



Quantitative analysis of systematic literature review on women entrepreneurship: A bibliometric analysis

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Abstract

The study aims to systematically review the published documents on women entrepreneurship. The main motto of the study is to analyze the research pattern, development & further future scope of the research path in the field of women entrepreneurship. All the important documents relating to women entrepreneurship were collected from the Dimensions database. These documents have been used in the bibliometric analysis for network mapping. It is found that the majority of researchers focused on the area of women entrepreneurship theory, analysis & creation but less intense on major supporting areas relating to women entrepreneurship. The study found new emerging areas relating to women entrepreneurship for future scope of research. The study contributes to the existing field of research relating to insights into women entrepreneurship. This critical review indicates the practicing insights of the world, present situation & future direction of research in women entrepreneurship.

Keywords: women entrepreneurship, social capital, social entrepreneurship, venture capital, bibliometric analysis

Introduction

In the present world, women play a crucial role in the growth of the economy as well as the development of societies from the ground level. China & Vietnam is the most popular destination for women entrepreneurs. It motivated growing business & income for women entrepreneurs (Zhu, *et al.* 2018). Women choose entrepreneurship as a career option in spite of doing a job in top management (Knorr, 2011) [14]. Women are motivated either by a pull or push strategy for doing business. Both needs & habits are not motivated for doing business because it is a situational factor (Ozsungur, 2019) [26]. There were a lot of problems for women entrepreneurs in Uganda such as gender inequality, lack of education, finance & awareness in rural areas (Lourenco, *et al.* 2014). The main aim of the study is to find out the research gap in the field of women entrepreneurship as well as mapping the network diagram with the help of VOS viewer software.

Literature Review

Economic participation is narrow & political involvement wider for women, which means there is a gap found in both men & women in societies & families. It creates a negative business relationship among themselves (Vracheva & Stoyneva, 2020) [36]. Women leaders believe that maintaining the social relationship, universal cooperation & security first priority for businesses (Borquist & Bruin, 2019) [6]. Women zeal for creativity, innovation, own-identity & independence comes under the pull strategy of entrepreneurship. The maximum number of women entrepreneurs starts their venture informal way. It means

small capital requires for doing business (Shastri, *et al.* 2019) [34].

Objectives of the Study

- The study aims to find out the research gap in the fields of Women Entrepreneurship.
- The main motto of the study is to analyze the research pattern, development & further future scope of the research path in the field of Women Entrepreneurship.

Materials & Methodology

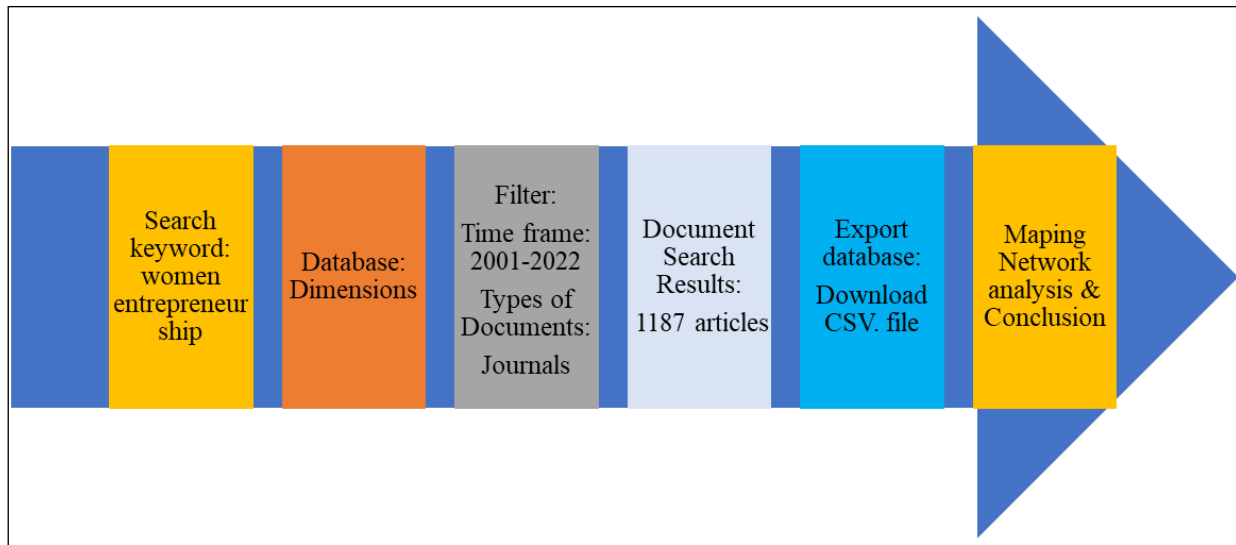
Table 1 indicates the study conducted from the year 2001 to 2022 to discover 1187 articles related to the areas of women entrepreneurship. The research papers were collected & filtered from the dimensions database. The keyword used for a search article such as women entrepreneurship in the Dimensions database. The research articles downloaded online & verified it's to check the originality of the papers.

