Data and Metadata. 2025; 4:949 doi: 10.56294/dm2025949

#### **ORIGINAL**



## Analysis of scientific production on women entrepreneurs in conflict zones

# Análisis de la producción científica en torno a mujeres emprendedoras en zonas de conflicto

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Cite as: Sánchez Castillo V, Gómez Cano CA. Analysis of scientific production on women entrepreneurs in conflict zones. Data and Metadata. 2025; 4:949. https://doi.org/10.56294/dm2025949

Submitted: 18-08-2024 Revised: 24-12-2024 Accepted: 17-04-2025 Published: 18-04-2025

Editor: Dr. Adrián Alejandro Vitón Castillo

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#### **ABSTRACT**

This article presents a bibliometric analysis of the scientific production about women entrepreneurs in conflict zones, to identify trends, gaps, and areas of opportunity in research on this topic. Through a methodological approach based on seven dimensions and a continuous disaggregation process, the evolution of the field and its impact in contexts affected by violence were examined. The results showed a significant growth in academic production during the last decade, with an interdisciplinary approach that integrates gender, economic, and human rights perspectives. International collaboration networks were identified, as well as the predominance of topics such as economic empowerment, gender violence, and resilience in post-conflict contexts. However, gaps were observed in the representation and practical application of academic findings in public policies. The study presents lines to strengthen research, foster global collaboration, generate new knowledge, and base concrete actions that promote female entrepreneurship as a tool for social transformation in conflict zones.

**Keywords:** Female Entrepreneurship; Conflict Zones; Bibliometric Analysis; Gender and Development; Public Policies.

## **RESUMEN**

Este artículo presenta un análisis bibliométrico de la producción científica en torno a las mujeres emprendedoras en zonas de conflicto, con el objetivo de identificar tendencias, vacíos y áreas de oportunidad en la investigación sobre este tema. A través de un enfoque metodológico basado en siete dimensiones y un proceso continuo de desagregación, se examinó la evolución del campo y su impacto en contextos afectados por la violencia. Los resultados evidenciaron un crecimiento significativo en la producción académica durante la última década, con un enfoque interdisciplinario que integra perspectivas de género, economía y derechos humanos. Se identificaron redes de colaboración internacional, así como la predominancia de temas como el empoderamiento económico, la violencia de género y la resiliencia en contextos de posconflicto. Sin embargo, se observaron brechas en la representación y en la aplicación práctica de los hallazgos académicos en políticas públicas. El estudio presenta líneas para fortalecer la investigación, fomentar la colaboración global, generar nuevo conocimiento y fundamentar acciones concretas que promuevan el emprendimiento femenino como herramienta de transformación social en zonas de conflicto.

Palabras clave: Emprendimiento Femenino; Zonas de Conflicto; Análisis Bibliométrico; Género y Desarrollo; Políticas Públicas.

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#### INTRODUCTION

Female entrepreneurship has emerged as a topic of growing interest in recent decades, not only for its potential to boost economic development but also for its ability to transform social realities in adverse contexts. (1,2,3) In particular, women entrepreneurs in conflict zones face unique challenges stemming from the intersection of structural violence, gender inequality, and lack of economic opportunity. These circumstances have led to the study of this phenomenon acquiring special relevance for academia and public policy, as it represents a way to promote economic autonomy, resilience, and the reconstruction of the social fabric in post-conflict scenarios.

At a global level, the literature on female entrepreneurship has grown significantly, addressing issues such as barriers to access to financial and technological resources, (4,5) support networks and insufficient experience, (6,7) as well as the impact of public policies on consolidating women-led initiatives. (8,9) However, when this phenomenon is analyzed in contexts of armed conflict, the complexity increases considerably. (10,11)

Women in these areas not only have to overcome the traditional obstacles associated with entrepreneurship but also face specific risks, such as gender-based violence and its impact on mental and reproductive health, (12,13) forced displacement and its consequences, (14) exposure to covert violence and inequities in power relations, (15) the violation of their fundamental rights, (16) as well as the disintegration of their communities. (17) These particularities have motivated a growing body of research to understand how women undertake amid adversity and what factors contribute to their success or failure.

