



# REVIEW OF WOMEN ENTREPRENEURSHIP LITERATURE: A BIBLIOMETRIC ANALYSIS

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## ABSTRACT

The growing trends and concern in women entrepreneurship makes it necessary to create models and bibliometric summary on this field of study.The goal of this work is to look at the descriptive and evaluative findings of articles in the scopus database about women entrepreneurs and also assess the impact of women entrepreneurship on scholar. The bibliometric analysis method was applied in this study for this reason. The scopus database was searched for 1264 scientific papers published between 1997 and 2023.Biblioshiny software was utilised to display the analysis results.The descriptive results showed that most articles analyzed in the year 2022, Morduch J was the most co-cited author,U.S.A is the most productive country,international journal of gender and entrepreneurship is the most productive journal,microfinance and self help group is the most productive words and feminism and entrepreneur is most trended topics in the study area.based on theses results,systematic literature reviews on women entrepreneurship at national level in different could be carried out.

**KEYWORDS;**-women entrepreneurship,female entrepreneurship,Women Business,Bibliometric analysis,Scopus.

## INTRODUCTION

In recent years, the study of women entrepreneurship has grown rapidly, gaining widespread acceptance among academics and, most all, contributing to a better understanding of the variables contributing to women's difficulties pursuing entrepreneurial careers. According to the coming literature, women can make a significant contribution to entrepreneurial activity (Noguera et al., 2013) and economic growth (Kelley et al., 2017; Hechevarría et al., 2019) with the aim of creating new jobs and increasing the gross domestic product (GDP) (Bahmani-Oskooee et al., 2013; Ayogu and Agu, 2015), with positive impacts on reducing poverty and social exclusion (Langowitz and Minniti, 2007; Rae, 2015). However, the percentage

of women who choose to pursue an entrepreneurial career is lower than that of men (Elam et al., 2019), and this disparity grows as the country's degree of development improves (Coduras and Autio, 2013).

In this regard, the rise in the volume of studies on female entrepreneurship highlights the necessity for bibliometric study on the subject. Thus, the purpose of this study is to investigate diagnostic and evaluative findings based on publications conducted in the scopus database on women entrepreneurship. In accordance with this purpose, this research is believed to make three important contributions to the literature. Firstly, this research will present an overview of the international development of entrepreneurship education in educational contexts in the scopus database. Secondly, the collaboration of entrepreneurship education researchers in educational contexts in the scopus database will be revealed. Thirdly, the citation analysis findings and keyword findings will identify the most cited articles and reveal frequently used keywords. In fact, all these contributions will give a general perspective to new researchers working in this field. In this way, entrepreneurship education researchers who focus especially on educational contexts will be able to see the authors, articles, organizations, institutions, journals, references, keywords and alike, that stand out. As a result, the following are the sub-problems of this research:

- (1) What is the distribution of descriptive findings (years, authors, institutions, countries, and journals) in the scopus database for articles on women entrepreneurship?
- (2) What is the distribution of evaluative outcomes (co-authorship network, co-citations, co-occurrence keywords) articles on women entrepreneurship in scopus database?

## LITERATURE REVIEW

There is an increase in number of studies aimed at exposing the current state of women entrepreneurship in the literature because women entrepreneurship has been an established component of education as well as economy that has been researched for many years. as a result, several bibliometric research on female entrepreneurship can be found in literature. Several studies in business, management, and economic environments have been conducted (Dana et al, 2023), Fayaz et al (2022), Raman. R et al (2022). for eg; Dana et al (2023) conducted bibliometric analysis and systematic literature review on the historical and theoretical perspectives of women entrepreneurship in India and bibliometric analysis portrays the publication landscape ,including the most popular journals, authors and countries, citation analysis and keyword analysis. Fayaz et al ,(2023) make a bibliometric analysis on women entrepreneurship using scopus database and found that most consistent key word is "gender" and identified that Ahl (2006) as the most cited article, moreover , raman et al (2022) , provides insights into the development of women entrepreneurship research , including a new analysis through the lens of economic development and the impact of the COVID-19 pandemic and reveals that a significant bias towards women's empowerment in ICT, digitalisation and e-commerce while exposing the need for gender moderated policies and governmental interventions. here, it is worth noting that these studies have been carried out in the context of business and economics.

It is also possible to see bibliometric analysis studies conducted on rural women entrepreneurship from general perspectives Parmar.S & Gahlawat.S (2020) Aggarwal.M &Johal.R.K(2021).for eg Parmar.S & Gahlawat.S (2020) highlights the growth of literature on rural women entrepreneurship from 1989 to 2018 by using Scopus data base and find out that paper by Warnakulasuriya,Johnson and Van Der Waal accounted highest number of citations (130).

Aggarwal and Johal, (2021) make a systematic literature review and bibliometric analysis on rural women entrepreneurship by using a scopus journals and highlight the keywords “women entrepreneurship”OR “female entrepreneurship”OR “women entrepreneurs”AND “rural entrepreneurs” for further processing .the study uses biblioshiny software for making Bibliometric analysis.