Table 1: Article Search Results

Category of Research Paper	Journals
Mode of articles collection	Online
Selection methods	Bibliometric analysis
Database used	Dimensions database
Tool use for investigation	VOSviewer software
Timeframe for data collection	2001-2022
Total number of articles used for the study	1187

Source: Primary Data

Figure 1 indicates the logical sequence of the methodology adopted for searching articles selection conditions to CSV. File download, Mapping the network analysis & conclusion.



Source: Compiled Data from Different Source

Fig 1: Materials & Methodology

Results & Discussion

Table 2 indicates the top 10 authors who have published the highest number of women entrepreneurship papers as per

total link strength in various journals in different years. It represents the number of citations of documents published by each author respectively.

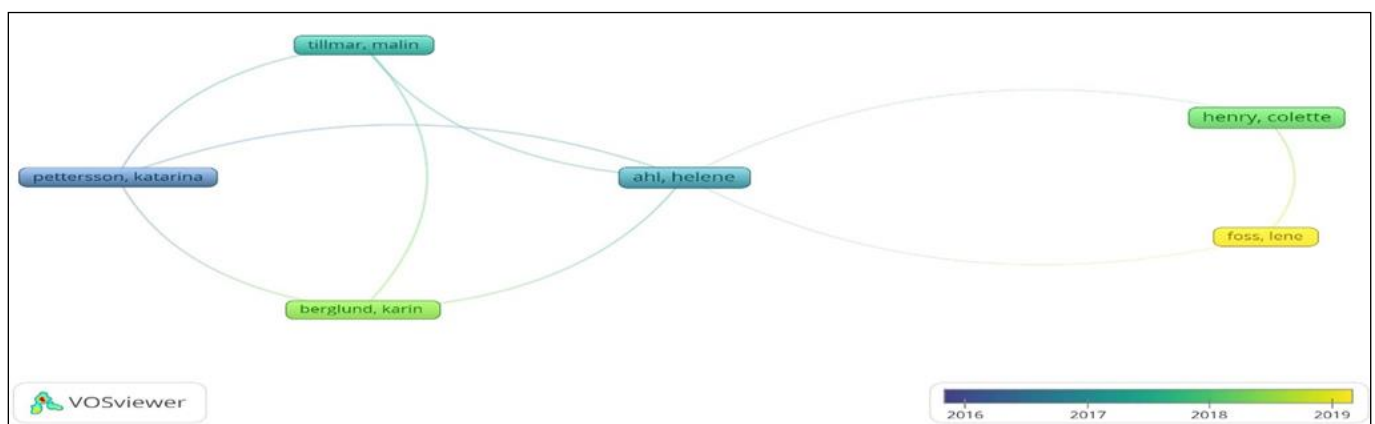
Table 2: Top 10 Authors published the highest number of Women Entrepreneurship Documents

Sl. No	Authors	Documents	Citations	Total link Strength
1	Ahl, Helence	10	1359	17
2	Berglund, Karin	6	166	15
3	Pettersson, Katarina	7	162	15
4	Tillmar, Malin	7	156	15
5	Brush, Candida g.	9	1777	5
6	Foss, Lene	6	165	5
7	Henry, Colette	10	220	5
8	Welter, Friederike	10	1757	4
9	Ramadani, Veland	6	254	3
10	Ratten, Vanessa	6	220	3

Source: Data Compiled from Dimensions Database

Figure 2 indicates the co-authorship analysis of the author, who has a minimum number of 5 documents & minimum of 30 citations. It represents that the authors have worked to collaborate with other authors in the field of women

entrepreneurship as seen in the network diagram. The size of the circle is large & connected with thick lines to other authors, which means such authors work with a team of a larger number of authors as shown in the figure.



