

From Margins to Mainstream: Bibliometric Insights into Women Entrepreneurship Research

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Abstract

Women's entrepreneurship has grown in both socioeconomic and policy implications, from a fringe subject to an active, mainstream field of scholarly research. To explore the conceptual framework, trends in publications, theme development, and collaboration networks of the topic of women entrepreneurship, the research provides a comprehensive bibliometric analysis of Scopus materials (2000-2025). The maps of author productivity, prominent journals, institutional affiliations, and keyword co-occurrences for 1208 documents were created using the Biblioshiny (R) and VOSviewer tools. The analysis is theoretically informed by feminist entrepreneurship theory and the entrepreneurial ecosystem framework, which collectively emphasise the role of gendered institutions, structural contexts, and ecosystem conditions in shaping women's entrepreneurial activity. The results showed that research production has changed drastically since 2015 due to comprehensive development plans and global efforts to empower women. India has emerged as the so-called major sponsor, replacing older research centres, such as the USA and the UK and becoming an indicator of a natural shift towards developing economies such as India. The results reflect the change towards descriptive case studies to interdisciplinary, theoretically oriented, and globally interconnected studies. In spite of these developments, there still exist gaps in the Global South regarding intersectionality, digital transformation, and contextual diversity.

Keywords: *women entrepreneurship, bibliometric analysis, gender studies, citation networks, sustainable development goals, research trends.*

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1. Introduction

The growing economic influence of women entrepreneurs and the increasing awareness of gender-related constraints in the entrepreneurial system have placed women entrepreneurs at the centre of scholarly research (Brush et al., 2009). The trends in the literature surrounding women entrepreneurs have not been comprehensively researched. Zupic and Čater (2015) suggest that bibliometric analysis provides a framework for studying published studies, citation patterns, and the intellectual structure of a subject. Moreover, given their maternal instincts and the fact that women constitute the majority of the world's population, it would be expected that strong entrepreneurial performance by women would go a long way toward influencing the economy. Nevertheless, in most developing and some developed nations, women's contributions are hardly felt (Nsengimana et al., 2017). Although it has always been accepted that entrepreneurship is beneficial for socioeconomic growth, its processes differ significantly by gender, caste, and class. The entrepreneurship of women has been gaining popularity in India and other parts of the world as a driver of social transformation and inclusive development, but the problems caused by prevailing structural disparities persist. Women entrepreneurship has evolved into a recognised area of scholarly inquiry, reflecting its growing relevance to inclusive economic growth and gender equality. More recent studies are examining gender engagement and institutionalised postures, given that women's entrepreneurial behaviour is situated within broader social and economic contexts (Ahl, 2006; Brush et al., 2009). Simultaneously, institutional differences across countries still shape the likelihood of becoming an entrepreneur as a woman, highlighting the need for contextual analysis in this area (Terjesen et al., 2016). A combination of these studies illuminates the complex interplay between gender, social structures, and entrepreneurial ecosystems, thereby adding to an implicit understanding of women as entrepreneurs as both a possibility and an arena of constant inequality.

The paper will present a comprehensive bibliometric analysis of the literature on women entrepreneurs, examining published trends, articles,

authors, and topic clusters. The 2023-2024 Global Entrepreneurship Monitor (GEM) report reports that about 274 million women engaged in new business activities in 2023, compared to 231 million in 2019. This growth underscores the significant influence of social factors on women's entrepreneurial activity. Following Crane's (2021) recommendation, women capable of making entrepreneurial judgments and choices without adapting to a competitive market may avoid the pitfalls that many of their colleagues fall into regarding the ownership of a small business and entrepreneurship overall. The impact of post-materialism on women entrepreneurs means that these businesswomen possess innate qualities shaped by their experiences and family backgrounds. Thus, their entrepreneurial and commercial skills should be developed through education methods grounded in leadership, experience, personality, self-perception, social, and cultural factors, especially those informed by their past jobs and family life (Aparicio et al., 2022). Law, normative, and socio-cognitive frameworks that are woman-oriented are necessary in the countries where women are still perceived as domestic devices for running the house. Besides enriching the global economy and promoting entrepreneurship, the promotion of women's entrepreneurship also works to eradicate conventional wisdom (Chhabra et al., 2023). Along with providing the most recent updates on the bibliometric analysis of the aforementioned themes up to 2025, the primary goal of this research is to enable a closer examination of publications, citations, authors, journals, institutions, and social media effects, thereby providing a more profound insight into this domain.

Recent research increasingly frames women's entrepreneurship through feminist and gendered perspectives that emphasise how social structures, institutions, and cultural norms shape entrepreneurial behaviour. Studies highlight the role of policy environments, cultural expectations, and institutional supports in enabling or constraining women-led ventures (Roundy et al., 2018; Alsos et al., 2019; Marlow & McAdam, 2013). These views indicate that the performance of women entrepreneurs is not an individual lack but a systemic and contextual factor. This study adopts a bibliometric approach to examine how these intersecting theoretical perspectives have

evolved over time in global research on women's entrepreneurship.

1.1 Research Questions

RQ1: How has research on women entrepreneurs evolved over time?

RQ2: Which writers and organisations have the most impact in this area?

RQ3: Which journals make the biggest contributions to the field of women entrepreneurs?

RQ4: In the context of women entrepreneurs, whose authors are the most well-known and have been cited the most.

RQ5: Which themes are most prevalent, and how have they changed throughout time?