In Colombia, this issue takes on an additional dimension due to the prolonged armed conflict that has marked the country's recent history and the various forms of violence that have overlapped in this scenario. (18,19) In this sense, the country has become a benchmark for studying female entrepreneurship in conflict zones, not only because of the magnitude of the phenomenon but also because of the efforts made regarding public policies and support programs for women victims of violence. However, despite the progress made, there are still gaps in our understanding of how these initiatives are developed in practice and their real impact on the lives of women and their communities. (20,21,22)

In response to the issues raised, this article aims to represent the intersection between fields of study by analyzing the scientific output of women entrepreneurs in conflict zones. To this end, a bibliometric approach was conceived to explore the trends, theoretical approaches, and areas of interest that have dominated research in this field. In doing so, it offers a vision of the achievements, the pending challenges, and the future lines of research. This rationale seeks to consolidate the basis for actions that promote female entrepreneurship as a tool for social transformation in contexts affected by violence from an integrative conceptual framework.

#### **METHOD**

The analysis of scientific production on women entrepreneurs in conflict zones was based on a methodology combining a bibliometric approach with scientometric techniques. This design allowed us to identify, quantify, and analyze the trends, patterns, and gaps in the academic literature on the subject. (23,24) This methodological rationale was adopted due to the scarce results obtained with integrative search strategies, which yielded small and unrepresentative samples.

Consequently, a proposal was generated to resolve this shortcoming, characterized by the selection of indicators and the execution of two parallel searches during the first phase (table 1). Subsequently, each data corpus was analyzed separately to extract the main trends. Finally, the data was integrated according to the indicators presented below.

Table 1. Strategies for data collection in phase 1	
Strategy 1	Strategy 2
	( TITLE-ABS-KEY ( armed AND conflict ) AND TITLE-ABS-KEY ( women ) ) AND PUBYEAR > 2003 AND PUBYEAR < 2025

Data was collected from the Scopus database, applying temporal filters (2004-2024) and impact filters to ensure broad historical coverage and relevance of results. The data obtained was processed and analyzed using VOSviewer, Excel, and Scopus tools, which enabled visualization of collaboration networks, thematic trends, and citation patterns.

The methodology was then structured around seven key dimensions, each operationalized using specific indicators. In addition, a strong triangulation program was designed that allowed the final results to be contrasted with seminal studies, documents not indexed in Scopus, and other relevant sources. The dimensions and indicators used are detailed below (table 2).

	Table 2. Dimensions and indicators of	of analysis
Dimension	Analysis indicator	Criteria and objective
Number of publications (absolute)	Total number of documents.	Quantify the volume of scientific production on the subject.
Distribution of citations	Temporal growth of research.	Assess the impact of publications.
Main areas of disciplinary relationship	Trends according to geographical contexts.	Explore the disciplines that have contributed to both lines of study.
Main sources	Distribution of citations.	Identify journals, publishers and academic platforms.
Co-authorship between countries	Most influential studies in the field.	Assess the degree of international collaboration.
Key words	Projected growth.	Analyze keywords and subject areas.
Main lines of research	Subject areas.	Analyze the most active and emerging lines of research.

Finally, a thematic analysis approach was incorporated, aimed exclusively at the problems, topics, and trends related to scientific production in Colombia. This approach facilitated the exploration of the intersection between gender and conflict from the perspective of scientific production but also allowed for a more precise representation of the expression of these trends at the level of lines and research concerns.

#### **RESULTS**

The first relevant finding regarding production and visibility was the scarcity of studies addressing the intersection between female entrepreneurship and conflict. Despite the introduction of multiple search strategies and keyword combinations, it was found that there is no field as such, but rather possible points in common, but not an organized and delimitable production.

Once this result was confirmed, the study design was continued, as explained in the previous section. Hence, an analytical effort was made aimed at identifying, exploring, and synthesizing the main trends, with an initial focus from the particular to the general. Then, the dialectic of the relationship between female entrepreneurship and armed conflicts, specifically the effect of the latter on the former, was examined.

Regarding the first indicator, it is vital to point out that the studies on female entrepreneurship and the impact of armed conflicts on women showed periods of boom and decline, with the former field being the more prominent (figure 1). Similarly, the study on female entrepreneurship was more stable than the study on the impact on women, as the former only experienced a decrease in absolute production in 2007 and 2011, while the latter did so on three occasions (2005, 2008, and 2012).

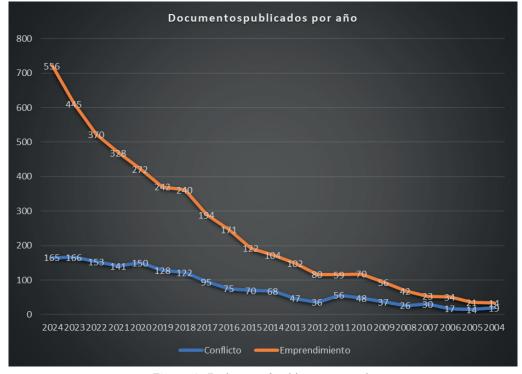


Figure 1. Evolution of publication trends

In trend terms, studies on female entrepreneurship began to experience an exponential increase from 2017 onwards, which could be influenced by a greater exploration of issues related to small businesses and their impact on social development and economic growth. For their part, studies of the effects of conflict on women also experienced an exponential increase. However, the rate was lower in comparison, as the field of "entrepreneurship" has grown at a much faster rate (20,95 %) than the field of "conflict" (11,64 %).

