted these desires as types of legacies. The first type of legacy refers to the desire to cooperate by helping people and the organization they represent in several ways, primarily by achieving exceptional outcomes.

a) Cooperation

Some authors (e.g., Jaskiewicz, Combs and Rau, 2015) suggested that legacy refers to the desire to motivate future generations to engage in entrepreneurial activities. In our case, we interpret legacy as the desire to transmit ideas or to eliminate barriers so that other individuals can achieve their anticipated results. In this research, this cooperation has its origins in the empathy participants feel for the needs of employees, coworkers, followers as well as the general needs of the organization. Some participants also mention that following this behavior allows them to grow professionally inside the organization.

“I try to do my tasks in the most efficient way and without making mistakes. I like to leave time to support others, to look into processes, or to look ideas for better processes, I feel this approach has helped me to remain in the organization and to grow as professional.” (Participant 15)

b) Role models

Interviewees also wanted to serve as role models for their co-workers and for their family. They wanted to communicate that if they are innovating and achieving organizational recognition, others in the organization can do the same as well. They wanted to inspire others by their behavior.

“The beauty of this or what I like is that I can be an example (for the rest of the organization), so they can say “Look at Mary. She gets in here, she has done this,

and now she is there, and she does this. I feel, that's wonderful. I have this opportunity, and I hope to continue on this path.” (Participant 10)

c) Paradigm breakers

For other participants, the opportunity to define better strategies for an organization means that others look at them as “paradigm breakers,” disrupting norms and presenting innovative ideas. One of the participants expressed (when looking to open a new market for the organization she represents).

“I make sure that the rest of the people look at all that we are doing, not with the aim to justify my work, but I want them to see that there is an area that is trying to break a paradigm; it takes a lot of effort but it is getting clear, what we can do and achieve [...]. The company where I work has been selling products to the mass—same products, same people, but I want them to see that the organization can have special customers.” (Participant 10)

Zest for challenges

In the field of entrepreneurship, studies suggest that women’s internal motivations to create businesses include the desire for independence (Stanger, 1990) or self-realization (Carter *et al.*, 2003). We encountered other elements associated with women looking to create and run new projects in an organization, such as a passion for work, self-efficacy, and a need for recognition.

a) Passion for work

Based on this research, women seem to enjoy their work, which justifies their goal of developing themselves in their respective occupations. They accomplish this by exceeding organizational expectations and by improving their own work abilities.

“I think I am very organized; it helps me. I think I have that characteristic that differentiates me from others; I mean I am very intense in everything. When I am working, I work a lot; I enjoy it; I work very intensely. In this way, I have had the opportunity to build good teams and work on good projects” (Participant 14)

“I like to innovate a lot and not be behind other co-workers. I like to perform new things and propose novel ideas (to the rest of the organization).” (Participant 9)

b) *Self-efficacy*

Self-efficacy is related to the generalized belief that a person is capable and able to perform different tasks (Bandura, 1997). Participants believe they can detect and implement new opportunities because they know their respective areas of expertise and have the necessary skills and experience.

“I consider myself innovative and creative. I am always seeking new opportunities. I have to say that I am smart. I look for ideas because I have the vision of where we should go as a company” (Participant 12).

c) *Need for recognition*

In this section, it is described how women have been recognized because of their work outcomes. It is important to mention that the evaluated environments are dominated by male managers. In such an environment, women may believe that to be recognized, they need to do something extraordinary and show results to the entire organization.

“There are some times that in a project I am not even the leader, I am just staff, but I like that everybody sees what I am doing. We have a web page where this organization uploads news. So then we have news from all our partners around the world, from all locations. So, we are more than 20,000 employees. I try that at least two news items from Mexico, from my area, are there. Then, for example, with the new process line, I like that these news items are there on the portal because everybody can see it.” (Participant 9)

Autonomy

Autonomy refers to the discretion they feel regarding how and when to respond to job demands. This is related to achieving goals in the way they feel is best for them and the team they lead. It means that they do not have to follow specific requirements or perform particular tasks. As other authors have suggested, autonomy usually leads to opportunity-seeking behaviors (Ireland *et al.*, 2003), which can result in innovative outcomes. In this study, participants constantly refer to autonomy as a way of generating change or to renew current processes. At the same time, they see it as an advantage to combine their personal and professional responsibilities, therefore they do not perceive the need to leave and become an independent entrepreneur.

“Almost always, I set my own goal, and almost always, in this way, I receive a lot of freedom to act. It came to my mind to develop an app for cellphones, and now we are developing it, so I do not tell him (leader). I am just developing it by later present him results.” (Participant 11)

Limitations

Organizational conditions

In this section, we describe factors that impede women from executing potential entrepreneurial activities. Although participants described different types of limitations, such as work and family conflicts, this study only presents what the participants said about limitations to the recognition, evaluation, or implementation of an entrepreneurial idea. Three main factors that discourage women from engaging in entrepreneurial activities were detected.

Need for approval

Women can obtain institutional approval to develop their ideas if they can demonstrate potential benefits to an organization. Often, the initial barrier is the need to convince their

immediate superior. Since such women work at middle-management positions, they do not have complete self-sufficiency to get the resources needed without approval. Women in these positions are also in need to follow rigid procedures or rules that cannot be easily modified.

“You need to have a lot of justification for what are you going to do and what are you going to obtain, so you can ask for resources. Look I want to develop this, and I will have these benefits; therefore, I need this. But the needs should be very well supported.” (Participant 13)

“Occasionally, the process is very bureaucratic. You present an idea, and the director tells you “let’s wait”, because it is not the right moment. After many such occasions, at the end, you are discouraged to create new things.” (Participant 5)

Change resistance

This section illustrates the limits that organizations place on women entrepreneurs. Participants frequently describe corporate cultures that hesitate to accept new ideas. They express that it takes time for the rest of the team to accept new ways of doing something.

“One of the main difficulties is the resistance to change or to accept new things that come from a different area. I think it has been one of the main challenges.” (Participant 14)

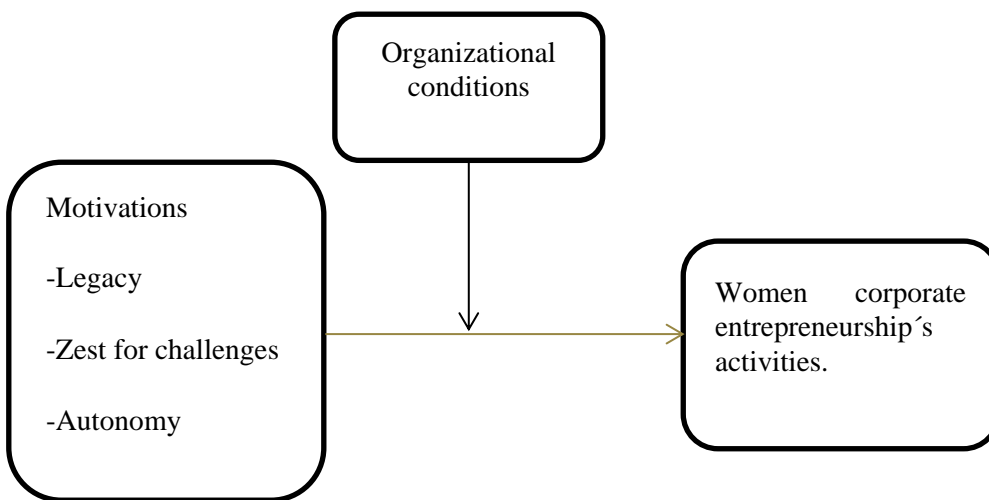
Daily operational tasks

They also note that daily tasks may leave little time for the development of new projects. Because women work between operational and strategic positions, their priority is to ensure that the current process performs well and achieves its operational goals. Some managers mentioned they have noticed that they need to dedicate time to ideate strategies; however, sometimes the pressure from key stakeholders to receive certain outcomes can be very high.

“I am executing more than planning or innovating; daily operational tasks consume the major part of my time.” (Participant 4)

Based on the findings of this research, Figure 1 shows a summary of the elements that provide an incentive to innovate. In addition, women expect that their practices as corporate entrepreneurs lead them to achieve better hierarchical positions, so they prefer to stay under a corporate environment instead of leaving and create new ventures. This environment (organizational conditions) also plays a crucial role because it can either constrain or encourage these types of activities.

Figure 1. Representation of motivations and limitations faced by female corporate entrepreneurs.



3.4 Discussion and implications

An increasing number of women as new venture creators have been motivated by different reasons to leave the corporate world owing to conflicts in the workplace or the inability to balance work and family responsibilities (Walker and Webster, 2007). In addition, the number of women as middle managers has been rising in some regions (International Labor Organization, 2015). In this paper, participants talked about the underlying motivations and

also about the obstacles they face during the corporate entrepreneurial process. These elements are relevant to organizations focused on retaining highly talented and entrepreneurial people with the aim to be more innovative and competitive.

Critical factors that inspire female middle managers to undertake innovative activities are related to the legacies they are trying to build. Because most of the study participants work in environments dominated by men, this result is associated with the need to “leave a mark” that can inspire and drive other women to propose and implement innovative ideas. In this study, women perceive that they have achieved success by having an entrepreneurial behavior and believe that this differentiates them from others. This behavior, in their opinion, can lead them to more challenging and higher hierarchical positions.

Equally important, participants referred that motivators are also linked to the perception of contribution they can make to the organization based on the skills they have developed through their career. They also refer to having the skills to run separate businesses if they desire, but prefer to remain where they are owing to the challenging tasks they currently have. This perception may oppose the findings from Martiarena (2013), who suggests that corporate entrepreneurs may have fewer skills to detect opportunities compared with business owners. In addition, autonomy, i.e., the perception of feeling empowered or with freedom to manage their responsibilities as they desire, plays an important role and is also a determinant in engaging in entrepreneurial activities.

This study also uncovered organizational restrictions that limit entrepreneurial initiatives, despite their ability to act independently, and while this situation can be determined by a resistance to change attitude, women are limited primarily because of their need for constant approval and the need to follow rigid guidelines and also because of the daily operational workload. Despite the potential for criticism about their innovations and their search for resources, which may be linked to corporate culture, they are determined on implementing their innovative ideas.

Other scholars' results that are similar to the results of this study (e.g., Huy, 2001; Kuratko *et al.*, 2005) suggest that middle managers are in a position to identify

entrepreneurial activities. Hornsby *et al.*, (2002) propose that entrepreneurial progress is linked to managerial support, autonomy, work recognition or reinforcement, time to develop ideas, limited daily tasks, and helpful organizational procedures, which we could see in the interviewees, but the difference may be linked to the motivation to leave a footprint that can inspire others. Despite Weiler and Bernasek (2001), who suggest women face difficult conditions when in the workplace, participants in this study show determination to solve those problems and continue with their legacy.

When exploring the field of working women in general, we agree with DeMartino and Barbato (2003) that women often work not by necessity but because they like to and because it allows them to develop a professional identity and a successful career. This study contributes to the literature of corporate entrepreneurship and women at work by further investigating women's motivations to engage in entrepreneurial activities.

Triggers and limitations for such activities are different from those in traditional entrepreneurial fields, and they are usually related to a desire for independence and flexibility and a need to balance work and family. Better corporate policies, promoting a more innovative environment and professional development will motivate the discovery of opportunities and their implementation.

3.4 Limitations and Future Research

Because most research regarding corporate entrepreneurship activities has not focused on gender, we cannot compare ours with those of other authors. However, we described similar findings as those analyzed across genders. To expand its scope, future research in this work area might include an evaluation of female middle managers by other members of the corporate hierarchy. Furthermore, a quantitative study could be performed to measure women's entrepreneurial outcomes. A study could also be performed to measure workers' entrepreneurial activities as a mediation to achieve better hierarchical positions. A comparative study between the entrepreneurial interests of male and female middle managers would also be a useful addition to the research. This study, however, has

limitations. Although purposive sampling provided us with a large quantity of subjects, we had difficulties finding women in middle-management positions who were developing innovative projects. Although we would have preferred female subjects from different sectors, most worked in manufacturing plants.

Chapter 4: Empirical Quantitative Study

Women as Corporate Entrepreneurs: Work Elements and National Culture Effect

4.1 Introduction

Corporate entrepreneurship refers to the development of new products or services within an existing corporation. It also refers to the process of renewal of existing processes (Guth and Ginsber, 1990). The concept has been the subject of study for decades, and it is gaining attention among researchers. This may be because different organizations are relying on corporate entrepreneurship as a strategy to diversify their portfolios. Consequently, organizations obtain substantial growth in terms of diverse outcomes like revenues, efficiency, and market growth. Furthermore, this type of entrepreneurship is also relevant to the economy of a country, because the benefits may be linked to the creation of jobs, new products and new services that may lead to competitive advantages for organizations and regions.

Even though the literature highlights the importance of corporate entrepreneurship for organizations and regions (e.g., Yu, Lau, and Bruton, 2007). It has not further investigated the relationship between gender and corporate entrepreneurship. Some authors have suggested that the participation of women in corporations is associated with more entrepreneurial outcomes (Lyngsie and Foss, 2017). Women may possess some abilities that could be related to entrepreneurial activities inside organizations, such as transformational leadership (Powell, Butterfield, and Bartol, 2008). Thus, organizations that have a minority of women may be sacrificing the opportunity to have more and more robust entrepreneurial activities.

The reasons that organizations may be lacking in the participation of women are numerous. Some authors suggest that women decide to leave the workplace due to dissatisfaction or work-life imbalance. For example, research has shown that many women independent entrepreneurs felt frustrated over not achieving better positions in their previous jobs (Hewlett, 2002; Mattis, 2004; Patterson and Mavin, 2009). The perception of feeling satisfied in the workplace may lead women to remain in their paid jobs and encourage better overall job performance (Judge et al., 2001). However, there is not clear evidence regarding whether certain organizational practices that lead to high job satisfaction will also lead women employees to engage in more corporate entrepreneurial

activities. A few studies positively relate to job satisfaction and innovation (e.g., Shipton et al., 2006), but they do not make any distinction with regard to gender.

Moreover, aware of the external factors that may influence the behavior of individuals within the organizational context, scholars in the entrepreneurship field describe the importance of taking into consideration elements of national culture (e.g., Kreiser et al., 2010). National culture plays an essential role, since it is assumed that different groups of people around the world have their own sets of beliefs or norms that differentiate them from each other. Thus, it is probable that different contexts assign different meanings to corporate entrepreneurship activity, and how women are seen as professionals. For Turró, Urbano, and Peris-Ortiz (2014), national culture is a key element when evaluating corporate entrepreneurship activities.

In the present study, we aim to analyze diverse influences experienced by women in the workplace and national cultural aspects that may lead them to engage in corporate entrepreneurship activities. This study takes into consideration individual characteristics, different elements at work (autonomy, satisfaction, perception of having a meaningful job, satisfaction with work-life balance) and all the cultural factors developed by Hofstede's studies (1980, 2010). Information was mainly taken from the GEM database (2013), since it offers a unique opportunity to evaluate individual factors and organizational elements related to corporate entrepreneurship across various countries.

This paper will help those leaders in charge of organizations to better understand the diverse elements of work and specifically the job satisfaction that may be linked to pursuing entrepreneurial opportunities in the workplace. It can also contribute to understanding the influence of national culture in corporate entrepreneurship activity, especially for those innovative companies that desire to establish their business in other countries. This paper also contributes to the literature by exploring a combination of different elements at work, individual factors, and national culture with regard to corporate entrepreneurship.

4.2 Literature Review

Corporate entrepreneurship is defined as entrepreneurial activity that occurs in an organizational context (Antoncic and Hisrich, 2001). In line with this definition, organizations that are considered entrepreneurial usually combine their business sustainability efforts based on reducing costs with efforts to engage in innovative activities. This strategy, by consequence, can bring high organizational performance (Hornsby et al., 2009) and even improve the company reputation (Shu et al., 2019). The entrepreneurial activity may involve introducing new products and processes that can bring about renewal in the organization or developing additional businesses (Guth and Ginsberg, 1990) that can help the organization to meet the constant changes in market demands.

In the same vein, Morris et al. (2008) describe entrepreneurial corporations as entities that can detect and exploit new business opportunities. Individuals within these organizations play an essential role when corporations desire to engage in the activity. Diverse elements merge and emerge to give them the elements they need to be able to pursue corporate entrepreneurship. As this is the case, Zahra (2015) proposes that corporate entrepreneurship should be viewed as a process through which individuals enhance creativity, intelligence, knowledge creation, and the possibility of seeing things in a new way.

Employees that engage in this process must be immersed in developing their entrepreneurial skills (Liu et al., 2018) and must work under organizational conditions that stimulate the activity. Organizations may provide autonomy to employees, which in turn allow them to seek freely for entrepreneurial opportunities without many restrictions (Burcharth et al., 2017; Lumpkin et al., 2009). Corporations may also work with employees to enhance job satisfaction (Kuratko et al., 2005) and achieve better outcomes. These elements, combined with an appropriate context, are important when developing entrepreneurial activities under the corporate umbrella.

Entrepreneurship is considered to be an activity that can bring prosperity and economic development to countries. In line with this idea, diverse authors have dedicated

studies to traditional entrepreneurship and its impact on the economic country indicators (e.g., Aparicio et al., 2016; Stuetzer et al., 2018). However, some economies (usually the most developed ones) show signs of higher corporate entrepreneurship activities than independent entrepreneurship (Stam, 2013), so corporations that are pursuing such activities are also contributing significantly to the economic development of countries.

A critically important factor to consider when analyzing the impact of entrepreneurship on economic growth is related to the set of beliefs, culture, and values with regard to entrepreneurship (Audretsch and Keilbach, 2008), since these are considered to have a significant impact on the activity. Cultural and social values may be particularly relevant, as recent studies (see Lyngsie and Foss, 2017) show that the presence of women in higher hierarchical positions within an organization brings about more entrepreneurial outcomes. Moreover, authors like Stam (2013) suggest that the most innovative outcomes usually result from entrepreneurial employees.

Hypothesis development

Interested in the effects of different elements at work on corporate entrepreneurship, Lyngsie and Foss (2017) dedicated their efforts to analyzing the structure of top management teams and entrepreneurial outcomes. They concluded that having gender-heterogeneous teams may result in more corporate entrepreneurial activities, because women may bring different perspectives that can be used in the development of these types of activities. However, the positive effect may be weakened by the presence of many women in the organization. These findings lead to the idea that many elements at work, such as creativity and innovation, interact when looking for extraordinary performance (Hunter et al., 2012).