2. Literature Review

The study of women entrepreneurship has ceased to be on the fringes of academic research and has become a significant focus in the entrepreneurship discipline as the role of women in economic development and creativity gains recognition. Over time, women entrepreneurship research has expanded in scope and methodology, increasingly recognising the influence of institutional environments, gender norms, and socio-economic contexts on entrepreneurial participation and outcomes (Jennings & Brush, 2013; Minniti & Naudé, 2010). Such perspectives often emphasised the problems regarded as obstacles to achieving equality with male businessmen, including limited access to capital. However, over time, the paradigm shift occurred, and researchers began to examine the institutional effect, gendered dynamics, and empowering variables that influence the entrepreneurial path of women, also being mindful of the setbacks (Ahl, 2006; Henry, Foss, and Ahl, 2016). It is a warning of greater changes in the economic sociology and feminist theory that emphasise institutional embeddedness and structural inequality over individual incompetence. Recent bibliometric assessments indicate that the quantity, volume, and variety of studies on women entrepreneurs have grown rapidly (Jennings & Brush, 2013; Saiz-Alvarez et al., 2020). The intellectual mainstreaming process is evident in the expanding

scope of the field, including management, sociology, women's studies, and economics. Thematic mapping and citation analyses can be viewed as a steady shift of descriptive case studies to theoretically grounded, methodologically challenging research. Also, there has been an increase in cross-national comparative research and international cooperation, which has encouraged the inculcation of world views on women entrepreneurship with less emphasis on the regional differences in the economies of both developed and developing countries (Minniti & Naudé, 2010). The major challenge identified in the literature is the ongoing struggle for access to finance.

Women entrepreneurs frequently face gender discrimination in credit and venture capital financing, which limits access to startup and scale-up financing (Carter et al., 2007; Orser, Riding, and Manley, 2006). Many female entrepreneurs depend mostly on personal savings, family assistance or an informal borrowing system (Tambunan, 2009). The funding limit not only hinders businesses' development but also disincentivises venturing into the vibrant innovation-based industries. On the same note, goodwill and networking have emerged as major factors of entrepreneurship success. It is often indicated that the circle of women is often smaller, more homogeneous and less strategically oriented as compared to those of their male counterparts (Noguera, Alvarez, and Urbano, 2013). This restricts their way of handling important business information, business networks, and guidance programmes. Nonetheless, it has been found that women tend to overcome the structural biases and resource disparities when they establish effective work relations, particularly with mixed-gender or global relations (Bastian, Metcalfe, and Zali, 2019). Another conclusive determinant of women's entrepreneurial participation is the institutional and cultural context. Comparative research has shown that women in the developing economies tend to have more governance gaps, strict gender expectations, and a lack of infrastructural support as compared to the developed countries (Gupta et al., 2009; Roomi & Parrott, 2008). As an example, the social systems of patriarchy, low property rights and poor childcare services work together to remain as intimidating hurdles in the new environments. Conversely, developed countries have been progressively

implementing gender-sensitive policies, financial incentives, and incubator programmes that strive to level the playing field for entrepreneurship (Henry et al., 2017). Nevertheless, gender disparities and the bias of unconscious biases and policy-making are still high in such settings.

All in all, bibliometric analysis confirms that the study of women entrepreneurs has shifted from the periphery to the centre of academic discussion. The field of work is becoming increasingly multidisciplinary, methodologically sophisticated, and theoretically diverse (Ratten & Jones, 2021). However, there is still much to be accomplished to incorporate intersectional perspectives, rectify structural injustices, and develop in-depth frameworks that reflect the dynamic nature of the interactive forces between gender, institutions, and technological change, before intellectual and practical mainstreaming can be fully realised. Even though the literature on women entrepreneurs is expanding, there are still many unmet research needs, particularly in bibliometric studies. Influential authors, well-known journals, and publishing patterns have been shown by previous bibliometric analyses (Jennings & Brush, 2013; Henry et al., 2016) to be the majority of these studies continue to be descriptive in nature and to focus more on output than on more intricate knowledge networks or thematic structures. This narrow focus limits our ability to comprehend how women's entrepreneurship research has changed over time and how future research might be focused, rather than on deeper thematic structures or knowledge networks. Mashapure et al., (2022) in her study reveals inadequate support from the government, patriarchal societal structure of the community, lack of relevant entrepreneurial knowledge to manage the businesses, lack of collateral security to access funding, lack of market information, occurrence of disasters in the localities, time limitation or role conflict to balance family pressures had a negative impact on the performance of women-driven ventures. Factors that have a significant impact on the successful completion of enterprises were examined, including entrepreneurial mindset, financial independence, professional competency, risk-taking capacity, prosperity, autonomy, receptiveness, and supportive environment (Matharu & Juneja, 2023).

1.1 Theoretical Perspectives on Women Entrepreneurship

The study by Terjesen, Bosma, and Stam (2016) represents one of the earliest large-scale applications of the entrepreneurial ecosystem framework to women's entrepreneurship at a global level. Using cross-country data, the authors demonstrate that female entrepreneurial activity is significantly influenced by ecosystem characteristics such as access to finance, labour market conditions, and institutional quality. Their results undermine the belief that the gender differences in business venture creation are mainly based on the personal potential, but rather it is the national ecosystem structure that is decisive. Further into the ecosystem viewpoint, McAdam, Harrison, and Leitch (2019) present a gendered understanding of entrepreneurial ecosystems in the form of gender capital. The authors state that the networking practises by women facilitate and limit entrepreneurial participation based on the qualitative evidence. Although the women-only networks supply social support and legitimacy, they might also perpetuate marginalisation in male-dominated ecosystems. This paper introduces a critical feminist perspective to the ecosystem theory by exposing how power relations and symbolic capital determine the access of women to resources, contrary to simplistic policy recommendations that only aim at augmenting networking possibilities.