Likewise, the analysis of the literature and the triangulation showed a more significant interest in the correlation between both constructs from 2023 onwards, with studies aimed at achieving a better understanding of the challenges of female entrepreneurship ecosystems, (25) resilience to multiple phenomena, (26) entrepreneurship in migration contexts, (27,28) retrospective analysis, among others. In terms of historical contextualization, armed conflicts in the Middle East, Africa, and Eastern Europe, as well as the impact of COVID-19 on global geopolitics, could explain the surge of interest in economic resilience mechanisms. At the same time, the increasingly frequent campaigns associated with SDGs 16 and 5 provide a framework for understanding the emphasis on the gender approach in studies on armed conflicts.

In terms of geographical distribution and the countries with the highest production, the United States and the United Kingdom led both fields in terms of the total output, a fact probably related to the collaboration and funding that higher education institutions, NGOs, and governments in both nations invested in these studies (figure 2). Furthermore, this production may be directly related to the involvement of both countries, especially the United States, in armed conflicts over the last twenty years, even more so if the patterns of scientific publication in previous periods are analyzed.

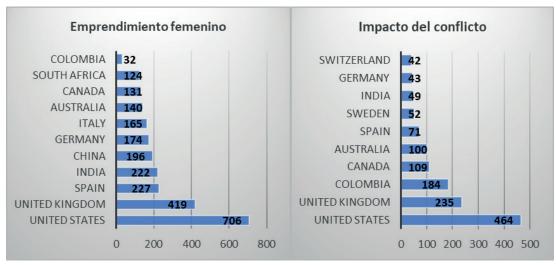


Figure 2. Most productive countries by field of study

In the case of Colombia, it appeared early on among the top five in terms of studies on the effects of the conflict on women, which was caused by the long-lasting conflict that affected the country. (29) Conversely, studies on female entrepreneurship ranked 24th worldwide, with 32 documents. However, the auxiliary search revealed a renewed interest in female entrepreneurship in the post-agreement context and the analysis of the factors that condition the entrepreneurial activity of Colombian women. (30) Particular emphasis was placed on the effect of the conflict on psychosocial well-being, (31) transitional justice processes, (30) informal situations (32) and the construction of new business models. (33)

The comparison showed a similar state in relation to previous analyses in terms of citations and impact (table 3). In addition to greater production in total terms, studies on female entrepreneurship have received greater attention in terms of citations, with almost three times more total citations and almost double the h-index.

Table 3. Comparison of citation and impact indicators		
Indicator	Female entrepreneurship	Conflict impact
Total number of documents cited	2 733	1 231
Citations	71 306	25 572
H-index	115	61

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In terms of impact and relevance, it is remarkable that in 2004. However, both were small fields; studies on female entrepreneurship were barely visible, with only one citation, while those on the impact of conflict received 11 (figure 3). From this point on, the former field has experienced exponential growth, while the latter can be described as stable despite the increase in total numbers. In fact, from 2010 onwards, the impact of studies on entrepreneurship significantly exceeds that of research on conflict in terms of cumulative volume, which reinforces the idea that female entrepreneurship has become a more prominent issue. This assertion must be understood in terms of the disaggregation process carried out, and therefore, it is recommended that it be explored in greater depth in future studies.



Figure 3. Distribution of citations

	Table 4. Comparison of growth rates			
Year	Entrepreneurship (Courage)	Growth index (Entrepreneurship)	Conflict (Courage)	Growth index (Conflict)
2004	1	1	11	1
2005	7	7	29	2,64
2006	40	40	54	4,91
2007	79	79	60	5,45
2008	140	140	105	9,55
2009	287	287	163	14,82
2010	473	473	184	16,73
2011	545	545	236	21,45
2012	840	840	328	29,82
2013	991	991	418	38,00
2014	1375	1 375	498	45,27
2015	1714	1 714	699	63,55
2016	2279	2 279	819	74,45
2017	3003	3 003	1010	91,82
2018	3585	3 585	1237	112,45
2019	4511	4 511	1668	151,64
2020	5545	5 545	2478	225,27
2021	7153	7 153	3442	312,91
2022	9153	9 153	3517	319,73
2023	11056	11 056	3638	330,73
2024	14471	14 471	4401	400,09

