# **Contributions of Women Entrepreneurship Studies for Policymakers**

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Abstract: - In the knowledge society, the issue of gender-linked to entrepreneurship is gaining more and more space in the academic community. Thus this paper aims to map the intersections between entrepreneurship and the female gender. For this, the bibliometric analysis was performed from a systematic search in the Sc opus database. As a result, it was identified that the research emerges Economy, Econometrics and Finance; Social Sciences; Business, Management and Accounting; Agrarian and Biological Sciences; Medicine; Arts and Humanities; Biochemistry, genetics and molecular biology; Computer Science; Environmental Science; Engineering; Multidisciplinary; Psychology; Energy; Nursing; Earth and Planetary Sciences; Health Professions; Mathematics; Neuroscience and Pharmacology, Toxicology and Pharmaceuticals, which allows us to weave the state of the art of the theme from the consulted database.

Key-words: Gender, entrepreneurship and management.

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## 1 Introduction

The issue of gender and entrepreneurship has been the subject of study by m any academic communities, policymakers, and institutions in recent years [1]According to the Global Entrepreneurship Monitor [2] report illustrates asymmetries in entrepreneurship, highli ghting Brazil as one of the three countries where the proportion of women who started businesses is higher than the pr oportion of men, along with Malaysia and Indo nesia. However, in other countries, the reality is different, pointing to a considerable gender asymmet ry. An exa mple is Europe, where men are twice as involved entrepreneurial activities as women.

Studies on the role of gender in entrepreneurship have been growing significantly in recent y ears [3]. Thus, this paper ai med to map the intersections between entrepreneurship and the female gender.

The article was divided into five sections. The first previously explained is entitled Introduction. In

the second section, the resear ch procedures are presented. In the third section, we present in detail the bibliometric research result, based on the scenario of scientific publications in the area. In the fourth section, the final considerations are explained. Finally, in the fifth section, the references used are listed.

# 2 Methodology

To address the research problem proposed in this study, a m ethodology classified as exploratory-descriptive was employed. This methodology aims to outline the them e and increase the researchers' familiarity with the fact, as well as clarify the concepts inherent to the theme under study [4].

As a literat ure search method, we used a systematic search in an online database, followed by a bibliometric analysis of the results. Bibliometrics is an information science methodology that uses mathematical and statistical methods to m ap documents and pu blication patterns from bibliographic records stored in databases. Thus, the

bibliometric methodology allows, for the auth ors cited, relevant counts such as production by region, the temporality of publications; research by area of knowledge; literature counting related to the study citation; impact factor of a scientific publication. These counts allow the visualization of scientific and statistical data that corroborate the systematization of the re-sult of research and the minimization of the occurrence of intersections when looking at a particular theme.

### 2.1 Data Collection Procedures

For the bibl iometric analysis, the study was elaborated in three distinct stages: planning, collection, and result. These st eps took place in an integrated and synchron ous way to answer the guiding question of the research: What are the links between entrepreneurship and the female gender?

Planning began in Aug ust 2019, when the research was carried out. In the sc ope of the planning, the Scopus database (<a href="http://www.scopus.com">http://www.scopus.com</a>) was stipulated as relevant for the research domain, due to its relevance in the academ ic environment, its interdisciplinary character, its tim eliness and also because it is one of the largest bases of abstracts and references of peer-reviewed scientific literature.

Considering the rese arch problem, the se arch terms were delimited in the planning phase, namely: "entrepreneurship and the female gender." As a basic principle for the s earch, we chose to use the terms in the fields "title," "abstract," and "keyword," without the restriction of tim e, language, or any other that may limit the result.

## 2.2. Procedures for data analysis

Based on the resear ch planning, data collection retrieved a total of 66 open-access indexed papers, with the first record dated 2002 and t he last 2019, and a timeframe was ugly until August 2019.