Thus far, few studies in the area have explored entrepreneurial behavior and determinants within organizations from a gender perspective, differentiating the roles of women and men. Adachi and Hisada (2017) note that women tend to engage less in corporate entrepreneurial activities in comparison with their male counterparts. The authors explain that this finding may be related to women having different interests. This subject was also addressed by Brindley (2005), who notes the differences in risk aversion (an

essential element for entrepreneurship); that is, women decide to take risks in specific activities that may differ from those of men.

It is possible that women engage less in corporate entrepreneurial activities due to self-perception regarding a lack of skills or risk tolerance (Langowitz and Minniti, 2007; Maxfield et al., 2010). However, scholars of gender in management studies propose that women possess important skills that may lead them to engage in entrepreneurial activities, such as showing an effective leadership style (Eagly, 2007) and more collaborative behavior in the workplace (Rosener, 1990), which are essential for corporate entrepreneurship.

In summary, the ability to detect opportunities is considered one of the most important elements for entrepreneurs (Ardichvili et al., 2003). Taking risks (Antoncic and Hisrich, 2003; Wood et al., 2008), which is also associated with the fear of failure, is also important for the development of entrepreneurial activities inside organizations. Based on these elements, the following hypotheses are explored:

H1: The more women perceive that they have entrepreneurial skills, the more they will engage in corporate entrepreneurship activities.

H2: The more women tolerate the fear of failure in order to take risks, the more they will engage in corporate entrepreneurship activities.

Satisfaction in the organizational environment

Organizational outcomes like innovation and constant growth may depend on entrepreneurial behavior that occurs within organizations. Antecedents and work satisfaction of employees are important elements to consider when promoting entrepreneurial behavior. Job satisfaction can be defined as a positive evaluation made by an individual regarding their job responsibility (Janssen, 2001). There is a considerable amount of literature linked to job satisfaction with different organizational outcomes, including like customer satisfaction (Fu and Deshpande, 2014), commitment (Firth et al., 2004), effectiveness (Koys, 2001), and job performance (Judge et al., 2001).

To determine the effect of job satisfaction on corporate entrepreneurship, Kuratko et al. (2005) analyzed different organizational antecedents like managerial support and rewards (pay and promotions), proposing that these elements, among others, may lead to employee job satisfaction, and by consequence individuals may show more entrepreneurial behavior. Supporting this thesis, Akehurst et al. (2009), Antoncic and Antoncic (2011), and Van Wyk and Adonisi (2012), suggest a direct relationship between job satisfaction and entrepreneurial behavior within organizations.

In the same vein of job satisfaction, analysts have attempted to study differences between women and men and the job satisfaction experienced. Some argue that women may tend to feel more satisfied in the workplace than men (Gazioglu and Tansel, 2006). Even when referring to the income they receive (Crossman and Abou-Zaki, 2003), women and men may feel satisfied for different reasons. For example, women tend to feel more gratified when they have a good relationship with their coworkers or superiors and find the job meaningful (Konrad et al., 2000), while men tend to consider economic benefits as an important element to feel satisfied with their job (Donohue and Heywood, 2004).

A more recent study pays particular attention to job satisfaction and individual characteristics. Lee et al. (2011) suggest that organizations should make efforts to provide an excellent organizational environment so that individuals who are interested in developing their innovative skills can do so without any restriction. The authors argue that low job satisfaction may lead such entrepreneurial employees to leave the workplace and look to develop their skills on their own or with other organization. Thus, organizations that are interested in entrepreneurial outcomes should seek to retain talented people and support them so they can make their jobs significant, experience job satisfaction, and, by consequence, show entrepreneurial initiative.

Based on this, the following hypotheses are presented.

H3: The more women feel satisfied with their jobs, the more they will engage in corporate entrepreneurship.

H3a: The more women feel their jobs are meaningful, the more they will engage in corporate entrepreneurship.

H3b: The more women feel satisfied with their income, the more they will engage in corporate entrepreneurship.

When studying women entrepreneurs, an element that regularly emerges is related to the desire to balance work, and family responsibilities, especially among those that have children or need to take care of elderly parents. Schindehutte et al. (2001), argue that when women find it challenging to balance these needs, they try to pursue new ventures in order to have more flexibility than they can find in the workplace. Even though they may find entrepreneurship to be a solution for their needs, Kirkwood and Tootell (2008) suggest that becoming an entrepreneur may not be the solution for balancing work and family duties. It may help to alleviate some problems (Kim and Ling, 2001) but lead to other challenges, depending on the individual context (McClelland et al., 2005).

Organizations focused on retaining talented people who can help to achieve exceptional outcomes have implemented different practices that may enable employees balance work and personal life. Research in the field suggests that when such a balance is obtained, employees may feel more satisfied with their job (Mas-Machuca et al., 2016) and by consequence show extraordinary results. Consequently, providing benefits to support and balance personal and work responsibilities may be related to general positive work outcomes (Beauregard and Henry, 2009), like active participation of employees in the workplace (Lambert, 2000), commitment (Aryee et al., 2005), and the possibility to develop their skills. Also, having these types of benefits will enable organizations to take advantage of women's skills, usually associated with communication, coaching skills, and transformational leadership (Burke and Collins, 2001), which may lead to positive entrepreneurial outcomes.

In line with this, the following hypothesis is present:

H4: The more women perceive a balance between work and family responsibilities, the more they will engage in corporate entrepreneurship.

Autonomy

Autonomy has been considered as one of the motives for individuals' desire to leave the corporate world and create and run new ventures. Usually, this term has been used as a synonym for freedom and independence to develop activities as the best convenience. In his research, Lange (2012) suggests that job satisfaction among self-employed individuals is strongly related to the autonomy they experience. Other studies have also analyzed autonomy and independence as motivators of the new venture creators, agreeing that these variables are strongly associated with the desire to become an entrepreneur (e.g., Shane et al., 2003; Edelman et al., 2010).

Regarding entrepreneurial activity within organizations, scholars usually find that organizations that provide opportunities to employees to work independently and with freedom are more likely to engage in entrepreneurial activities (Lumpkin et al., 2009) because they promote the opportunity-seeking behavior of employees (Ireland et al., 2003). This element is also associated with specific outcomes associated with the entrepreneurial activity, like innovation performance or strategic tasks to promote competitiveness (Brock, 2003; Lassen et al., 2006). Interestingly, other authors associate autonomy with diverse elements like employee well-being (Chirkov et al., 2003) and engagement and career commitment (Littman-Ovadia et al., 2013).

Based on this, the following hypothesis is presented:

H5: The more autonomy women experiences on the job, the more they will engage in corporate entrepreneurship.

External factors

National Culture

There has been an increasing interest in understanding the determinants that enable activities related to entrepreneurship, such as creativity and innovation that come from within and outside organizations. Diverse authors in the area have focused on

understanding the context in which those activities are developed, in order to determine the impact on the entrepreneurship activity (Garrett and Holland, 2015; Lumpkin and Dess, 2001; Wiklund and Shepherd, 2005). However, the same context that motivates an entrepreneur to look for more business opportunities to develop can also work as an inhibitor of such activity (Welter and Smallbone, 2011). The influence of normative beliefs from societies may a reliable predictor.

Culture has been defined by Hofstede (1980, 2011) as “the collective programming of the mind that distinguishes the members of one group or category of people from others.” Based on this definition, different behaviors can be interpreted in various ways, such as how women and entrepreneurship are viewed in the workplace. Hofstede included different dimensions that have been analyzed in different contexts. Kreiser et al. (2010), who analyzed individualism, power distance and uncertainty avoidance, conclude that these elements influence the entrepreneurial behavior of organizations negatively.

Other studies in the area have focused on culture and innovation (a concept that is linked to corporate entrepreneurship). For Van Everdingen and Waarts (2003), the cultural dimension of long-term orientation is positively linked to innovation activities, while uncertainty avoidance, masculinity, and power distance have adverse effects. Regarding power distance, Efrat (2014) suggests that other variables may interact with this dimension to diminish the negative effect. Efrat also advises that masculine cultures tend to have a substantial effect on innovation.

The dimension of indulgence is the newest addition to Hofstede’s studies; this was based on the studies of Michael Minkov’s World Values Survey (WVS) (Hofstede et al., 2010). There are not yet any conclusive studies analyzing this dimension in terms of entrepreneurship or a related element; however, a recent study performed by Prim *et al.* (2017) suggests a positive association between the dimension of indulgence and innovation.

In the traditional entrepreneurship field, Hechavarria et al. (2017) conclude that national culture acts as one of the most influential factors that impact women entrepreneurs. In those countries with high masculinity levels, women may find it more problematic to

engage in entrepreneurial activities because of the traditional roles they are expected to take (Saffu, 2003). Based on this evidence, the following hypotheses are proposed.

H6: Hofstede's cultural dimensions influence women's corporate entrepreneurship activities.

H6a: High individualism cultures have a negative effect on women's engagement in corporate entrepreneurship.

H6b: High power distance cultures have a negative effect on women's engagement in corporate entrepreneurship.

H6c: High uncertainty avoidance cultures have a negative effect on women's engagement in corporate entrepreneurship.

H6d: Masculine cultures have a negative effect on women's engagement in corporate entrepreneurship.

H6e: High indulgence cultures have a positive effect on women's engagement in corporate entrepreneurship.

H6f: Long-term orientation cultures have a positive effect on women's engagement in corporate entrepreneurship.

4.3 Methodology

The presented hypotheses were tested using information from the Global Entrepreneurship Monitor database (GEM) from 2013. GEM introduced in that year a series of special questions related to wellbeing at work and the entrepreneurial behavior of employees (Amorós and Bosma, 2014). A total of 51 countries participated in this survey; however, information from only 26 countries was used, as only these countries described individuals engaging corporate entrepreneurship activities and answered wellbeing questions. The final representative sample consisted of 7478 women from 19 countries who are working either part-time or full-time in a corporation. These countries were the ones that included full

information about elements at work, culture, and corporate entrepreneurship. In this study, the variables of culture from Hofstede's studies were used to complement the country-level data for analysis.

The authors then performed a hierarchical logistic regression, in which a two-level model was assessed. This type of analysis is well suited for data information that is nested into countries, as is the case in this study. The information was analyzed by running models from the simplest to the most complex, in which all variables are included. Intra-class correlation (ICC) was calculated to support the use of hierarchical analysis. The present paper also reports -2Log likelihood as an indicator of model fit.

Dependent variables

Consistent with the theoretical focus, the dependent variable is a binary variable indicating whether or not a woman has engaged in corporate entrepreneurship activities during the last three years. This variable introduced by GEM is a good proxy to analyze employee entrepreneurial behavior. Different authors have also used it similarly when evaluating entrepreneurial activity (e.g., Urbano and Turró, 2013). The variable is coded as 1 if a female employee has been active as a corporate entrepreneur and 0 otherwise.

Independent variables

The independent variables come mainly from the GEM database and Hofstede's studies. Since the main goal is to evaluate the impact of culture and work elements on the entrepreneurial activity of women within paid jobs, individual characteristics were also included in the study, because of their importance when studying individual behavior.

Skills: This variable refers to whether individuals perceive that they possess the right skills and experience to develop a business (GEM, 2013). It is defined as a binary variable, with 1 indicating that the participant perceives having the right skills and 0 otherwise. Different authors like Koellinger et al. (2013) have used this variable.

Fear of failure: This variable describes whether fear of failing prevents an individual from starting a business. GEM (2013) operationalizes it as a binary variable, where 1 indicates that the fear of failure prevents an individual from starting a business, and 0 indicates that it

does not. This variable has also been studied by diverse authors like Koellinger et al. (2013).

Autonomy: This variable refers to whether an individual perceives that she has control to perform her assigned job tasks or responsibilities. The job control or autonomy variable has been emphasized by different authors as important when evaluating diverse organizational outcomes (e.g., Mauno et al., 2006). This variable has also been considered as one of the main constructs when evaluating corporate entrepreneurship (Hornsby et al., 2002). GEM (2013) operationalized the variable with the statement “I can decide on my own how I go about doing my work” measured on a scale from 1 (strongly disagree) to 5 (strongly agree).

Meaningful job: This variable describes whether individuals consider their job as important to them. GEM (2013) used the following sentence to operationalize it: “The work I do is meaningful to me.” It was assessed using a scale from 1 (strongly disagree) to 5 (strongly agree). This question is also part of the Job Diagnostic Survey developed by Hackman and Oldham in 1975.

Income. This variable refers to individuals’ satisfaction with their income (1 = strongly disagree; 5 = strongly agree). GEM (2013) assessed it by asking participants their degree of satisfaction with their current income from work. Income was also tested as part of the affective responses to the job dimensions developed in the Job Diagnostic Survey (Hackman and Oldham, 1975).

Work-life balance (time). This variable refers to the perception of having sufficient time to perform one’s professional and personal responsibilities (operationalized on the same 1-5 scale as above).

Work-life balance (needs): This variable refers to the perception of having the ability to balance work and personal responsibilities (operationalized on a 1-5 scale).

The work-life balance items were initially used by Valcour (2007), who originally developed a 5 item-scale to assess the overall satisfaction with the work-life balance.

Cultural variables

The following variables are the result of diverse studies developed by Geert Hofstede (1980); they reflect the distinct characteristics that distinguish the members of different countries (Hofstede, 2011).

Power distance: This dimension refers to a culture's acceptance that power is not equally distributed; higher values indicate more hierarchical countries.

Individualism: This variable refers to the degree of interdependence of individuals; higher values indicate more individualistic countries, while lower values indicate more collectivistic countries.

Masculinity: This concept refers to the degree of success or achievement that society pursues; higher values indicate more masculine countries, while lower values indicate more feminine countries, whose societies focus more on care for others and quality of life.

Indulgence: For this variable, higher values indicate societies that focus more on fun and enjoyment, while lower values indicate more restrictive and norm-bound cultures.

Uncertainty avoidance: For this variable, higher values indicate societies that try to avoid unknown situations.

Long-term orientation: For this variable, higher values indicate societies that tend to look for new to solve necessities in order to be prepared for the future.

Control variables

Age: Age is included as a continuous variable ranging from 18-86. This variable has been analyzed as an important predictor of entrepreneurial behavior; Bosma and Levie (2010) have suggested that most entrepreneurial individuals are of middle age.

Education: This variable ranges from 0-6, where 0 indicates pre-primary education, 1 indicates primary education on first stage of basic education, 2 indicates lower secondary or second stage of basic education, 3 indicates upper secondary education, 4 indicates post-secondary non tertiary education, 5 indicates first stage of tertiary education and 6

indicates second stage of tertiary education. Individuals with higher education may tend to use their knowledge to detect opportunities.

% GDP growth: This variable refers to the percentage of annual GDP growth by country. This variable is used as a control variable since higher innovation or rates of entrepreneurial activity are usually associated with economies that are constantly growing (Reynolds, 2010).

% Female employment: This refers to the percent of female labor force participation between ages 15-64.

Descriptive statistics

Table 1 shows the descriptive statistics of the sample. On average, about 33% have upper secondary education, almost 1% have no education, 4% have primary education, 13% have lower secondary education, 13% have post-secondary education, and 32% declares have the first stage of tertiary education. About 74% of our population is working full time and 25% is working part-time (retired individuals, students, homemakers, and self-employed individuals are not considered in the sample). The mean age is around the 39's. The highest proportion of the population falls between 30-39 years of age (27%), while the second highest group is from 40-49 years of age (25%). About 31% of women perceive having the needed skills to engage in entrepreneurial activities, and about 51% indicated that they are not afraid of failure.

In an organizational context, 65% somehow agree that they have the autonomy needed to accomplish their tasks, while 17% do not, the remaining neither agree nor disagree. Approximately 45% of women consider the job they perform to be important or meaningful to them. Around 60% are satisfied with the time they have to balance work and personal responsibilities. Around 64% feel that they have the ability to balance work and personal responsibilities.

At the country level, individualism, masculinity, power distance, and indulgence are approximately located at the middle level of the used scale from 1-100. The mean for

individualism is 49; for masculinity, 43, for power-distance, 57; for indulgence, 53; for uncertainty avoidance, 59; and for long-term orientation, 4. Table 2 shows the correlations between the studied variables.

Table 1. Descriptive Statistics

Variable	Mean	Std. Dev.	Min	Max
Dependent				
Female Intrapreneur	0.1711	0.376	0	1
Individual level	-----	-----	-----	-----
Education	3.610	1.271	0	6
Age	38.894	11.858	18	80
Fear of failure	0.4851	0.499	0	1
Skills	0.396	0.489	0	1
Organizational level	-----	-----	-----	-----
Autonomy	3.593	1.287	1	5
Meaningful Job	4.095	1.060	1	5
Income	3.568	1.194	1	5
Work satisfaction	3.760	1.163	1	5
Work-life balance (time satisfaction)	3.568	1.194	1	5
Work-life balance (ability satisfaction)	3.716	1.090	1	5
Country level	-----	-----	-----	-----
Culture-Masculinity	53.370	21.216	19	100
Culture-Individualism	42.893	25.465	8	89
Culture-Indulgence	53.007	27.754	16	99
Culture-Power Distance	57.622	21.222	33	100
Culture-Uncertainty avoidance	59.060	22.294	30	99
Culture-Long-term orientation	44.184	21.933	13	100
% GDP Growth	2.9273	2.5169	-1.13	11.34
%Female at work	39.916	22.242	5.14	73.6

Table 2. Correlations

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
1- Female CE	1																		
2- Age	0.020	1																	
3- Education	0.177	-0.121	1																
4- Skills	0.123	-0.040	0.075	1															
5- Fear of failure	0.008	0.047	0.024	-0.131	1														
6- Autonomy	0.061	0.001	0.058	0.124	-0.103	1													
7- Meaningful job	0.104	0.139	0.110	0.072	-0.028	0.318	1												
8-Income	0.049	-0.017	0.074	0.036	-0.087	0.224	0.263	1											
9-Work satisfaction	0.070	0.114	0.084	-0.001	-0.037	0.269	0.526	0.430	1										
10-Work-Life balance time satisfaction	-0.031	0.032	0.003	0.002	-0.060	0.230	0.263	0.326	0.380	1									
11-Work-life balance ability satisfaction	0.002	0.031	0.008	0.043	-0.065	0.252	0.316	0.290	0.381	0.650	1								
12-Culture- Indulgence	-0.032	0.051	-0.114	0.025	-0.104	0.126	0.156	0.117	0.103	0.091	0.144	1							
13-Culture- Masculinity	-0.062	0.035	-0.066	-0.032	-0.002	-0.050	-0.101	-0.045	-0.049	-0.037	-0.089	0.074	1						
14-Cuture- Invidualism	0.031	0.170	0.007	-0.124	0.051	-0.086	0.033	-0.022	0.076	-0.017	-0.046	0.421	0.427	1					
15- CulturePowerdistan	-0.013	-0.129	-0.012	0.111	-0.020	-0.005	-0.070	-0.013	-0.082	-0.008	-0.004	-0.489	0.081	-0.763	1				
16- Culture- Uncertainty avoidance	0.111	0.035	0.088	0.092	0.038	-0.035	0.182	-0.031	0.110	-0.016	0.033	-0.377	-0.403	-0.347	0.218	1			
17-Culture-Long term orientation	-0.018	0.035	0.083	-0.181	0.080	-0.077	-0.195	-0.077	-0.108	-0.090	-0.149	-0.585	0.197	-0.021	0.117	-0.179	1		
18-% GDP Growth	-0.142	-0.166	-0.128	0.066	-0.088	0.038	-0.168	-0.036	-0.166	-0.023	-0.062	-0.348	0.102	-0.434	0.398	-0.209	0.301	1	
19- %Female at work	-0.010	-0.125	-0.013	0.065	0.015	-0.052	-0.138	-0.101	-0.103	-0.025	-0.049	-0.630	-0.376	-0.798	0.613	0.435	0.138	0.389	1

4.3 Results

Table 3 shows the results of the multilevel regressions. Model 1 refers to the null model, or an empty model. The intra-class correlation resulted in .1253. According to Aguinis et al. (2013), ICCs over 0.05 suggest individual variation across countries; since a higher correlation was obtained, there is sufficient evidence to pursue multilevel modeling. Model 2 includes all individual variables as potential factors to promote corporate entrepreneurship among women; as stated previously, age and education were used as control variables. Per previous research studies, there is evidence that the perception of having the right skills is one important factor for women to pursue such activity. Contrary to the traditional entrepreneurship activities, however, the fear of failure does not seem to be significant.