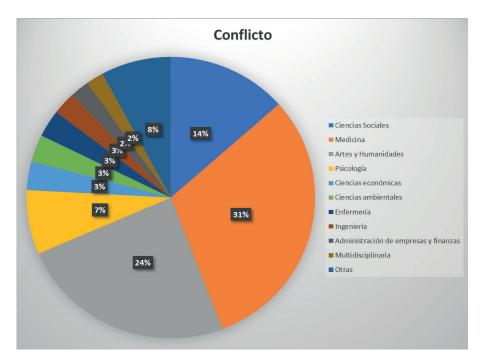
However, it is necessary to compare the growth rates, as these clearly show the disparity between the two fields (table 4). Furthermore, the projection calculation and triangulation of sources show that this trend should be maintained until 2023, even considering the recent inclination toward the intersection between the constructs (table 5). Based on these findings, the idea that it is vital to delve deeper into the intersection, both in specific contexts and at a gnoseological level, was reinforced due to the probable shortcomings in conceptual and theoretical frameworks for integrating both constructs.

	Table 5. Projected growth rates		
Year	Entrepreneurship (Projection)	Conflict (Screening)	
2024	14,471	4,401	
2025	18,394	5,079	
2026	23,374	5,861	
2027	29,707	6,763	
2028	37,758	7,804	
2029	47,993	9,006	
2030	61,000	10,393	

Based on these considerations, the coinciding topics and concerns addressed in the most relevant studies of both cases were initially analyzed using the Cited by (highest) and Date (newest) filters in the Scopus citation overview. As a result of this procedure, the following were established as common topics: gender identity, gender inequality, the impact of environmental stressors on health<sup>(34)</sup> the importance of public policy, <sup>(35,36,37)</sup> structural violence against women, <sup>(38,39)</sup> sexual violence against women, <sup>(40,41,42)</sup> and expressions of gender-based violence, <sup>(43,44)</sup> among others. This initial approach served as a guide for the analyses and interpretations carried out in the subsequent dimensions.

Analysis of the most prominent sources showed that, although there are solid sources in both subject areas, there is a disconnect between studies on the impact of conflict and those on female entrepreneurship. In addition, there was a marked tendency towards disciplinary sources in the study of entrepreneurship and a wider range of subjects about conflict and women. However, these are limited and more concentrated in Medicine and Social Sciences.

Based on these findings, this dimension and the previous one were unified, facilitating determining the most recurrent disciplinary approaches, as seen in figure 4. Although the exploration of seminal and current documents had already revealed common themes, no journals explicitly addressed the intersection between women entrepreneurs and conflict zones. Plos One, a renowned mega journal, was the only coincidence. These results and overlapping areas such as psychology, finance, environmental sciences, and health sciences reinforce the notion that building interdisciplinary bridges and developing joint conceptual frameworks is possible.



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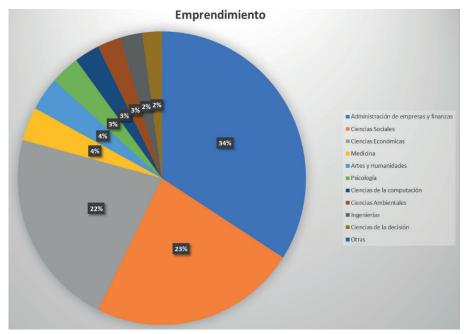
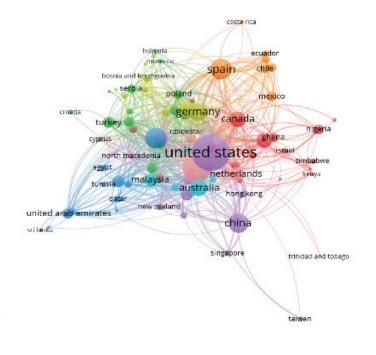


Figure 4. Areas of knowledge by field

The journals on the impact of the conflict showed a lower H-Index (24-44) compared to those on female entrepreneurship (30-167) (table 6). This indicates that the field of female entrepreneurship has more significant consolidation and visibility in the scientific literature. This aspect confirms previous analyses on the distribution of citations and the total number of documents.

