# Bibliometric Analysis of Sustainable development of Women Entrepreneurship from 1989-2022

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### Abstract

Bibliometric analysis allows for the impartial evaluation of vast volumes of bibliometric data. In this paper, bibliometric analysis is used to look at research trends and where research on women entrepreneur is going in the future. The Scopus database was used to find about this topic. Altogether, 492 papers were chosen for bibliometric analysis. Data was collected and output drive using R studio. The findings revealed that the most cited authors are entrepreneur, women status, and women employment, female. International journal of gender and entrepreneurship, International journal of entrepreneurship and small business, gender in management, journal of development entrepreneurship small business economics these are most cited journals. There are some theoretical and practical ramifications of this inquiry offered. This survey's findings can inform researchers and practitioners regarding the current state of sustainable women's entrepreneurship. In addition, it might act as a good guide for identifying potential research gaps. It was possible to locate relevant research by searching the Scopus database. For this bibliometric study, 492 papers were selected. The results of this study can inform future studies and policy changes aimed at empowering women business owners. In addition, it can serve as a useful tool for pinpointing research gaps.

Keywords: Sustainable, Sustainability, entrepreneurship, women entrepreneurship.

Paper type: Research paper

### Introduction

Sustainable development refers to progress that meets the needs of the present without jeopardizing future generations' ability to do the same (WCED, 1987). Currently, we define sustainability as the process of harmony achieving among economic, ecological human. and systems. Concerning the belief that businesses do not operate in isolation but rather as part of a larger ecosystem (Elkington, 1997). Triple bottom line (TBL) or 3P (people, planet, profit) was conceived by Elkington in 1997 from this stance. He suggested that the environmental economic, social, and

systems should all be in balance. Economic line: Business activities that have an effect on the economy (Elkington, 1997). The topics of economic expansion, reduction, savings, innovation, salary, taxation, and employment are highlighted. Issues of economic expansion, risk reduction, savings, innovation, productivity, income distribution, taxation, employment are emphasised (Buckingham, 2009). Second is Social line in which actions by a company that helps society (Elkington, 1997). Green practises, which include employment, education, social services, health, community investment, leisure, cultural investment,

and public awareness, are third (Epstein and Roy, 2001).

It refers to making effective use of available energy sources, cutting down on emissions of greenhouse gases, and leaving as little of an impact on the environment as possible (Drohomeretski and Gouvea Da Costa, 2015; Epstein and Roy, 2001). The rapid expansion of entrepreneurial activity around the world can be attributed to the combined effects of globalisation and liberalisation (Gartner, 1985). According to the results of a survey, for many people, entrepreneurship represents both meaningful lifestyle and a meaningful work identity (Reynolds and White, 1997). The 1990s liberalisation of India's economy changed the chances and constraints for entrepreneurs. Growth pace and pattern changed market strategy, reach. vulnerability. Markets are flatter than civilizations (Friedman, 2006). Materially successful people and those whose right to a living is marginalised have a fundamental contradiction (Wilson and Wyn, 1985).

Businesses' rights and privileges have overridden the marginalised in the pursuit of rapid economic expansion. Unregulated domestic and overseas mergers and acquisitions have resulted in wealth disparities (Stuteville and Ikerd, 2009). There has been a shift in mentality over the course of the past couple of decades, and now, business owners are recognised as being crucial to the process of economic revitalization as well as the formation of new wealth. This shift in mentality has occurred over the course of the past couple of decades. In point of fact, researchers and policymakers have been paying increasing amount of attention in recent years to the role and relevance of female entrepreneurship and the formation of new businesses, both of which are important to both established economies and developing