The preliminary evidence indicates that work variables show a positive impact on the activity (Model 3), such as having the autonomy to develop activities and finding the job to be meaningful. However, satisfaction with having sufficient time to balance work and family responsibilities seems to have a negative influence.

The results for the effect of the country context on the female corporate entrepreneurs' activity are described in Model 4. The resulting data indicate that there is an influence of national culture over the activity, with individualistic and high uncertainty avoidance cultures seeming to have a positive influence. More hierarchical structures as measured by power distance also seem to have a positive effect, while more masculinity environments seem to have a negative effect. The control variables indicate that there is no significant effect of the percentage of women in the work-force, but there is a negative influence on the activity related to the percentage of GDP growth.

Table 3- Hierarchical regression analysis

	Model 1		Model 2		Model 3		Model 4	
	B	Se	B	Se	B	Se	B	Se
Constant	-1.774***	.1410	-3.5876***	.1882	-4.2660***	.2661	-7.1229	1.1224***
Education			.3747***	.0232	.4127***	0.0283	.4304***	.0304
Age			.0019	.0023	.0003	0.0027	.0013	.0029
Skills			.6266 ***	.0536	.5313***	0.0643	.5616***	.0679
Fear of failure			-.0160	.0530	-.0161***	0.0633	-.0593	.0669
Autonomy					.1047***	0.0271	.1143***	.0289
Meaningful work					.1366***	0.0386	.1532***	.0422
Income satisfaction					.0482	0.0272	.0382	.0290
Work satisfaction					.0051	0.0358	.0169	.0389
Work-life balance (time satisfaction)					-.1242***	0.0349	-.1498***	.0375
Work-life balance (ability satisfaction)					-.0079	0.0381	.0214	.0421
Country variables								
% GDP growth							-.1206***	0.0391
% Female work force participation							0.0025	0.0065
Culture-Indulgence							.0047	0.0061
Culture-Masculinity							-.0168***	0.0057
Culture-Individualism							0.0294***	0.0075
Culture-Power distance							0.0221***	0.0073
Culture-Uncertainty avoidance							0.0104**	0.0041
Culture-Long term							0.0069	0.0048

orientation								
Country variance	0.4770	0.1443	.4255064	.130799	.4574	.1457	.0869	.0390
-2log likelihood	-5164.29		-4925.168		-3514.985		-3110.423	

4.2 Discussion and Conclusion

The results of this study contribute to the literature on gender and corporate entrepreneurship by helping to understand whether job satisfaction factors and culture are determinants for women to engage in corporate entrepreneurship. The research question was based on results from other studies that suggest that women tend to leave the corporate world to develop their entrepreneurial skills due to dissatisfaction in the workplace. The findings support some of the proposed hypothesis. Elements that contribute to job satisfaction, such as having a meaningful job and having autonomy in performing one's tasks, are related to the corporate entrepreneurship behavior of female workers.

Other research studies have found that entrepreneurship may be a consequence of the job satisfaction in organizations (Antoncic and Antoncic, 2011; Ahmed et al., 2013), however, the results of this study do not show significance in this variable. Thus, it is deduced that if a combination of satisfaction elements are in place, women will remain in the organization and develop their entrepreneurial skills within it. Feeling satisfied with income does not seem to be a significant factor for women. The reason for the finding may be related to the probability that women place more emphasis on other characteristics of work, such as having a job that is significant to them.

Interestingly, Hypothesis 4 is not supported, since the results do not show a positive relationship between satisfaction with having the time to balance work and personal responsibilities and entrepreneurial outcomes. Authors like Dikkers et al. (2010) have argued that women usually benefit most from having control over their jobs. However, the outcomes from this study are in line with those that did not find any positive influence on the work-life balance variables on job outcomes (e.g., Baral, Bhargava, 2010). A possible explanation for this is the perception of having more responsibilities to attend to when engaging in these practices, which cause female employees to be afraid of losing the balance between work and life they have achieved. Gawke et al. (2018) suggest an influence of entrepreneurial employee behavior on job exhaustion, resulting in an increase in work avoidance.

National culture is an interesting theme when analyzing job satisfaction and job outcomes, as the results suggest that some cultural factors, including high individualism, uncertainty avoidance, and high power distance, are positively related to women's entrepreneurial behavior. As Saffu (2003) suggest, women may find more barriers to engaging in entrepreneurial activities in highly masculine environments. In accordance with his results, in this research it seems that the higher the masculinity in the culture, the lower will be the entrepreneurial behavior of women. The reason for this is likely that highly masculine societies tend to follow rigid norms about gender roles. These societies are material driven and see men as breadwinners and women as caregivers, resulting in women having less representation in political and social positions (Hofstede et al., 1998). It is surprising that uncertainty avoidance shows a positive effect; this result differs from the negative effects found by Kreiser (2010) and Van Everdingen and Waarts (2003). This outcome may be related to the fact that countries high in this dimension tend to plan all their strategies and implement changes gradually; thus, the more women plan, the more they probably will engage in entrepreneurial activities.

Also, an element that needs to be interpreted with care is the positive relationship of corporate entrepreneurship activities performed by women with power distance culture dimension, as the results from this study differ from those finding a negative effect (e.g., Kreiser, 2010). Countries with high scores in this dimension usually have a higher tolerance for hierarchies, meaning that decisions are made at the top. However, people from these nations tend to prefer paid jobs over engaging in traditional entrepreneurship activities (Lee and Peterson, 2000), which may explain the positive outcome between women corporate entrepreneurship activities and power distance. It is assumed that when skilled entrepreneurial women stay in the workplace is because there are factors, like important benefits to them that make them remain at corporations

The present article added national culture and work factors in an effort to understand the entrepreneurial behavior of women within corporations. The main findings suggest that having desirable conditions at work will encourage women to remain within organizations and develop their entrepreneurial skills. The findings from this article are helpful for those interested in developing effective work policies aimed at increasing the

participation of women at work, and especially for those interested in retaining talented and entrepreneurially minded individuals in order to have innovative organizational outcomes.

4.2 Limitations and Future Research

The core information for this study was gathered from a GEM database from 2013. This was the only year that the organization evaluated well-being factors at work, in an effort to contribute due to the lack of studies relating well-being and entrepreneurship (Carree and Verheul, 2012). However, there is a limitation in the number of countries that participated in evaluating corporate entrepreneurial behavior. Another limitation is related to the number of variables included in the study. Future research may want to include another set of control variables related to the workplace, such as work hours, as this variable has been found to be one of the causes of work-life conflicts (Hughes and Parks, 2007), which in turn may affect the well-being of women at work and in their lives. The occupational level may be another useful variable for future investigations, since different work levels may have different responsibilities. For example, Hornsby et al. (2002) suggest that middle managers have a privileged position in the organization to identify entrepreneurial activities. Women's civil status and number of children may be other factors that could add explanation to the entrepreneurial activity within corporations developed by women.

4.2 Appendix

Table 4- Countries included in the study

Country
1. South Africa
2. Hungary
3. Romania
4. United Kingdom
5. Peru
6. Chile
7. Malaysia
8. Philippines
9. Korea
10. Vietnam
11. China
12. Iran
13. Nigeria
14. Finland
15. Lithuania
16. Slovenia
17. Slovakia
18. Uruguay
19. Puerto Rico

Chapter 5: Empirical Quantitative Study

Does Gender Matters On Corporate Entrepreneurship? A Cross-Country Study

5.1 Introduction

In corporate entrepreneurship, existing organizations create new ventures or implement strategies to renew their business models (Guth and Ginsberg, 1990). Organizations engaging in this type of activity usually enhance their performance. Google, 3M, Eli Lilly, and other companies have adopted corporate entrepreneurship as a core strategy for their businesses (Finkle, 2012). However, these organizations have affirmed that superior corporate results also involve hiring, retaining, and developing talented employees. Moreover, organizations pay special attention to diversity and inclusion policies in the countries where they operate. While gender has been studied extensively at the entrepreneurship level, academic discussion about gender in corporate entrepreneurship activities is insufficient.

Gender in corporate entrepreneurship also requires a country level perspective. National policies regarding gender influence the design and implementation of organizational strategies (specifically, policies to include women in the workplace) and performance (Lewis, 2006). Here, context determinates organizations' gender-oriented strategies, including corporate entrepreneurship. Previous research has noted how gender equality policies affect organizational output (Swaab and Galinsky, 2015). Regarding entrepreneurship, countries with higher rates of equality show a significant gender gap in entrepreneurial activity, a circumstance that may be related to policies supporting women in the workplace (Klyver et al. 2013). Manolova et al. (2008) and Mattis (2004) argue that because women lack support in the corporate arena, they leave paid positions and start new ventures.). Previous studies have found that culture influences employees' engagement in entrepreneurial activities within organizations (Turró et al., 2014). It remains unclear what exactly explains gender differences in corporate entrepreneurship activities.

In this regard, several questions emerge. Are men more likely to outperform women in corporate entrepreneurship activities within an environment of social support? Can women close the gender gap in corporate entrepreneurship activities in a more equal environment? This paper analyzes how gender affects employees' propensity to engage in corporate entrepreneurship activities in several different countries. Using multiple sources of data at country and individual level, a multilevel regression model shows how a

reduction in gender inequalities (an environmental condition) at the country level enhances male and female participation in corporate entrepreneurship activities. The results provide insights about gender equality in labor.

This paper is organized as follows. It first reviews the literature about corporate entrepreneurship, individual determinants when engaging in this type of activity, and country conditions, posits hypotheses to test the empirical evidence, and then describes the data and the methodology. The paper incorporates data from 50 countries and uses a multilevel model that includes national, cultural, and formal institutions' variables in combination to predict corporate entrepreneurial activity by gender. In closing, the paper provides implications and conclusions.

5.2 Literature Review

Corporate entrepreneurship, which is defined as activity within an organization that creates a new venture or establishes a strategy that renews the entire organization (Guth and Ginsberg, 1990; Kuratko et al., 2015), has gained substantial attention during the past several years at organizations looking to grow or to regenerate their business models (Kreiser, 2019; Kuratko, et al., 2015; Miles and Covin, 2002; Antoncic and Hisrich, 2001). Adopted as strategy, corporate entrepreneurship creates or maintains competitive capabilities (Ireland et al., 2009; Kreiser, et al., 2019).

Corporate entrepreneurship also benefits a country's economy. Organizations with an entrepreneurial orientation usually create jobs and provide benefits to communities (Mason and Brown, 2013), hire and retain employees with entrepreneurial skills, and support their initiatives (Finkle, 2012; Foba and De Villiers, 2007). As a result, entrepreneurial employees' innovations contribute to their organizations' competitiveness (Guerrero and Peña-Legazkue, 2013, 2019). Stam (2013) noted that corporate entrepreneurship may be more prevalent than independent entrepreneurship, especially in developed countries. Similarly, Martiarena (2013) compared entrepreneurial employees' efforts with those of independent entrepreneurs. [In this study, gender does not seem to

affect the activity over corporate entrepreneurs, but differences may be more related to fear of failure and age]. Comparing independent and corporate entrepreneurs, Parker (2011) found that male-dominated environments have a greater propensity to develop corporate entrepreneurship activities than gender-balance environments. However, regardless of gender, identifying and developing employees' specific entrepreneurial characteristics should be a primordial corporate task.

In the following section, gender in corporate entrepreneurship activity is analyzed both for several countries (Hayton et al., 2002) and for individuals' characteristics (Antoncic, 2003; Douglas and Fitzsimmons, 2013).

5.2.1 Understanding Gender's Influence on Corporate Entrepreneurship in Different Countries

Equality Levels

According to the United Nations, high gender equality assists countries in many respects. For instance, greater gender equality promotes economic growth and social development. Some research has focused on how gender affects the performance and survival of new ventures (e.g., Boden and Nucci, 2000; Robb and Watson, 2012; Watson, 2002). Greene et al. (2003) suggested that entrepreneurs with the same amount of education and work experience will perform equally. Having access to these elements will ameliorate startup activities (Millan et al., 2014).

Similarly, Baughn et al. (2006), who analyzed equality globally, found that gender equality is one factor that incentivized women to engage in independent entrepreneurial activities. Klyver et al. (2013) suggested that countries with higher levels of equality have a higher gender gap in nascent entrepreneurs, which is explained by the influence of policies that promote inclusion and equality in the workplace (Thébaud, 2015). In highly developed countries, this is evidenced by policies such as flexible jobs and parental leave, among others, which help women develop entrepreneurial skills within organizations.

Other studies indicate that gender-heterogeneous organizations show higher levels of performance (Dezsó and Ross, 2012), better corporate governance, and better delineation of environmental strategies (Glass et al., 2016). As a result, these organizations generate

entrepreneurial, innovative outcomes (Lyngsie and Foss, 2017; Østergaard et al., 2011) and appreciate the different perspectives that men and women bring to teams. In less-egalitarian, less-developed environments, independent entrepreneurship can alleviate unemployment problems (Malach Pines et al., 2010).

Women also leave jobs because of wage discrepancies (Blau and Khan, 2007), as well as a lack of opportunity for professional advancement within an organization (Hoobler et al., 2011; Heilman and Chen, 2003), which result in discriminatory policies. We believe that men and women should have the same opportunities to develop entrepreneurial initiatives inside organizations. This is particularly true in economies with high levels of equality, whose corporate policies ensure favorable employee work conditions and the development of entrepreneurial skills. In this regard, we suggest the following hypothesis:

H1: A Country's Equality Level Encourages Corporate Entrepreneurship for Both Men and Women.

Cultural and Normative Support

The importance of national culture in the development of specific economic activities such as innovation was legitimized almost three decades ago (Shane, 1993). More recently, the predominant effects of social rules on entrepreneurial activity also was recognized and legitimized in the entrepreneurship literature (Huggins and Thompson, 2016). Therefore, organizations pursuing innovation and entrepreneurship may look for social change within their countries (Shane, 1993; Huggins and Thompson, 2016). More concretely, feminine versus masculine cultural norms influence the development of entrepreneurial activities in these environments (Huggins and Thompson, 2016). For example, societies with more masculine traits may create new ventures. In contrast, feminine cultures may encourage the growth of existing ones. Similarly, individualistic, collectivist cultures influence entrepreneurship (Liñán et al., 2016; Pinillos and Reyes, 2011).

Concerning corporate entrepreneurship, using Hofstede's measurement of culture, Kreiser et al. (2010) highlighted the importance of cultural factors over risk-taking and proactive behaviors (essential elements of corporate entrepreneurship activities). Similarly,

corporate entrepreneurship develops better in areas where entrepreneurship is legitimized and respected (Turró et al., 2014). Moreover, Hayton et al. (2002) indicated the importance of culture on corporate entrepreneurship outcomes, such as innovation, entry modes, joint ventures, or decisions to follow specific business strategies. A considerable amount of research emphasized the importance of culture on innovation (e.g., Rinne et al., 2012; Taylor and Wilson, 2012; Tian et al., 2018). Even though culture is considered a determinant of entrepreneurship, too few studies have explored the effect of culture on the entrepreneurial behavior of employees using a gender perspective. Based on the arguments that, culture and social support benefits men and women, as well as organizational outcomes (Barnett and Hyde, 2001), we propose the following hypothesis:

H2: The Perception of Cultural and Social Norms Influences Levels of Corporate Entrepreneurship among Men and Women.

5.2.2 Understanding Gender's Influence on Corporate Entrepreneurship at the Employee Level

Entrepreneurship Skills

Employees' characteristics are important when exploring business opportunities, their positive attitudes about entrepreneurship can also influence the development of corporate entrepreneurship activities. Entrepreneurship skills combine knowledge, attitudes, and skills necessary to identify, create, and exploit business opportunities. In the corporate entrepreneurship literature, Guerrero and Peña-Legazkue (2013, 2019) introduced a new measure of human capital called "the intrapreneurial experience," which represents skills and knowledge that employees acquire while engaging in corporate entrepreneurship. Regarding gender, Elsesser and Lever (2011) found that women had fewer entrepreneurial skills than men in the workplace. Marques, et al. (2018) found that women with an entrepreneurial propensity believed that they possessed the required managerial skills to perform their jobs, as well as high-risk initiatives. Similarly, Malach-Pines and Schwarts (2008), who analyzed men's and women's perceptions about work values and entrepreneurship, found similar perceptions between genders about work values. The

primary differences were cultural and stereotypical (e.g., men are more confident regarding challenges than women). A similar assumption is described by Foss et al. (2013), who suggested that men's and women's innovative behaviors are similar (e.g., creativity and the identification of ideas) but also noted that contextual factors, like colleagues' support, may cause men's ideas to be implemented more often than those of women.