It is also possible to see a bibliometric studies conducted on women entrepreneurship from general perspectives (Moreiraj et al )(2019) conducted bibliometric analysis on articles in the WOS databases and reveals three main clusters from the research, (a) epistemological position & gender (b) cultural and social reasons for the creation of businesses and (c) motivations,business characteristics,& performance.

Moreover slavinski et al,(2020) make a descriptive bibliometric analysis on women entrepreneurship by using the keywords “women entrepreneurship”,”education”,in scopus database and rely on analytical tool and bibexcel,while a world cloud text generator was used to create some of the graphical representations .Machado et al (2020) exit the intersections between entrepreneurship and female gender and the research emerges in multidisciplinary approach.Bagis et al (2020) shows that studies on women entrepreneurship in family businesses are in three clusters where first focused on family succession and women’s role,the second cluster includes succession and process,gender bias,leadership and entrepreneurship.the third cluster includes the themes of women leaders and identity construction dominate and the study addresses that the future literature on women’s entrepreneurship in family businesses.

As a result, it can be said that there is no bibliometric analysis investigating studies conducted in women entrepreneurship in decades in India in scopus database using Biblioshiny and Rstudio.

## **Materials and methods**

The data sources and research approach utilised to identify and analyse the study are described in this section.

### **Data sources and collection**

This article selects Scopus as the data source (<https://www.scopus.com/>). Scopus is the largest abstract and citations database of peer-reviewed literature -scientific journals,books and conference proceedings with more than 81 million items from more than 7000 publishers in 105 countries and includes 17 million author profiles (Elsevier, 2021). The entered search terms are [Women entrepreneurship OR Female entrepreneurship OR women business OR women-industries OR female businesses]. The analyzed period was from 1977 to 2023. The search language is english. The Scopus bibliographic citation database includes various types of documents, but only original articles were considered in the present analysis. A

total of 1264 documents were finally selected for the analysis. The complete records for each publication retrieved during the search were converted as a Scopus BibTex file and imported into Bibliometrix and Biblioshiny.