Table 6. Reputation, impact factor and subject coverage of the main sources			
Source (impact of the conflict)	Data	Fuente (female entrepreneurship)	Data
Conflict And Health	37. H-Index 44. Q1. Medicine Public Health, Environmental and Occupational Health Social Sciences Health (social science)	International Journal Of Gender And Entrepreneurship	128. H-Index 45. Q1-Q2. Business, Management and Accounting Business and International Management Economics, Econometrics and Finance Economics and Econometrics Social Sciences Gender Studies
International Feminist Journal Of Politics	25. H-Index 57. Q1-Q2. Arts and Humanities Arts and Humanities (miscellaneous) Social Sciences Gender Studies Political Science and International Relations Sociology and Political Science	International Journal Of Entrepreneurship And Small Business	69. H-Index 46. Q3. Business, Management and Accounting Business and International Management Economics, Econometrics and Finance Economics and Econometrics
Women S Studies International Forum	16. H-Index 71. Q2-Q1. Social Sciences Development Education Gender Studies Law Sociology and Political Science	Small Business Economics	56. H-Index 167. Q1. Business, Management and Accounting Business, Management and Accounting (miscellaneous) Economics, Econometrics and Finance Economics and Econometrics
Plos One	16. H-Index 435. Q1. Multidisciplinary	Journal Of Developmental Entrepreneurship	50. H-Index 32. Q3. Business, Management and Accounting Business and International Management Strategy and Management Economics, Econometrics and Finance Economics and Econometrics
Lancet	16	Plos One	44. 16. H-Index 435. Q1. Multidisciplinary

Journal Of International Women S Studies	16. H-Index 30. Q3. Social Sciences Gender Studies	International Journal Of Entrepreneurial Behaviour And Research	42. H-Index 91. Q1. Business, Management and Accounting Business and International Management Business, Management and Accounting (miscellaneous)
International Review Of The Red Cross	15. H-Index 43. Q2. Social Sciences Law Sociology and Political Science	Sustainability Switzerland	38. H-Index 169 Q2. Computer Science Computer Networks and Communications Hardware and Architecture Energy Energy Engineering and Power Technology Renewable Energy, Sustainability and the Environment Environmental Science Environmental Science (miscellaneous) Management, Monitoring, Policy and Law Social Sciences Geography, Planning and Development
Social Science And Medicine	14. H-Index 283. Q1. Arts and Humanities History and Philosophy of Science Medicine Medicine (miscellaneous) Social Sciences Health (social science)	Gender In Management	38. H-Index 66. Q1. Business, Management and Accounting Business, Management and Accounting (miscellaneous) Social Sciences Gender Studies
Medicine Conflict And Survival	11. H-Index 24. Q3. Medicine Pathology and Forensic Medicine	Journal Of Small Business And Enterprise Development	32. H-Index 86. Q1-Q2. Business, Management and Accounting Business, Management and Accounting (miscellaneous) Strategy and Management
BMC Pregnancy And Childbirth	11. H-Index 114. Q1. Medicine Obstetrics and Gynecology	Journal Of Entrepreneurship In Emerging Economies	31. H-Index 32. Q2-Q1. Business, Management and Accounting Business and International Management Marketing Strategy and Management Economics, Econometrics and Finance Economics, Econometrics and Finance (miscellaneous)



🤼 VOSviewer

Figure 5. Collaborative networks

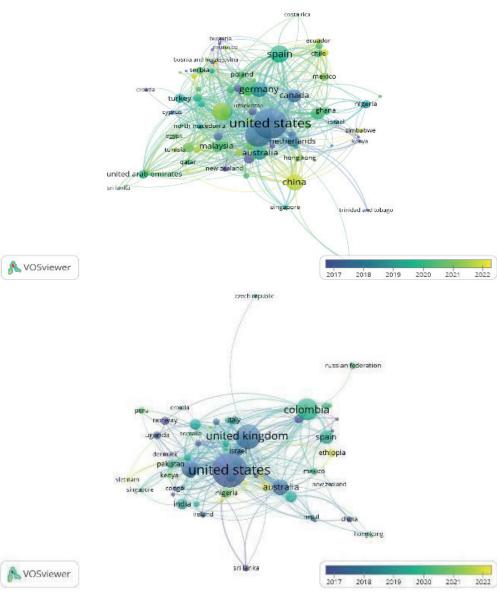


Figure 6. Evolution of collaborative networks

Regarding co-authorship between countries, the leaders in production also appeared to be leaders in collaborative networks, mainly the United States, the United Kingdom, Australia, Germany, Canada, and Spain. In the case of conflict studies, Colombia stands out as the central node of a cluster that includes Spain, Russia, and Ethiopia, among others, a fact conditioned by the long duration of the historical Colombian conflict and the numerous efforts to study and make visible the phenomena associated with it (figure 5). Meanwhile, collaboration in female entrepreneurship showed the United States and China as fundamental nodes, with the former occupying a central position and acting as the strongest link.