We assume that employees who engage in corporate entrepreneurship have the required knowledge and skills to develop any entrepreneurial activity. In this regard, we propose the following hypothesis:

H3: For Both Men and Women, a Perception of Having More Entrepreneurial Skills Leads to More Corporate Entrepreneurial Activity.

Risk-Taking

In a comparative study between independent entrepreneurship and corporate entrepreneurship, Douglas and Fitzsimmons (2013) analyzed the role of risk-taking behavior without considering gender. The authors concluded that employees with low risk tolerance are strongly engaged in corporate entrepreneurial activities, compared with independent entrepreneurs, who have high-risk tolerance. Manso (2011) highlighted the importance of tolerance in achieving innovation. For example, Guerrero and Peña-Legazkue (2019) found that employees with corporate entrepreneurship experience are more likely to enroll in corporate entrepreneurship after a business failure. Similarly, Naldi, et al. (2007), who analyzed how risk-aversion affected family firms' entrepreneurship, concluded that risk-taking behavior (e.g., a high tolerance for failure) is part of entrepreneurship and is closely related to innovation and proactive behavior.

Entrepreneurial research studies suggest a positive relationship between high risk-takers, new businesses (Caliendo et al., 2010), and self-employment (Segal et al., 2005). Other studies have indicated that women are more risk-averse than men (e.g., Shinnar et al., 2012; Wagner, 2007). Shahriar (2018) found that risk-taking contributes to gender differences in entrepreneurship rates. However, Nelson's (2015) examination of how gender influences risk-taking suggests that men and women have more similarities than differences.

Analyzing diverse research from different fields, Nelson (2015) concluded that other

considerations needed to be taken into account before considering risk-taking gender differences. Similarly, Marlow and Swail (2014) suggested that gender-related differences in risk-taking could be caused by different elements.

Based on these arguments, we assume that a relationship exists between the risk-taking and engagement in corporate entrepreneurship activities. In this regard, we propose the following hypothesis:

H4: For Both Men and Women, Lower Tolerance for Failure May Cause Employees to Avoid Corporate Entrepreneurship.

Networking

The ability to establish networks and relationships with other entrepreneurs is essential for developing entrepreneurial activities (Langowitz and Minniti, 2007). Networks provide diverse types of resources during different stages of an entrepreneurial endeavor (Klyver et al., 2008; Shane and Cable, 2002; Sullivan and Marvel, 2011). In organizations, networks also help capture resources and achieve expected outcomes. Employees' networks help access financial and human resources, as well as relevant information about industries and markets, which are necessary to identify opportunities in corporate entrepreneurship (Guerrero and Peña-Legazkue, 2013; Urbano and Turró, 2013). Seibert et al. (2001) suggested that social capital assists employees who want to succeed in their professional careers. Related benefits include access to specific information or a career sponsorship.

Regarding differences between men and women, Daniel (2004) reported that women usually have better networking skills than men. However, Klyver and Grant (2010) suggested that men know more entrepreneurs than women do. Manolova, et al. (2007) found a positive association between human capital and the growth expectations for women (but not for men). Foss (2010), who analyzed previous studies about networks between men and women, found few major differences in gender. Similarly, Watson (2012), who analyzed networking differences between men and women in an SME context, saw few significant differences between genders and noted that formal networks may be associated with company growth. However, as noted earlier, few studies link gender differences in networks with entrepreneurial behavior in corporations.

We assume that established networks reinforce employees' entrepreneurial behavior inside organizations for both men and women. In this regard, we propose the following hypothesis:

H5: For Both Men and Women, the More Networks that are Established, the Better the Corporate Entrepreneurial Outcomes.

Opportunity Recognition

Opportunity recognition, the ability to detect an opportunity that can be later developed into a business, is the one of the most studied subject in the entrepreneurship field (e.g., Baron and Ensley, 2006). As noted earlier in this paper, the environment crucially influences entrepreneurial behavior, specifically the detection of opportunities. An organization's environment can affect its practices (Stainback, et al., 2016; Welter and Smallbone, 2011). For example, a dynamic corporation may pursue more innovative products or processes. Similarly, Baron and Tang (2011) suggested that entrepreneurs tend to innovate more in highly dynamic environments. This may occur because employees who perceive these conditions tend to work closely with customers and diverse stakeholders. To detect business opportunities, employees try to understand their customers' needs. Organizations pursue their goals by developing innovative products or services (Davis et al., 1991), and this strategy gives them a significant competitive advantage (Nicolaidis and Kosta, 2011). DeTienne and Chandler (2007) evaluated how different genders recognize opportunities. They argued that while both men and women can detect business opportunities, their processes differ. Likewise, Foss et al. (2013) suggested that men and women behave similarly when identifying innovative ideas, and Gupta et al. (2014) opined that both genders behave the same when analyzing opportunities but can be biased by stereotypes.

Employees' perception of business opportunities is a determinant of corporate entrepreneurship. Therefore, we suggest the following hypothesis:

H6: In Any Country, the Ability to Perceive Business Opportunities Positively Associates with Men's and Women's Corporate Entrepreneurial Activities.

5.3 Methodology

5.3.1 Data Collection

We used the 2015 Global Entrepreneurship Monitor (GEM) database, which includes information about individuals from 50 countries. Because GEM's variables identify employees' entrepreneurial behavior (Bosma et al., 2013) it is a good proxy for corporate entrepreneurial activities. We also used GEM's National Expert Survey to identify variables that (according to chosen experts) may either support or constrain entrepreneurial activity in a country (e.g., policies and cultural norms). In addition, we matched information from the World Bank, United Nations' Human Development Reports, and latest Hofstede's studies (2010). Information from these databases provided important insights that enriched our understanding of phenomena from a global perspective. Our final sample consisted of 62,494 employees who worked in part- or full-time jobs, who were not independent entrepreneurs, and who worked on innovative projects in the last three years.

5.3.2 Variables

Table 1 summarizes the variables included in the analysis.

Table 1. Description of Variables

Variable	Description	Source
Dependent Variable		
Corporate entrepreneur	A binary variable that indicates if men or women are active as corporate entrepreneurs during the past three years. The base is the employee population.	GEM, 2015
Independent Variables at the Individual Level		
Skills	An individual who has the necessary skills, knowledge, or experience to start a business. It equals 1 if they have these skills and 0 if they do not.	GEM, 2015
Networks	This variable is operationalized as follows: "Do you know	GEM, 2015

	<i>someone personally who started a business in the past two years?” It equals 0 if they do not and 1 if they do.</i>	
Fear of failure	This variable refers to the perception that fear of failure would prevent an individual from starting a business. It equals 0 if they do not feel this way and 1 if they do.	GEM, 2015
Opportunity	The opportunity to do business in their living area. It equals 1 if yes and 0 if no.	GEM, 2015
Independent Variables at the Country Level		
Cultural and social norms	This reflects the opinion of entrepreneurial experts about cultural and social support for entrepreneurial activity. The higher the number, the higher the support level.	NES, 2015
Masculinity	Ranging from 0 to 100, higher scores represent more masculine cultures, and lower ones represent feminine cultures.	Hofstede’s studies 2010.
Inequality	This composite measure reflects the disparity between men and women. The higher the number, which ranges from 0 to 1, the higher the inequality level.	United Nations, 2015
Control variables		
GDP (per-capita)	The gross domestic product of a country divided by its total population, in U.S. dollars.	World Bank, 2015
Incoming	Household income divided into thirds (the lowest 33.3%, the middle 33.3%, and the highest 33.3%).	GEM, 2015
Education	Ranges from 0 to 4, where 0 is “none,” 1 is “some secondary,” 2 is “secondary,” 3 is “post-secondary,” and 4 is “graduate.”	GEM, 2015
Female/male ratio	The TEA (Total Entrepreneurship Activity) ratio of women to men.	GEM, 2015

Dependent Variable

Following an approach used by previous studies (e.g., Bosma, 2013; Guerrero and Peña-Legazkue, 2013; Urbano and Turró, 2013), the dependent variable *corporate entrepreneur (CE)* is operationalized as a dummy variable. A value of one indicates that an employee is working or has worked on innovative projects in an organization, and zero otherwise.

Independent Variables

GEM's information includes variables at an individual level, which are useful for this study (Bosma, 2013). Our analysis of gender differences incorporates a set of binary variables used in previous studies, such as skills necessary to initiate a new venture (Arenius and Minniti, 2005; Martiarena, 2013), networks (Ramos-Rodriguez, et al., 2010), fear of failure (Bourdreaux et al., 2019; Martiarena, 2013), and opportunity recognition (Martiarena, 2013; Guerrero and Peña-Legazkue, 2013), which is defined as the perception of having opportunities to do business in the place where they live.

To capture gender conditions at a country level, three variables were included in our analysis. First, a *perception of cultural and social norms* variable was obtained from the National Expert Survey (NES). This variable captures the perception of support for entrepreneurial activity (Bosma, 2013). Second, a *masculinity/femininity* variable was obtained from Hofstede's studies (Hofstede et al., 2010). These data was also used when analyzing the effect of culture on innovation by Efrat (2014) and Van Everdingen, and Waarts (2003). This variable measures how strongly masculine values lean toward achievement, competition, and success, and how strongly feminine values refer to caring for others and quality of life. Third, an *inequality* variable was obtained from the United Nations' dataset (Gaye, et al., 2010). This variable, which captures gender inequalities based on three factors, health, empowerment, and the labor market, ranges between 0 and 1 (higher values indicate greater inequality and lower human development) (Gaye, et al., 2010).

Control Variables

We also included per-capita GDP as a control variable. GDP, which measures the value of goods and services produced annually, is a proxy for a country's income and economic development. Researchers have used GDP as a control (e.g., Beugelsdijk and Noorderhaven, 2005; Boudreaux et al., 2019; Stephan et al., 2015). Because differences in income for individuals may stimulate entrepreneurial activities, we decided to include it (Arenius and Minniti, 2005; Fu et al., 2018). Other factors that influence entrepreneurial behavior are age (Parker, 2011) and education (Liñán et al., 2011). Finally, we also included the ratio of female entrepreneurial activity to capture a country's entrepreneurship gap (measures the ratio of female to male total entrepreneurship activity).

5. 3.3 Statistical Tests

Due to the binary nature of independent and dependent variables at the employee and country level, a logit hierarchical regression analysis was used. This model analyzes how covariates at different employee and country levels affect the outcome (the corporate entrepreneurship variable). After an ICC (Intraclass Correlation Coefficient) was calculated to assure the use of multilevel analysis, two separate models (one for women and one for men) were tested with the set of variables described above. In addition, robustness checks were implemented to confirm the findings.

5.2 Results

Table 2 describes the sample. The average age for both men and women is 40 years, and most employees achieved either a secondary degree (37%) or a post-secondary degree (36%). About 45% of the employees had considered starting a new venture in the city

where they live. By gender, 39% of women perceived this opportunity, compared with 42% for men. While most employees felt that they had the required skills to start a business (51%), the specific breakdown was 56% for men versus 45% for women.

Table 2-. Summary Statistics

Variable	Female				Male			
	Mean	Std. Dev.	Min.	Max.	Mean	Std. Dev.	Min.	Max.
CE-Corporate Entrepreneur	0.095	0.293	0	1	0.125	0.330	0	1
Networks	0.383	0.486	0	1	0.383	0.485	0	1
Opportunity	0.406	0.491	0	1	0.405	0.490	0	1
Skills	0.497	0.499	0	1	0.497	0.499	0	1
Fear of failure	0.406	0.491	0	1	0.406	0.491	0	1
Age	3.668	0.4489	2.89	6.90	3.668	0.448	2.890	6.906
Education								
Some secondary	0.167	0.350	0	1	0.161	0.368	0	1
Secondary	0.368	0.482	0	1	0.368	0.458	0	1
Post-secondary	0.299	0.458	0	1	0.300	0.458	0	1
Graduate	0.050	0.218	0	1	0.052	0.223	0	1
Income								
Middle	0.323	0.467	0	1	0.323	0.469	0	1
Upper	0.313	0.464	0	1	0.314	0.464	0	1
GDP	9.518	1.118	6.355	11.527	9.518	1.119	6.355	11.527
Cultural norms	2.868	0.507	1,62	4.402	2.868	0.507	1.62	4.401
Masculine vs. feminine	47.19	18.142	5	100	47.19	18.142	5	100
Inequality	0.239	0.164	0.042	0.621	0.245	0.165	0.042	0.621

Table 3 shows the correlations analysis. To confirm data and to exclude any possible multicollinearity issues in subsequent analyses, we calculated variance inflation factors. The mean was 1.74, with a maximum value of 3.47 and a minimum value of 1.01 for the female model. For men, the mean was 1.63, with a high of 2.76 and a low of 1.01. These values were below the threshold of 10. We then calculated the ICC by running a null model, which assured that a multilevel approach was the most appropriate for the analysis. Results showed a variance within countries of 18% for the female group and 20% for the male group. Since these values were above 0.05 (Aguinis, et al., 2013), strong evidence exists in favor of the multilevel approach. Table 4 shows the multilevel regression models.

Table 3. Correlations

	CE Female	Networks	Opportunity	Skills	Fear of Failure	Age	Education	Income	GDP	Cultural Norms	Masculine vs. Feminine	Inequality
CE Female	1											
Networks	0.0826	1										
Opportunity	* 0.0853	0.228	1									
Skills	* 0.0834	0.252	0.2122	1								
Fear of failure	* -0.000	9* -0.03	* -0.080	* -0.14	1							
Age	4 -0.023	05* -0.11	2* -0.070	40* -0.02	-0.0115*	1						
Education	5* 0.1157	36* 0.051	6* 0.0423	40* 0.051	1* 0.0168*	95* -0.10	1					
Income	* 0.0927	4* 0.105	* 0.0910	8* 0.103	-0.0324*	95* -0.01	4* 0.205	1				
GDP	0.1017	-0.11	-0.014	-0.11	0.0315*	6* 0.173	5* 0.204	1* 0.049	1			
Cultural norms	* -0.018	5* 0.057	* 0.1084	0* 0.013	-0.0145*	3* 0.022	1* 0.076	6* 0.039	8* 0.190	1		
Masculine vs. feminine	-0.071	0.004	-0.058	0.018	-0.0077*	-0.05	-0.11	0.012	-0.13	0.0314*	1	
Inequality	5* -0.096	5 0.128	0* 0.1266	5* 0.169	-0.0945*	76* -0.19	16* -0.23	3* -0.02	53* -0.71	0.0160*	0.2147*	1

	CE Male	Networks	Opportunity	Skills	Fear of Failure	Age	Education	Income	GDP	Cultural Norms	Masculine vs. Feminine	Inequality
CE Male	1											
Networks	0.095	1										
Opportunity	4* 0.097	0.228	1									
Skills	7* 0.102	0.252	0.2122	1								
Fear of failure	5* -0.00	9* -0.03	* -0.080	* -0.14	1							
Age	74 -0.02	05* -0.11	2* -0.070	40* -0.02	-0.0115*	1						
Education	15* 0.121	36* 0.051	6* 0.0423	40* 0.051	1* 0.0168*	95* -0.10	1					
Income	9* 0.138	4* 0.105	* 0.0910	8* 0.103	-0.0324*	95* -0.01	4* 0.205	1				
GDP	0* 0.151	1* -0.11	* -0.014	8* -0.11	0.0315*	6* 0.173	5* 0.204	1* 0.049	1			
Cultural norms	7* -0.00	76* 0.057	0* 0.1084	87* 0.013	-0.0145*	3* 0.022	1* 0.076	6* 0.039	8* 0.190	1		
Masculine vs. feminine	-0.08	0.004	-0.058	0.018	-0.0077*	-0.05	-0.11	0.012	-0.13	0.0314*	1	
Inequality	68* -0.12	5 0.128	0* 0.1266	5* 0.169	-0.0945*	76* -0.19	16* -0.23	3* -0.02	53* -0.71	0.0160*	0.2147*	1

Table 4. Logit Hierarchical Regressions' Results

Variables	CE Female		CE Male	
	B	SE	B	SE
Networks	0.493***	0.047	0.503***	0.037
Opportunity recognition	0.338***	0.047	0.267***	0.037
Skills	0.652***	0.048	0.556***	0.039
Fear of failure	-0.080	0.046	-0.010	0.037
Age	-0.319***	0.063	-0.384***	0.051
Educ. – non (reference)	0	0	0	0
Educ. - some secondary	0.137	0.138	0.367***	0.098
Educ. - secondary degree	0.492***	0.123	0.487***	0.091
Educ. - post-secondary	0.861***	0.124	0.950***	0.091
Educ. – graduate	1.1861***	0.138	1.295***	0.104
Income – lowest (reference)	0	0	0	0
Income – middle	0.269***	0.064	0.386***	0.063
Income – upper	0.580***	0.062	0.754***	0.069
GDP	0.023	0.187	-0.162	4.65E-06
Cultural and social norms	-0.017	0.196	-0.241	0.204
Culture: masculine vs. feminine	-0.004	0.005	-0.004	0.005
Inequality	-2.416**	1.268	-2.554**	1.309
Female ratio	-1.504**	0.520	-1.449**	0.537
var(_cons[country])	0.441***	0.107	0.502***	0.108
Constant	-1.190***	0.52	-0.4211***	2.120
Observations	26,595		35,899	
Number of groups	50		50	

*** p<0.01 ; ** p<0.05 ; * p<0.1

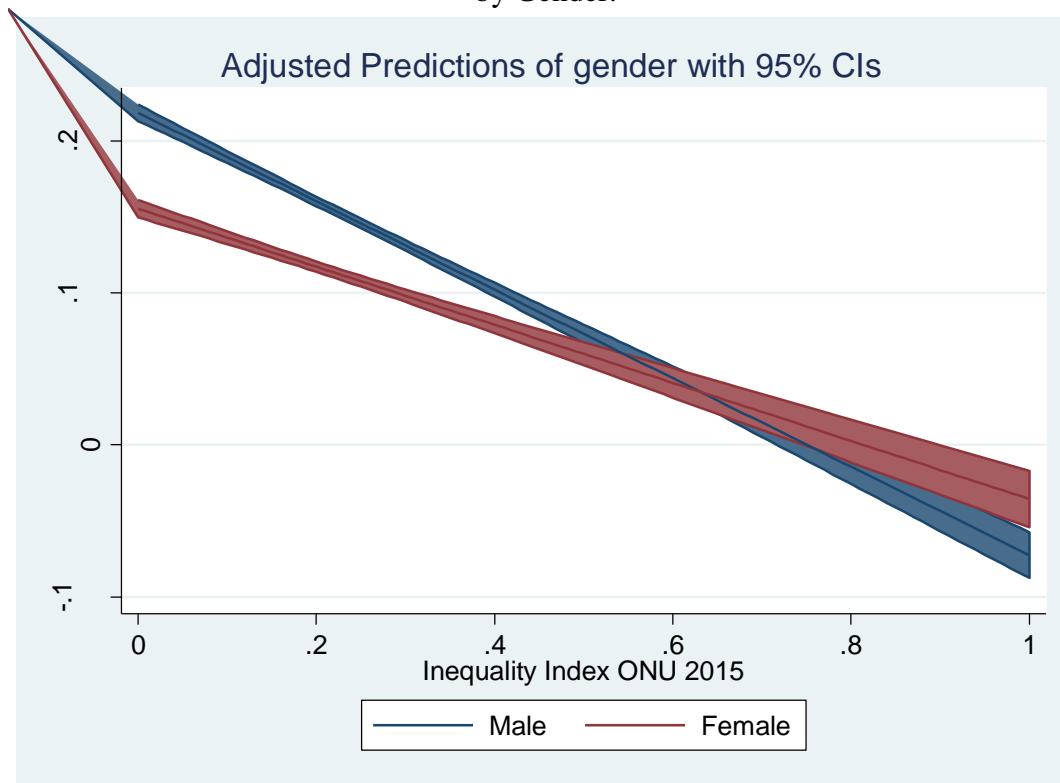
Regarding country conditions, results showed that the *inequality level variable* was a strong predictor for CEs. Regardless of gender, less corporate entrepreneurship takes place in organizations located in countries with high levels of inequality. This supports Hypothesis 1. Interestingly, inequality affects the entrepreneurial activity of men as well as that of women, and inequality was more pervasive in high-income countries (see figure 1).