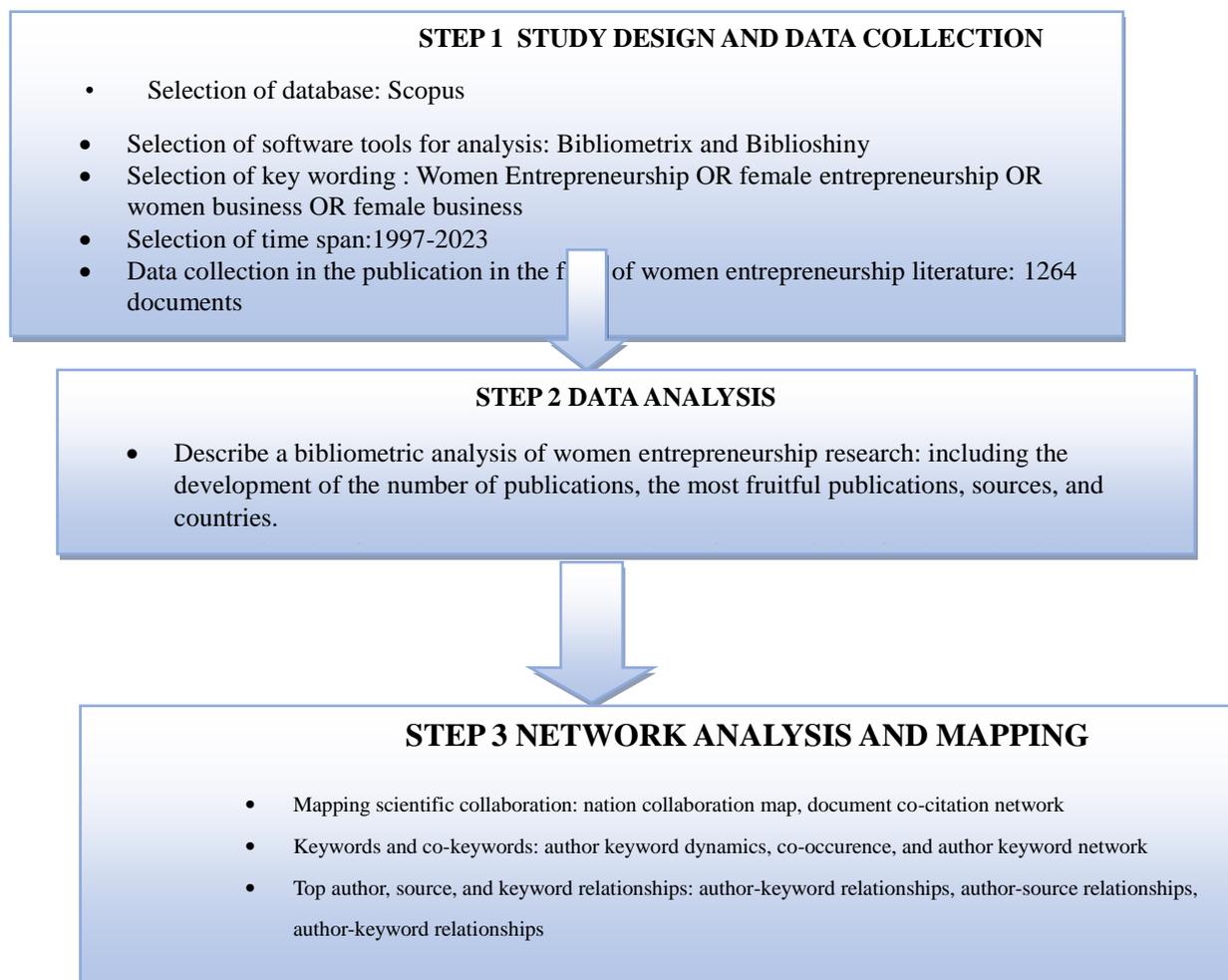
## 2.2 Research method

### 2.2.1 Research software

The R language environment is used to run the free source packages Bibliometrix and Biblioshiny. Bibliometrix enables the completion of the entire process of scientific literature analysis and data processing. Biblioshiny is an online data analysis platform that captures the fundamental Bibliometrix code (Aria & Cuccurullo, 2017). Biblioshiny's interactive web interface allows users to perform relevant bibliometric and visual analyses.

### 2.2.2 Network analysis and mapping

The research shows bibliometric indicators on women entrepreneurship such as publishing volume in number of articles, citation count, and keywords using the Bibliometrix and Biblioshiny packages. The article then includes figures and maps, such as a citation network diagram, a theme evolution map, and an international collaboration network map, to identify research areas of greatest need, scientific status, and the dynamics of the women entrepreneurship threshold across time.



**Results and discussions**

**Evolution of number of articles**

The evolution of the number of articles published on women entrepreneurship during the period 1997-2023 is presented in figure 2. the number of publication started to increase in 2000(20) articles and considerably increased over the period analyzed. the graph shows an escalation in women entrepreneurship publication 2005 and spotted as the peak of publication in 2022 with more than 250 articles in the year.

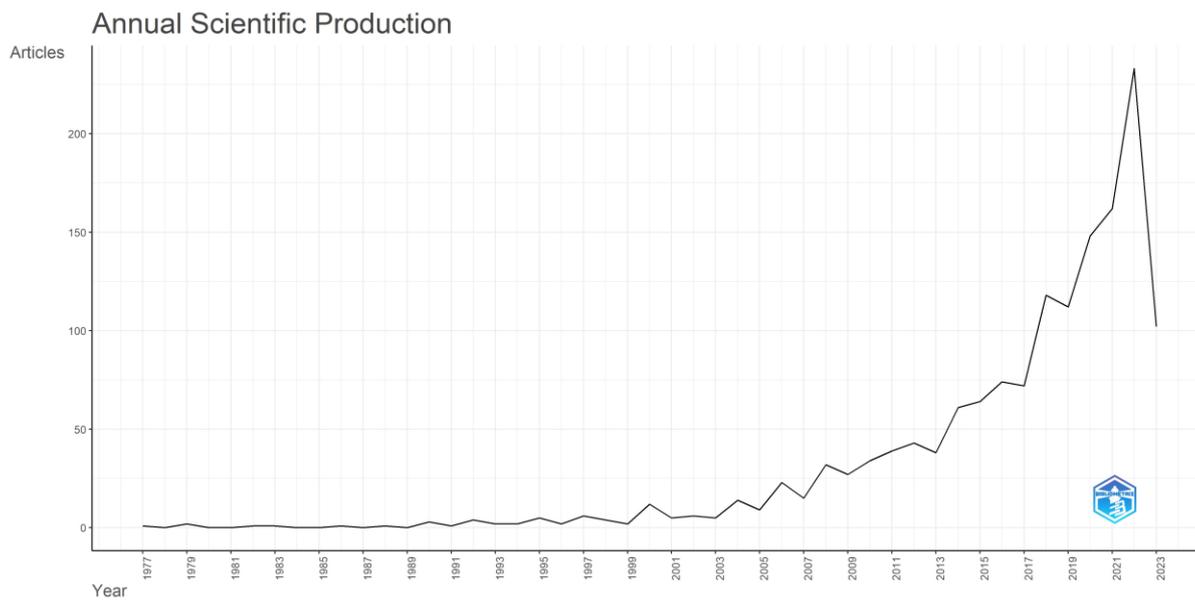


Fig. 2 Evolution of the number of articles (1997–2023). Source: Scopus/Biblioshiny