Source: Compiled Data in VOSviewer

Fig 2: Co-authorship of authors having a minimum number of 5 documents & minimum of 30 citations

Table 3 indicates the highest number of women entrepreneurship documents published by top countries in Dimensions. These are given below such as

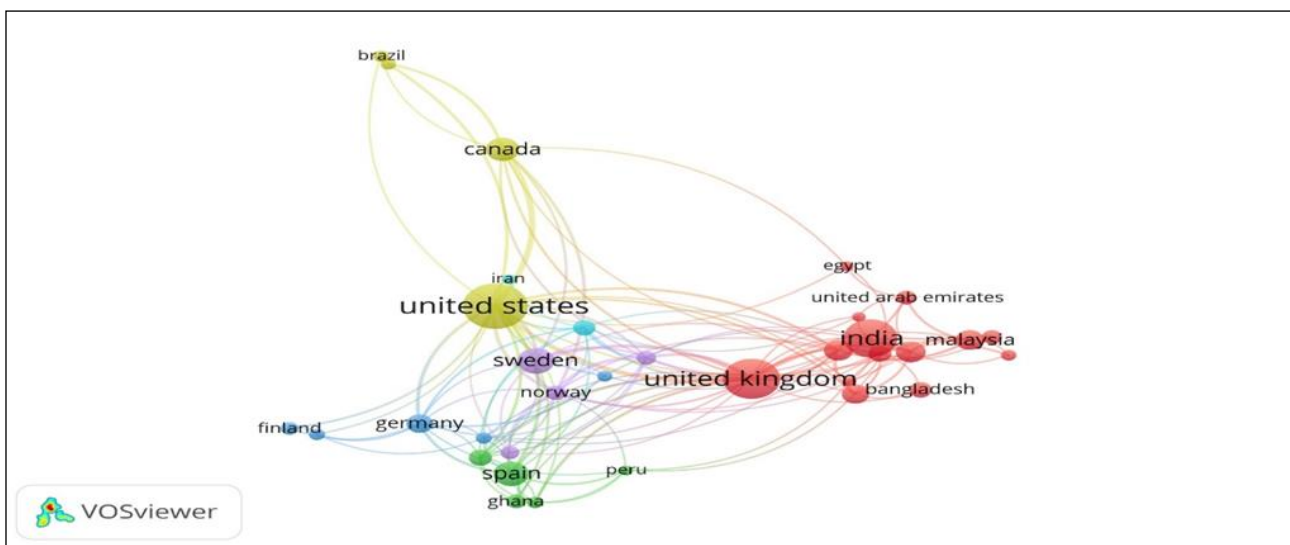
Table 3: Top 10 Countries published the highest number of Women Entrepreneurship Documents in Dimensions

Sl. No	Country	Documents	Citations	Total link Strength
1	United States	90	3571	64
2	United Kingdom	72	2145	50
3	Norway	11	269	31
4	Ireland	10	109	26
5	Canada	26	776	25
6	Australia	20	403	21
7	Sweden	32	2238	21
8	Germany	17	941	20
9	Spain	29	506	18
10	France	12	181	17

Source: Data Compiled in Excel from Dimensions Database

Figure 3 indicates the co-authorship analysis of different countries, that have a minimum number of 5 documents & minimum of 15 citations for each related to women entrepreneurship paper published in Dimensions. It found

that the USA has published the highest number of women entrepreneurship documents than the UK, Norway, Ireland & many more countries in Dimensions over different years.



Source: Compiled Data in VOSviewer

Fig 3: Co-authorship of countries having a minimum number of 5 documents & minimum of 15 citations of a country

Table 4 indicates the top 10 institutions that have published the highest number of women entrepreneurship documents in Dimensions.