The *cultural and social norms variable* did not have a significant effect, so Hypothesis 2 was not supported. Culture variables may be interesting to analyze from a moderation perspective or for the inclusion of more cultural variables. The environment seems to have a stronger effect on organizations' behavior and employees' entrepreneurial activity. In other words, organizations respond to market pressures, and they need to continuously improve their performance. We believe that both organizations and individuals discount cultural influences in response to demand pressures.

At the individual employee level, for both men and women, what is important is the perception of having the *skills* required to engage in corporate entrepreneurial activities. This finding supports Hypothesis 3. Hypothesis 4, though, was not confirmed, because no significance was found in the *fear of failure* variance in any of the models, for either men or women. Hypothesis 5, which relates to *networks*, was confirmed in both models. Male and female employees who know other entrepreneurs are more likely to engage in corporate entrepreneurship activities. Hypothesis 6 also was supported. Thus, the ability to perceive business opportunities in the environment may be associated with both male and female employees who engage in corporate entrepreneurship activities. At the individual level, these overall results are in line with those obtained by Urbano and Turró (2013), who suggested that these variables are a strong determinant for corporate entrepreneurship.

Regarding control variables, education is significant for male and female corporate entrepreneurial behavior. Employees use their acquired knowledge to detect potential opportunities (Stam, 2013; Guerrero and Peña-Legazkue, 2013, 2019). Age, while significant for both men and women, is negatively associated with corporate entrepreneurship. As shown in Table 3, GDP and income have a significant effect on corporate entrepreneurship. In the case of the variable of female ratio (regarding entrepreneurial activities) also resulted significant.

Figure 1. Marginal Plots of the Effect of Inequality Levels on Corporate Entrepreneurship by Gender.



5.4.1 Robustness Checks

We included a follow-up analysis to confirm our results. The first is a linear, logistic regression for both men and women, which supports our hypotheses. The positive ability to start a business is significantly related to corporate entrepreneurship for both men and women. Additionally, having access to the right networks and the ability to perceive opportunities benefited both male and female groups in our sample (Table 5).

Table 5. Logit Regressions' Results

Variables	CE Female		CE Male	
	B	SE	B	SE
Networks	0.452***	0.046	0.436***	0.036
Opportunity recognition	0.402***	0.046	0.349***	0.036
Skills	0.640***	0.046	0.583***	0.038
Fear of failure	-0.037	0.044	0.010	0.036
Age	-0.305	0.069	-0.398*	0.056
Educ. - non (reference)	0	0	0	0
Educ. - some secondary	-0.177	0.129	0.061	0.090
Educ. - secondary degree	0.200**	0.112	0.169**	0.081
Educ. - post-secondary	0.613***	0.110	0.625***	0.081
Educ. - graduate	1.006***	0.124	1.065***	0.094
Income - lowest (reference)	0	0	0	0
Income - middle	0.357***	0.062	0.444***	0.054
Income - upper	0.537***	0.060	0.787***	0.051
GDP	0.114***	0.049	0.179***	0.039
Cultural and social norms	-0.080**	0.050	-0.062**	0.038
Culture: masculine vs. feminine	-0.008***	0.001	-0.009***	0.001
Inequality	-0.972***	0.293	-0.562**	0.228
Female ratio	-1.906***	0.133	-1.765***	0.096
Constant	-1.606***	0.585	-2.016***	0.472
Pseudo R ²	0.103		0.113	
Observations	26595		35899	

*** p<0.01; ** p<0.05; * p<0.1

Our results indicate that the two highest levels of education have the greatest significance for both men and women. Secondary education, by contrast, was not significant. Age was not significant in the logistic regression for females, but not for males. Moreover, as in the hierarchical model, incoming variables were significant for both groups. The logistical analysis also indicated the importance of inequality levels. While this variable was negative and significant for both genders, it was higher for women. The variable of *culture and social norms support* resulted not significant as in the hierarchical analysis. However, the culture variable of Masculinity from Hofstede's studies has mixed results, while in the hierarchical analysis resulted non-significant in the ordinary logistic regression resulted in significant and negative but with a small effect. Since we are concerned with differences in factor-, efficiency- and innovation-driven countries, we undertook additional analysis to evaluate male and female models in each country. Because six groups were factor-driven,¹ twenty-three were efficiency-driven,² and twenty-one were innovation-driven,³ we could not follow the multilevel approach, where at least 36 second-level groups are required (Bell, et al., 2010). We then performed an analysis following a regular logistic regression strategy.

¹ Burkina Faso, India, Iran, the Philippines, Senegal, and Vietnam.

² Argentina, Brazil, Bulgaria, Chile, China, Colombia, Ecuador, Egypt, Guatemala, Hungary, Indonesia, Latvia, Lebanon, Malaysia, Mexico, Morocco, Panama, Peru, Poland, Romania, South Africa, Thailand, and Uruguay.

³ Australia, Belgium, Canada, Estonia, Finland, Greece, Ireland, Israel, Italy, Luxembourg, the Netherlands, Norway, Portugal, Slovakia, Slovenia, South Korea, Spain, Sweden, Switzerland, the United Kingdom, and the United States.

The logistic regression results for factor-driven countries support hypothesis H3 for both men and women. For instance, when pursuing corporate entrepreneurship activities, all education levels seem to be important for both genders. Regarding environmental factors, equality levels affect women but not men, while cultural norms have a significant effect on men but not on women. Moreover, high masculinity levels may favor male activities. When we performed a final regression in efficiency-driven countries, the results were similar to those in the hierarchical regression, and H3 was supported. Higher-level education and income also had a significant effect. Based on the environmental variables; high levels of inequality affected the entrepreneurial activities of both men and women in organizations. Thus, Hypothesis 1 was supported. Unlike factor-driven countries, cultural norms had a significant effect on women but not on men. Here again, high masculinity levels may favor male but not female corporate entrepreneurship activities. The last regression's results suggest that innovation-driven countries, linked networks, perceived skills, and opportunity recognition are important variables when engaging in entrepreneurial activity. For both men and women, graduate study, income, and GDP were significant. The environmental variables showed that cultural and social norms, as well as high masculinity levels, affected entrepreneurial activity negatively. Inequality levels were not significant. The results of these analyses are next included.

Table 6- Logistic Regression for Subsamples of Factor-, Efficiency-, and Innovation-Driven Countries.

Variables	Factor-Driven				Efficiency-Driven				Innovation-Driven			
	CE Female		CE Male		CE Female		CE Male		CE Female		CE Male	
	B	SE	B	SE	B	SE	B	SE	B	SE	B	SE
Networks	0.500**	0.220	0.503**	0.156	0.299***	0.076	0.456***	0.059	0.533***	0.060	0.419***	0.048
Opportunity recognition	0.516**	0.219	0.603***	0.153	0.259***	0.076	0.160**	0.058	0.431***	0.061	0.387***	0.049
Skills	0.546*	0.265	0.352*	0.188	0.678***	0.080	0.677***	0.065	0.650***	0.060	0.547***	0.050
Fear of failure	0.165	0.209	-0.043	0.154	-0.006	0.076	0.040	0.059	-0.043	0.058	0.038	0.048
Age	-0.845	0.323	-0.688	0.211	-0.430	0.099	-0.473	0.080	-0.166	0.082*	-0.305	0.069
Educ												
Educ. None (reference)	0	0	0	0	0	0	0	0	0	0	0	0
Educ. - some secondary	1.006**	0.382	0.864**	0.252	-0.178	0.216	0.124	0.143	-0.368*	0.202	0.119	0.160
Educ. - secondary degree	1.251***	0.407	0.638*	0.260	0.534***	0.169	0.486***	0.121	-0.235	0.91	0.045	0.152
Educ. - post-secondary	1.702***	0.417	1.250***	0.248	0.820***	0.171	0.802***	0.124	0.279	0.188	0.643***	0.151
Educ. - graduate	1.586**	0.626	2.123***	0.344	1.317***	0.202	1.274***	0.157	0.688**	0.199	1.061***	0.159
Income - lowest (reference)	0	0	0	0	0	0	0	0	0	0	0	0
Income - middle	0.328	0.255	0.047	1.90	0.335**	0.103	0.459***	0.085	0.359***	0.083	0.489***	0.077
Income - upper	0.344	0.259	0.522*	0.173	0.597***	0.101	0.762***	0.082	0.534***	0.0799	0.808***	0.073
GDP	0.711	0.467	-0.339	0.267	0.634***	0.103	0.650***	0.075	0.402***	0.077	0.574	0.064
Cultural and social norms	-0.366	0.558	-1.549***	0.376	0.369***	0.107	0.217**	0.085	-0.241**	0.070	-0.268***	0.057
Culture: masculine vs. feminine	-0.051**	0.039	0.043	0.025	0.003	0.002	-0.002	0.001	-0.012***	0.002	-0.011***	0.002
Inequality	18.622***	6.139	4.247**	3.795	-0.444*	0.480	-0.696**	0.372	-0.103	1.223	0.597	0.943
Female/male ratio	4.125***	1.368	2.358***	0.737	-3.075***	0.302	-2.761***	0.219	-1.903***	0.210	-2.195***	0.168
Constant	-17.130***	6.886	-1.401	4.13	-7.166***	1.146	-6.470***	0.849	-4.360***	0.860	-5.726***	0.719
Observations	2148		3751		11715		16019		12732		16129	

*** p<0.01; ** p<0.05; * p<0.1

5.2 Discussion and Conclusion

Prior corporate entrepreneurship research highlighted factors that motivate entrepreneurial activities (Urbano and Turró, 2013). However, few studies have analyzed, from an individual perspective, differences in the entrepreneurial activity between male and female employees, besides there are few studies that take into consideration elements that may act as modifiers on the corporate entrepreneurship. Using multiple data sources, this paper analyzed how countries' national inequality levels and cultures, as well as individual factors, influenced corporate entrepreneurship, and differences between men and women.

Previous studies in the field have suggested that analyzing inequality levels in societies might help explain men's and women's different entrepreneurial choices (Klyver et al., 2013). Others believe that cultural values modify entrepreneurial behavior in societies (Hayton et al., 2002; Turró et al., 2014). A study by Urbano and Turró (2013) focused on individual components of human capital as differentiator. Our literature review emphasized gender differences in entrepreneurship activity and our empirical analysis incorporated data from 50 countries.

Overall, we found that for both men and women, inequality was negatively associated with employees' entrepreneurial behavior. These results were more pronounced in less-developed or factor-driven countries, where the effect could be stronger for women than for men. As countries advance from factor-driven to innovation-driven, gender inequality in corporate entrepreneurship activity decreases, possibly because of corporate policies that promote equality.

Cultural values and normative support are statistically insignificant for both men and women who engage in corporate entrepreneurship activities. However, because more advanced countries tend to be more masculine, the effect is stronger and more negative. We believe that these mixed results are related to policies that support independent entrepreneurs rather than CEs. Moreover, we also believe that additional organizational cultures and policies differentiate entrepreneurial activity.

As noted by Turró, López, and Urbano (2013), this study also shows that individual characteristics, such as having the skills, networks, and environment to do business, are linked to corporate entrepreneurship activities. Our results see no differences between men and women on this subject. Like other studies (e.g., Douglas and Fitzsimmons, 2013), we concluded that fear of failure did not affect the activity of either men or women.

5.2.1 Contributions

This paper makes two contributions. First, previous studies theoretically emphasized how entrepreneurial performance differed between men and women (Boden and Nucci, 2000; Robb and Watson, 2012). This study articulates how national inequality levels and cultures may cause men and women to operate differently when engaging in corporate entrepreneurship activities. Thus, it contributes to research about gender and entrepreneurship, using contextual factors as determinants. We show that inequality levels affect corporate entrepreneurship for both men and women and believe that equal opportunities for men and women provide a synergistic effect. As suggested by Lyngsie and Foss (2017), who analyzed senior, diversified corporate teams, this may generate better entrepreneurial outcomes.

Second, our study demonstrates the importance of having employees with entrepreneurial capabilities, regardless of their gender. We agree with Turró et al. (2013), who opined that employees should have the skills and knowledge required to undertake entrepreneurial activities within organizations. We reinforce the findings by analyzing gender differences.

From a practical perspective, this study may serve as a reference for policymakers to continue improving equality levels. Less-developed countries need to strengthen equality policies and to create environments where established companies can pursue entrepreneurial activities by providing specialized training to employees, regardless of gender. Developed countries need to pay attention to restrictive norms that may diminish these activities.

5.2.2 Limitations and Future Directions

Our study has some limitations. First, we primarily relied on the GEM database to provide proxies for employees' perceptions. We also limited the study to countries included in this database and to the binary variable of gender. A more extended research project could use different and more accurate proxies for independent and dependent variables or for in-depth analysis of other countries. Second, using other independent variables to analyze the effect of the environment could be helpful and could add different perspectives to the research. The effect of culture in corporate entrepreneurship could be studied differently in further research, because culture can moderate other variables as well as corporate entrepreneurship. Third, different levels of analysis could enrich the findings, for example, by adding different variables at the organizational level (such as organizational

culture), specific equality policies that organizations have in place to achieve gender balance, or specific strategies that organizations delineate to achieve innovative outcomes.

5.2.3 Conclusion

This study considers factors that promote corporate entrepreneurial behavior and gender differences. Among the elements evaluated, inequality strongly determines entrepreneurship for both men and women. This finding highlights the importance of establishing mechanisms to close the gender gap within organizations. Individual factors also are relevant to promote workers' entrepreneurial activity. While challenging, identifying, retaining, and developing employees with entrepreneurial skills, networks and opportunities can benefit an entire organization. Although countries and companies can limit women's opportunities, from an individual perspective, men and women show more similarities than differences. Therefore, context is an important determinant when pursuing entrepreneurial activities inside organizations.

Chapter 6: Conclusions

These studies explored the role of women as corporate entrepreneurs. Specifically, this research analyzed the contextual influences that may prevent or motivate this type of entrepreneurial activity. Results from the literature review describe the role of women as important contributors to the development of entrepreneurial activities within organizations, and the research studies highlight the importance of outcomes from gender diversity teams. It is important to highlight that there is not a strong body of literature analyzing the role of women and the effect of contextual influences when engaging in corporate entrepreneurship activities. Thus, this thesis is a contribution in this direction.

External factors such as national culture and inequality levels were explored with the intention to analyze their possible effect on the entrepreneurial activity of women inside organizations. Internal factors were preliminarily explored from the perspective of women holding middle management positions; the study also includes individual characteristics. Overall satisfaction within the workplace, including work-life balance satisfaction, was analyzed to ascertain the possible effect that specific elements may have on women engaging in corporate entrepreneurship activities. This chapter summarizes the key findings derived from the aforementioned studies and suggests ideas for future research.

6.1 Summary of Findings

The present thesis highlights the importance of studying the entrepreneurial behavior of women employees. The results show that women are engaging in corporate entrepreneurship activities. Women perform those activities to achieve specific goals that they consider part of their job duties; they find different motivations to engage in these kinds of activities, and they feel passionate about their work. However, some difficulties remain within the social sphere, and they have to make some efforts to face them and overcome obstacles. Findings of the thesis are split into three main groups: internal factors, external factors, and, finally individual characteristics.

Internal factors

As some other authors have found (e.g., Kuratko et al., 2014; Lumpkin et al., 2009), one of the most important elements of women's workplace experience is autonomy. They describe autonomy as the possibility to manage their responsibilities, their time, and their resources as they think are best to achieve their goals. These include not only work responsibilities but also personal responsibilities. Women in these situations highly appreciate the autonomy they are given and their superiors who grant it.

Linked to these factors, some of the interviewed managers relate their passion and pride about their role within the organization. They feel motivated to continue giving their best, as they think their work has a valuable meaning and enables them to have a significant impact on others, including not only women but also men and, for some, their families. They also have expectations that if they continuously achieve their goals and have good work evaluations, they may grow within the organizational hierarchy. However, this situation can be affected their personal responsibilities and organizational culture. They may be working in organizations that have developed and have in place some work-life balance policies, but they may feel that taking advantage of these policies will not be well-regarded by their coworkers. Alternatively, once they have achieved a good balance, they may be afraid of losing it by taking on more responsibilities. This situation may prevent them from engaging in corporate entrepreneurship activities.

Besides the work-life element, other elements emerge as significant for women employees. They note that excessive mechanisms of approvals, rigid policies in the workplace, or overload of operational work may demotivate them from proposing something innovative. Even when they have support from their superiors, employees have to follow all the procedures to get approval, which can take excessive time; during this process, they may feel a decrease in their motivation, as they may feel that other elements are more important than their initiatives. In some of the cases they felt stereotyped and felt that their ideas were not heard, taken into consideration, or implemented. They based these judgments on the environment of the organization. This situation usually leads to women having difficulties in seeing their ideas implemented.