economies. In the following years, this trend will continue. This growing interest in entrepreneurship's economic contribution has led to a wider range of municipal, national governmental regional, and measures to encourage and support the sector. Both the public sector and the private sector have been involved in the execution of these efforts (Henry et al. 2003). The emergence of entrepreneurship in the twentieth century encouraged female entrepreneurs to be creative imaginative. Women-owned businesses are essential to economic expansion and job creation (Mari, Poggesi, & De Vita, 2016; Verheul, van Stel, & Thurik, 2006). There are more female entrepreneurs in both developing economies and economies that have already been developed. Women make up 32% of the EU's business owners (EC, 2017). The importance of sustainable economies to both the short-term and longterm performance of businesses received insufficient attention from researchers. Women's families often provide number of forms of encouragement and support for their entrepreneurial endeavors, which can take many various forms (Brush et al., 2009; Jennings & Brush, 2013). The research conducted by French et al. (2018) suggests that this background may include either an instrumental or emotional an accompaniment. According to several research (Akehurst, Simarro, & Mas-Tur, 2012; Collins-Dodd, Gordon, & Smart, 2004; Jennings & Brush, 2013; Shelton, 2006; Singh, Reynolds, & Muhammad, 2001), family support is crucial to company success. Entrepreneurship, particularly that undertaken by women, is essential to the achievement of sustainable development (Agarwal and Lenka, 2018). The delivery of sustainable goods and services, as well as the discovery of entrepreneurial solutions to social and environmental problems, contribute to the achievement of the Sustainable Development Goals (SDGs). The literature, despite its caution and lack of pretence, presents expectations for a better model of growth in which businesspeople handle issues related to society and the environment (Hart and Milstein, 1999; Vaitheeswaran, Lovins et al., 2004; Brown, 2006; Prahalad, 2007). In 1976, Schwartz released the first study on the subject of women in business, which was based on interviews with twenty different female business owners. She studied the women's attitudes, motivations, and features by employing both exploratory and descriptive research designs in her studies. From 1976 to 1981, this article was the only one of its kind to focus on female business owners (Ahl, 2006). There have only been a very small number of studies that look at women entrepreneurs in the context of sustainable development. Padmavathi (2011) analysed the challenges and prospects of women business owners in rural India. These females were the primary target of her attention.

Her focus was primarily on these women. She stressed that businesses of this nature require assistance, but that they have the potential to play an important role in fostering sustainable growth. Ambepitiya (2016) revealed that women-led firms are well conscious of the role that they play in the process of sustainable development, based on the results of a survey with forty female business owners from four different developing nations (India, Sri Lanka, Maldives, and Nigeria). Ambepitiya found that women-led businesses are very aware of the role that they play in the process of sustainable development. Because women are in charge of these businesses, they place a greater emphasis on addressing social, economic, and environmental issue. The core principles of these women's business models are "trading with the poor, assisting

the community in the development of skills and capabilities, paying fair prices and receiving fair payments, encouraging fair treatment of all staff, and encouraging environmentally friendly conditions in business operations." According to Dakhane and Baali (2018), enterprising women contribute to economic and social advancement. Their research confirmed this. Our study analyses entrepreneurship research from 1989 to 2022.

### **Research Questions:**

The author of the current research would like to focus on the following questions:

- 1. What are the top-cited articles on 'Sustainable women entrepreneurship'?
- 2. What are the relevant sources related to 'Sustainable women entrepreneurship'?
- 3. State the most cited countries associated with 'Sustainable women entrepreneurship'?

# Methodology

The guidelines made by Donthu et al. (2021) were followed by the present study when doing the bibliometric analysis. In particular, the research was conducted in accordance with the five steps that are as follows:

### **Step 1: Database Selection**

Scopus, PubMed, and the Web of Science (WoS) are just a few of the databases that can be used for bibliometric research (AlRyalat et al., 2019). PubMed, as stated by AlRyalat et al.(2019), is focused on research in the biomedical and biological sciences, whereas WoS and Scopus are more concerned with cross-disciplinary work. Scopus from Elsevier was chosen

over WoS from Clarivate due to its wider scope (Paul et al., 2021; Pranckute, 2021)

# **Step 2: creating the search keywords**

The search methodology was developed after reviewing the women entrepreneurship. The terms "women," "sustainable," and "women entrepreneurship" are all used to describe this process. Because of this, these were included in the search criteria. Boolean "AND" and "OR" operators were utilized in the "title, abstracts, and keywords" search boxes. It resulted in the following search formula: TITLE-ABS-KEY (("Sustainable" or "Sustainability" "entrepreneur" or "entrepreneurship" and "women" and "female")).