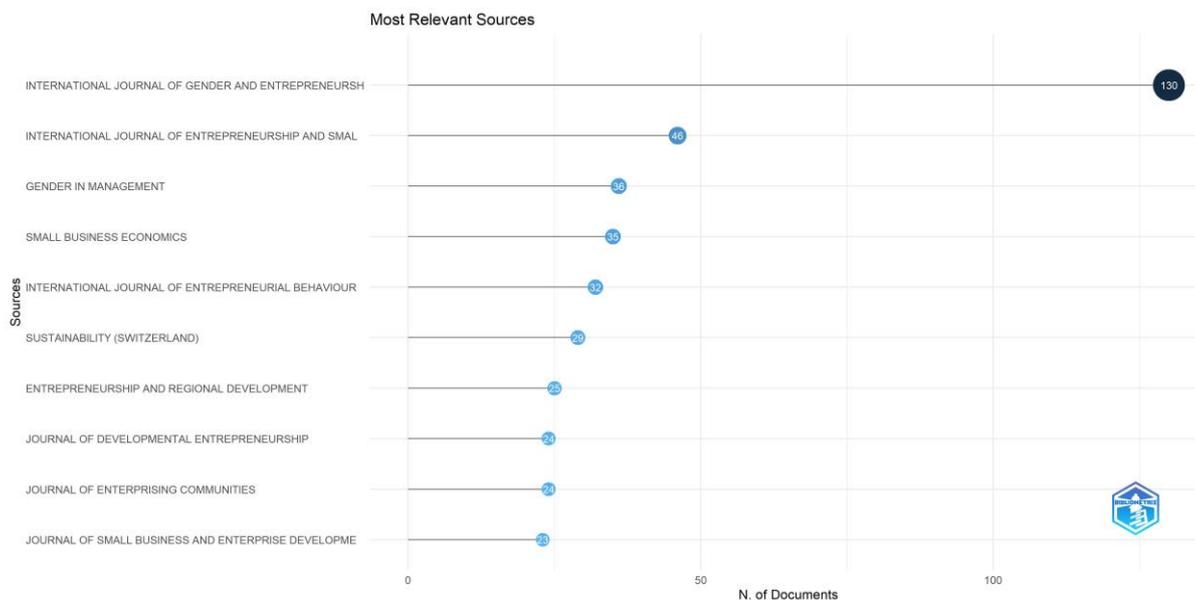


Fig. 3 most relevant sources. Source: Scopus/Biblioshiny

Figure 3 shows the journals that published most articles about women entrepreneurship over the period 1997-2023.”international journal of gender and entrepreneurship”was the journal that published the highest number of articles on women entrepreneurship(130)during the period 1997-2023.international journal of entrepreneurship and SMAL was the second leading journal with 46 articles found on women entrepreneurship.the journal “gender in management” published 36 articles,meanwhile the journal “small business economics” published 35 articles.

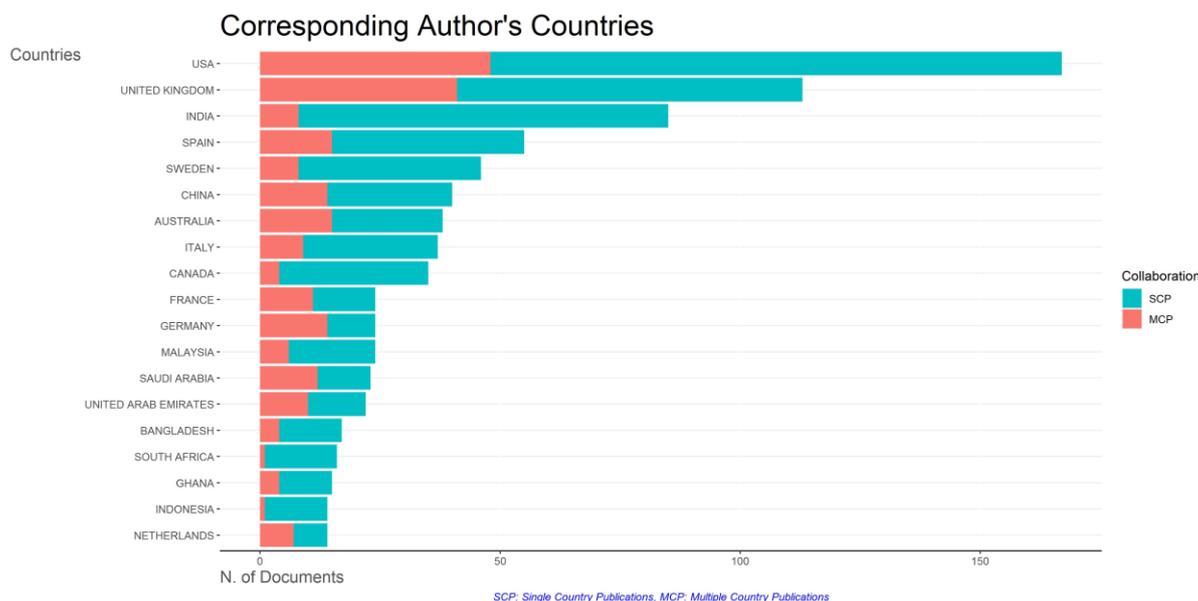


Figure 4 Scientific production of the main countries linked to the women entrepreneurship. Source: Scopus/Biblioshiny

Graph 4 shows countries with higher scientific production on women entrepreneurship. It is observed that two American countries(USA,Canada),two Asian countries (India,China),one Australian country (Australia),and five European countries (UK,Spain,Swedwen,Italy, and France) among the top ten countries.Developed countries occupy a higher proportion and present a strong research impact in the field of women entrepreneurship.the USA obtained first position in the world with a total of 175 articles.