External factors

As stated earlier, this thesis took as a reference two external elements as main factors that may prevent women from engaging in corporate entrepreneurship activity. The first of these relates to national culture. From the two quantitative analyses, it can be inferred that national culture may not play a strong role in when women engage in corporate entrepreneurship analysis. This result not only applies to women but also to men. National culture may be diminished by the internal culture that a given organization has built. Even though the results of the first quantitative study show a statistically significant impact of some cultural dimensions like masculinity, collectivism, power distance, and uncertainty avoidance, it can be seen that the size of the effect is relatively low when compared with internal factors such as autonomy or having meaningful work.

Outcomes from the second analysis took as a reference a different way to measure culture as a complement to Hofstede's studies. The study analyzed the opinions of experts in different nations (National Expert Survey). The results were not statistically significant, complementing the earlier finding that the effect of national culture may be reduced by the set of norms that each organization has developed and put in place.

The second element analyzed refers to the equality levels that each nation has. Differing from the results of culture, equality levels have an effect on corporate entrepreneurship activity not only for women but also for men. Equality levels can also be reflected in the organizational setting and may prevent the activity if inequality levels are high. Countries based on primary-factor activities seem to be the most affected by the inequality levels and by consequence, reflecting a detriment in the corporate entrepreneurship activity. Those countries with an emphasis on innovation usually show high equality levels and high corporate entrepreneurship activities by women and men.

Based on the findings from these studies, I argue that organizations should create a more inclusive and gender-sensitive environment where skills can be complemented and more entrepreneurial outcomes can be fostered, which in turn may result in a more profitable corporation and may contribute to the economic stability of entire nations. Since national culture does not have a strong effect on the activity, organizations may take into

consideration building a culture of innovation, participation, and equality, where the skills from each employed are combined with the aim of engaging in the different phases of corporate entrepreneurship.

Individual-level factors

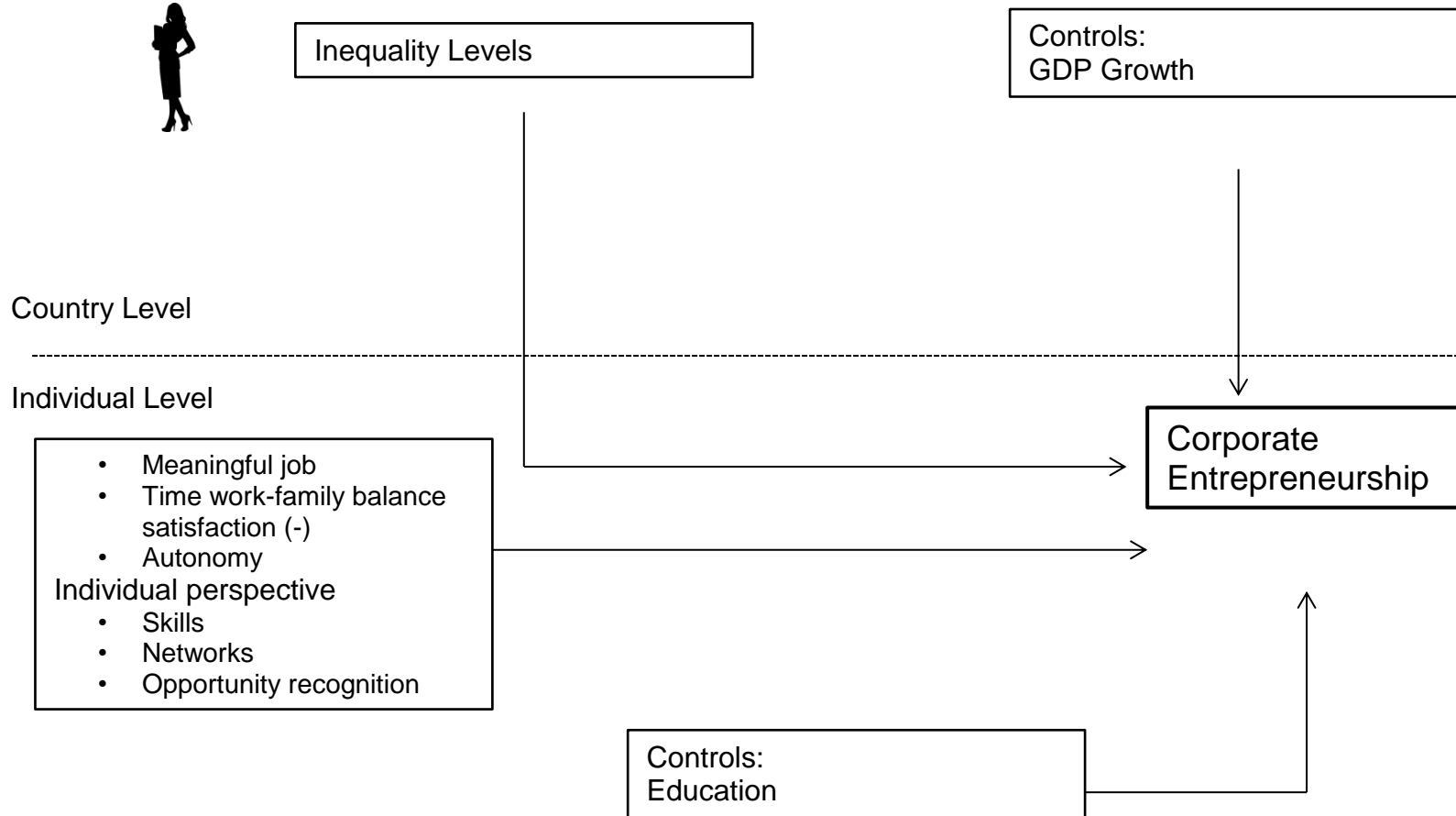
As part of the study, individual factors were also included to analyze the importance of their effect on corporate entrepreneurship activities. It is concluded, in line with other studies (e.g., Guerrero and Peña-Legazkue, 2013; Marques et al., 2018) that organizations should invest in developing the business skills of their employees. As part of the two quantitative studies, it is inferred that women or men who perceive that they have the required skills to develop a business opportunity will probably engage more in corporate entrepreneurship activities. Employees achieve this level of skill through experience or by acquiring higher levels of education. Results from the research studies described in chapter 4 and 5 show that the higher is the level of education a person has, the higher the is probability that individual will engage in corporate entrepreneurship activity.

Another important factor is one related to the perception of the business environment. Therefore, the probability of engaging in corporate entrepreneurship activities will be higher for those that perceive that the environment facilitates the development of new businesses. Moreover, a positive effect may be found when employees know other people that are engaging in entrepreneurial activities or have an entrepreneurial network. This is an important feature for organizations, since entrepreneurs may serve as role models for engaging in entrepreneurial activities within organizations. Organizations may find it helpful to develop a network of entrepreneurs who can share their experiences and serve as role models.

Differing from the positive effects of the aforementioned variables, fear of failure, a variable that has been widely studied in entrepreneurship, showed insignificant results for corporate entrepreneurship activity (e.g., Urbano and Turró, 2013). This result, as expected, may not interfere in the practice of corporate entrepreneurship of women or men. The reason for this is that companies usually have a list of procedures that employees need to follow to run or implement a new strategy, product, or process. If there is a failure, the

responsibility may be shared by the entire organization or specific teams. Moreover, the employee may not be afraid of losing their resources, as in this case the resources are previously authorized with an analysis of possible risk that the company can take. The following chart shows the quantitative and statistically significant variables studied.

Figure 2- Summary of findings.



6.2 Summary of contributions

This thesis offers three main contributions. First, at a theoretical level, the research studies presented here contribute to the developing body of work that analyzes the entrepreneurial behavior of employees from a gender perspective. Second, the study demonstrates the importance to employees of having a job with a meaningful purpose, as well as the importance of understanding and valuing the passion that women can show for their tasks and goals in the workplace.

Third, the study analyzes the effect of country conditions on corporate entrepreneurship activities engaged in by women. The study demonstrates that countries need to continue working on achieving gender equality levels so all the activities related to corporate entrepreneurship activities may also be increased, such as competitiveness and innovation levels. From the results derived from the studies, it can be inferred that national culture does not have a strong effect on the activity. The present study has implications for policy, theory, and practice.

6.4 Limitations and Future Research

The largest limitation in this study was the difficulty of finding women who are developing corporate entrepreneurship activities in the workplace. Women in the workplace are usually busy with tasks that need to be developed, and any free time is filled by personal responsibilities. Once they are in the workplace, they want to use all their time to accomplish their commitments, so it was not possible to schedule follow-up interviews with them. The second limitation was the number of countries used for the analysis in two of the quantitative studies; we were limited to those countries included in the GEM (Global Entrepreneurship Monitor) database. We also relied on a proxy variable to measure corporate entrepreneurship. The third limitation is related to the levels of analysis included in the hierarchical analysis; the studies only included two levels (individual and country levels). At the national level, the research studies primarily rely on the outcomes of Hofstede's cultural dimensions when analyzing culture.

Future directions

This study is one of the first efforts toward understanding whether and how gender matters to corporate entrepreneurship activities. My recommendations focus on the need to increase the ways of evaluating corporate entrepreneurship activities; future research should also focus on the process itself. Case studies are strongly recommended. Future studies also may evaluate the organizational culture involved when developing these kinds of practices. Work-life balance also needs further examination. Based on the present qualitative analysis, women usually refer to struggle balancing job duties and personal responsibilities, so may be a limitation for giving “the extra (beyond their job responsibilities)” in their job duties. Some of them related that they needed to take personal time to develop an improvement or an innovation for their work. In the quantitative studies, results point out that once women feel satisfied with the time they have to devote to their work and personal responsibilities, it seems that they do not want to engage in more activities.

Future studies also need to explore the type of training or skills needed for employees to be willing to engage in corporate entrepreneurship activities. Another related study could analyze highly innovative corporations and explore what they are doing to develop the potential of women so they can participate more in these types of activities. It is also recommended that the professional development of women in those corporations should be examined, as well as how the participation in corporate entrepreneurship activities will help them to grow in the organizational hierarchy.

From a national perspective, future studies should also focus on different ways of analyzing culture, so that the effect of this variable may be better explained. Adding more countries and performing longitudinal analysis are additional steps recommended for future studies. Other country variables like competitiveness or specific policies may also act as influencers for the activity, so I recommend analyzing these variables as possible moderators in future studies.

References

- Adachi, T. & Hisada, T. (2017). Gender differences in entrepreneurship and intrapreneurship: an empirical analysis. *Small Business Economics*, 48(3): 447-486.
- Agnete, Alsos, G., Ljunggren, E., & Hytti, U. (2013). Gender and innovation: state of the art and a research agenda, *International Journal of gender and Entrepreneurship*, 5(3),236-256.
- Aguinis, H., Gottfredson, R. K., & Culpepper, S. A. (2013). Best-practice recommendations for estimating cross-level interaction effects using multilevel modeling. *Journal of Management*, 39(6), 1490-1528.
- Ahmed, S. N., Rehman, A., & Amjad, M. (2013). Job Satisfaction and Intrapreneurship: The moderating effect of Personality Trait. *Journal of International Studies*, 6 (1): 87-95.
- Akehurst, G., Comeche, J. M., & Galindo, M. A. (2009). Job satisfaction and commitment in the entrepreneurial SME. *Small Business Economics*, 32 (3): 277-289.
- Akulava, M. (2015). *Gender and Innovativeness of the Enterprise: The Case of CIS countries*. Working Paper in Belarusian Economic Research and Outreach Center (BEROC); BEROC: Minsk, Belarus.
- Amorós, J.E. & Bosma, N. (2014). Global Entrepreneurship Monitor 2013 Global Report: fifteen years of assessing entrepreneurship across the globe. Santiago de Chile: Global Entrepreneurship Research Association (GERA)
- Antoncic, A. J., & Antoncic, B. (2011). Employee satisfaction, intrapreneurship and firm growth: a model. *Industrial Management & Data Systems*, 111 (4): 589-607.
- Antoncic, B., & Hisrich, R. D. (2003). Clarifying the intrapreneurship concept". *Journal of Small Business and Enterprise Development*, 10 (1): 7–18.
- Antoncic, B., & Hisrich, R. D. 2001. Intrapreneurship: Construct refinement and cross-cultural validation. *Journal of business venturing*, 16(5): 495-527.
- Aparicio, S., Urbano, D., & Gómez, D. (2016). The role of innovative entrepreneurship within Colombian business cycle scenarios: A system dynamics approach. *Futures*, 81, 130-147.
- Ardichvili, A., Cardozo, R., & Ray, S. (2003). A theory of entrepreneurial opportunity identification and development. *Journal of Business Venturing*, 18 (1): 105-123.

Arenius, P. & Minniti, M. 2005. Perceptual variables and nascent entrepreneurship. *Small business economics*, 24(3): 233-247.

Aryee, S., Srinivas, E. S., & Tan, H. H. (2005), "Rhythms of life: antecedents and outcomes of work-family balance in employed parents". *Journal of Applied Psychology*, Vol. 90 No. 1, pp.132-146.

Audretsch, D. B., & Keilbach, M. (2008). Resolving the knowledge paradox: Knowledge-spillover entrepreneurship and economic growth. *Research Policy*, 37(10): 1697-1705.

Bandura, A. (1997), *Self-efficacy: The exercise of control*. Freeman & Co, New York, NY.

Baral, R., & Bhargava, S. (2010). Work-family enrichment as a mediator between organizational interventions for work-life balance and job outcomes. *Journal of Managerial Psychology*, 25 (3): 274-300.

Barnett, R.C. & Hyde, J.S. (2001). Women, men, work, and family: An expansionist theory. *American psychologist*, 56(10): 781.

Baron, R. A., & Ensley, M. D. (2006). Opportunity recognition as the detection of meaningful patterns: Evidence from comparisons of novice and experienced entrepreneurs. *Management science*, 52(9), 1331-1344.

Baron, R.A. & Tang, J. (2011). The role of entrepreneurs in firm-level innovation: Joint effects of positive affect, creativity, and environmental dynamism. *Journal of Business Venturing*, 26(1): 49-60.

Baughn, C. C., Chua, B.-L., & Neupert, K. E. (2006). The Normative Context for Women's Participation in Entrepreneurship: A Multicountry Study. *Entrepreneurship Theory and Practice*, 30(5): 687-708.

Beauregard, T. A., & Henry, L. C. (2009), Making the link between work-life balance practices and organizational performance. *Human resource management review*, 19(1), 9-22.

Bell, B. A., Morgan, G. B., Schoeneberger, J. A., Loudermilk, B. L., Kromrey, J. D., & Ferron, J. M. (2010). Dancing the sample size limbo with mixed models: How low can you go. *In SAS global forum*, 4:11-14.

Beugelsdijk, S., & Noorderhaven, N. (2005). Personality characteristics of self-employed; an empirical study. *Small Business Economics*, 24(2): 159-167.

Blau, F. D., & Kahn, L. M. 2007. The gender pay gap: Have women gone as far as they can?. *Academy of Management Perspectives*, 21(1): 7-23.

- Boden Jr, 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.
- Borowiec, K. (2018). Gender and Divergent Thinking-Implications for Management Executives. *Innovation Management, Entrepreneurship and Sustainability*, 248.
- Bosma, N. (2013). The Global Entrepreneurship Monitor (GEM) and its impact on entrepreneurship research. *Foundations and Trends® in Entrepreneurship*, 9(2), 143-248.
- Bosma, N. & J. Levie (2010), “Global Entrepreneurship Monitor: 2009 global report”, London: Global Entrepreneurship Research Association (GERA).
- Bosma, N., Wennekers, S., Guerrero, M., Amorós, J.E., Martiarena, A., & Singer, S. (2013). The Global Entrepreneurship Monitor. Special report on entrepreneurial employee activity. London: Global Entrepreneurship Research Association (GERA).
- Bosma, N., Wennekers, S., Guerrero, M., Amorós, JE., Martiarena, A. & Singer, S. (2015), Special Report on Entrepreneurial Activity, available at: <https://www.gemconsortium.org/report/48592> (accessed December 18 2018).
- Boudreaux, C. J., Nikolaev, B. N., & Klein, P. (2019). Socio-cognitive traits and entrepreneurship: The moderating role of economic institutions. *Journal of Business Venturing*, 34(1): 178-196.
- Briganti, S. E., & Samson, A. (2019). Innovation talent as a predictor of business growth, *International Journal of Innovation Science*, 11(2), 261-277.
- Brindley, C. (2005), Barriers to women achieving their entrepreneurial potential: Women and risk. *International Journal of Entrepreneurial Behavior & Research*, 11 (2): 144-161.
- Brinkmann, S., Kvale, S. (2015). Interviews—Learning the Craft of Qualitative Research Interviewing, Sage, Los Angeles, CA.
- Brock, D. M. (2003). Autonomy of individuals and organizations: Towards a strategy research agenda. *International Journal of Business and Economics*. 2 (1): 57-73.
- Brodsky, M.A. (1993). Successful female corporate managers and entrepreneurs: Similarities and differences. *Group & Organization Management*, 18(3): 366-378.
- Burcharth, A., Præst Knudsen, M., & Søndergaard, H. A. (2017). The role of employee autonomy for open innovation performance. *Business Process Management Journal*. 23(6):1245-1269.
- Burke, S., & Collins, K. M. (2001). Gender differences in leadership styles and management skills. *Women in management Review*. 16(5):244-257.

- Caliendo, M., Fossen, F., & Kritikos, A. (2010). The impact of risk attitudes on entrepreneurial survival. *Journal of Economic Behavior & Organization*, 76(1), 45-63.
- Carree, M. A., & Verheul, I. (2012). What makes entrepreneurs happy? Determinants of satisfaction among founders. *Journal of Happiness Studies*. 13(2):371-387.
- Carter, N.M., Gartner, W.B., Shaver, K.G. & Gatewood, E.J. (2003). The career reasons of nascent entrepreneurs. *Journal of Business Venturing*. 18(1): 13-39.
- Catalyst Organization. (2018). Women CEOs of the Fortune 1000. available at: <https://www.catalyst.org/knowledge/women-ceos-sp-500> (accessed December 06 2018).
- Charmaz, K. (2014), Constructing grounded theory, SAGE Publications Ltd, London, UK.
- Chen, C., & Li, B. (2008). The Work and Non-work Pressure of Female Managers. In *2008 International Seminar on Business and Information Management* (Vol. 2, pp. 482-487). IEEE.
- Chen, J., Leung, W. S., & Evans, K. P. (2018). Female board representation, corporate innovation and firm performance, *Journal of Empirical Finance*, Vol. 48, pp. 236-254.
- Chirkov, V., Ryan, R. M., Kim, Y., & Kaplan, U. (2003). Differentiating autonomy from individualism and independence: A self-determination theory perspective on internalization of cultural orientations and well-being. *Journal of Personality and Social Psychology*, Vol. 84 No. 1, 97-110.
- Collins, J.A. & Fauser, B.C. (2005). Balancing the strengths of systematic and narrative reviews, *Human Reproduction Update*, 11(2), 103-104.
- Corbett, A., Covin, J. G., O'Connor, G. C., & Tucci, C. L. (2013). Corporate entrepreneurship: State-of-the-art research and a future research agenda. *Journal of Product Innovation Management*. 30(5): 812-820.
- Covin, J.G. & Kuratko, D.F. (2010). The concept of corporate entrepreneurship, in V.Narayanan & G. O'Connor (Eds), *Encyclopedia of Technology and Innovation Management*, Wiley and Sons Ltd, West Sussex, UK, pp 207-213.
- Crossman, A., & Abou-Zaki, B. (2003). Job satisfaction and employee performance of Lebanese banking staff. *Journal of Managerial Psychology*. 18(4): 368-376.
- Dai, Y., Byun, G., & Ding, F. (2019). The Direct and Indirect Impact of Gender Diversity in New Venture Teams on Innovation Performance. *Entrepreneurship Theory and Practice*, 43(3), 505-528.