More recently, Foss, Henry, et al. (2024) have provided an extensive systematic review of the connection between feminist theories and entrepreneurship research. Their discussion highlights persistent conflicts between feminist epistemologies and mainstream entrepreneurship studies. The authors list several feminist methodologies, including liberal, social, and post-structuralist feminism, and show how these perspectives have been employed to challenge mainstream entrepreneurial practises, challenge gendered assumptions, and promote more inclusive knowledge production. Notably, the review notes that feminist theory has led to a tendency to move female entrepreneurship studies away from descriptive comparison and toward critical, reflexive, and context-specific studies. By focusing on how the gendering of entrepreneurial experiences is produced by social constructions of gender roles,

institutional practises, and power relations, feminist entrepreneurship theory critiques gender-neutral entrepreneurship models (Ahl, 2006; Henry et al., 2016).

The most recent research increasingly incorporates the perspectives of the entrepreneurial ecosystem, which conceptualises entrepreneurship as intertwined with systems of relationships that include policy systems, financial institutions, cultural norms, networks, and support mechanisms (Saiz-Alvarez et al., 2020). In this context, the results of women's entrepreneurship differ across regions, depending on ecosystem maturity and inclusiveness. The intersection of feminist and ecosystem views has shifted the research focus on women entrepreneurship towards situational, policy-based, and institution-driven studies. This conceptual change is especially applicable to the analysis of emerging economies, where gendered norms and informal institutions play a key role in the emergence of entrepreneurial opportunities.

2.2 Research Gap

Even though the literature on women entrepreneurs is expanding, many unanswered questions remain, particularly in the field of bibliometric research. The available bibliometric studies have helped to learn about publication flows, authors whose literature has the greatest impact, and the most popular journals (Jennings & Brush, 2013; Henry et al., 2016). Nonetheless, most of these studies have been descriptive in nature and are more inclined toward outputs rather than in-depth thematic structures or knowledge networks. This narrow focus does not allow learning much about the development of research on women entrepreneurship and the ways the research can be oriented in the future.

3. Methodology

Today, the world has witnessed the growth of research across various fields. Another important requirement of every researcher is to keep up with the latest developments, especially in their field. The bibliometric methodology serves as a radar, which allows professionals to monitor progress (Koseoglu et al., 2016; Mota et al., 2024), uncover major themes (Rojas-Lamorena et al., 2022), visualise relationships

between research themes, publications, authors, countries, and institutions, analyse collaboration patterns (Shanmugam, 2010; Zupic & Čater, 2015), and find gaps in research, to indicate the productivity of an author and highly cited articles. Though the bibliometric analysis method is not new, its proliferation is fairly contemporary (Donthu et al., 2021). This study adopts a bibliometric approach using citation databases like Scopus. Keywords such as "women entrepreneurship," OR "female entrepreneurship," OR "women entrepreneur" were used to search for articles published from 2000 to 2025. VOSviewer and RStudio software were used to analyse data and visualise trends in publication, citation networks, and co-authorship patterns.

3.1 Search Strategy and Sample Selection

Recent bibliometric analyses have shown that the Scopus database is an effective source for large-scale literature mapping. Bhatia (2025) notes that Scopus is highly interdisciplinary and provides high-quality metadata that can serve as a basis for longitudinal citation and thematic analysis. Likewise, Kumar and Bharathi (2023) note that Scopus's extensive indexing makes it compatible with bibliometric methodology and enables the systematic study of publication trends and systems of knowledge. In this respect, Scopus is used in the current study according to the established methodological practises of modern bibliometric research. To ensure conceptual accuracy and minimise keyword overlap, the search strategy underwent operational refinement, grouping overlapping terms and similar words. Instead of using general, gender-neutral terms that are likely to retrieve irrelevant literature on entrepreneurship, the search term specifically targeted gender-specific entrepreneurial constructs. Women entrepreneurship and female entrepreneurship were considered synonymous terms describing the same phenomenon and were operationalised together within a single search expression. Such refinement was done to improve methodological clarity and accuracy without altering the scope, size, or thematic composition of the literature retrieved. An initial sensitivity analysis confirmed that the optimised search query produced a document set that was significantly similar. That is why the selected bibliometric dataset comprised 1,208

Scopus-indexed articles published between 2000 and 2025. TITLE-ABS-KEY fields were used in order to conduct the search, and data was retrieved on 1st October 2025. The obtained records were further analysed using Biblioshiny (RStudio) and VOSviewer (version 1.6.20) to examine trends in publications, citation structures, collaboration networks, and the development of themes.

Table 1

Search string adopted in Scopus database

String	Justification
"women entrepreneurship" OR "female entrepreneurship" OR "women entrepreneurs"	Captures literature explicitly addressing women and gendered dimensions of entrepreneurship while avoiding redundancy and exclusion of irrelevant gender-neutral studies

Source: Author's own elaboration

Note: The search query was narrowed down to ideas (conceptual consolidation) of synonymous words to enhance clarity and precision. This narrowing down did not result in the inclusion or exclusion of any documents in the original dataset.