Country Scientific Production

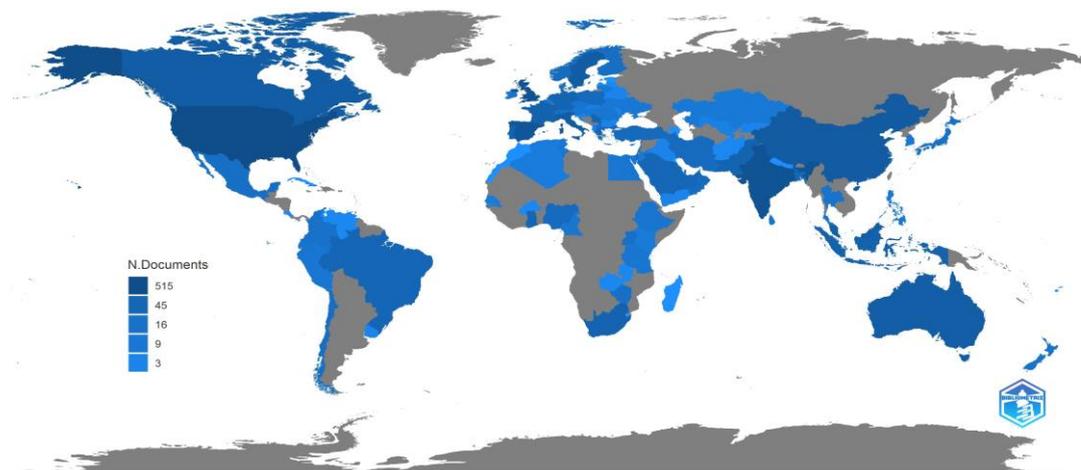
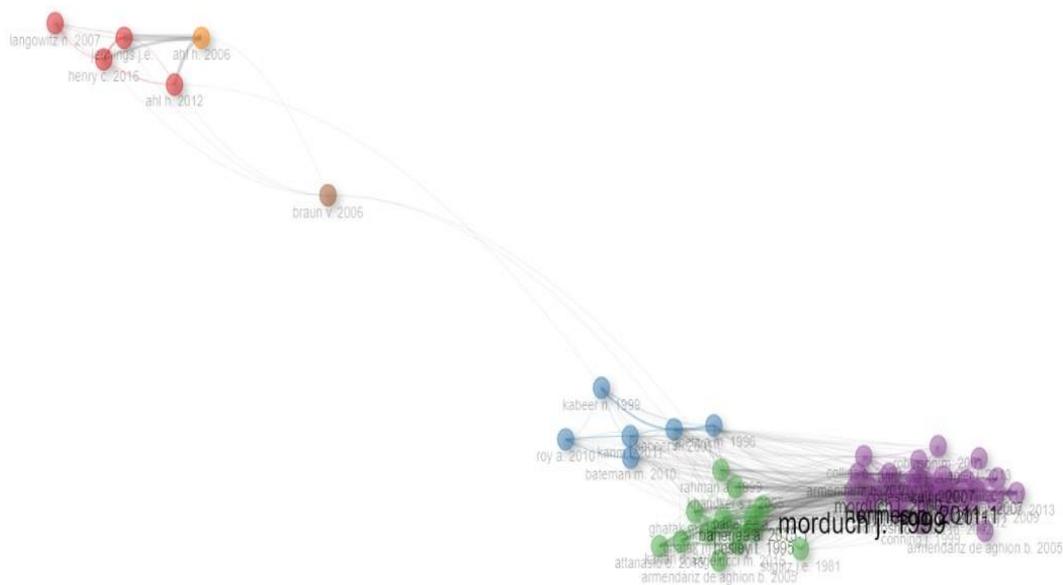


Fig. 5 Country collaboration map. Source: Scopus/Biblioshiny

A map shown in Fig 5 identifies the country collaboration of the main producing countries. Some Asian countries, Australia both North America and south America holds highest document producing countries in women entrepreneurship holding dark blue colour. Bugge et al (2016) observed that different kinds of organisations such as companies and not only universities were placed in a geographic cluster of collaborations.

Fig 6 shows a co-citation analysis with each box representing an article in the women entrepreneurship. The size of the name indicates the volume of the citation (the larger the size of the name, the more author's documents are cited) and the proximity of the boxes indicates a close relationship between the co-cited documents. As a result, the formation of co-citation networks around the authors mentioned below is evident.