- Daniel, T.A., (2004). The exodus of women from the corporate workplace to self-owned businesses. *Employment Relations Today*, 30(4): 55-61.
- Davis, D., Morris, M., & Allen, J. (1991). Perceived environmental turbulence and its effect on selected entrepreneurship, marketing, and organizational characteristics in industrial firms. *Journal of the Academy of Marketing Science*, 19(1): 43-51.
- DeMartino, R., & Barbato, R. (2003). Differences between women and men MBA entrepreneurs: exploring family flexibility and wealth creation as career motivators. *Journal of Business Venturing*, 18(6): 815-832.
- Dezsö, C. L., & Ross, D. G. (2012). Does female representation in top management improve firm performance? A panel data investigation. *Strategic Management Journal*, 33(9): 1072–1089.
- Díaz-García, C., González-Moreno, A., & Jose Sáez-Martínez, F. (2013). Gender diversity within R&D teams: Its impact on radicalness of innovation. *Innovation*, 15(2), 149-160.
- Dikkers, J., van Engen, M., & Vinkenbug, C. (2010). Flexible work: ambitious parents' recipe for career success in The Netherlands. *Career Development International*, 15(6): 562-582.
- Dohse, D., Goel, R. K., & Nelson, M. A. (2019). Female owners versus female managers: Who is better at introducing innovations?. *The Journal of Technology Transfer*, 44 (2), 520-539.
- Donohue, S. M., & Heywood, J. S. (2004). Job satisfaction and gender: an expanded specification from the NLSY. *International Journal of Manpower*, 25(2): 211-238.
- Douglas, E. J., & Fitzsimmons, J. R. (2013). Intrapreneurial intentions versus entrepreneurial intentions: distinct constructs with different antecedents. *Small Business Economics*, 41(1): 115-132.
- Eagly, A. H. (2007). Female leadership advantage and disadvantage: Resolving the contradictions. *Psychology of Women Quarterly*, 31(1):1-12.
- Edelman, L. F., Brush, C. G., Manolova, T. S., & Greene, P. G. (2010). Start-up motivations and growth intentions of minority nascent entrepreneurs. *Journal of Small Business Management*, Vol. 48 (2): 174-196.
- Efrat, K. (2014). The direct and indirect impact of culture on innovation. *Technovation*, 34(1), 12-20.

- Elsesser, K. M., & Lever, J. (2011). Does gender bias against female leaders persist? Quantitative and qualitative data from a large-scale survey. *Human Relations*, 64(12): 1555-1578.
- Fellnhöfer, K., Puumalainen, K., & Sjögrén, H. (2016). Entrepreneurial orientation and performance—are sexes equal?, *International Journal of Entrepreneurial Behavior & Research*, Vol. 22 (3), 346-374.
- Fernández, J. (2015). The impact of gender diversity in foreign subsidiaries' innovation outputs, *International Journal of Gender and Entrepreneurship*, 7(2), 148-167.
- Finkle, T. A. (2012). Corporate entrepreneurship and innovation in Silicon Valley: The case of Google, Inc. *Entrepreneurship Theory and Practice*, 36(4), 863-884
- Firth, L., Mellor, D. J., Moore, K. A., & Loquet, C. (2004), “How can managers reduce employee intention to quit?”. *Journal of Managerial Psychology*, 19(2): 170-187.
- Foba, T. W., & de Villiers, D. (2007). The integration of intrapreneurship into a performance management model. *SA Journal of Human Resource Management*, 5(2), 1.
- Foss, L. (2010). Research on entrepreneur networks: the case for a constructionist feminist theory perspective. *International Journal of Gender and Entrepreneurship*, 2(1), 83-102.
- Foss, L., Woll, K., & Moilanen, M. (2013). Creativity and implementations of new ideas: do organisational structure, work environment and gender matter?. *International Journal of Gender and Entrepreneurship*, 5(3), 298-322.
- Fu, K., Larsson, A. S., & Wennberg, K. (2018). Habitual entrepreneurs in the making: how labour market rigidity and employment affects entrepreneurial re-entry. *Small Business Economics*, 51(2), 465-482.
- Fu, W., & Deshpande, S. P. (2014). The impact of caring climate, job satisfaction, and organizational commitment on job performance of employees in a China's insurance company. *Journal of Business Ethics*, 124(2), 339-349.
- Galia, F., & Zenou, E. (2012). Board composition and forms of innovation: does diversity make a difference?, *European Journal of International Management*, 6(6), 630-650.
- Galia, F., Zenou, E., & Ingham, M. (2015). Board composition and environmental innovation: Does gender diversity matter, *International Journal of Entrepreneurship and Small Business*, 24(1), 117-141.
- Garba, T., & Kraemer-Mbula, E. (2018). Gender diversity and enterprise innovative capability: The mediating effect of women's years of education in Nigeria, *International Journal of Gender and Entrepreneurship*, 10(4), 290-309.

Garcia Martinez, M., Zouaghi, F., & Garcia Marco, T. (2017). Diversity is strategy: the effect of R&D team diversity on innovative performance. *R&D Management*, 47(2), 311-329.

García Solarte, M., García Perez de Lema, D., & Madrid Guijarro, A. (2015), Cultura organizacional intraempresarial y el género del gerente: un estudio empírico en la pyme. *FAEDPYME International Review*, 4(6), 8-18.

Garrett, R. P., & Holland, D. V. (2015). Environmental effects on the cognitions of corporate and independent entrepreneurs". *Small Business Economics*, 45(2), 369-381.

Gawke, J. C., Gorgievski, M. J., & Bakker, A. B. (2018). Personal costs and benefits of employee intrapreneurship: Disentangling the employee intrapreneurship, well-being, and job performance relationship. *Journal of Occupational Health Psychology*. 23(4), 508-519.

Gaye, Amie, Jeni Klugman, Milorad Kovacevic, Sarah Twigg, & Eduardo Zambrano. (2010). Measuring Key Disparities in Human Development: The Gender Inequality Index. Human Development Research Paper 2010/46. New York: United Nations Development Programme (UNDP)

Gazioglu, S., & Tansel, A. (2006). Job satisfaction in Britain: individual and job related factors. *Applied economics*, 38 (10), 1163-1171.

Glass, C., Cook, A. & Ingersoll, A.R. (2016). Do women leaders promote sustainability? Analyzing the effect of corporate governance composition on environmental performance. *Business Strategy and the Environment*, 25(7), 495-511.

Global Entrepreneurship Monitor. (2018). Global Report 2017/2018. Available at: <https://www.gemconsortium.org/report/50012> (accessed 18 November 2018).

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(1), 1-47.

Greenhalgh, T., Robert, G., Macfarlane, F., Bate, P. & Kyriakidou, O. (2004). Diffusion of innovations in service organizations: systematic review and recommendations, *Milbank Quarterly*, 82(4), 581-629.

Guerrero, M., & Peña-Legazkue, I. (2013). The effect of intrapreneurial experience on corporate venturing: Evidence from developed economies. *International Entrepreneurship and Management Journal*, 9(3), 397-416.

Guerrero, M., & Peña-Legazkue, I. (2019). Renaissance after post-mortem: the choice of accelerated repeat entrepreneurship. *Small Business Economics*, 52(1), 47-65.

Gupta, V.K., Goktan, A.B. & Gunay, G. (2014). Gender differences in evaluation of new business opportunity: A stereotype threat perspective. *Journal of Business Venturing*, 29(2), 273-288.

Guth, W. D., & Ginsberg, A. (1990). Guest editors' introduction: Corporate entrepreneurship. *Strategic Management Journal*, 5-15.

Hackman, J. R., & Oldham, G. R. (1975). Development of the job diagnostic survey. *Journal of Applied Psychology*, 60(2), 159.

Hatak, I., Harms, R., & Fink, M. (2015). Age, job identification, and entrepreneurial intention", *Journal of Managerial Psychology*, 30 (1), 38-53.

Hayton, J. C., George, G., & Zahra, S. A. (2002). National culture and entrepreneurship: A review of behavioral research. *Entrepreneurship theory and practice*, 26(4): 33-52.

Hechavarria, D. M., Terjesen, S. A., Ingram, A. E., Renko, M., Justo, R., & Elam, A. (2017). Taking care of business: the impact of culture and gender on entrepreneurs' blended value creation goals. *Small Business Economics*, 48(1), 225-257.

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

Heilman, M. E., & Chen, J. J. (2003). Entrepreneurship as a solution: the allure of self-employment for women and minorities. *Human Resource Management Review*, 13(2): 347-364.

Hewlett, S. A. (2002). Executive women and the myth of having it all. *Harvard Business Review*, Vol. 80 (4), 66-73.

Horbach, J., & Jacob, J. (2018). The relevance of personal characteristics and gender diversity for (eco-) innovation activities at the firm-level: Results from a linked employer-employee database in Germany. *Business Strategy and the Environment*, 27(7), 924-934.

Hofstede, G. (1980), *Culture's Consequences: International Differences in Work-Related Values*. Beverly Hills, CA: Sage.

Hofstede, G. (2011). Dimensionalizing cultures: The Hofstede model in context. *Online Readings in Psychology and Culture*. 2(1), 8.

Hofstede, G. H., Hofstede, G., and Arrindell, W. A. (1998), *Masculinity and femininity: The taboo dimension of national cultures*, Sage, Thousand Oaks, CA.

Hofstede, G.H., Hofstede, G., & Minkov, M. (2010), *Cultures and Organizations: software of the mind: intercultural cooperation and its importance for survival*, Mc-Graw Hill, USA.

Horbach, J., & Jacob, J. (2018). The relevance of personal characteristics and gender diversity for (eco-) innovation activities at the firm-level: Results from a linked employer–employee database in Germany, *Business Strategy and the Environment*, 27(7), 924-934.

Hornsby, J. S., Kuratko, D. F., Shepherd, D. A., & Bott, J. P. (2009). Managers corporate entrepreneurial actions: examining perception and position. *Journal of Business Venturing*, 24(3), 236–247.

Hornsby, J.S., Kuratko, D.F. & Zahra, S.A. (2002). Middle managers' perception of the internal environment for corporate entrepreneurship: assessing a measurement scale. *Journal of Business Venturing*, 17 (3), 253-273.

Hughes, E. L., & Parkes, K. R. (2007). Work hours and well-being: The roles of work-time control and work-family interference. *Work and Stress*, 21, 264 –278.

Hunter, S. T., Cushenbery, L., & Friedrich, T. (2012). Hiring an innovative workforce: A necessary yet uniquely challenging endeavor. *Human Resource Management Review*, 22(4), 303-322.

Huse, M., & Grethe Solberg, A. (2006). Gender-related boardroom dynamics: How Scandinavian women make and can make contributions on corporate boards. *Women in management review*, 21(2), 113-130.

Huy, Q.N. (2001), In praise of middle managers, *Harvard Business Review*, 79(8), 72-9.

International Labor Organization (2018). World Employment Social Outlook, available at: https://www.ilo.org/wcmsp5/groups/public/---dgreports/---dcomm/---publ/documents/publication/wcms_615594.pdf (accessed 10 December 2018).

International Labour Organization (2015). Women in Business and Management: Gaining Momentum. Available at: www.ilo.org/wcmsp5/groups/public/---dgreports/---dcomm/---publ/documents/publication/wcms_334882.pdf (accessed 10 December 2018).

Ireland, R. D., Covin, J. G., & Kuratko, D. F. (2009). Conceptualizing corporate entrepreneurship strategy. *Entrepreneurship Theory and Practice*, 33(1), 19-46.

Ireland, R. D., Hitt, M. A., & Sirmon, D. G. (2003). A model of strategic entrepreneurship: The construct and its dimensions. *Journal of Management*, 29(6), 963-989.

Janssen, O. (2001). Fairness perceptions as a moderator in the curvilinear relationships between job demands, and job performance and job satisfaction. *Academy of Management Journal*, 4(5), 1039-1050.

Jaskiewicz, P., Combs, J.G. & Rau, S.B. (2015). Entrepreneurial legacy: Toward a theory of how some family firms nurture transgenerational entrepreneurship. *Journal of Business Venturing*, Vol. 30 (1), 29-49.

Jennings, J. E., & Brush, C. G. (2013). Research on women entrepreneurs: challenges to (and from) the broader entrepreneurship literature?. *The Academy of Management Annals*, 7(1), 663-715.

Judge, T. A., Thoresen, C. J., Bono, J. E., & Patton, G. K. (2001). The job satisfaction–job performance relationship: A qualitative and quantitative review. *Psychological Bulletin*, 127(3), pp. 376-407.

Khan, B.Z. (2016). Invisible women: Entrepreneurship, innovation, and family firms in nineteenth-century France, *The Journal of Economic History*, 76(1), 163-195.

Kim, J. L. S. & Ling, C. S. (2001). Work–family conflict of women entrepreneurs in Singapore, *Women in Management Review*. 16, 204–221.

Kirkwood, J., & Tootell, B. (2008), “Is entrepreneurship the answer to achieving work–family balance?”. *Journal of Management & Organization*, Vol. 14 No. 3, pp. 285-302.

Klyver, K., Hindle, K., & Meyer, D. (2008). Influence of social network structure on entrepreneurship participation—A study of 20 national cultures. *International Entrepreneurship and Management Journal*, 4(3), 331-347.

Klyver, K., Nielsen, S.L. & Ewald, 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.

Koellinger, P., Minniti, M., & Schade, C. (2013). Gender differences in entrepreneurial propensity. *Oxford Bulletin of Economics and Statistics*, 75(2), 213-234.

Konrad, A., Corrigan, E., Lieb, P., & Ritchie, J. (2000). Sex differences in job attribute preferences among managers and business students. *Group and Organization Management*, 25, 108–31.

Koys, D. J. (2001), The effects of employee satisfaction, organizational citizenship behavior, and turnover on organizational effectiveness: A unit-level, longitudinal study. *Personnel psychology*, 54(1), 101-114.

Kreiser, P. M., Kuratko, D. F., Covin, J. G., Ireland, R. D., & Hornsby, J. S. (2019). Corporate entrepreneurship strategy: extending our knowledge boundaries through configuration theory. *Small Business Economics*, 1-20.

Kreiser, P. M., Marino, L. D., Dickson, P., & Weaver, K. M. (2010). Cultural influences on entrepreneurial orientation: The impact of national culture on risk taking and proactiveness in SMES. *Entrepreneurship Theory and Practice*, 34 (5), 959-984.

Kuratko, D. F., Hornsby, J. S., & Bishop, J. W. (2005), "Managers' corporate entrepreneurial actions and job satisfaction. *The International Entrepreneurship and Management Journal*, 1(3), 275-291.

Kuratko, D. F., Hornsby, J. S., & Covin, J. G. (2014). Diagnosing a firm's internal environment for corporate entrepreneurship. *Business Horizons*, 57(1), 37-47.

Kuratko, D. F., Hornsby, J. S., & Hayton, J. (2015). Corporate entrepreneurship: the innovative challenge for a new global reality. *Small Business Economics*, 45(2), 245-253.

Kuratko, D.F., Hornsby, J.S. & Covin, J.G. (2014). Diagnosing a firm's internal environment for corporate entrepreneurship. *Business Horizons*, 57(1), 37-47.

Kuratko, D. F., Ireland, R. D., & Hornsby, J. S. (2001). Improving firm performance through entrepreneurial actions: Acordia's corporate entrepreneurship strategy. *Academy of Management Perspectives*, 15 (4), 60-71.

Kuratko, D.F., Ireland, R.D., Covin, J.G. & Hornsby, J.S. (2005). A model of middle-level managers' entrepreneurial behavior, *Entrepreneurship Theory & Practice*, 29 (6), 699-716.

Kushnirovich, N., & Heilbrunn, S. (2013). Innovation and conformity: intersection of gender and ethnicity in hi-tech organizations. *Journal of Management Development*, 32(2), 204-220.

Lambert, S.J. (2000). Added benefits: the link between work-life benefits and organizational citizenship behavior. *Academy of Management Journal*, 43(5), 801-815.

Lange, T. (2012). Job satisfaction and self-employment: autonomy or personality?. *Small Business Economics*, 38 (2), 165-177.

Langowitz, N., & Minniti, M. (2007). The entrepreneurial propensity of women. *Entrepreneurship Theory and Practice*, 31(3), 341-364.

Lassen, A. H., Gertsen, F., & Riis, J. O. (2006). The nexus of corporate entrepreneurship and radical innovation. *Creativity and Innovation Management*, 15(4), 359-372.

Lee, L., Wong, P. K., Der Foo, M., & Leung, A. (2011). Entrepreneurial intentions: The influence of organizational and individual factors. *Journal of Business Venturing*, 26(1), 124-136.