3.2 Data Screening and Filtering Process

Bibliometric data is usually full of inconsistencies, including duplication, spelling differences in author names and even inconsistency in keywords. As suggested in recent bibliometric methodology studies, preprocessing, such as deduplication and normalisation, is necessary to ensure data quality and the integrity of the analysis (Kozak et al., 2025; Jadrijevic et al., 2025). Bibliometric analysis requires data cleaning and preprocessing (e.g., duplicate removal, keyboard harmonisation, metadata normalisation) to ensure the accuracy of the dataset and the robustness of the analysis (Lim & Agrawal, 2024). The first Scopus search returned 2,805 records for the 1992-2025 period, since Scopus automatically captures previous publications that satisfy the search expression. Nevertheless, in order to achieve methodological consistency with the declared time horizon and research aims, multi-

stage screening and filtering have been implemented to narrow down the data.

To begin with, the time-frame filter (2000-2025) was utilised to align the data with the study period, and all publications published before 2000 were excluded. Second, the data were narrowed down to the most pertinent to the research topic of women entrepreneurship, i.e. Business, Management and Accounting; Economics, Econometrics and Finance; and Social Sciences.

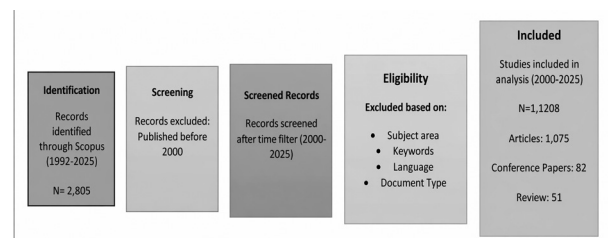
Third, the relevance of the keywords was considered, keeping records that were indexed under core thematic descriptors such as female entrepreneurship (390 records), entrepreneurship (356), women entrepreneurship (345), women-entrepreneurs (197), and entrepreneur (204). Fourth, only publications from recognised academic sources—journals, books, and conference proceedings—were considered to maintain scholarly rigour.

Further refinement was achieved by limiting the dataset to English-language publications, followed by screening for document types, retaining only articles (1,075), conference papers (82), and review articles (51).

After applying all inclusion and exclusion criteria, the final dataset comprised 1,208 documents published between 2000 and 2025, which formed the basis for the bibliometric analysis conducted using Biblioshiny and VOSviewer.

Figure 1

Steps in the Data Selection and Filtering Process



Source: Author's Compilation`

4. Data Analyses

For the measurement, the Biblioshiny R packages and VOSviewer 1.6.20 were used. The data is presented visually using VOS Viewer and bibliometric analysis

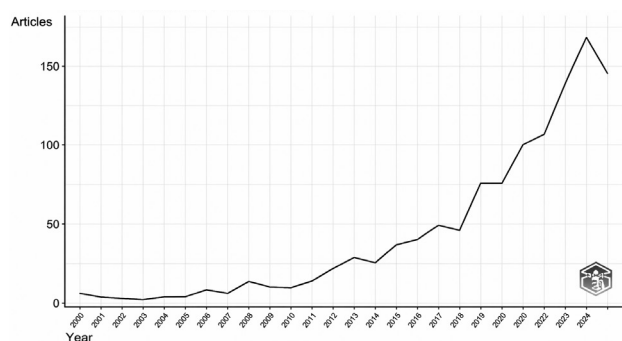
methods, making it easy to understand for non-coders. Using this open-source software is simple. The automated workflow functionality of this program is helpful for networking and mapping jobs (Helena et al., 1919). It is possible to obtain cluster analysis, co-authorship maps, country analyses, journal visualisation network maps, and a great deal of other information with the assistance of the Biblioshiny R packages and VOS Viewer software (Nerur et al., 2008).

4.1 Article Published over the Years

The sharp rise in publications after 2015, shown in Figure 2, signals the institutionalisation of women entrepreneurship as a mainstream research domain rather than a marginal topic. It displays a gradual rise in publications until 2015, followed by a sharp, steady increase, reaching over 150 articles around 2023. This exponential growth reflects the increasing importance of women's entrepreneurship as an academic and socio-economic focus. The modest output between 2000 and 2010 indicates that research was still in early stages, with limited academic attention. Nevertheless, the 2015 growth has been associated with international policies, gender equality, and additional investments in entrepreneurship research, which may have increased scholarly activity. Overall, the graph indicates a significant positive change and an expanding research sphere, with women's entrepreneurship moving from a limited topic to a stable and evolving area of study.

Figure 2

Annual Scientific Production



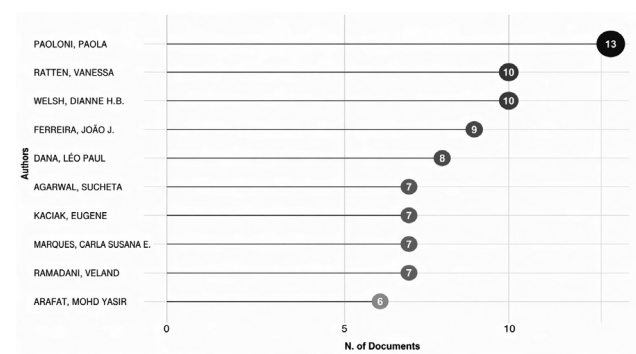
Source: Biblioshiny

4.2 Most relevant authors

Figure 3 indicates the top ten authors in the research on entrepreneurship and female entrepreneurship. Paola Paoloni is probably the most prolific writer, having published 13 works that have demonstrated her strong academic impact and long-term role in the field. Subsequently, Vanessa Ratten and Dianne H.B. Welsh follow, and both have 10 publications, demonstrating their active involvement in the development of gender, entrepreneurship, and innovation-related research. Joao J. Ferreira and Leo Paul Dana have 9 and 8 documents, respectively, placing them in enviable positions and indicating that they have been extensively involved in cross-national and comparative entrepreneurship studies. An emerging and diverse literature, the result of different locations, is evident in the seven documents submitted by authors such as Sucheta Agarwal, Eugene Kaciak, Carla Susana E. Marques, and Veland Ramadani. This pattern aligns with feminist entrepreneurship theory, where repeated scholarly engagement challenges male-centric entrepreneurship models and embeds gender as a central analytical lens within mainstream entrepreneurship research.