Furthermore, the evolution of these collaborations showed a trend toward developing contexts, conflicts, humanitarian crises, and demands for socioeconomic revitalization (figure 6). In both overlay maps, Colombia stood out as an emerging context, and its growing academic and scientific relations with countries such as Spain, Mexico, Italy, Chile, and France were confirmed.

Analysis of the keywords revealed that, in the field of the impact of conflict on women, the most frequent term was war (376 occurrences, 6894 link strength), confirming the centrality of conflict and war in the analyzed literature. In addition, sexual violence (144 occurrences, 2160 link strength) and mental health (75 occurrences, 1656 link strength) stood out, two categories widely studied for their relationship with the well-being of women, their families, organizations, and communities.

In the network layout, the term female did not show significant relationships with other relevant nodes within its cluster. Still, it was associated with other essential nodes and clusters (figure 7) and in terms of thematic relationships, gender and violence (gender-based violence, intimate partner violence), mental health and trauma (mental health, posttraumatic stress disorder (PTSD), psychological distress), reproductive and maternal health (reproductive health, maternal health, pregnancy) stood out. Furthermore, it is crucial to point out that the keywords gender-based violence, sexual violence, and intimate partner violence are strongly related to terms such as war, armed conflict, and post-conflict, which shows that gender-based violence has been a central issue in studies on armed conflicts over the last 20 years.

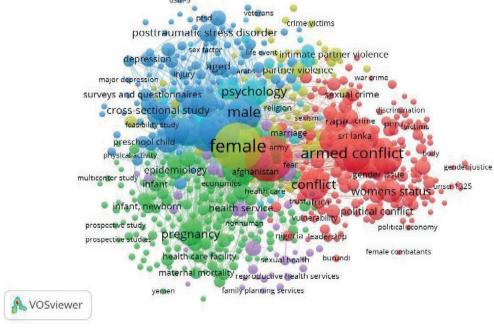


Figure 7. Keyword network (armed conflict AND women)

Regarding emerging lines and less explored topics, terms with low frequency but high relevance were appreciated, among which gender justice, peace agreement, and human security stand out. Despite their importance and visibility in international literature, these terms are under-researched in this field. On the other hand, topics related to COVID-19, climate change, epidemiological studies, and analysis of specific contexts emerged. (45,46,47)

On the other hand, the analysis of keywords in studies on female entrepreneurship showed that the most relevant terms were a combination of categories associated with entrepreneurship, gender, and women (figure 9). However, cluster analysis also revealed trends related to the study of female entrepreneurship at different stages of the life cycle. These educational and social supports mediate between entrepreneurial intention and the success of initiatives, risk factors, mental health, and the impact of female entrepreneurship in different contexts.

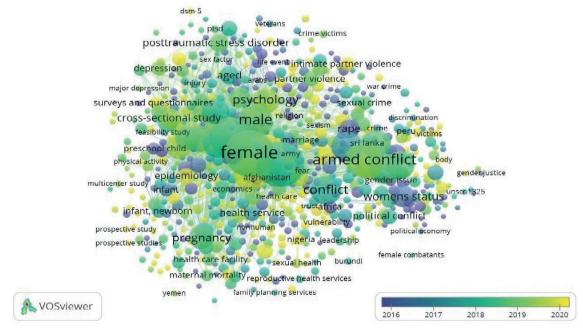


Figure 8. Evolution of keywords (armed conflict AND women)

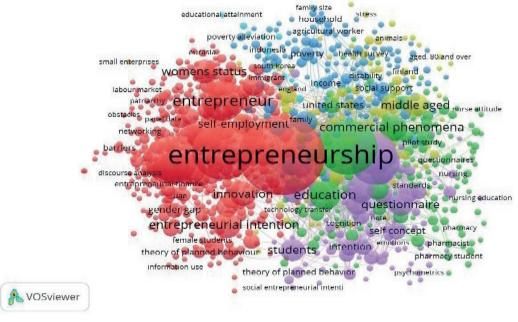


Figure 9. Keyword network (female entrepreneurship)

Table 7. Emerging issues and areas of interest		
Line	Terms	Analysis data
Gender and entrepreneurship	gender equality gender inequality gender gap gender roles	(45 occurrences, 129 bond strength) (33 occurrences, 206 bond strength) (46 occurrences, 118 bond strength) (9 occurrences, 27 bond strength)
Female empowerment	empowerment women empowerment female empowerment	(78 occurrences, 807 bond strength) (29 occurrences, 132 bond strength) (18 occurrences, 64 bond strength)
Female entrepreneurship in specific contexts	developing countries rural entrepreneurship social entrepreneurship	(51 occurrences, 296 bond strength) (10 occurrences, 54 bond strength) (76 occurrences, 379 bond strength)
Barriers and challenges	barriers discrimination challenges	(21 occurrences, 75 bond strength) (14 occurrences, 54 bond strength) (32 occurrences, 106 bond strength)

Examining the terms and emerging lines showed a considerable approximation to issues related to the gender approach, which suggests a growing awareness of the factors associated with it that condition entrepreneurship beyond economic and financial matters. Specifically, four main lines were found, which can be consulted in table 7 and contrasted in figure 10.