As a result of this data collection, it was found that the works were written by 114 authors linked to 116 institutions from 39 countries. One hundred seventy-two keywords were used to identify and index the publications, which are distributed in 1 9 knowledge areas and 1 ty pe of publication. Table 1 presents the result of data collection in a general bibliometric analysis of the results obtained in the Scopus database.

Table 1 – General bibliometric data obtained from the Scopus database

Database	Scopus
Theme	entrepreneurship and the female gender
Fields	"title", "abstract", "keyword"
Number of publications	66
Authors	114
Institutions	116
Countries	39
Keywords	172
Knowledge Areas	19
Source	1

Source: Authors (2019).

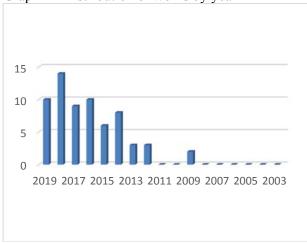
The universe of 66 scientific works co mpose the sample for a general bibli ometric analysis of publications in the area of: Econom ics, Econometrics and Fina nce; Social Sciences; Business, Management and Accounting; Agrarian and Biological Sciences; Medicine; Arts and Humanities; Biochemistry, genetics and molecular biology; Computer Science; Environmental Science; Engineering; Multidisciplinary; Psychology; Energy; Nursing; Earth and Planetary Sciences: Health Professions; Mathematics; Neuroscience and Pharmacology, Toxicology and Pha rmaceuticals, which allows us to weave the state of the art of the theme from the consulted database.

To further analy ze the r esults in bi bliometric analysis, the result was exported to a bibliographic management software called EndNot eWeb (web-based software that contributes to the resea rcher's work during the writing process of his research). Thus, the relevant information was classified according to temporal distribution; principal authors, institutions, and countries; type of publication in the area; top keywords and most referenced works.

# 3 Results and discussion

At first, it was analyzed the temporal distribution of the works, which allowed us to identify that the first publication on the subject is regist ered in 2002 with only one work. There are no pu blications in 2003 and 2008. In 2009 there were two publications. In the years 2010 and 2011, there were no publications. Already in 2012 and 2013, there were three publications. In the year 2014, there were eight publications. In 2015 there was an increase in publication with six articles published. In 201 there was an increase again, with the publication of 10 articles. In 2017, there was a decrease again, with nine articles published. Already in 2016, there was increase in publications with 14 articles published. In 2018 until the moment of the research had ten articles published. The following graph help to visualize this data:

Graph 1 - Distribution of works by year



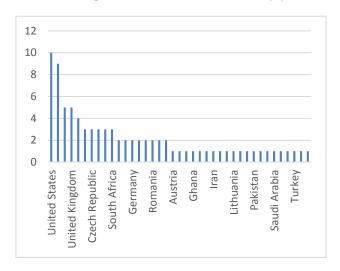
Source: Authors (2019).

A pioneering article was published in 200 2, entitled Örjan Hemströ m's Alcohol-related deaths contributing to socioe conomic differentials in Sweden. Its objective was to esti mate the contribution of alcohol to the so cioeconomic mortality differentials in Sweden, referring to gender. Male and female on this issue.

From a systemic and focused look at the 66 works located, there is a varied list of countries that stand out. The United Stat es is the most prominent country, with 12% of t otal publications, ie, ten articles. Second is Sweden, with 11% of occurrences, or nine works. In third place are Spain and the United Kingdom, with 6%, ie, five articles, which shows that there is a lack of work in this area on the world stage. Graph 2 shows the relationship between countries and publications indexed in the

area according to the Scopus database, as shown in graph 2.

Graph 2 - Distribution of works by year



Source: Authors (2019).