Co-citation network. Source: Scopus/Biblioshiny

## ANALYSIS OF KEYWORDS AND CO-KEYWORDS

The main term occurrence per year are presented in figure 6. Most of them have increased over time. However, some terms have experienced a more dynamic growth compared to others. During the studied period, the terms with the highest increase in occurrences were mainly “microfinance”; then at a lower level, “male”, “article”, “self-help”, “self-help groups” and “human” were used.

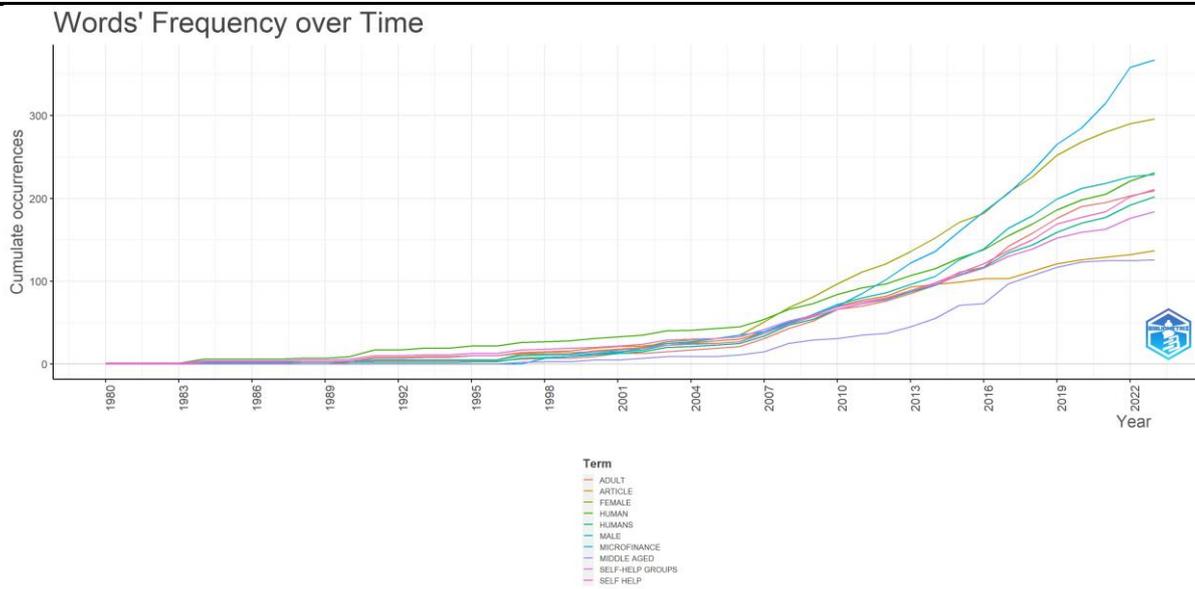


Fig 7 Evolution of authors' keywords in the women entrepreneurship literature. Source: Scopus/Biblioshiny

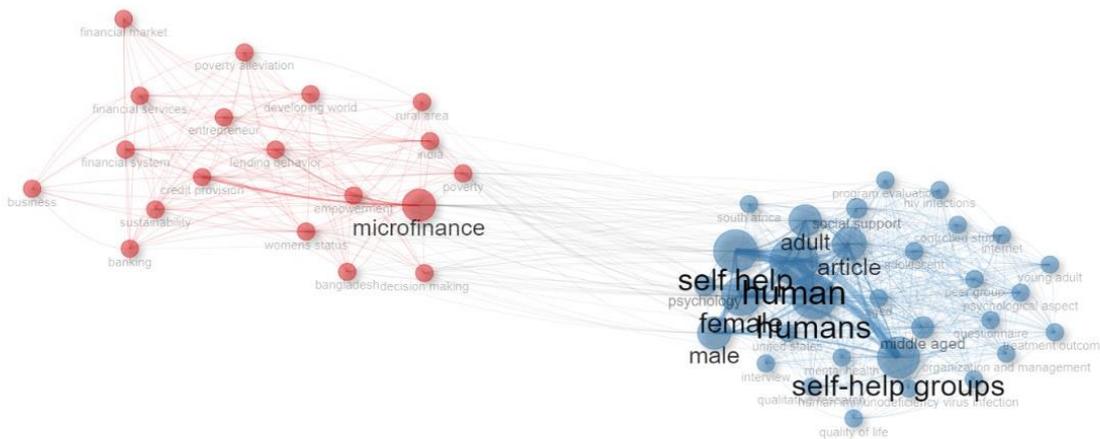


Fig 8 Author keywords co-occurrence network in the women entrepreneurship literature. Source: Scopus/Biblioshiny



Fig 9 word cloud In women entrepreneurship literature. Source: Scopus/Biblioshiny

Figure 8 shows the keyword co-occurrence network. The number of occurrences of the keywords is represented through the large size of words in the graph. more co- selected author's keywords in the women entrepreneurship literature increase the size of words in the graph. the topic similarity and its relative strength are represented through the distances between the elements of individual pairs. the keyword microfinance is most frequently used and all other terms in the red colour are co occurred with the term "microfinance". Similarly "self help groups", "female", "human" and "article" are the keywords frequently used with women entrepreneurship.