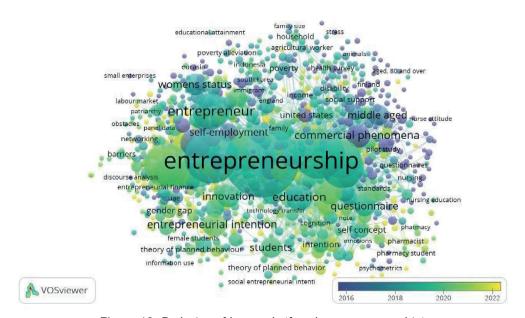


Figure 10. Evolution of keywords (female entrepreneurship)

Finally, it is vital to point out that in the less explored terms, categories such as gender justice appeared. This did not appear in the data but is a critical line in conflict and female vulnerability. At the same time, it is linked to studies on equity, according to the literature consulted. (48,49,50,51) In addition, the need to move towards studies of digital transformation and the integration of technologies in female entrepreneurship and the training of women entrepreneurs was triangulated, as was the discussion on the aspects of sustainable development and their relationship with the sustainability of entrepreneurship, as well as political and legal support at all socio-educational levels. (52,53,54,55)

To conclude the analysis of the dimensions and indicators, a mixed matrix was constructed based on the quantitative data from both strands, the assessments made from the triangulation, and the qualitative exploration of the primary sources collected. Table 8 shows the six lines of intersection and their description; there is a clear intersection between these two fields of study, which suggests that women's entrepreneurship initiatives can be a key tool for recovery and development in conflict zones. Future research should explore how policies and programs can integrate these fields to maximize the impact of women's entrepreneurship on social and economic reconstruction.

Table 8. Matrix of the intersection of the fields		
Main line	Sublines	Description
Gender and female empowerment	Gender	In the context of conflict zones, gender is associated with issues such as gender-based violence, inequality and gender roles. In female entrepreneurship, gender is more related to the gender gap, empowerment and the barriers faced by women.
	Empowerment	In conflict zones, empowerment is linked to post-conflict recovery and women's participation in social reconstruction. In entrepreneurship, empowerment refers to economic autonomy and overcoming cultural and social barriers.
	Feminism and feminist theory	They appear in both sets, indicating that a gender focus is critical to understanding both the challenges of women in conflict zones and their role in entrepreneurship.
Health and well- being	Health and health services	In conflict zones, health is related to limited access to medical services, mental health and the consequences of violence. In female entrepreneurship, health is associated with the well-being of women entrepreneurs and their ability to balance work and personal life.

	Mental health	It is a cross-cutting issue, especially relevant in conflict zones due to trauma and post-traumatic stress. In entrepreneurship, mental health is linked to work stress and the pressure of running a business in challenging environments.
	Health empowerment	It is a key connection point, as women in conflict zones often lead community health initiatives, which can be a precursor to social entrepreneurship.
	Education	In conflict zones, education is related to social reconstruction and the training of women for leadership roles. In entrepreneurship, education is fundamental for the development of business skills and the overcoming of cultural barriers.
	Development and developing countries	These are common themes, which suggests that, both in conflict zones and in female entrepreneurship, economic and social development is a shared objective.
	Training and education	Key processes for the empowerment of women in both contexts, whether to overcome the aftermath of conflict or to promote entrepreneurship.
Violence and conflict	Violence and gender- based violence	They are central themes in the dataset on conflict zones, while in female entrepreneurship they appear less prominently, but still relevant, as barriers that women must overcome.
	Conflict	It is a main keyword in the field of the impact of armed conflict, but it also appears in the second, although less frequently. This suggests that female entrepreneurship can be a strategy for post-conflict recovery and economic reconstruction.
	Resilience	It is a common construct in both contexts, highlighting the ability of women to overcome adversity, whether in conflict environments or in the business world.
	Entrepreneurship	It is the core of the field, but it is also relevant in the context of post-conflict economic recovery. Women in conflict zones often turn to entrepreneurship as a means of subsistence and empowerment.
	Economic empowerment	This is a key point of connection because, both in conflict zones and in entrepreneurship, women seek financial autonomy and economic opportunities.
	Microfinance and access to finance	These are two critical categories in the study of female entrepreneurship, but they can also be applied to conflict zones, where women need resources to start businesses and rebuild their communities.