Based on graph 2, which illustrates the frequency of publications on the topic under study in this article, it can be seen that research in the are a is relevant and that, in general. Thus, from the 66 papers filtered in the search, the authors that have two articles published stand out for this research, as shown in Table 2 below:

Table 2 - Authors with the most significant number of publications in the area, with their affiliations and their countries

Author	Number of Publicatio ns	Affiliation	Country
Balkfors, Anna	2	Lunds Universite t	Sweden
Cepel, Martin	2	Paneurope an University Bratislava	Slovakia
Gavriilidis, Georgios	2	Organisati on Mondiale de la Santé	Switzerla nd

Gavriilidou, Nivetha Natarajan	2	Lunds Universite t, Lund	Sweden
Pettersson, Erika	2	Malmö City Council	Sweden
Renhammar, Eva	2	Malmö City Council	Sweden
Östergren, Per Olof	2	Lunds Universite t	Sweden

Source: Authors (2019).

Based on T able 2, it is observed that the institution with the most professionals discussing is Sweden with five authors and two publications each.

From the bibliom etric analysis, based on the group of works retrieved from the Scopus database, it was possible to i dentify a total of 168 different keywords. The highlight was the keyword Gender with 28 occurrences, followed by Entrepreneurship 26 occurrence, Female 13, Human 12, Male 10, Article 9, Female Entrepreneurship 9, Humans 9. Sex Difference 9, Entrep reneur 6, Entrepreneurial Intention 6, Sex Factors 6, Adult 5, Age 5, Controlled Study 5, Education 5, Middle Aged 5, Women Status 5, Behavior 4, Commercial Phenomena 4, Empowerment 4, Major Clinical Study 4, Occupation 4 and Sweden 4 occurrences. Words with less than three occurrenc es were not included in this sear ch. These are the highlight words, among others, that appeared as words in this publication scenario, as showed in figure 1.

Figure 1- Tag Cloud



Source: Authors (2019).

In the analysis of the ke ywords, female gender and entrepreneur gain prominence in word quantity, as it is a topic that is being m uch discussed at the moment, despite the lack of publications on this theme.

Finally, in qualitative analy sis, it was noticed that the disc ussion also involves the concern with the entrepreneurship formats and their connection to the female gender, which must be guaranteed through public policies regarding the actions carried out in the world scenario for the realization of these guarantees the population of this kind. As practical inputs, the findings help entrepreneurship promotion agencies and entrepreneurship education units to understand gender-specific characteristics and attitudes in the process of starting a business. This enables the creation of training policies and business training courses by gender, allowing for potential optimization of results.

### 4 Conclusion

This paper advances the literature empirically demonstrating that the issue between gender and business creation is little discussed in the literature. Also, the research demonstrates quantitative results such as the leading authors, countries, key words, and also the temporal location of when the scientific community discussed the subject. Thus enriching the debate on the relevance of variables associated with the path of creation and development of

business related to the female gender. The scientific mapping of the production related to the them e between entrepreneurship and the female gender allowed a bi bliometric analysis that described the main contemporary discussions and the intersection between the areas. As a result, it was identified that the research emerges in the multidisciplinary field, intersecting the discussions in the fields: Economics, Econometrics and Finan ce; Social Sciences; Business, Management and Accounting; Agrarian and Biological Sciences; Medicine; Arts Humanities: Biochemistry, genetics and molecular biology; Computer Science: Environmental Science; Engineering: Multidisciplinary; Psychology Energy; Nursing; Earth and Planetary Sciences; Health Professions; Mathematics; Neuroscience and Pharmacology, Toxicology and Pharmaceuticals.

### References:

- [1] Thébaud, S. (2015). Business as plan B: Institutional foundations of gender inequality in entrepreneurship across 24 industrialized countries. Administrative Science Quarterly, v. 60, n. 4, p. 671-711, 2015.
- [2] Global Entrepreneurship Monitor (GEM). Global Report 20 16/2017. Global Entrepreneurship Research Association (GERA), London Business School, UK, 2017.
- [3] Frigotto, M. L.; Della V, N.. (2016) Gender and the Structuring of the Entrepreneurial Venture: An Effectuation Approach. International Journal of Entr epreneurial Venturing,
- [4] Lakatos, E. M.; Marconi, M. (2 010) De A. Fundamentos de m etodologia científica. São Paulo: Atlas, 2010.