Figure 3

Most Relevant Authors



Source: Biblioshiny

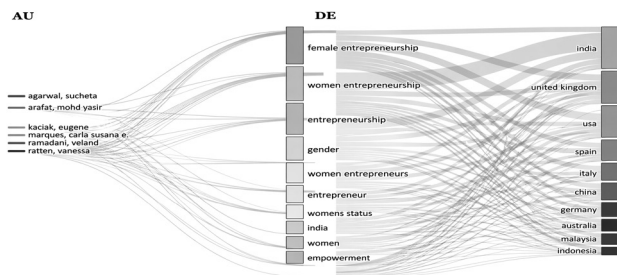
4.3 Three-field plot

Sankey plots, in which the size of each section is exactly proportional to the value of the corresponding node, are used in three-field plots to show the relationship between three fields (Riehmman et al., 2005). Figure 4 demonstrates strong interlinkages between key

authors, gender-focused keywords, and specialised journals, indicating thematic coherence within women entrepreneurship research. This framework indicates a move away from piecemeal descriptive research toward a theory-based approach guided by gender, empowerment, and institutional settings. The prevalence of gendered terms upholds the theory of feminist entrepreneurship, which underlines that the experiences of women entrepreneurs are influenced by the institutional and social embedded order. Scholars are interested in gendered issues in entrepreneurship, given the close links among authors such as Sucheta Agarwal, Mohd Yasir Arafat, and Vanessa Ratten, and basic topics such as female entrepreneurship, women’s empowerment, and the status of women.

Figure 4

Three Field Plot



Source: Biblioshiny

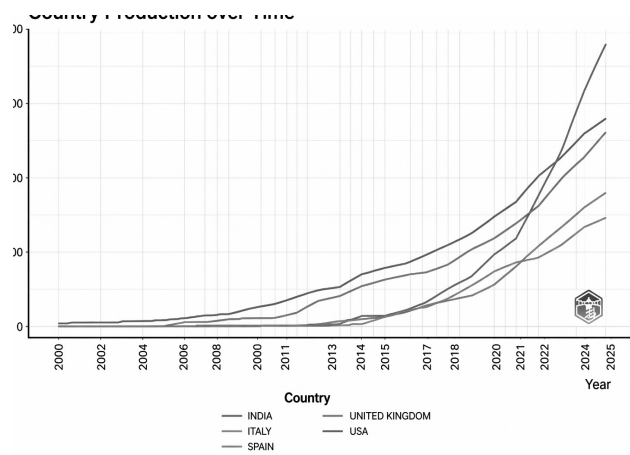
4.4 Country Scientific Production

The growing flow of research results from developing economies, particularly India, indicates a geographical shift in women’s entrepreneurship studies, as demonstrated in Figure 5. In the entrepreneurial ecosystem, this trend underscores that national policy, institutional reforms, and socio-economic transitions catalyse entrepreneurial activity and academic research. Feminist scholarship further interprets this shift as a move toward contextualised and inclusive knowledge production, reducing Western-centric dominance in entrepreneurship research. The country that shows the most significant positive trend after 2020 out of five is India, overtaking all other countries by 2025, which speaks to its emerging leadership and increased scholarly

interest in the study of women entrepreneurship. In the USA and the United Kingdom, publishing output rates have been extremely high over the years, indicating that these countries have developed their research ecosystems; Italy and Spain have moderate yet steadily increasing rates, particularly after 2015. The lack of activity in the early 2000s may indicate that the field was still in its infancy, but the steep growth since 2015 and the explosive growth since 2020 suggest that the field is no longer a niche but a mainstream field of research.

Figure 5

Country Production over time



Source: Biblioshiny

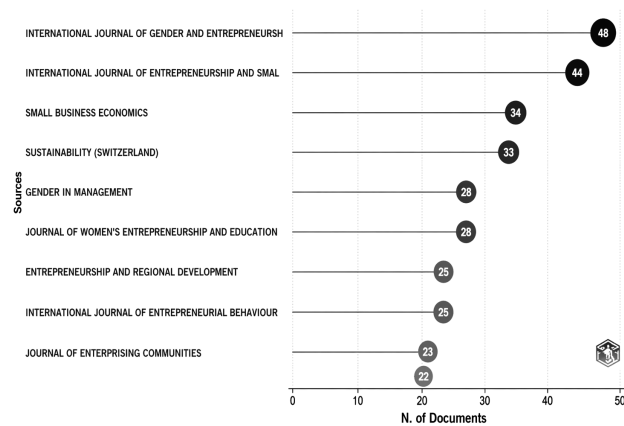
4.5 Most Relevant Sources

The dominance of gender and entrepreneurship-focused journals indicates that women’s entrepreneurship research has achieved disciplinary legitimacy. These core journals function as central knowledge platforms that support theoretical refinement and interdisciplinary dialogue. The concentration of publications in these outlets reflects the field’s maturation, as feminist and institutional approaches are increasingly integrated into mainstream entrepreneurship debates, reinforcing the field’s academic credibility. The best publication outlets in the area, which demonstrate the high level of research interest in the intersection of gender and entrepreneurship, are the International Journal of Gender and Entrepreneurship (48 documents) and the International Journal of Entrepreneurship and Small Business (44 documents), according to

the analysis of the most relevant sources (Figure 6). Another famous journal that advocates an interdisciplinary approach combining sustainability and economic perspectives is *Small Business Economics* (Switzerland).