Figure 9 word cloud also means the same significance of keyword occurrence in the research women entrepreneurship where MICROFINANCE is placed centrally in big letters, other keywords are placed around it on the basis of its usage in the study.

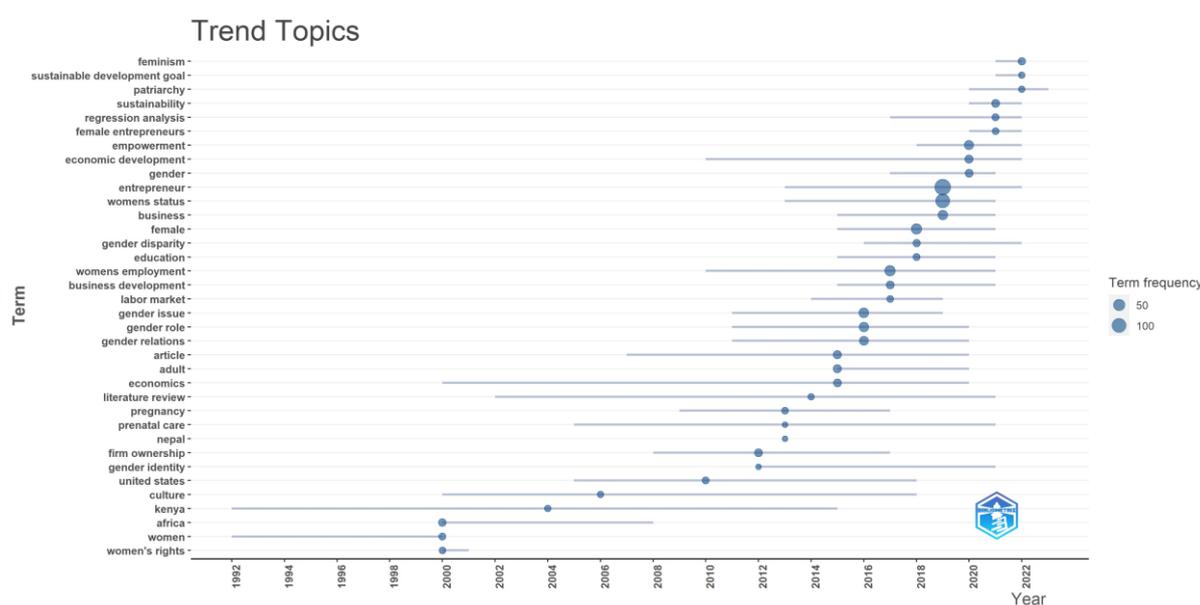


Fig 10 Evolution of trend topics in women entrepreneurship literature

Figure 10 shows the trend topics for future studies in the area of women entrepreneurship. the graph shows the topic "entrepreneur" and "womens status" have occurred largely during the period 2018-2020. the topics "feminism", "sustainable development goals" and "patriarchy" are trending from 2022.

## Conclusions

During the researched time, there was an increase in public, scientific, and academic interest in subjects relevant to women's entrepreneurship. Over the past two decades, this movement has grown, but there hasn't been much done to perform a thorough review of the topical and methodological patterns that shape the women's entrepreneurship's intellectual framework. The systematisation and analysis of the Scopus database has been the focus of this essay. Based on an exploratory writing review, this article reported on the development in the number of articles, the most relevant sources, the science output of the major countries and their collaboration, the co-citation network, and the evolution of author keywords, as well as the reach of the women entrepreneurship concept.

The Scopus database was used for bibliometric analysis of women entrepreneurship research documents. The most common language for the document is English ( 1254 documents). The country that has done much of the women entrepreneurship research is the USA (with more than 200 articles). Regarding this topic, it is important to mention the extensive cooperation and exchanges among scholars from the USA, Canada, and European countries. The journal which published the most on women entrepreneurship research is the “international Journal of gender and entrepreneursh” (130 articles). Other important sources were international journal of entrepreneurs and SMAL, and gender in management . The most productive women entrepreneurship authors are Morduch.J (1999), and the co-citation network of references revealed four clusters; “microfinance” “female” “adult” and “self help groups.”

Finally, the findings of this paper imply that the literature on women entrepreneurship is one of the keys to entrepreneurial development in the world, particularly in developing nations, for the coming year.

#### 4.1 Limitations and future direction of research

Our examination has some limitations. One of the restrictions is the use of the Scopus information base. Although the scopus information base is extremely extensive and legitimate, it is smarter to use different datasets including WoS, Google Scholar, springer, or dimensions allowing examination in other languages like Russian, Spanish and Portugese. Another difficulty we faced was that the most prominent and influential authors were organized according to the number of publications; therefore, publications with a single document but with many citations may be misrepresented in the results. Given the main emphasis on the sciences which make up the core of women entrepreneurship research, an important point for future examinations is the association between the women entrepreneurship and its broader cultural ramifications, such as toward economics. Future studies may include the study of new materials that allow to face the challenges of female entrepreneurship during the COVID-19 crisis. Consequently, further researches on the state of the women entrepreneurship can not only allow in the field of commerce and economics, but also progress while taking into account in the field of business, Management, finance, and social sciences at local and regional scales.