# **Step 3: Data collection**

At first, 6728 results were returned by the aforementioned search criteria (Figure 1). Improvements are made to the documents. Information that can be accessed freely is included. Materials not related "Business, Management, and Accounting" were discarded. The next step was to select papers from specialized journals. This includes all documents that are in the final stages of completion. Then, a commaseparated (.csv) file containing 701 articles was downloaded from Scopus after further refinement. After that, you may further narrow down the document using criteria like title and abstract. Papers that have nothing to do with women entrepreneurship are simply disregarded. The list has been cleaned up to get rid of duplicate documents. After these procedures, 492 documents were left for bibliometric analysis.



**Step 4: conducting the analysis** 

•N=492

RECORD

AVAILABLE FOR BIBLIOMETRIX

According to Donthu et al., the current inquiry included the running of primary analyses in addition to aggrandizement analyses (2021). The research makes use of Biblioshiny to identify the top 30 keywords, and a was developed in order to present the findings of the study. In conclusion, a three-field plot was created to show the link between countries, keywords, and journals in the field. This plot was built using data from the field.

# Step 5: identifying the present themes and future research directions

Donthu et al. (2021) suggest that business academics employ this approach to learn about new trends and topics in the field.

Keyword analyses, leading researchers, and leading journals in the field will be then shown. The findings presented here are useful for future study.

### Result

According to Table 1, the average number of citations for a single piece of writing in 1989 was 170, while the average number of

citations for an entire year was 5.15. This area grows in 1990. But in 1991 it is zero .In 1992, 1993, 1994,1995,1996,1997 there is slow pace of growth in this area. But after 2004 there is high pace in number of papers and citation. Maximum paper 59 published in 2021.which shows increase interest in this domain. There is constant growing area of interest.

Year	N	MeanTCperArt	MeanTCperYear	CitableYears
1989	2	170	5.15	33
1990	6	93.33	2.92	32
1991	0	0	0	0
1992	2	78.5	2.62	30
1993	3	65.33	2.25	29
1994	1	38	1.36	28
1995	2	39	1.44	27
1996	1	10	0.38	26
1997	1	5	0.2	25
1998	1	263	10.96	24
1999	2	211.5	9.2	23
2000	3	221.67	10.08	22
2001	5	116.6	5.55	21
2002	2	5	0.25	20
2003	1	283	14.89	19
2004	3	44.67	2.48	18
2005	4	51.75	3.04	17
2006	11	96.36	6.02	16
2007	5	206.2	13.75	15
2008	9	29.67	2.12	14
2009	24	87.13	6.7	13
2010	17	39.35	3.28	12
2011	15	58.6	5.33	11
2012	20	32.9	3.29	10
2013	20	58.75	6.53	9
2014	15	32.93	4.12	8
2015	15	16.27	2.32	7
2016	23	23.48	3.91	6
2017	24	24.71	4.94	5

2018	39	13.54	3.38	4
2019	49	18.53	6.18	3
2020	50	7.92	3.96	2
2021	59	2.76	2.76	1
2022	58	1.57		0

Figure 2 Annual productions of 492 articles during 1989-2022

1989 to 2022 is the research time frame for this biblometric study. Since 1989, the average number of citations per document for research on sustainable women entrepreneurship has increased to 31.99. The annual scientific production scale suggests that the number of articles produced in this field is increasing at a pace of 10.74 percent per year. There are 1114 authors in this domain and 1207 author keywords with 28750 references. document with a single author has 92 authors in total. This graph also displays the annual evolution of the number of articles published. Annual . Figure 2 depicts the highest number of 2021 publications, 59.