Figure 6

Most Relevant Sources



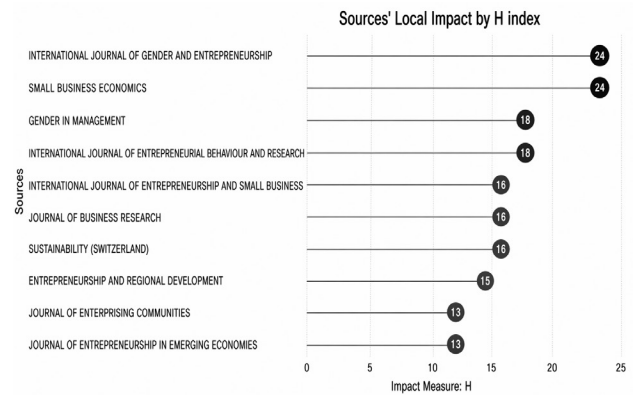
Source: Biblioshiny

4.6 Sources' Local Impact by H Index

According to Tony and Desai (2020), the h-index is a metric that shows the highest value of "n," where "n" is the number of journals that have published "n" articles with at least "n" citations. The h-index could be a more trustworthy indicator of a publication's overall quality as well as the quality of a particular article. Figure 6 shows that high h-index values among leading journals suggest that women entrepreneurship research is gaining not only in volume but also in scholarly influence. This reference-based effect signifies theoretical richness and methodological rigour, especially through the amalgamation of the feminist critique and the institutional framework. The trend signifies a shift in the field towards less exploratory and more analytically sound research, permeating the literature of the wider field of entrepreneurship and making it policy-informed.

Figure 7

Sources' Local Impact by H index



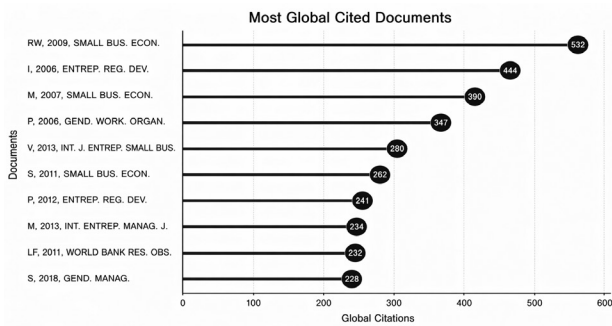
Source: Biblioshiny

4.7 Most cited papers on women entrepreneurs

The fact that citations are concentrated in high-impact journals also underscores the role of foundational theoretical work in current empirical and policy-driven research agendas. In Figure 7, key articles that have significantly influenced the field and the most frequently cited papers in global entrepreneurship research are indicated. The RW (2009) paper in *Small Business Economics*, with 532 citations, is an essential one. This Journal's reputation as a premier venue for influential research is further supported by a number of additional highly referenced articles. Publications in *Entrepreneurship and Regional Development* further highlight the importance of geographical and policy factors in entrepreneurial studies. Furthermore, an increasing scholarly interest in gender-related aspects of entrepreneurship is indicated by the inclusion of significant publications from *Gender, Work & Organisation* and *Gender in Management*. Most of these highly cited articles fall between the years 2007 and 2013, which is a mature citation window, even though some of the more recent research is beginning to be recognised. The concentration of citations in high-impact journals further demonstrates how foundational theoretical contributions continue to shape contemporary empirical and policy-oriented research agendas.

Figure 8

Most Global Cited Documents



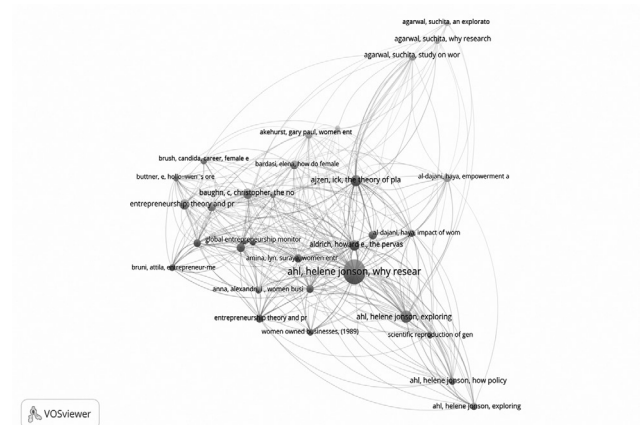
Source: Biblioshiny

4.8 Co-citation analysis

The co-citation clusters (Figure 8) reveal strong theoretical integration between feminist, institutional, and behavioural perspectives. The visualisation of co-citation networks identifies the discrete yet related subject clusters and shows the conceptualisation of the women’s entrepreneurship study. The largest blue cluster, centred on Helene Ahl, represents the theoretical foundations of feminist criticisms of entrepreneurship, highlighting how gender prejudices shape entrepreneurial discourse and policy. Major works and authors such as Howard Aldrich and Attila Bruni, as well as publications, are found in the red cluster, which denotes the inclusion of gender insights into more holistic theories and institutions of the entrepreneurship ecosystem. The green cluster is empirical research on the performance outcomes, their motives and entrepreneurial behaviour of women, including academics such as E. Holly Buttner and Candida Brush. In the meantime, the growing yellow cluster, which includes writers such as Sucheta Agarwal and Haya Al-Dajani, showcases recent studies on intersectionality, empowerment, and identity among women entrepreneurs.