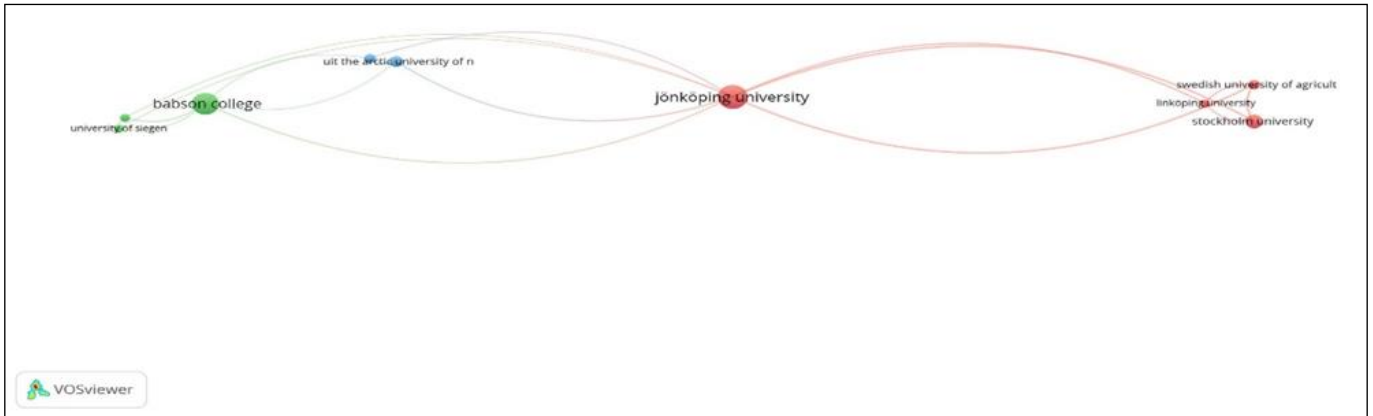
Table 4: Highest number of documents published by Affiliated Organizations

Sl. No	Organizations	Documents	Citations	Total link Strength
1	Jonkoping University	15	1968	23
2	Stockholm University	9	190	13
3	Swedish University	6	131	13
4	Linkoping University	5	109	10
5	Uit the Arctic University, Norway	7	222	8
6	Babson College	14	1428	7
7	Dundalk Institute of Technology	6	76	7
8	Massey University	5	1178	5
9	Brock University	5	152	4
10	University of North Carolina	7	187	4

Source: Data Compiled in Excel from Dimensions Database

Figure 4 indicates the Co-authorship compared with the organization, which has a minimum number of 5 documents & minimum of 10 citations relating to women

entrepreneurship. The top institutions have published the highest number of women entrepreneurship documents in Dimensions.



Source: Compiled Data in VOSviewer

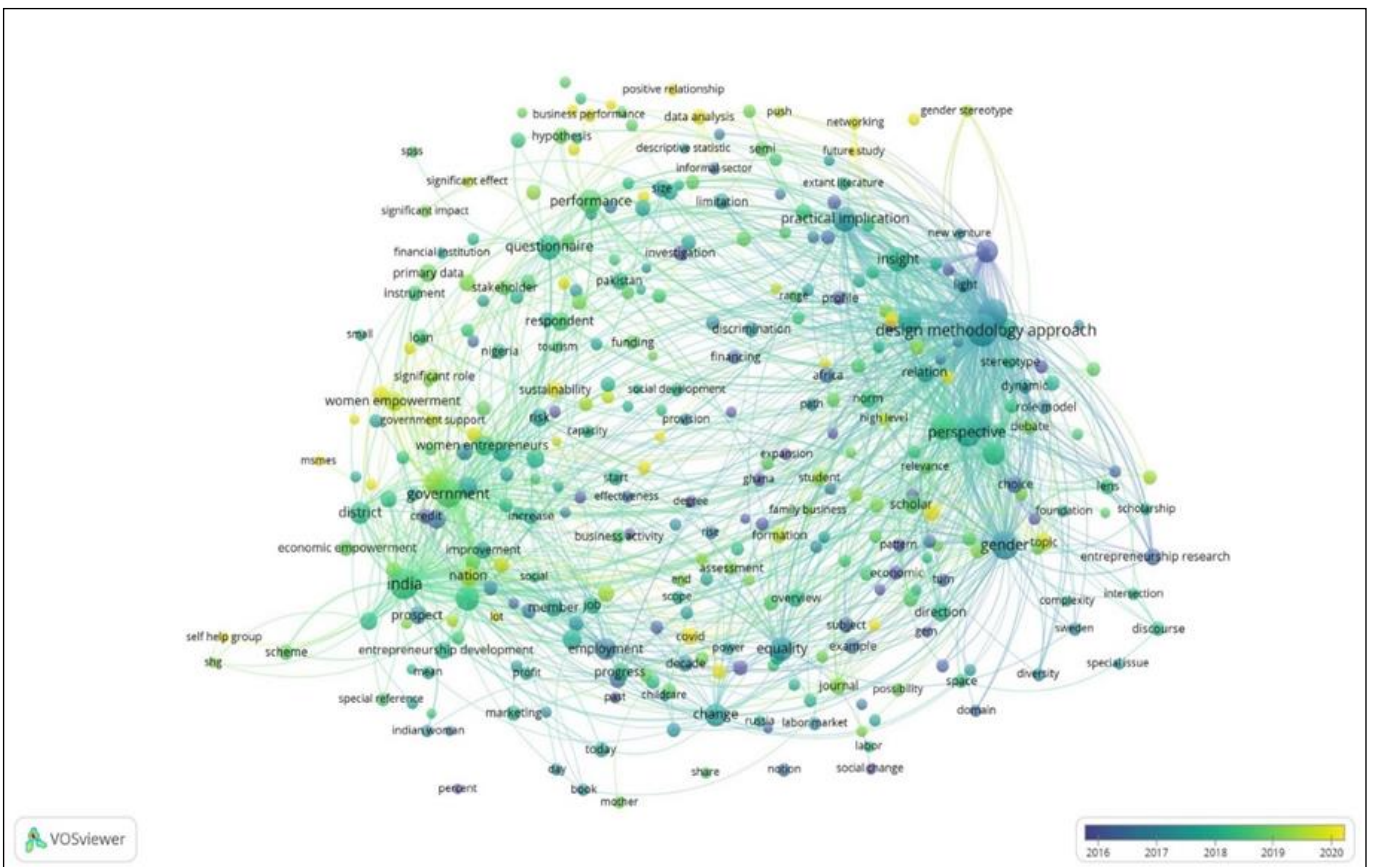
Fig 4: Co-authorship of organizations having a minimum number of 5 documents & minimum of 10 citations of an organization