Articles

1989

1999

2003

2003

2004

2011

2011

2012

2012

2012

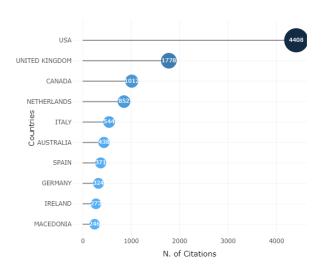
2013

### MOST CITED COUNTRIES

According to biblioshiny, USA was the most cited country in the world, with an

average of 65.79 citations per piece of writing and 4,408 total citations. UK came in second place with 1,778 total citations and 55.56 citations on average for each individual item. It is essential to take note that the total number of citations has dropped from 4408 to 1778. After following Canada and neitherland wi.th total citation 852 with average 106.50. There is major point to be noted in this category majority countries from Europe. There are no one Asian country in this category.

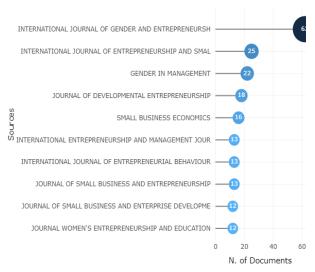
n



Top 10 most relevant source

This table lists the top ten sources that are most relevant to the discussion. The

international journal of gender and entrepreneurship holds the top spot in this category, having published 60 articles in the "women entrepreneur" subject area. Next, the international journal of entrepreneurship and small business, which has 25 articles, came in at number two. Following that, gender in management with 22 articles, and journal of developmental entrepreneurship, with 18 articles, were published. The small business economics in fifth place with 16 different articles



# **Source Impact Analysis**

Table displays that the International Journal of international journal of gender and entrepreneurship has received a total of 1508 citations and has the highest h-index of 20. After that gender in management (515) and a factor of 13 for the h index following that. International Entrepreneurship Management And Journal which had 675 citations and a 13point index, came in third place in. In fifth position small business economics comes with 13 h index category. According to the source impact analysis, these papers rank among the top five.

Element	h_index	g_index	m_index	TC	NP
International Journal Of	20	37	1.429	1508	60
Gender And					
Entrepreneurship					
Gender In Management	13	21	0.867	515	21
International	13	13	0.765	675	13
Entrepreneurship And					
Management Journal					
Small Business	13	16	0.591	1619	16
Economics					
International Journal Of	11	21	0.611	466	22
Entrepreneurship And					
Small Business					
Journal Of Business	10	10	0.294	1958	10
Venturing					
Journal Of Small	10	12	0.526	481	12
Business And					
Enterprise Development					
International Journal Of	8	12	0.444	523	12
Entrepreneurial					

Behaviour	And					
Research						
Journal Of		8	16	0.571	277	16
Developmental						
Entrepreneurship						
Journal Of	Small	7	11	0.412	128	12
Business	And					
Entrepreneurship						

### Limitations

The current study, like other studies, includes a few caveats or restrictions. Scopus was the only source for this database; no other source was used. Articles, and not any other kind of sources, were used for this research. Paper presented at a conference; books are not included. In addition, the "Business Management and Accounting" topic area was utilized for the subject area. Only the English language is accepted. Research publications that were not written in English were excluded from this study.

### Conclusion

This study is a bibliometric examination of 33 years' worth of research on the subject of women entrepreneur from 1989 to 2022. The purpose of this investigation is to have a comprehensive understanding of this domain. This study examines various bibliometric indicators, including annual total citations, annual scientific production, , the most cited countries, the most relevant asource, source impact analysis, the top 10 most relevant sources. This field exhibits growth in this area. In terms of the R package employed, this investigation is more exhaustive and rigorous. This study benefits global readers. In this study average number of citations per article in 1989 was 170 and the average number of citations per year was 5.15. This area grows in 1990. But in 1991 it is zero. In 1992, 1993, 1994,1995,1996,1997 there is slow pace of growth in this area. But after 2004

there is high pace in number of papers and citation. Maximum paper 59 published in 2021. The international journal of gender and entrepreneurship holds the top spot in this category. in most cited country category USA, UK and Canada in this category. All this information about this topic will boost the further research.

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