- Lee, S. M., & Peterson, S. J. (2000). Culture, entrepreneurial orientation, and global competitiveness. *Journal of World Business*, 35(4), 401-416.
- Lewis, J. (2006). Work/family reconciliation, equal opportunities and social policies: the interpretation of policy trajectories at the EU level and the meaning of gender equality. *Journal of European public policy*, 13(3), 420-437.
- Liñán, F., Moriano, J. A., & Jaén, I. (2016). Individualism and entrepreneurship: Does the pattern depend on the social context?. *International Small Business Journal*, 34(6), 760-776.
- Liñán, F., Rodríguez-Cohard, J. C., & Rueda-Cantuche, J. M. (2011). Factors affecting entrepreneurial intention levels: a role for education. *International entrepreneurship and management Journal*, 7(2), 195-218.
- Littman-Ovadia, H., Oren, L., & Lavy, S. (2013). Attachment and autonomy in the workplace: New insights. *Journal of Career Assessment*, 21(4), 502-518.
- Liu, G., Rong, K., & Ko, W. W. (2018). Promoting employee entrepreneurial attitudes: an investigation of Chinese state-owned enterprises. *The International Journal of Human Resource Management*, 1-19.
- Luksyte, A., Unsworth, K. L., & Avery, D. R. (2018). Innovative work behavior and sex-based stereotypes: Examining sex differences in perceptions and evaluations of innovative work behavior. *Journal of Organizational Behavior*, 39(3), 292-305.
- Lumpkin, G. T., & Dess, G. G. (2001). Linking two dimensions of entrepreneurial orientation to firm performance: The moderating role of environment and industry life cycle. *Journal of business venturing*, 16 (5), 429-451.
- Lumpkin, G. T., Cogliser, C. C., & Schneider, D. R. (2009). Understanding and measuring autonomy: An entrepreneurial orientation perspective. *Entrepreneurship Theory and Practice*, 33 (1), 47-69.
- Lyngsie, J., & Foss, N. J. (2017). The more, the merrier? Women in top-management teams and entrepreneurship in established firms. *Strategic Management Journal*, 38(3), 487-505.
- Mainiero, L. A. (1994). Getting anointed for advancement: The case of executive women. *Academy of Management Perspectives*, 8 (2), 53-64.
- 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.
- Manolova, T.S., Brush, C.G. & Edelman, L.F. (2008). What do women entrepreneurs want?. *Strategic Change*, 17(3-4), 69-82.

Manolova, T.S., Carter, N.M., Manev, I.M. & Gyoshev, B.S. (2007). The differential effect of men and women entrepreneurs' human capital and networking on growth expectancies in Bulgaria. *Entrepreneurship theory and practice*, 31(3), 407-426.

Manso, G. (2011). Motivating Innovation. *The Journal of Finance*, 66 (5), 1823-1860.

Marlow, S., & Swail, J. (2014). Gender, risk and finance: why can't a woman be more like a man?. *Entrepreneurship & Regional Development*, 26(1-2), 80-96.

Marlow, S., & Carter, S. (2004). Accounting for change: Professional status, gender disadvantage and self-employment, *Women in Management Review*, 19(1), 5-17.

Marques, C. S., Marques, C. P., Ferreira, J. J., & Ferreira, F. A. (2018). Effects of traits, self-motivation and managerial skills on nursing intrapreneurship. *International Entrepreneurship and Management Journal*, 1-16.

Martiarena, A., (2013). What's so entrepreneurial about intrapreneurs?, *Small Business Economics*, 40(1), 27-39.

Mas-Machuca, M., Berbegal-Mirabent, J., & Alegre, I. (2016). Work-life balance and its relationship with organizational pride and job satisfaction. *Journal of Managerial Psychology*, 31(2), 586-602.

Mason, C., & Brown, R. (2013). Creating good public policy to support high-growth firms. *Small Business Economics*, 40(2), 211-225.

Mattis, M. C. (2004), Women entrepreneurs: out from under the glass ceiling. *Women in Management Review*, 19(3), 154-163

Mauno, S., Kinnunen, U., & Ruokolainen, M. (2006). Exploring work-and organization-based resources as moderators between work–family conflict, well-being, and job attitudes. *Work & Stress*, 20(3), 210-233.

Maxfield, S., Shapiro, M., Gupta, V. & Hass, S. (2010). Gender and risk: women, risk taking and risk aversion. *Gender in Management: An International Journal*, 25(7), 586-604.

Maxwell, J.A. (2009). Designing a qualitative study. In L. Bickman and D.J. Rog (Eds), *The SAGE Handbook of applied social research methods*, SAGE publications Inc, Thousand Oaks, CA, 214-253.

McClelland, E., Swail, J., Bell, J., & Ibbotson, P. (2005). Following the pathway of female entrepreneurs: A six-country investigation. *International Journal of Entrepreneurial Behavior & Research*, 11(2), 84-107.

- Millan, J. M., Congregado, E., Roman, C., Van Praag, M., & Van Stel, A. (2014). The value of an educated population for an individual's entrepreneurship success. *Journal of Business Venturing*, 29(5), 612-632.
- Miller, D. (1983). The correlates of entrepreneurship in three types of firm, *Management science*, 29(7), 770-791.
- Miller, T., & del Carmen Triana, M. (2009). Demographic diversity in the boardroom: Mediators of the board diversity–firm performance relationship, *Journal of Management studies*, 46 (5), 755-786.
- Morris, M. H., Kuratko, D. F., & Covin, J. G. (2008), Corporate entrepreneurship and innovation. Cincinnati, OH: Thomson/SouthWestern Publishers.
- Morris, M. H., Kuratko, D. F., & Covin, J. G. 2010. Corporate entrepreneurship & innovation. Mason, OH: Cengage Learning.
- Na, D. M., Park, S. H., & Kwak, W. J. (2018). The Demographic Faultline Is a New Situational Factor for Team Management: The Effect of Leader Teamwork Behaviors on Support for Innovation. *The Journal of Asian Finance, Economics and Business (JAFEB)*, 5(4), 149-160.
- Na, K., & Shin, K. (2019). The Gender Effect on a Firm's Innovative Activities in the Emerging Economies. *Sustainability*, 11(7), 1992.
- Naldi, L., Nordqvist, M., Sjöberg, K., & Wiklund, J. (2007). Entrepreneurial orientation, risk taking, and performance in family firms. *Family business review*, 20(1), 33-47
- Nelson, J. A. (2015). Are women really more risk-averse than men? A re-analysis of the literature using expanded methods. *Journal of Economic Surveys*, 29(3), 566-585.
- Nicolaidis, C.S. & Kosta, G.C. (2011). Intrapreneurship as a unique competitive advantage. *World Academy of Science, Engineering and Technology*, 59(5), 1121-1125.
- Østergaard, C. R., Timmermans, B., & Kristinsson, K. (2011). Does a different view create something new? The effect of employee diversity on innovation. *Research Policy*, 40(3), 500-509.
- Parker, S. C. 2011. Intrapreneurship or entrepreneurship?. *Journal of Business Venturing*, 26(1), 19-34.
- Patterson, N., & Mavin, S. (2009). Women entrepreneurs: Jumping the corporate ship and gaining new wings. *International Small Business Journal*, 27 (2), 173-192.

Pickering, C., & Byrne, J. (2014). The benefits of publishing systematic quantitative literature reviews for PhD candidates and other early-career researchers. *Higher Education Research & Development*, 33(3), 534-548.

Pinillos, M. J., & Reyes, L. (2011). Relationship between individualist–collectivist culture and entrepreneurial activity: evidence from Global Entrepreneurship Monitor data. *Small Business Economics*, 37(1), 23-37.

Powell, G. N., Butterfield, D. A., & Bartol, K. M. (2008). Leader evaluations: a new female advantage?. *Gender in Management: An International Journal*, 23(3), 156-174.

Ramos-Rodriguez, A. R., Medina-Garrido, J. A., Lorenzo-Gómez, J. D., & Ruiz-Navarro, J. (2010). What you know or who you know? The role of intellectual and social capital in opportunity recognition. *International Small Business Journal*, 28(6), 566-582.

Rehman, S. & Azam Roomi, M.(2012). Gender and work-life balance: a phenomenological study of women entrepreneurs in Pakistan. *Journal of Small Business and Enterprise Development*, 19 (2), 209-228.

Reynolds, P. D. (2010). New firm creation: A global assessment of national, contextual, and individual factors. *Foundations and Trends in Entrepreneurship*, 6(5–6), 315-496.

Ritter-Hayashi, D., Vermeulen, P. & Knoblen, J. (2016). Gender diversity and innovation: The role of women’s economic opportunity in developing countries. *Tilburg University*.

Robb, A. M., & Watson, J. 2012. Gender differences in firm performance: Evidence from new ventures in the United States. *Journal of Business Venturing*, 27(5), 544-558.

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.

Rosener, J.B. (1990). Ways women lead. *Harvard Business Review*, 68, 119-125.

Rouleau, L. (2005). Micro-practices of strategic sensemaking and sensegiving: How middle managers interpret and sell change every day. *Journal of Management Studies*, 42(7), 1413-1441.

Ruiz-Jiménez, J. M., & del Mar Fuentes-Fuentes, M. (2016). Management capabilities, innovation, and gender diversity in the top management team: An empirical analysis in technology-based SMEs. *BRQ Business Research Quarterly*, 19(2), 107-121.

Ruiz-Jiménez, J. M., del Mar Fuentes-Fuentes, M., & Ruiz-Arroyo, M. (2016). Knowledge combination capability and innovation: The effects of gender diversity on top management teams in technology-based firms, *Journal of Business Ethics*, 135(3), 503-515.

Saffu, K. (2003). The role and impact of culture on South Pacific island entrepreneurs. *International Journal of Entrepreneurial Behavior & Research*, 9(2), 55-73.

Saggese, S., & Sarto, F. (2018). The Role of Women on Board for Innovation: Lessons from the High-tech Companies, *In IPAZIA Workshop on Gender Issues*, Springer, Cham, 169-180.

Saldaña, J., (2016). The coding manual for qualitative researchers. Sage, Thousand Oaks, CA.

Schindehutte, M., M. Morris, & C. Brennan. (2001), Female entrepreneurs and their children: Implications for family life, career aspirations and entrepreneurial perceptions. Paper presented at the Babson 2001 Conference, Jonkoping Sweden.

Sebora, T.C. & Theerapatvong, T. (2010). Corporate entrepreneurship: A test of external and internal influences on managers' idea generation, risk taking, and proactiveness. *International Entrepreneurship and Management Journal*, 6(3), 331-350.

Segal, G., Borgia, D., & Schoenfeld, J. (2005). The motivation to become an entrepreneur. *International Journal of Entrepreneurial Behavior & Research*, 11(1), 42-57.

Seibert, S.E., Kraimer, M.L. & Liden, R.C. (2001). A social capital theory of career success. *Academy of Management Journal*, 44(2), 219-237.

Shahriar, A.Z.M., (2018). Gender differences in entrepreneurial propensity: Evidence from matrilineal and patriarchal societies. *Journal of Business Venturing*, 33, 762-779.

Shane, S. (1993). Cultural influences on national rates of innovation. *Journal of Business Venturing*, 8(1).

Shane, S., & Cable, D. (2002). Network ties, reputation, and the financing of new ventures. *Management science*, 48(3), 364-381.

Shane, S., Locke, E. A., & Collins, C. J. (2003). Entrepreneurial motivation. *Human Resource Management Review*, 13 (2), 257-279.

Sharma, P. & Chrisman, J. (1999). Toward a reconciliation of the definitional issues in the field of corporate entrepreneurship. *Entrepreneurship Theory and Practice* 23(3): 11-27.

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.

Shipton, H. J., West, M. A., Parkes, C. L., Dawson, J. F., & Patterson, M. G. (2006), "When promoting positive feelings pays: Aggregate job satisfaction, work design features,

and innovation in manufacturing organizations". *European Journal of Work and Organizational Psychology*, 15(4), 404-430.

Shu, C., De Clercq, D., Zhou, Y., & Liu, C. (2019). Government institutional support, entrepreneurial orientation, strategic renewal, and firm performance in transitional China. *International Journal of Entrepreneurial Behavior & Research*, 25 (3), 193-216.

Singh, M., & Sarkar, A. (2019). Role of psychological empowerment in the relationship between structural empowerment and innovative behavior. *Management Research Review*, 42(4), 521-538.

Stainback, K., Kleiner, S. & Skaggs, S., (2016). Women in power: Undoing or redoing the gendered organization?. *Gender & Society*, 30(1), 109-135.

Stam, E. (2013). Knowledge and entrepreneurial employees: A country-level analysis". *Small Business Economics*. 41(4), 887-898.

Stanger, A. (1990). Female entrepreneurs in Australia: A review. *Asia Pacific International Management Forum*, 16(4), 12-20.

Stephan, U., Uhlaner, L. M., & Stride, C. (2015). Institutions and social entrepreneurship: The role of institutional voids, institutional support, and institutional configurations. *Journal of International Business Studies*, 46(3), 308-331.

Steyn, R., & De Bruin, G. P. (2018). The structural validity and measurement invariance across gender of the Brief Corporate Entrepreneurship Assessment Instrument. *South African Journal of Economic and Management Sciences*, 21(1), 1-8

Stuetzer, M., Audretsch, D. B., Obschonka, M., Gosling, S. D., Rentfrow, P. J., & Potter, J. (2018), Entrepreneurship culture, knowledge spillovers and the growth of regions. *Regional Studies*, 52 (5), 608-618.

Sullivan, D., & Marvel, M. (2011). How entrepreneurs' knowledge and network ties relate to the number of employees in new SMEs. *Journal of Small Business Management*, 49(2), 185-206.

Swaab, R. I., and Galinsky, A. D. (2015). Egalitarianism makes organizations stronger: Cross-national variation in institutional and psychological equality predicts talent levels and the performance of national teams. *Organizational Behavior and Human Decision Processes*, 129, 80-92.

Taylor, M. Z., & Wilson, S. (2012). Does culture still matter?: The effects of individualism on national innovation rates. *Journal of Business Venturing*, 27(2), 234-247.

Tharenou, P. (2001). Going up? Do traits and informal social processes predict advancing in management?. *Academy of management Journal*, 44(5), 1005-1017.

The World Bank (2019). Women, business and the law 2019, retrieved from <https://openknowledge.worldbank.org/bitstream/handle/10986/31327/WBL2019.pdf?sequence=4&isAllowed=y> (accessed 20 July 2019).

Torchia, M., Calabrò, A., Gabaldon, P., & Kanadli, S. B. (2018). Women directors contribution to organizational innovation: A behavioral approach. *Scandinavian Journal of Management*, 34(2), 215-224.

Torchia, M., Calabrò, A., & Huse, M. (2011). Women directors on corporate boards: From tokenism to critical mass, *Journal of Business Ethics*, 102(2), 299-317

Tian, M., Deng, P., Zhang, Y., & Salmador, M. P. (2018). How does culture influence innovation? A systematic literature review. *Management Decision*, 56(5), 1088-1107.

Tietz, M.A. & Parker, S.C. (2012). How Do Intrapreneurs and Entrepreneurs Differ in Their Motivation to Start a New Venture?, *Frontiers of Entrepreneurship Research*, 32(4), 4.

Turró, A., López, L., & Urbano, D. (2013). Intrapreneurship conditioning factors from a resource-based theory. *European Journal of International Management* 2, 7(3), 315-332.

Turró, A., Urbano, D., & Peris-Ortiz, M. (2014). Culture and innovation: The moderating effect of cultural values on corporate entrepreneurship. *Technological Forecasting and Social Change*, 88, 360-369.

Urbano, D., & Turró, A. (2013). Conditioning factors for corporate entrepreneurship: an internal approach. *International Entrepreneurship and Management Journal*, 9 (3), 379-396.

Valcour, M. (2007). Work-based resources as moderators of the relationship between work hours and satisfaction with work-family balance. *Journal of Applied Psychology*, 92(6), 1512.

Van Everdingen, Y. M., & Waarts, E. (2003). The effect of national culture on the adoption of innovations. *Marketing Letters*, 14(3), 217-232.

Van Wyk, R., & Adonisi, M. (2012). Antecedents of corporate entrepreneurship". *South African Journal of Business Management*, 43(3), 65-78.

Vázquez-Carrasco, R., López-Pérez, M.E. & Centeno, E. (2012). A qualitative approach to the challenges for women in management: are they really starting in the 21st century?, *Quality & Quantity*, 46(5), 1337-1357.

Wagner, J., (2007). What a difference a Y makes-female and male nascent entrepreneurs in Germany. *Small Business Economics*, 28(1), 1-21.

Walker, E.A. & Webster, B.J. (2007). Gender, age and self-employment: some things change, some stay the same, *Women in Management Review*, 22(2), 122-135.

Watanabe, C., Naveed, K., & Neittaanmäki, P. (2017). ICT-driven disruptive innovation nurtures un-captured GDP–Harnessing women's potential as untapped resources. *Technology in Society*, 51, 81-101.

Watson, J. (2002). Comparing the performance of male-and female-controlled businesses: relating outputs to inputs. *Entrepreneurship Theory and Practice*, 26(3), 91-100.

Watson, J. (2012). Networking: Gender differences and the association with firm performance. *International Small Business Journal*, 30(5), 536-558.

Weiler, S. & Bernasek, A. (2001), “Dodging the glass ceiling? Networks and the new wave of women entrepreneurs”, *The social science journal*, Vol. 38 No. 1, pp. 85-103.

Welter, F., & Smallbone, D. (2011). Institutional perspectives on entrepreneurial behavior in challenging environments. *Journal of Small Business Management*, 49(1), 107-125.

Wentling, R.M. (2003). The career development and aspirations of women in middle management–revisited”, *Women in Management Review*, 18 (6), 311-324.

Whittington, K. B. (2018), A tie is a tie? Gender and network positioning in life science inventor collaboration, *Research Policy*, 47(2), 511-526.

Wiklund, J., & Shepherd, D. (2005). Entrepreneurial orientation and small business performance: a configurational approach”. *Journal of Business Venturing*, 20(1), 71-91.

Wood, C. C., Holt, D. T., Reed, T. S., & Hudgens, B. J. (2008). Perceptions of corporate entrepreneurship in air force organizations: antecedents and outcomes. *Journal of Small Business & Entrepreneurship*, 21(1), 117-131.

World Economic Forum (2018). World economic forum annual meeting 2018, Creating a shared future in a fractured world. Available at: http://www3.weforum.org/docs/WEF_AM18_Report.pdf (accessed 04 December 2018).

Xavier, S. R., Ahmad, S. Z., Nor, L. M., & Yusof, M. (2012). Women entrepreneurs: Making a change from employment to small and medium business ownership. *Procedia Economics and Finance*, 4, 321-334.

Yiu, D.W., Lau, C.M., & Bruton, G.D. (2007). International venturing by emerging economy firms: The effects of firm capabilities, home country networks and corporate entrepreneurship, *Journal of International Business Studies*, 38,519–540.

Yu, D., Lau, C., & Bruton, G. (2007). International venturing by emerging economies firm: the effects of firm capabilities, home country networks, and corporate entrepreneurship. *Journal of International Business Studies*, 38, 519-540.

Zahra, S. A. (2015). Corporate entrepreneurship as knowledge creation and conversion: The role of entrepreneurial hubs. *Small Business Economics*, 44(4), 727-735.