Table 5 indicates the authors’ keywords published in different journals relating to women entrepreneurship across the globe.

Table 5: Scope of work relating to Authors’ Keywords

Sl. No	Groups	Number of Items	Keywords
1	Cluster-1	112	Bank, Childcare, Economic empowerment, entrepreneurial skill, financial institutions, Credit, etc.
2	Cluster-2	105	Business development, Business ownership, Diversity, Economics, Entrepreneurial Career, etc.
3	Cluster-3	82	Business performance, Competency, Financial capital, financial resources, Gender differences, Family support, Employee, Founding, etc.
4	Cluster-4	44	Covid, Inequality, Govt. policy, Commerce, Mother, Financing, etc.

Source: Data Compiled in Excel from Dimensions Databas



Source: Compiled Data in VOS viewer

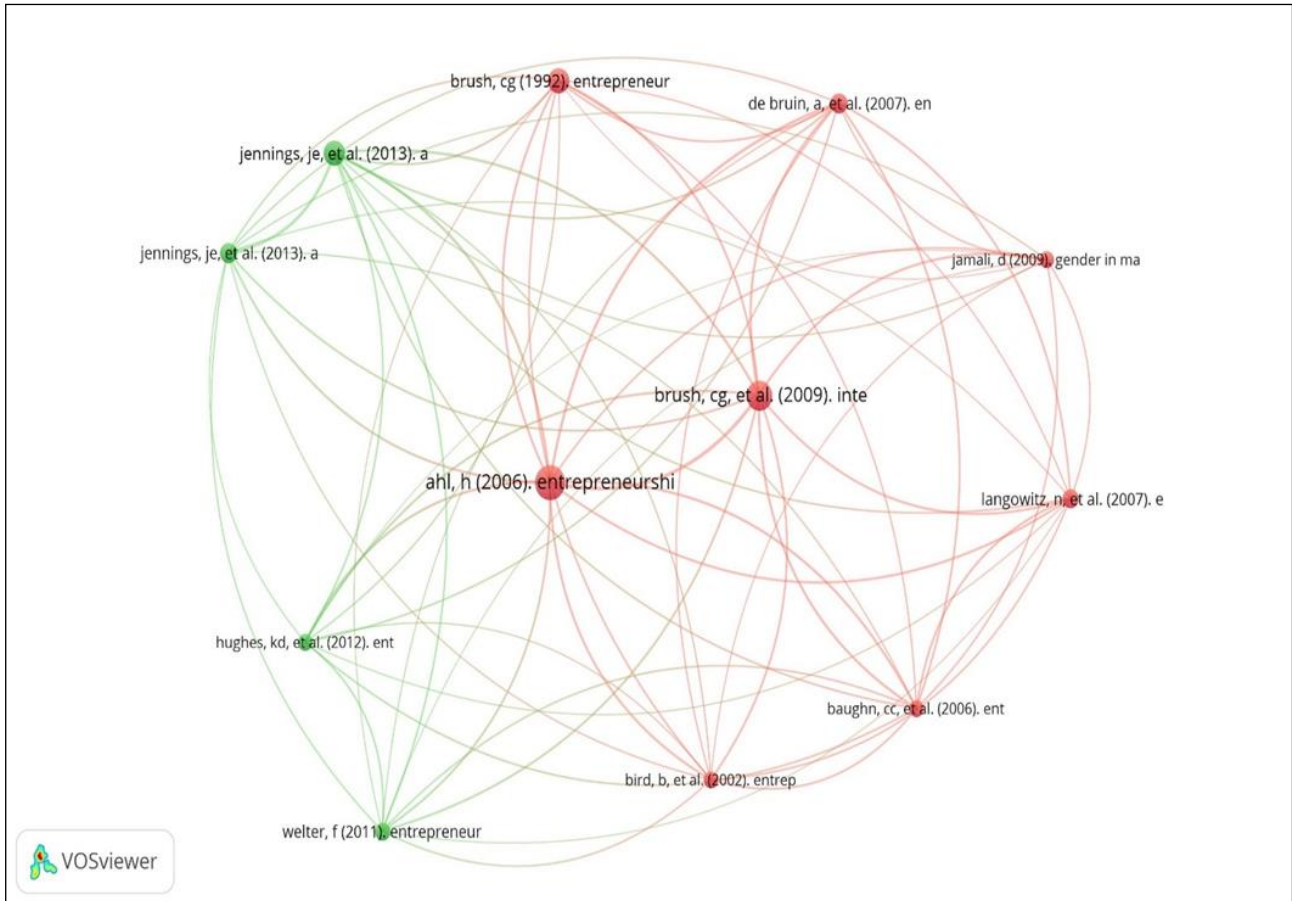
Fig 5: Co-occurrence of Authors’ Keywords

Figure 5 indicates the co-occurrence of the authors' keyword relating to Women Entrepreneurship. The larger size of circles of keywords “Women Entrepreneurship” in different

colors shown on the map means the highest number of publications of articles & more research work done in that keyword in Dimensions. The small size of circles of

keywords of various colors indicates the lesser number of publications of articles & less research work done on that keyword in Dimensions. The network map of the co-occurrence of author keywords hints at the researchers & experts who have interested to do work in this field and then focuses on relating keywords of the map in which less work is on a particular keyword. Women Entrepreneurship has more work in Dimension as shown in the network map but supporting areas of women entrepreneurship are less focused such as family business, SHG, gender stereotype, entrepreneurship development, economic empowerment, networking, positive relationship, business performances, social development, business activity, financing, funding, childcare, labor market, positive relationship, financial