#### References

4th annual IPAZIA workshop on gender issues, 2018. (2019). Paper presented at the *Springer Proceedings in Business and Economics*, Retrieved from [www.scopus.com](http://www.scopus.com)

Abou-Moghli, A. A., and Al-Abdallah, G. M. (2019). A systematic review of women entrepreneurs opportunities and challenges in Saudi Arabia. *J. Entrep. Educ.* 22:6. Available online at: <https://www.abacademies.org/articles/A-systematic-review-of-women-entrepreneurs-opportunities-and-1528-2651-22-6-486.pdf>

Ahl, H. (2004). *The Scientific Reproduction of Gender Inequality; A Discourse Analysis of Research Texts on Women's Entrepreneurship*. Copenhagen: Copenhagen Business School Press.

PubMed Abstract | Google Scholar

Aggarwal, M., & Johal, R. K. (2021). Rural women entrepreneurship: A systematic literature review and beyond. *World Journal of Science, Technology and Sustainable Development*, 18(4), 373-392. doi:10.1108/WJSTSD-04-2021-0039

Bağış, M., Kryeziu, L., Kurutkan, M. N., & Ramadani, V. (2022). Women entrepreneurship in family business: Dominant topics and future research trends. *Journal of Family Business Management*, doi:10.1108/JFBM-03-2022-0040

Cardella, G. M., Hernández-Sánchez, B. R., and Sánchez-García, J. C. (2020). Entrepreneurship and family role: a systematic review of a growing research. *Front. Psychol.* 10:2939. doi: 10.3389/fpsyg.2019.02939

PubMed Abstract | CrossRef Full Text | Google Scholar

Carter, S., Mwaura, S., Ram, M., Trehan, K., and Jones, T. (2015). Barriers to ethnic minority and women's enterprise: Existing evidence, policy tensions and unsettled questions. *Intern. Small Business J.* 33, 49–69. doi: 10.1177/0266242614556823

CrossRef Full Text | Google Scholar

Centindamar, D., Gupta, V., Karadeniz, E. E., and Egrican, N. (2012). What the numbers tell: the impact of human, family and financial capital on women and men's entry into entrepreneurship in Turkey. *Entrep. Regional Dev.* 24, 29–51. doi: 10.1080/08985626.2012.637348

CrossRef Full Text | Google Scholar

Dana, L. -, Chhabra, M., & Agarwal, M. (2023). A two-decade history of women's entrepreneurship research trajectories in developing economies context: Perspectives from india. *Journal of Management History*, doi:10.1108/JMH-11-2022-0064

Fayaz, N., Khandai, S., Zupic, I., & Kaur, A. (2022). GOING BACK TO THE ROOTS: A BIBLIOMETRIC AND THEMATIC ANALYSIS OF WOMEN ENTREPRENEURSHIP. *Dynamic Relationships Management Journal*, 11(2), 97-115. doi:10.17708/DRMJ.2022.v11n02a07

Machado, A. D. B., & Sousa, M. J. (2020). Contributions of women entrepreneurship studies for policymakers. *Advances in Engineering Education*, 17, 53-57. doi:10.37394/232010.2020.17.6

Moreira, J., Marques, C. S., Braga, A., & Ratten, V. (2019). A systematic review of women's entrepreneurship and internationalization literature. *Thunderbird International Business Review*, 61(4), 635-648. doi:10.1002/tie.22045

Parmar, S., & Gahlawat, S. (2020). Thirty years research output on rural women entrepreneurship: A bibliometric analysis of publications (1989-2018). *Library Philosophy and Practice*, 2020 Retrieved from [www.scopus.com](http://www.scopus.com)

Raman, R., Subramaniam, N., Nair, V. K., Shivdas, A., Achuthan, K., & Nedungadi, P. (2022). Women entrepreneurship and sustainable development: Bibliometric analysis and emerging research trends. *Sustainability (Switzerland)*, 14(15) doi:10.3390/su14159160

Sampaio, C., Farinha, L., Sebastião, J. R., & Fernandes, A. (2022). Putting the magnifying glass on minorities groups in entrepreneurship: What can we observe? *Strategic Change*, 31(4), 367-386. doi:10.1002/jsc.2510

Slavinski, T., Todorović, M., Vukmirović, V., & Montenegro, A. M. (2020). Women, entrepreneurship and education: Descriptive bibliometric analysis based on scopus database. *Journal Women's Entrepreneurship and Education*, 2020(3-4), 181-201. doi:10.28934/jwee20.34.pp181-201

Small, H. (1973). Co-citation in the scientific literature: A new measure of the relationship between two documents. *Journal of the American Society for information Science*, 24(4), 265-269.