Figure 9

Co-citation Analysis



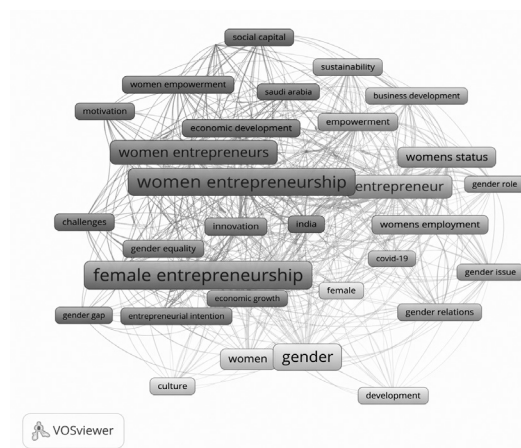
Source: VOS viewer visualisation

4.9 Co-word Analysis

Figure 9 presents the co-word network of keywords related to women entrepreneurship, generated using VOSviewer. The figure shows four distinct keyword clusters based on co-occurrence relationships. Larger nodes represent keywords with higher frequencies, while links indicate their co-appearance in publications. Keywords such as entrepreneurship, female entrepreneurship, women entrepreneurship, and gender are presented at the beginning and in the middle, indicating that they are used regularly and are closely related to each other in the scientific literature.

Figure 10

Co-word analysis



Source: VOS viewer visualisation

Table 2 shows the 15 keywords most frequently employed in the research on women entrepreneurship, as well as their frequency and overall strength of the links. Entrepreneur and entrepreneurship have recorded the greatest level of link strengths with other keywords. Gender-specific terms such as female entrepreneurship and women entrepreneurship also show high occurrence values. Other keywords, including women’s status, empowerment, innovation, India, and economic development, appear with moderate frequencies and link strengths.

Table 2
Top 15 keywords in the co-occurrence of keywords analysis

Ranking	Keyword	Occurrence	Total Link Strength
1	Female entrepreneurship	390	368
2	Women entrepreneurship	345	353
3	Entrepreneurship	356	614
4	Gender	215	487
5	Entrepreneur	204	633
6	women entrepreneurs	197	249
7	Women status	111	394
8	Women	90	226
9	Women employment	48	181
10	India	47	144
11	Empowerment	46	148
12	Innovation	45	125
13	Female entrepreneurs	44	102
14	Female	40	150
15	Economic Development	39	107

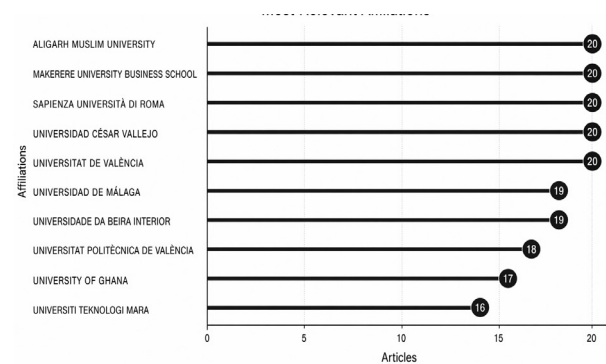
Source: VOS viewer visualisation

4.10 Top Universities in Publications on Women Entrepreneurs

The diverse geographical distribution of leading institutions demonstrates the globalisation of women’s entrepreneurship research. The graph

illustrating the most significant associations in the research on women entrepreneurship shows the relevant academic institutions that have made significant contributions to the field. The two leading universities, which are Aligarh Muslim University, Makerere University Business School, Sapienza Università di Roma, Universidad Cesarjandro Vallejo, and Universitat de Valencia, have 20 publications each, which testifies to their crucial influence on the discussion on women entrepreneurs in diverse geographical locations, such as Asia, Europe, Africa, and Latin America. Universitat Politècnica de València has made 18 contributions, University of Ghana has made 17, Universiti Teknologi MARA has made 16, and Universidad de Malaga and Universidade de Beira Interior have made 19. With a majority of European and developing-nation representation, this distribution reflects the global and varied participation in research on women entrepreneurship. The inclusion of Ghana, Malaysia, Uganda, and India universities underscores the growing academic interest in emerging countries and focuses on policy, empowerment, and local issues.

Figure 11
Most Relevant Affiliations



Source: Biblioshiny

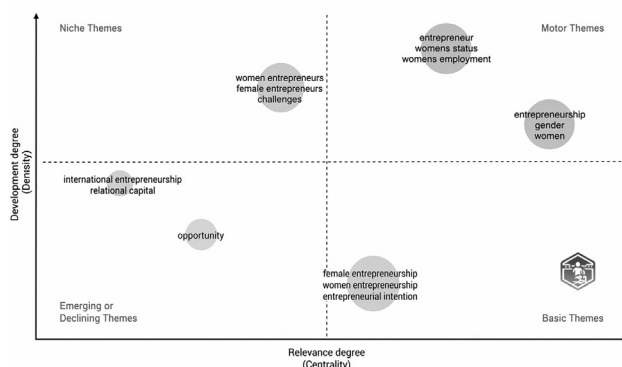
4.11 Thematic Clusters and Research Gaps

As indicated in the Figure 11 thematic cluster map, the study of women entrepreneurship has been organised into distinctly differentiated themes in terms of their relevance and level of development. The motor themes, positioned in the upper-right quadrant, include entrepreneur, women’s status, and women’s employment, indicating that these

topics are both highly developed and central to the field. The basic themes, such as entrepreneurship, gender, women, female entrepreneurship, women's entrepreneurship, and entrepreneurial intention, appear as foundational concepts with high relevance but lower internal development, forming the conceptual base of the literature. The niche themes like women entrepreneurs, female entrepreneurs, and challenges are well-developed but less connected to the broader research structure, reflecting specialised lines of inquiry. Finally, international entrepreneurship, relational capital, and opportunity fall under emerging or declining themes, indicating limited development and peripheral relevance within the current women entrepreneurship research landscape.