#### **DISCUSSION**

The trends identified in the bibliometric analysis made it possible to contextualize the relevance of gender studies, female entrepreneurship, the intersection between gender and conflict, and the protection of human rights, not only at a global level but also about the state of affairs in Colombia. (56,57,58) The increase in academic production at the international level reflected a greater awareness of the need to address gender inequalities and promote equity from multiple perspectives. (59,60,61)

However, this progress has not been homogeneous, as significant gaps remain in categories and conceptual bridges for studying both fields from an integrative perspective. This suggests that, although each field has managed to consolidate itself as a high-impact interdisciplinary area, specific theoretical models are still needed to facilitate the representation of common problems and concerns, which in turn should translate into a more equitable approach to the voices and realities of women entrepreneurs in conflict and post-conflict contexts.

In Colombia's case, the bibliometric analysis findings find particular resonance in the context of the armed conflict and the peace processes. The country has been the subject of numerous studies exploring the relationship between gender and conflict, (62) especially regarding sexual violence as a weapon of war, the participation of women in the negotiation processes, and the implementation of gender approaches in peace agreements. However, despite this progress, significant challenges remain, such as the lack of resources to effectively implement these policies and the need to strengthen local research that addresses the particularities of the Colombian context. (63,64)

Colombia has made significant progress in recent years in terms of female entrepreneurship, but there is still a gap between the policies designed and their real impact on the most vulnerable communities. Furthermore, research on this topic in the country tends to focus on urban areas, leaving aside the realities of rural women,

who face additional barriers such as limited access to financial and technological resources. This imbalance highlights the need to broaden the focus of studies to include more diverse and representative perspectives.

#### **CONCLUSIONS**

The analysis of scientific production on women entrepreneurs in conflict zones made it possible to identify trends, gaps, and areas of opportunity in this field of study. Over the last decade, there has been significant growth in research on female entrepreneurship, with an interdisciplinary approach that integrates perspectives on gender, economics, and human rights. However, the intersection between female entrepreneurship and contexts of armed conflict remains an under-explored area, suggesting the need to develop conceptual and theoretical frameworks that allow this issue to be addressed comprehensively.

One of the most relevant findings was the predominance of issues such as economic empowerment, gender violence, and resilience in post-conflict contexts. These issues reflect the complexity of the challenges faced by women in violence-affected areas, where they must not only overcome traditional barriers associated with entrepreneurship but also deal with specific risks such as forced displacement, sexual violence, and the disintegration of their communities. Despite growing awareness of these issues, gaps persist in the representation and practical application of academic findings in public policy, limiting the real impact of this research on the lives of women and their communities.

In geographical terms, the United States and the United Kingdom led scientific production in both fields. This may be related to the funding and international collaboration these nations have allocated to research in these areas. In the case of Colombia, the country stood out as an emerging context, especially in studies on the impact of armed conflict on women. However, Colombian scientific production in female entrepreneurship is still limited, which underlines the need to strengthen local research and broaden the focus to include more diverse perspectives, especially in rural areas and post-conflict contexts.

International collaboration was also a relevant aspect of this analysis. Cooperation networks were identified between countries that are leaders in scientific production, such as the United States, the United Kingdom, and Australia, as well as developing nations facing conflicts and humanitarian crises. These collaborations reflect a growing interest in addressing the issues of gender and entrepreneurship from a global perspective. However, greater integration between studies on conflict and female entrepreneurship is still needed to maximize their impact on affected areas' social and economic reconstruction.

Finally, the analysis of keywords and emerging trends revealed the importance of topics such as gender justice, peace agreements, and human security, which, although relevant, have been little explored in the scientific literature. Likewise, the need was identified to advance research addressing digital transformation, sustainability, and political-legal support for women's entrepreneurship in conflict contexts. These topics represent promising areas for future research, which could strengthen the role of female entrepreneurship as a tool for social transformation in regions affected by violence.

In short, this study showed that, although significant progress has been made in understanding female entrepreneurship and its relationship with conflict contexts, essential challenges still require attention. Consolidating integrative theoretical frameworks, expanding research in specific contexts, and promoting evidence-based public policies are crucial steps to ensure that female entrepreneurship becomes an engine of change in the world's most vulnerable areas.

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## **FINANCING**

The authors did not receive any funding for the development of this research.

## **CONFLICT OF INTEREST**

None.

## **AUTHORSHIP CONTRIBUTION**

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