institutions & women empowerment, etc. if the researchers focus on fewer work areas of their interested field then their research will be more significant & effective in future. Figure 6 indicates the co-citation of cited references has the least number of 50 citations. It found that out of 13664 cited references, only 12 meet the criterion. It resulted that the 12 items in this network are connected very well. There are two clusters found in the network map as Red, & Green colors as shown in fig.6. The red color clusters have papers relating to women entrepreneurship highly cited & link in the network map. The Green color clusters are less cited & link in the network map as associated with the Red & Green colors groups but the largest size of the circle represents the highest cited reference of authors.



Source: Compiled Data in VOSviewer

Fig 6: Co-citation link with the cited references having a minimum number of 50 citations

Conclusion

Women entrepreneurship has relevance in present days for the growth of the economy but it has various new emerging areas such as family business, SHG, gender stereotype, entrepreneurship development, economic empowerment, networking, positive relationship, business performances, social development, business activity, financing, funding, childcare, labor market, positive relationship, financial institutions & women empowerment, etc. The bibliometric analysis is a way of systematically analyzing the kinds of literature of the researchers who have already published documents & available in the public domain through the network diagram. The following countries top rank sequentially such as USA, UK, Norway, Ireland, Canada, Australia, Sweden, Germany & France, etc. The study will suggest the top-ranking countries which have less focus on

supporting areas of women entrepreneurship require to be more attention & constant effort in these fields.

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