Figure 12

Thematic Clusters



Source: Biblioshiny

5. Findings & Discussion

5.1 Findings

The study concludes that women's entrepreneurship research has clearly moved from the margins to the mainstream of academic research, based solely on a bibliometric analysis of 1208 Scopus-indexed articles (2000-2025). Publication output was low until 2015, at which point it began to rise sharply and steadily, reaching a peak around 2023. Such growth coincides with the popularity of women's empowerment, gender equality, and inclusive economic development at the global level. Paola Paoloni, Vanessa Ratten, and Dianne H.B. Welsh are the most prolific contributors based on authorship analysis,

which shows continued leadership in the field of gendered entrepreneurship studies. The increasing methodological maturity and consolidation in the field are manifested in the percentage of journal publications versus conference papers and reviews. The national analysis shows that there is a significant geographic shift. India overtaking well-established research centres such as the UK and the USA to be the top contributor occurred after 2020. This shows that more focus is being given to the developing and emerging economies by academics. Even the efforts of European countries such as Spain and Italy are also regular, representing the proliferation of scientific work all over the world. The International Journal of Gender and Entrepreneurship and the International Journal of Entrepreneurship and Small Business are the most prominent sources, based on the analysis of the publications. This demonstrates that the research on women entrepreneurship has been institutionalised in a specialised, high-impact journal. Increasing intellectual influence and citation impact are also demonstrated by high h-index values. A sound theoretical basis based on feminist, institutional and behavioural perspectives is disclosed through analysis of co-citation, where important contributions have been made through Helene Ahl, Candida Brush and Howard. Co-word analysis demonstrates that female entrepreneurship, women entrepreneurship, gender, empowerment, innovation, and economic development are central concepts prevalent in the literature. Themes such as the entrepreneur, the position of women, and the employment of women are emphasised as the driving forces in the thematic mapping, whereas intersectionality and international entrepreneurship are shown as new or underdeveloped spheres.

5.2 Discussion

The results show that research on women's entrepreneurship has experienced both quantitative growth and qualitative development. The fact that feminist scholars and gender-oriented journals have become dominant in the field is evidence of a conclusive move to leave behind the focus on explaining entrepreneurship as a form of deficit and adopt more structure-based and gender-conscious approaches. This is in agreement with the feminist entrepreneurship theory that highlights institutional

discrimination, power dynamics, and gender patterns within society that influence the outcome of entrepreneurship. Simultaneously, the increase in policy-related and institutional partnerships, as well as the country-based production, especially by India, indicates the increasing relevance of the entrepreneurial ecosystem points of view. The contribution being made by the developing economies is increasing, and this implies that research is becoming more contextual and that it is concerned with region-specific constraints and opportunities that women entrepreneurs encounter. The intersection of feminist criticism and the analysis of ecosystems marks a shift toward the presentation of descriptive cases in scholarship that is more analytical and theory-based. Nevertheless, a relatively small amount of themes, including intersectionality, digital entrepreneurship, and contextual diversity suggests that the significant aspects of the entrepreneurial experiences of women are under-researched in the current knowledge base. On the whole, the discussion shows that research on female entrepreneurship has become a multidisciplinary, globally connected, and theoretically informed field. Although the field has gained academic credibility and acceptance, according to bibliometric data, there is a need for further exploration of emerging themes to enhance theoretical integration and inclusiveness in future studies.

6. Conclusion

This paper summarises the evidence that the research on women entrepreneurship has reached the level of intellectual maturity, at which the increasing publication volumes are followed by a more evident theoretical focus and international activities. Instead of just a descriptive mapping activity, the bibliometric trends are indicative of an internal shift of the discipline towards gendered and institutionally realised understandings of entrepreneurship. This discussion indicates that the scholarship of women entrepreneurship is no longer held by fragmented or deficit-based approaches. Rather, the presence of influential citation clusters and thematic structures is indicative of long-term working with theoretical business feminism and entrepreneurial ecosystem models. All these views redirect the focus on the individual-level explanations to gendered

institutions, policy settings, and contexts that have a role in determining the entrepreneurial outcomes. The growing role in the ecosystems of emerging economies, especially India, directly adds to the contextual turn in the literature and determines the applicability of ecosystem conditions not only to the long-established centres of Western research. Simultaneously, the thematic organisation of the sphere speaks of uneven development. Although the central themes regarding gender, women's positions, labour and entrepreneurship are well developed, other aspects include intersectionality and internationalisation, are poorly integrated into the prevailing knowledge base. This lack of balance indicates that, even with mainstreaming, the field still has room to fill conceptually and analytically.

In general, the work has value, as it provides a theoretically supported synthesis of the existing body of research on global women entrepreneurs, grounded in bibliometric evidence. The paper makes women's entrepreneurship a more robust yet dynamic research field, offering a stronger foundation for future research aimed at integrating theory more thoroughly and addressing the gaps that remain in the literature.

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